Midwifery primary health care groups during childbearing

Peeranan Wisanskoonwong

Southern Cross University

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MIDWIFERY PRIMARY HEALTH CARE
GROUPS DURING CHILDBEARING

Thesis submitted for the degree of
Doctor of Philosophy

Peeranan Wisanskoonwong
Cert. Midwifery, BNS, M.Ed.

Southern Cross University, Australia
School of Health and Human Sciences

2 November, 2012
DECLARATION

I certify that the work presented in this thesis is, to the best of my knowledge and belief, original, except as acknowledged in the text, and that the material has not been submitted, either in whole or in part, for a degree at this or any other university.

I acknowledge that I have read and understood the University’s rules, requirements, procedures and policy relating to my higher degree research award and to my thesis. I certify that I have complied with the rules, requirements, procedures and policy of the University (as they may be from time to time).

Peeranan Wisanskoonwong

Date: 2nd November 2012
ABSTRACT

Question:
How can midwives facilitate effective group-based antenatal education in ways that are most valued by Thai women who are at increased risk of preterm birth?

Aims:
To review the existing research on interventions aimed at reducing preterm birth rates and to develop a culturally appropriate model of midwife-facilitated group-based antenatal education.

Thesis:
Group-based antenatal education aimed at health optimisation during pregnancy is effective in engaging with Thai women who are at known risk of preterm birth. Groups have been shown to be effective in reducing preterm birth rates.

Background
Preterm birth is the major cause of neonatal death and long-term disability for babies. The medical strategies for preventing preterm birth have not been effective; indeed rates of preterm births continue to rise. Multiple unmet needs in pregnant women, particularly when they persist over a long period of time, cause chronic stress and preterm births. An approach that has been proven to be effective in reducing preterm birth rates is CenteringPregnancy which is a form of group-based antenatal education. This study is informed by CenteringPregnancy, Maslow’s hierarchy of needs, feminist group processes and midwifery philosophy.

Methods for data collection
One-on-one interviews, group-based discussion and reflective journal

Methodology
Sixteen pregnant women participated in groups aimed at promoting their health. Feminist Action Research was conceptualised as an ongoing spiral of ‘Planning’; ‘Practising’; ‘Reflecting’; ‘Revising to change practice’. The midwife/researcher, who facilitated the
groups, used a woman-centred approach with the aim of raising each woman’s consciousness and sense of her own empowerment so that she was able to make positive to changes in her life.

**Key findings**

Data analysis and interpretation resulted in two chapters of findings. In the first one, the women’s stories were described. All the women in the study improved their holistic health; no woman had a baby after less than 35 weeks gestation. The women expressed satisfaction with their relationship with their midwife and with the groups. The second findings chapter concerned the researcher’s experiences and the development of a model of Midwife-facilitated Primary Health Care Groups.

**Significance**

This study provides a firm foundation for making recommendations for change in the way Thai midwives are educated and the way they practise. In order to reduce preterm birth rates, all pregnant Thai women should be offered the choice of attending Primary Health Care Groups.

The word ‘midwife’ and not ‘nurse’ should be used when referring to the professionals who provide midwifery care. The education of midwives needs to be upgraded in Thailand; consideration should be given to double degrees, direct entry and Masters’ degrees. Australian, New Zealand or the UK textbooks should be used in all midwifery training to ensure that midwifery philosophy, not nurse-midwifery is integrated into all aspects of midwifery education.
SCHOLARSHIPS RECEIVED DURING THIS RESEARCH

Kuakarun Faculty of Nursing, Navamindradhiraj University which is under Bangkok Metropolitan Administration, Thailand: Approximately $38,000 per annum was awarded in July 2007; following an extension it terminated in February 2012.

Research Funds from School of Nursing & Midwifery Scholarship, the University of Newcastle: $3,000 awarded in July 2007 to May 2011

Research Funds from School of Health and Human Sciences, Southern Cross University: $1,500 awarded in July 2011 to February 2012

PUBLICATIONS ARISING FROM THIS THESIS

Refereed journals:


Conference presentations:

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I wish to give my deepest thanks to the sixteen Thai women in this study who shared their thoughts, feelings, and experiences in the Midwifery Primary Health Care Groups. These women gave their valuable time and their experience and I am extremely grateful for the major part they played in this study.

Thank you to the obstetricians and the midwives at the Department of Obstetrics and Gynaecology at the Faculty of Medicine, Vajira Hospital, Navamindradhiraj University (Thailand) who provided support during data collection.

I was very honoured and fortunate to be offered a scholarship from Kuakarun Faculty of Nursing, Navamindradhiraj University. I deeply thank both the Executive Committees of the Faculty and my colleagues together with the Bangkok Metropolitan Administration, Thailand for their generosity and foresight in seeing the worth of this project.

I am deeply grateful to my principal supervisor Professor Kathleen Fahy. Without her kind understanding and dedication, it is unlikely that I could have come this far. Kathleen has been very generous with her time and had faith in my ability, and presented me with an unbelievable opportunity to complete this PhD. As a student from Thailand, the most immediate and formidable challenges I have had to face is the English language, and the differences between midwifery practice in Thailand and Australia. Four-and-a-half years under Kathleen’s supervision gave me greater confidence and she consistently reassured me about the direction I took in my research. I am eternally grateful for her intuitive direction which has allowed me to produce a new model for midwifery appropriate for the social setting in Thailand, beyond what either of us had imagined possible. Kathleen has changed my life in so many ways.

My heartfelt thanks to my second supervisor Mrs. Carolyn Hastie, who has untiringly guided me through the many aspects of the Midwifery Primary Health Care Groups, feminist action research and all the other subjects that I found most challenging. I am grateful for her ideas, heartfelt support, and enthusiasm. Carolyn is a wonderful teacher and mentor and helped me to be strong and become an empowered woman. Third, my sincere thanks to my third supervisor Dr. John Hurley, who came to my aid in the final stages of my PhD. He lent me a
helping hand, all the while giving me his feedback in the final months of the project and also helped with proofreading.

When I first set foot in Australia in 2007, it was my first trip abroad and naturally I was filled with a sense of uncertainty and a degree of tension. Fortunately, Mr. Vasant and Mrs. Dussadee Sanpradit were like my Thai father and mother in Australia; they made sure that I found a good and comfortable dormitory facility. They lent me a helping hand, all the while trying to put my concerns and fears to rest. I am eternally grateful for their love, care and concern.

In the final stages of this study, I had to transfer to study at Southern Cross University. I owe my deepest gratitude to Dr. David Simpson and Mrs. Judy Simpson who supported me by giving me their love, care and support.

Thank you to Ilze Jaunberzins, my wonderful friend, who encouraged and supported my body, mind and spirit. Ilze guided me to become a strong PhD midwifery student. It was indeed extraordinary that she went out of her way to help me so that I felt comfortable working on my PhD.

I would like to give a special thank you to Miss Janyalak Sukjaem who is my beloved friend and colleague. Janyalak was also my research assistant during data collection. She always supported me during my PhD journey.

And lastly, but not by any means least, I am indebted to my wonderful family. I give loving acknowledgment to my beloved mother, sisters and brothers. My sisters and brothers have given support in many small and practical ways by taking over my responsibilities for looking after our mother during my PhD journey. Their support, encouragement and graciousness when I was preoccupied and focused on this work is truly appreciated and valued.
DEDICATION

I would like to dedicate this dissertation to my dear papa who gave me the opportunity to study for my PhD in Australia. He cared for and was concerned about me and he encouraged and inspired me in so many ways to do my PhD. Without his self-sacrifice, it is unlikely that I could have completed my PhD. I know he is still looking at me and smiling up in the heaven. I know that the heaven is never too far. I love you papa.
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<tbody>
<tr>
<td>PTB</td>
<td>Preterm birth</td>
</tr>
<tr>
<td>LBW</td>
<td>Low birth weight</td>
</tr>
<tr>
<td>FAR</td>
<td>Feminist action research</td>
</tr>
<tr>
<td>RCT</td>
<td>Randomised control trial</td>
</tr>
<tr>
<td>AR</td>
<td>Action research</td>
</tr>
<tr>
<td>WHO</td>
<td>The World Health Organisation</td>
</tr>
<tr>
<td>UNICEF</td>
<td>The United Nations International Children's Emergency Fund</td>
</tr>
<tr>
<td>ACM</td>
<td>The Australian College of Midwives</td>
</tr>
<tr>
<td>ICM</td>
<td>The International Confederation of Midwives</td>
</tr>
<tr>
<td>FIGO</td>
<td>The International Federation of Gynecology and Obstetrics</td>
</tr>
<tr>
<td>CI</td>
<td>Confident interval</td>
</tr>
<tr>
<td>OR</td>
<td>Odd ratio</td>
</tr>
<tr>
<td>RR</td>
<td>Relative risk</td>
</tr>
<tr>
<td>COX</td>
<td>Cyclo-oxygenase</td>
</tr>
<tr>
<td>ACOG</td>
<td>The American Congress of Obstetricians and Gynecologists</td>
</tr>
<tr>
<td>HBCs</td>
<td>Healthy Behavioural Cards</td>
</tr>
<tr>
<td>CNS</td>
<td>Central Nervous System</td>
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Q. 5 How can positive mother-baby connections be facilitated?

Q. 6 How should a midwife facilitate the sharing of vulnerabilities?

Q. 7 Should I act as a Thai nurse or as a contemporary midwife?

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INTRODUCTION

1.1 Introduction

This dissertation aims to review the existing research on interventions aimed at reducing preterm birth rates and to develop a culturally appropriate model of midwife-facilitated group-based antenatal education. This study has been guided by the research question:

‘How can midwives facilitate effective group-based antenatal education in ways that are most valued by Thai women who are at increased risk of preterm birth?’

In this study I designed, implemented and evaluated a primary intervention aimed at preventing preterm births. This midwifery ‘intervention’ is a feminist-based, midwife-facilitated antenatal care and education model. The dissertation provides evidence that maternal stress is a causal factor in spontaneous abortions and preterm births [1] and that therefore helping women reduce their stress and improve their health should reduce preterm births. A number of studies have shown that midwifery primary health care interventions, such as providing group-based, interactive and collaborative care and education can reduce the incidence of low birth weight babies [2-5] (see Section 3.4 in Chapter Three). These studies have been conducted in the United States of America where feminism had its roots [6-9]. As a Thai midwife, I know that these forms of woman-centred care are not provided in government hospitals in Thailand. As discussed below, the maternity system is dominated by obstetricians, with midwives and women consequently playing submissive roles. Therefore, to enable me to work with the women effectively and investigate culturally suitable ways of protecting, supporting and enhancing the health of childbearing women, the role of the contemporary midwife had to be modified to fit the Thai context.

A major outcome of this study is the development of a model of midwifery practice that focuses on the capacity building of Thai childbearing women’s sense of self. The primary goal of this model is to optimise the health and empowerment of childbearing women, with a secondary goal of improving birth outcomes for the women and their babies. This study therefore focuses on how Thai midwives can work holistically with childbearing women so they become aware and conscious of their health and the health of their babies.
In this dissertation, I support the thesis that:

‘Group-based antenatal education aimed at health optimisation during pregnancy is effective in engaging with Thai women who are at known risk of preterm birth. Group-based antenatal education has been shown to be effective in reducing preterm birth rates’.

The key terms used in this study are defined before proceeding to the body of this chapter which is organised into five main sections. The first section provides a background to the study and research problem by presenting data on the frequency and severity of the problem that this study seeks to address – that is, the incidence and impact of preterm birth. The location for this study is then presented, including its geography and socio-political status. The health care system within the study site of Bangkok is described, including the regulations governing nursing and midwifery training.

Next, I discuss my personal background and interest in the study. The fourth section explains the significance of the study. The last section provides an overview of the dissertation. Definitions of key terms not included in the next section are provided in the glossary (Appendix B).

1.1.1 Definition of Key Terms

The simple definition of a preterm birth is one that occurs before 37 weeks of gestation [10, 11]. In the literature, however, there is significant overlap between ‘preterm birth’ and ‘low birth-weight babies’, with the terms often used synonymously [12-14]. Low birth weight is defined as less than 2,500 grams at birth, and is frequently due to prematurity and/or intrauterine growth restriction [13]. The causes of intrauterine growth restriction are not necessarily the same as the causes for preterm birth, however, because under-nutrition and hypertension appear to directly contribute to low birth weights via intrauterine placental insufficiency regardless of the gestational age at which they occur. Where there has been an intrauterine growth restriction, the neonate is referred to as ‘small for gestational age’ (SGA). However, low birth-weight babies born after 37 weeks’ gestation are often included in statistics that are meant to be reporting preterm births. Many studies (see Chapter Two) do not make a distinction between spontaneous preterm birth and those preterm births which were medically or surgically induced [13-16]. For Thailand, the statistics on preterm birth are based
on a baby’s birth weight and do not distinguish between normally grown babies born early and small for gestational age (SGA) babies born at term.

1.2 Background to the Study

This section establishes the extent of the problem of preterm birth, which is part of the justification for the present study. Worldwide, approximately 9.6% of all births are preterm [17] which the World Health Organisation recognises as one of the top ten causes of death [18]. In Thailand, the rate in 2009 was 11.4% [19, 20] which is considerably higher than the global average.

Preterm birth is the major cause of neonatal death and long-term disability for babies throughout the world, with approximately 75% of perinatal morbidity being related to preterm births [12, 17, 21-25]. The morbidity may include intellectual disability, cerebral palsy or breathing and respiratory problems, vision loss, hearing loss, and feeding and digestive problems [17, 26]. With preterm birth rates rising in some countries, the survival rates for preterm babies have also gone up. This means that the morbidity rate of preterm babies also increases because these babies are at greater risk and are extremely vulnerable to serious health complications [26].

1.2.1 The Incidence of Preterm Birth

A review of the epidemiological evidence revealed that the rates of preterm birth have not declined over the past 30 years despite increases in available medical treatments. In some countries preterm birth rates are actually increasing [12, 27-31]. Figure 1.1 below divides the world into six major regions and presents the incidence of preterm birth as a percentage of total live births in each region [25]. The map shows that the regional rate of preterm birth is high for Africa, North America and Asia where over 9.9 % of all preterm births occur [17].
Figure 1.1 Percentage of Births Born Preterm around the World

In developed countries, the incidence of preterm birth has been increasing steadily over the past one to two decades [32]. In the US, for example, the incidence of preterm birth as a percentage of live births gradually increased from 11% in 1995 to 12.8% in 2007 (see Table 1.1) [12, 23, 33]. In 2008, the rate of preterm birth had decreased but it is still much higher than the nation’s 2010 target of 7.6% [34] and much higher than in any year before 2002 [23].

Table 1.1: The Incidence of Preterm Birth as a Percentage of Live Births in the United States of America in 1995-2008

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<tr>
<td>Preterm births</td>
<td>11</td>
<td>11.6</td>
<td>12.5</td>
<td>12.7</td>
<td>12.8</td>
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In Europe the rates of preterm birth range from 5.5% to 11.4% and between 2003 and 2009 the rate increased slightly to 7.1% of all live births [28]. Due to increased rates of preterm births, 17 November 2009 was designated the first ’International Prematurity Awareness Day’ by the European Foundation for the Care of Newborn Infants (EFCNI) [35]. The seconds and third International Prematurity Awareness Days were 17 November 2010 and 17 November 2011.

The incidence of preterm birth as a percentage of live births in Australia during the period 2001–2009 varied between 7.8 and 8.7 and has remained at this figure (Table 1.2) [24, 36-42]. However, the Northern Territory where a large part of the population is Indigenous
women who are the most socioeconomically disadvantaged group, the preterm birth rates is 13.1% in 2009 [43]. They generally have low education standards, low employment rates, low incomes and poor housing [44]. Because of their socioeconomic disadvantage, Indigenous women are at increased risk of experiencing other problems related to preterm birth such as alcohol use, domestic violence, unwanted pregnancy and low body mass index as well as inadequate antenatal care [45].

<table>
<thead>
<tr>
<th>Places/Women</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
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<td>Around Australia</td>
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<td>8.5</td>
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<td>8.6</td>
<td>8.7</td>
<td>7.8</td>
<td>7.9</td>
<td>8.2</td>
</tr>
<tr>
<td>Northern Territory</td>
<td>10.2</td>
<td>10.4</td>
<td>11.3</td>
<td>10.6</td>
<td>11.2</td>
<td>11.6</td>
<td>10.1</td>
<td>9.5</td>
<td>10.1</td>
</tr>
<tr>
<td>Aboriginal and Torres Strait Islander</td>
<td>12.9</td>
<td>12.9</td>
<td>14.1</td>
<td>14.3</td>
<td>13.9</td>
<td>13.7</td>
<td>13.7</td>
<td>13.3</td>
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Table 1.2: The Incidence of Preterm Birth as a Percentage of Live Births around Australia in 2001-2009

In Thailand, preterm birth is a common cause of disability and death [46]. Consequently, the Thai Public Health Ministry has focused on maternal and baby health in order to reduce the incidence of low birth weight and preterm babies. The Ministry has a goal of reducing the incidence to 7% by 2013 [47]. Despite this goal, preterm births have not decreased during the past 30 years [20] (see Table 1.3). Table 1.3 shows that the incidence of preterm birth in Thailand is higher than the global average rate of 9.6% [17]. The incidence of preterm birth in Thailand is similar to the rate in the Northern Territory where a large part of the population is made up of Indigenous women [48]. In this dissertation I will explore possible reasons for preterm birth in Thailand using Maslow’s theory of human motivation as a framework (see Section 3.2.2.3.1 in Chapter Three and Section 5.2 in Chapter Five).

<table>
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<tr>
<th>Year</th>
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<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preterm birth</td>
<td>11.2</td>
<td>11.4</td>
<td>11.0</td>
<td>10.8</td>
<td>11.4</td>
<td>11.3</td>
</tr>
</tbody>
</table>

Table 1.3: The Incidence of Preterm Birth as a Percentage of Live Births in Thailand in 2005-2009

1.2.2 The Impact of Preterm Birth

Preterm births account for one-third of the five million neonatal deaths that are estimated to occur worldwide every year [49]. About 24% of all neonatal deaths are the result of health complications following preterm birth [30]. In South-East Asia, the major cause of neonatal
death is preterm birth and preterm birth is therefore a significant cause of short- and long-term morbidity (see Figure 1.2) [26, 31]. This morbidity increases the demand for neonatal intensive care units to care for the large and increasing number of preterm babies surviving with deficits such as blindness, neurological impairment [50, 51] and chronic respiratory disease [52]. As these diseases become more common [25, 29] the rate of preterm birth increases the monetary burden on the country, both in terms of health costs and in the lost working capacity of the long term survivors and their carers [25, 26, 29].

**Figure 1.2 Neonatal Death Rates by Cause**

![Neonatal Death Rates by Cause](image)

### 1.2.2.1 The Impact of Preterm Birth on Health and Development

The incidence of hospitalisation is higher for those who are born prematurely than for those born at term. The highest rate of hospitalisation is associated with the earliest preterm births [53]. Babies who were born before 28 weeks (birth weights less than 1,500 grams) have high rates of severe disabilities [54] including cognitive and neurologic impairment [50, 51, 55, 56]. These preterm babies may also have physical and mental impediments to their growth and wellbeing [51, 57, 58]. They can experience poor development because of neonatal or postnatal growth failure [51, 52, 57, 59, 60].

### 1.2.2.2 The Impact of Preterm Birth on Families

Having a preterm baby is an emotionally distressing event for the parents [51, 61, 62]. Parenting a preterm baby is particularly stressful because the parents need to negotiate their parental rights with staff in the intensive care unit as well as manage their parenting roles at
home [51, 63]. Higher rates of psychological stress, depression, marital problems, and stressful daily life have been linked with parenting preterm babies [12, 62]. For underdeveloped countries, these stressors are multiplied due to limited resources, poverty, the absence of health insurance, and limited health facilities, particularly early childhood clinics [57].

1.2.2.3 The Social and Financial Cost of Preterm Birth

There are direct and indirect social costs related to the delivery of preterm babies. Direct costs involve the value of the resources needed for treatments such as obstetric care, medical services, and educational and developmental services. Indirect costs include the loss of social opportunities and the loss of potential human resources due to preterm morbidities and mortalities [12].

The financial costs of preterm birth include maternal and caregiver costs. Maternal costs are those associated with purchasing prenatal and delivery services, and the cost of medical interventions aimed at extending the gestational age until survival of the newborn is possible. Caregiver costs include the cost of time for travelling to take care of the preterm infant, and the cost of visiting the hospital every day [12]. Furthermore, the birth and rehospitalisation of preterm babies increases the financial cost [64]. For example, the financial cost of preterm birth in the US in 2005 was $26.2 billion or $51,600 per preterm baby [12, 17, 28]. Maternal delivery costs were $1.9 billion. Moreover, the cost of special educational services for preterm infants with cerebral palsy, mental retardation, hearing loss and visual impairment was $1.1 billion or $2,200 per person [12]. Unfortunately, there is no record of the financial impact of preterm birth in Thailand, but it is reasonable to assume, based on the situation in the US, that the financial burden is high.

1.3 Thailand: The Context of the Study

Thailand was formerly known as Siam. Thailand is unique in that it is the only country in South-East Asia that has never been colonised by a Western power. Thailand escaped colonisation because the Thais were resourceful, flexible and open to new ideas [65]. Thais

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1 This section has been written with reference to the Thailand National Statistics websites: (http://web.nso.go.th/index.htm and http://portal.nso.go.th/otherWS-world-context-root/index.jsp). These were translated and written into English language by the researcher.
have evolved by adopting concepts from other cultures [66]. Thai people, including their culture, education, health care system and technology have therefore been impacted by Western countries. This next section explores the geographic and social characteristics of Thailand. The health care system, including the education and regulation of nurses and midwives, is explained and the social-political context is described. This exploration of Thai culture and terrain will facilitate a better understanding of the stories of the women who took part in the study (see Sections 5.2 of Chapter Five).

1.3.1 Geography

Thailand is located in South-East Asia. Thailand is divided into six regions and consists of 75 provinces (see Figure 1.3). The north-eastern part is considered the poorest.

1.3.2 Socio-Political

Thailand is governed by a constitutional monarchy. According to the National Statistics Office of Thailand [67], the total population is 67 million, comprised of 33 million men, and 34 million women. Thailand is ranked as the 21st most populous country. The races in the Thai population are Thai (75%), Chinese (14%), Myanmar, Cambodian and hill tribes (8%), and Malay (3%). The Thai language is considered the official language with English also being used. Most Thai people are Buddhists who believe in the action of karma, which according to Mishra [68] means that “As you make your bed, so you must lie on it. As you sow, so you shall reap” [68 p.9].
1.3.2.1 Hierarchical Social Relationship in Thailand

The following section is my personal account of Thai social relations. I write this section as a Thai citizen. Where appropriate references exist, I have used them. In Thailand there are hierarchical structures based on dominance and submission. Within the hierarchical system, a junior person should not argue with a senior person [69, 70]. Broadly, throughout Thailand, seniority depends on gender, age, wealth, education, family social status as well as professional standing [69]. Therefore, the most powerful people are older Thai male nationals from wealthy families who have a good education and have achieved high professional or business standing in their own right. Professional people such as doctors and teachers are
generally held in very high regard and are neither questioned nor disobeyed [69, 71]. Teachers are considered to be superior to their students, and doctors superior to midwives rather than being colleagues [69, 71, 72]. Health care providers are considered to be superior to their patients [71, 73].

Within antenatal clinic environments, this hierarchical culture affects the midwifery profession. Midwives honour and defer to the obstetricians who work with them [71, 74]. Similarly, midwives are highly respected and admired by women patients. Women usually obey midwives because they believe that midwives help them and their babies to maintain good health and wellbeing. Women are submissive and don’t dare to express their needs and wants, believing their humility will ensure that they will get good care from midwives [71, 73]. Consequently, hierarchical systems strongly affect relationships and communication between women and midwives [73]. These hierarchical systems can therefore be seen as structures that may suppress independent thought and self-determination and impact negatively upon the knowledge and power of Thai women [71, 72].

1.3.2.2 The Contemporary Socio-Economic Profile of Thailand

Thai society has been experiencing rapid industrialisation, capitalist development and technological innovation [68, 75]. With the shift from farming to working in cities, the social structures of Thai families and communities are undergoing stress as society becomes more urbanised. Another source of stress is the reduction in family size and the increased burden of caring for elderly people. Since the introduction of family planning programs in the late 1970s, Thai families have had fewer children, population growth has slowed and the ratio of children to elderly people has decreased.

Unskilled workers continue to migrate to Bangkok to look for jobs that promise the opportunity to move from subsistence farming to become part of the middle class. There has also been an increase in the number of legal and illegal immigrants from Burma, Cambodia and Laos. Many of them settle in Bangkok [75]. The population of Bangkok is approximately 10 million [76].

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This section has been written with reference to the Thailand National Statistics websites: (http://web.nso.go.th/index.htm and http://portal.nso.go.th/otherWS-world-context-root/index.jsp). These were translated and written into English language by the researcher.
1.3.2.3 The Economy

Most people in the urban area are employees, while most people in the north-east are farmers. Most of the income earned by Thai people comes from the employed sector. People in Bangkok and adjacent areas have the highest average income, whereas people in the north-east have the lowest levels of average income [75, 76]. More than 50% of all families in the country have some form of debt. Poverty continues to be a major challenge [75, 76].

1.3.2.4 Marriage and Divorce

A Thai metaphor for the married couple is ‘the elephant.’ The proverb says, ‘The man is the front legs while the woman is the back legs of the elephant.’ The metaphor means that a man is the leader while a woman is follower and together they hold the family up. Thai people who are uneducated and live in the country still believe in this model of family life. However, the new generations of Thai men and women have more independence and self-confidence. Contemporary men and women seek more equality within their relationships. However, the hierarchical nature of Thai society makes equality within married couples rare and difficult to maintain, particularly once they have children [73].

The average marrying age is now 24 years for women and 27 years for men, which is older than previous generations [77]. Women are opting to be single, especially women living in urban areas who have high levels of education [67, 77]. Whenever a man and a woman decide to spend their lives together, they are called husband and wife. Obtaining a marriage license is considered less important nowadays with about 50% of all couples living together unregistered. These unregistered unions are treated equally to those who are legally married [77, 78]. People believe that the marital registration is not as important as living together with love. However, some couples decide to get married after living together for a long time because they want to avoid any possible legal problems that may arise in the future concerning inheritance and property ownership [77]. Some women prefer not to register as a legal wife since they do not want to be addressed as “Mrs” and lose the use of their surnames. Even with these ideals and despite rising educational levels and a continuing commitment to marriage, the rate of divorce in Thailand has doubled over the past ten years [77].
1.3.2.5 Maternity Leave

Most Thai women work outside the home but only some have access to maternity leave and even less (46.8%) have access to paid maternity leave [77]. Women who are employed by companies or factories are protected under the Labour Protection Act of 1998 from being fired from work due to pregnancy [77]. Additionally, women employees are entitled to 90 days of maternity leave on full pay. However, to be entitled to pay maternity leave, women must have paid contributions to the Social Welfare Fund for at least seven months before pregnancy [79]. Despite these provisions, some private organisations do not allow women employees to take maternity leave. Other organisations allow women to take maternity leave without getting paid, and some allow women to take only one month’s leave after giving birth. Consequently, breastfeeding time is too short, especially for women living in Bangkok and only 3.6 % of newborns are breastfed exclusively [77]. Due to the transition from the traditional extended family to the nuclear family, women have only three months or less to provide full-time care for their babies after giving birth.

1.3.2.6 Family Planning

The reduction in family size discussed previously is due to more effective contraception. In general, Thai men prefer not to use condoms for contraception. Contraception is considered the responsibility of the woman with most taking oral contraceptives while others prefer sterilisation. There are very few cases of male sterilisation in Thailand – about 1.2 % [77, 78]. Unwanted pregnancies are common as is induced abortion which is an illegal procedure in Thailand.

1.3.3 Health Care System

The development of health care, including maternity care, has been influenced by the Western world, especially the USA. There are five levels of health care services in Thailand [80 p.1]:

1. Primary health care level: the services are provided by village health trained volunteers.

2. Primary care level, with entry point at the community level (health centre or primary care unit) and with care provided by health professionals and other personnel. Services usually cover treatment of common illnesses,
health promotion, disease prevention and rehabilitation. High-risk patients are referred for further diagnosis and treatment at secondary care level.

3. Secondary care level is for those who need appropriate investigations and treatment that is available at community, provincial or general hospitals. Physicians and other health professionals with intermediate specialisation provide services at this level.

4. Tertiary care services are available at general, regional, and university hospitals and include provision of specialist care and the availability of high technology equipment and operations.

5. Specialised services refer to psychiatric and mental health hospitals and children’s hospitals.

In this structure registered nurses work at levels 2–5. Since 2001, the public health care system in Thailand has developed universal coverage reforms. This policy was called “30 baht treats all diseases project”. The project helps all Thai people who register with a contracting hospital. They are given a gold card which entitles them to access medical care in their dwelling district free of charge for all kinds of illnesses. As well as basic care, they receive the benefits of health promotion activities as well as health protection initiatives for both the individual and the family. In addition to obtaining free services from government hospitals and clinics, they are also able to access medical services provided by any private hospitals which are network members of the program. However, care outside the district of registration is limited to accident and emergency. These universal coverage reforms help lower the cost of the medical care for Thai people and lengthen their life span.

1.3.3.1 Maternity Services in Thailand

Maternity services are available at each of the five levels of health care outlined above. All government maternity services (primary, secondary, and tertiary care) are required to adhere to the maternal service policy from the Ministry of Public Health [20, 47]. The targets are:

- 55% of women to be receiving antenatal care before 12 weeks of gestation in 2011 and 65% by 2013
- the proportion of teenage women who become pregnant to be less than 10% by 2013
reduce the incidence of iodine deficiency in pregnant women by 50% by 2013

birth asphyxia to be less than 30 per 1000 of birth by 2013

low birth weight and preterm birth less than 8% of all births in 2011 and less than 7% by 2013

a breast feeding rate at 6 months of approximately 30% in 2011 and about 50% by 2013.

The Ministry of Public Health’s policy determines the maternity services offered by each government hospital and the level of health care each one offers. Even though every level of health care has the same targets (outlined above), they operate under different procedures for the provision of antenatal care. The provision of maternity services depends upon the resources and facilities available, including numbers of health care providers at each hospital. Obstetricians are assigned to check up on the pregnancy status of both low and high risk women at the second and third care levels. This treatment includes the provision of treatment and prescriptions. Midwives are in charge of the assessment of pregnant women, vaccination, health education, counselling and breast feeding promotion. Midwives also undertake the recording of body weight, blood pressure. They also process urine tests and assist obstetricians with special investigations. Women usually have antenatal visits based on their trimester. Some hospitals offer health promotion projects for pregnant women and their partners.

Within the Thai hospital system, midwives usually provide pregnancy and birth care for low risk women. Obstetricians are only called in for complicated cases. There is no continuity of midwifery care, so women are looked after by different midwives. Most women birth their babies in hospitals that have modern delivery facilities. At six weeks post-partum, obstetricians examine the mother while paediatricians are involved in the care of newborns. If however, a woman lives in a very remote area, then she usually does not give birth in a hospital; she gives birth at a primary health care centre or home and she is cared for by midwives. Different hospitals have different ways of providing post-partum care. Typically post-partum care involves examinations of both mother and baby.
1.3.4 Nursing/Midwifery Training and Regulation

In order to understand the role of the midwife in Thailand, it is helpful to understand how nursing and midwifery are regulated. All nursing programs that lead to registration as a nurse and midwife must be approved by the Nursing Council of Thailand. The Bachelor of Nursing program must comply with the National Plan for Higher Education, the National Health Development Plan and the National Plan for Nursing and Midwifery Development as well as the major mission of each educational institution [80]. Both nursing and midwifery are taught in pre-registration programs so there is no separate entry [80]. Degrees are issued with both nursing and midwifery [80]. There are three levels of academic education in nursing: bachelor, master and doctoral programs [80].

Masters and doctoral nursing programs are available in a large number of public and private universities. However, I focus here on midwifery programs. The original name of this program was the Master of Women Nursing program. This was changed to Maternal and Newborn Nursing, and finally to Advanced Midwifery [80]. This program must be completed to meet the requirements for the competency test for the Nursing Specialist Certificate in Midwifery.

1.3.4.1 The Scope of Midwifery Practice

Based on the fourth bylaw of the Professional Nurses and Midwives Act of B.E.2528 (1985), and the revised version (2nd issue) of B.E.2540 (1997), the term ‘professional midwives’ refers to persons who are registered and have licenses of professional midwifery under the Nursing Civil Law of Thailand [80]. The Nursing Civil Law of Thailand defines midwifery as:

… the action of caring and helping the pregnant women, postnatal women and neonates including examination, executing normal delivery, health promotion and prevention of abnormalities during ante-natal, intra-natal and post-natal periods as

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3 This section has been written with reference to the Thailand Nursing and Midwifery Council websites: [http://www.tnc.or.th/law/page-6.html](http://www.tnc.or.th/law/page-6.html). With the correct translations and tone of the Thai documents, words like ‘nursing care’ and ‘delivery’ are used instead of the Australian ‘midwifery’ and ‘birth’.
well as helping the physicians to treat and cure based on the science and art of midwifery [80 p.4].

‘Professional midwifery’ refers to midwifery practice for pregnant women, postnatal women, their newborns and their families [80 p.4]. It involves the following:

1. providing education, advice, counselling and solving health problems

2. providing physical care to pregnant women, post-natal women and their newborns, and psychological care to pregnant women in order to prevent complications during pregnancy, delivery and post-partum

3. providing physical examinations, normal delivery and family planning services

4. assisting physicians in performing treatments or special investigations.

1.3.4.2 The Scope of Practice of Maternal and Newborn Nurses

The Nursing Civil Law of Thailand [80] determines the scope of practice in maternal and newborn nursing and midwifery. Details are in Section 1.2 of Appendix 1. A broad overview of the scope of practice is as follows:

1. Preparing women for marriage and pregnancy.

2. Care during pregnancy: This domain involves prenatal care, screening of pregnant women, processing blood and urine tests, abdominal palpation and vaccinations. Providing advice and health education and relieving minor discomforts are other activities in this domain. Assessing the woman’s risk status, fetal monitoring, helping women adapt to pregnancy, encouraging relationships among fathers, mothers and unborn babies, preparedness for normal birth and breastfeeding are also aspects of care given.

3. Care during labour and normal birth. This involves attending labour and normal deliveries and breech births in cases of emergency, cutting and repairing a woman’s perineum to facilitate birth, encouraging relationships among fathers, mothers and babies during pregnancy, labour and post-labour are required competencies.
4. Care of women and neonates during the postnatal period and promoting the adaptation of parental roles and breastfeeding, and the provision of family planning services including health education before discharge from hospital.

5. Competence during obstetrical emergency and complicated situations such as ante-partum and post-partum haemorrhage, prolonged labour and dystocia, retained placenta, convulsion from eclampsia, post-partum infection, neonatal resuscitation, pre-eclampsia and diabetes mellitus during pregnancy.

1.3.5 Bangkok Metropolis and Study Site

Bangkok is the capital of Thailand and is the largest population centre in the country. It is the centre of the country’s government, education, transportation, finance and banking, business, and telecommunication systems, and therefore is the most developed area in the country. Bangkok city is governed as a special area wherein residents elect its governor. Rapid population growth in Bangkok is caused by the immigration of people from other parts of the country. The inner area of Bangkok is more crowded than the outer areas of the city. The average population density of Bangkok is about 465 people per square kilometre [67].

1.3.5.1 The Study Site: Antenatal Clinic at Medical College and Vajira Hospital, Bangkok

Bangkok Metropolitan Administration Medical College and Vajira Hospital is a medical college in the Bangkok Municipality, and also a site for the internship of medical, nursing and midwifery students. This hospital was chosen as the site for this study because it is the referral centre for the surrounding hospitals for preterm birth and other pregnancy complications. The hospital is a leader in maternity care for the region. As a teaching hospital it is responsive to research projects, undertaking change to its practices based on research evidence.

The Obstetrics and Gynaecology Department of the hospital runs a special clinic exclusively for pregnant women. The chief of the department is a professional midwife. The clinic provides antenatal care for pregnant women from the initial stages of pregnancy through to the labour stage. Prenatal diagnosis and foetal wellbeing assessments using ultrasound are provided by the clinic. Pregnant women are taught how to take care of themselves during pregnancy, birth and the post-partum stages, and are educated about breastfeeding and the health problems that may occur during pregnancy.
Clinic services are available from 6 a.m. to 12 noon from Mondays to Fridays. There are two components of the pregnancy care service: (1) a special clinic, from 6 a.m. to 8 a.m. and (2) an ordinary clinic, from 8 a.m. to 12 noon. There are five midwives who work in this clinic. While on duty, the midwives always wear a white nurse’s uniform and cap (see Figure 6.1 of Chapter Six).

An estimated 1,500 to 2,000 pregnant women per month come to this clinic. All are screened according to clinical criteria. High-risk pregnant women have a red stamp on their medical appointment card. This alerts the relevant obstetrician and midwives and expedites the initial screening process. As a tertiary referral hospital, this hospital functions as described in Section 1.3.3 above. Health education is provided daily through videos and posters. Pregnant women are divided into two groups, namely the second quarter pregnancy group and the third quarter pregnancy group.

1.4 My Background and Interest in this Study

The focus in this section is to give an honest account of how I as a woman, midwife and researcher have influenced the research project. Ever since I graduated from the Bachelor of Nursing Science program over fifteen years ago, I have worked as a midwife at a public hospital under the supervision of the Bangkok Municipality.

Based on my study and work experiences, I have recognised that the medicalisation of pregnancy and childbirth has restricted midwifery practice. In Thailand, midwifery is practised in a medicalised environment and encompasses working with interventions relying on medical technology, such as electronic foetal monitoring, rather than valuing midwifery practices that are more holistically oriented, such as continuity of care; position changes. I have realised that a medicalised approach to issues facing women and babies is a limited perspective. For example, when I was a junior midwife working in a high risk pregnancy ward, the question ‘Is preterm birth a disease?’ emerged in my mind. At that time, the incidence of preterm births in the hospital was high [81]. Every day I saw how women were medically managed and the way that nurses cared for women based on medically directed management. However, most of the medically managed women gave birth prematurely despite that management. I recognised how much physical, mental and emotional suffering each woman experienced through having a preterm baby. As preterm birth was seen as a disease, women were called ‘patients’. A second question emerged in my mind: ‘Is a woman
who is faced with preterm birth a patient?” I wondered about preterm birth with those two questions in mind. At that time, I recognised that medical treatments and nursing care with a focus on preterm birth as a disease was ineffective and was based on what I believed was an inappropriate approach. As a nurse however, my self-confidence regarding what I considered the real causes of preterm birth was not strong enough theoretically or practically. Therefore, I had a strong desire to find out what could be done to help women who faced preterm birth to have a full term pregnancy.

I sought to increase my self-confidence in my professional career as a midwife and undertook a master’s degree of health education focusing on health promotion behaviours for pregnant women. I found that enhancing health promotion for pregnant women depended upon their own decision making abilities [82]. Women with high self-efficacy had the self confidence and health promotion behaviours required to look after themselves during pregnancy [82]. I also found that being pregnant is a healthy condition, not sick so a pregnant woman is not a patient. Her life belongs to herself. She knows about her life and she understands her needs. I finally answered my own questions by concluding that that the effective way to conquer preterm birth should be to focus on the women themselves, not as sick people or as people suffering from a disease and to consider the concept of primary prevention prior to the onset of preterm labour.

I have learned from the literature review that preterm labour and birth are multifactorial in origin and are related to issues arising from any combination of the following aspects of being human: body, mentality, society, spirit, and environment. Medicalised approaches to health problems such as preterm birth address the symptoms of the problem only, without attending to the woman’s real health needs. Medical management is organised around the convenience of the medical and midwifery professions, rather than on the provision of the sort of care provided by the continuity of care model, which focuses on the woman’s needs [83]. As a result, there is a lack of the skills and experience needed for taking a holistic approach to the care of pregnant women.

There are no research papers about midwifery practice in Thailand and the midwife’s role in the antenatal clinic in preventing preterm births. Most of the previous research relates to the use of medication in preterm labour to inhibit preterm birth. Therefore, current midwifery practice is based on what medical treatment the woman is receiving. Medical intervention temporarily solves the problem, but does not address or prevent the cause of the preterm
labour [84]. This is the reason why preterm labour and birth is still one of the most serious problems in Thailand. After reviewing the available literature and information, it is clear that while the actual causes of spontaneous preterm birth are unknown, the onset of preterm labour is related to multiple factors (see Section 3.2.2.3 in Chapter Three). There is a need for more cooperation between midwives and pregnant women from a holistic perspective, based on midwifery philosophy. If midwives work effectively together with pregnant women, problems could be identified early and strategies put in place to help avoid the onset of preterm labour and reduce the incidence of preterm births.

Pregnancy is a natural event and not an illness. With support and information, all childbearing women are capable of taking care of themselves and their unborn babies. I strongly believe that a partnership between women and midwives is one of the best ways for them to share knowledge and experiences with each other. Sharing in this way enables women to grow in confidence and consciousness, to take responsibility for her own health and her baby’s health and to loosen the culturally imposed oppression they are subjected to. As a Thai midwife I have discovered that when women are emancipated from oppression, they discover their power to think, act and be empowered to make decisions in their own best interests. When women are empowered they look after their own health and pregnancy and are more likely to give birth spontaneously at term.

1.5 The Significance of the Study

This study provides an effective strategy for enhancing the health and wellbeing of disadvantaged childbearing women and for reducing the risk of preterm birth. It offers a way to minimise the consequences of multifactorial contributors to preterm labour through the provision of group-based antenatal education by a midwife. It also presents a model of midwifery practice that provides childbearing women who are at risk of preterm birth with information and an opportunity to become empowered in a major maternity unit in Bangkok. The following five areas of midwifery will potentially benefit from the outcomes of this study.

1.5.1 Midwifery and Women

This study demonstrates the importance of the relationship between childbearing women and midwives. This relationship will be shown to support childbearing women to have self-
awareness and self-consciousness, and to take responsibility for what can be done to improve their individual lives and the lives of other women. As women’s self-confidence grows, women’s health empowerment will increase, their health behaviours will improve and the risk of preterm labour and birth will be reduced.

1.5.2 Midwifery Practice

This study demonstrates the value of midwifery as a primary health care practice that is grounded in the woman–midwife relationship. This research was designed to investigate whether a primary health care approach to addressing disadvantaged women’s health needs in pregnancy will reduce the risk of preterm labour and birth. It shows that this primary health care model is effective.

1.5.3 Midwifery and Antenatal clinic

The model of midwifery care derived from this project will be able to be implemented in antenatal clinics in hospitals and public health centres throughout Thailand. The details of how the model will be developed, modified, implemented, evaluated, and re-implemented are described in this dissertation (see Chapters Four, Six, Seven and Appendix 6).

1.5.4 Midwifery Education

The findings of this study could be used to guide Thai midwifery educators in teaching women-centred care to midwifery students. Information to assist educators in providing training aimed at improving collaborative work and the relationship between women and midwives is provided by this study. The research demonstrates the value of focusing on each woman’s health needs, and on her expectations and aspirations to improve health outcomes for women and their babies.

1.5.5 Midwifery and Research

The recommendations from this study may be trialled in other Thai communities and disadvantaged populations to see if this midwifery model of care translates to different contexts. This study provides a blueprint for research for other midwives who want to make a difference to the preterm birth rate, as is evidenced in the group of women who participated in this study.
1.6 Overview of Dissertation

The dissertation has seven chapters with appendices and references. In Chapter Two, the theoretical foundations of the literature are reviewed. Chapter Three presents the reviewed literature about the factors associated with preterm birth, including medical and midwifery interventions aimed at preventing preterm birth. Chapter Four describes the methodology of the study. Chapter Five presents the stories of the women as they relate to Maslow’s hierarchy of needs while Chapter Six contains the key findings that led to the development of a new model of “Midwifery Primary Health Care Groups”. The model relates to women’s primary health care groups for women who are at risk of preterm birth. It addresses their hope of having a full-term, healthy, appropriate weight baby. Chapter Seven outlines the findings, discusses the study’s limitations and makes recommendations for the use of the new midwifery model.
CHAPTER TWO

THEORETICAL FOUNDATIONS

2.1 Introduction

This chapter presents the philosophical and theoretical foundations of this study. Philosophy is defined as, “the study of the most general and abstract features of the world and the categories with which we think” [85 p.286]. A theory provides “a rigorous description, explanation and prediction of phenomena in the world by defining concepts and linking them together with propositions” [86 p.4]. A concept is an abstract idea involving phenomena, objects or actions. For example, preterm labour and stress are both concepts [86]. “Philosophy and theory in midwifery are focused on the holistic wellbeing of women” (i.e. women’s social, emotional, physical, psychological, spiritual and cultural needs and expectations) [87 p.xvii].

The chapter is divided into five main sections. The first section critically explores stress and the link between stress and disease and by extension, the link between maternal stress and preterm birth. The next section examines primary health care principles. The third section describes the hierarchy from Maslow’s theory of human motivation, used as a framework for considering women’s health needs. This framework, although criticised for being too individualistic in regards to human motivation [88], is highly pertinent for my purpose of conceptualising the social determinants of health from a primary health care midwifery perspective. This perspective is holistic and recognises that when human needs are violated or unmet, illness can result. The fourth section discusses feminism as the framework that was used to conduct this action research and antenatal groups. Section four is divided into two sub-sections: feminism and feminist group processes. Section five considers theory and philosophy for midwifery practice, focusing on: the philosophy of the Australian College of Midwives; the theory of midwifery partnership and the theory underpinning the CenteringPregnancy model of group prenatal care.

These five theoretic approaches are needed in order to understand how stress is the mediating link between unmet women’s needs and preterm birth and to do so in such a way as to explain how a feminist approach to the practice of midwifery and antenatal women’s groups is most
likely to facilitate the empowerment of childbearing women to meet their needs and optimise their own health and wellbeing.

2.2 Stress and Preterm Birth

This section assumes that the reader is a health care professional and has a basic understanding of stress and the fight, flight and freeze responses. Another assumption is that the reader is aware that the automatic functions of the human body are optimised when the person is relaxed and the autonomic nervous system is predominantly in the parasympathetic mode. The two autonomic branches of nervous system vary “reciprocally, coactively or independently” [89 p.438] as they are influenced by higher neural systems. Automatic bodily functions include the beating of the heart; appropriate blood flow to all organs and body cells; the maintenance of blood pressure and blood sugar levels, breathing, eating, digesting, eliminating, immune function, having sex and for women, giving birth [90]. Included in the repertoire of automatic bodily functions for the female is the growth and development of the fetus to maturation during pregnancy.

Hans Selye [91] first used the word ‘stress’ in 1956 to conceptualise the non-specific generalised physiological syndrome of responses which occur within the living organism when exposed to one or many stressors such as heat, trauma, illness, physical or psychological threat. The stress system maintains a “basal circadian tone” and is activated by higher cortical functions at the level of the hypothalamus and brain stem in response to stressors [92 p.303]. The autonomic, neuroendocrine and immune systems interact in multiple, dynamic regulatory processes, in both the central nervous system and the periphery, to enable the body to adapt to and accommodate the changes brought about by regulatory and restorative reactions to internal and external stimuli to maintain homeostasis and achieve a sense of wellbeing [89, 92]. These stimuli include psychological states and the social world. The responses to these stimuli vary from individual to individual and can be adaptive or maladaptive.

When animals, including humans, experience stress, two main systems react and interact. One is the hypothalamic pituitary adrenal axis (HPA axis), the other is the sympathetic axis of the autonomic nervous system. The HPA axis stimulates the release of corticotrophin-releasing hormone (CRH), adrenocorticotropic hormone (ACTH) and cortisol. “CRH initiates and perpetuates the stress response and affects overall arousal and autonomic
activation” [92 p.303]. The sympathetic axis stimulates the release of catecholamines: epinephrine and nor-epinephrine [93]. These hormones are called stress mediators. Definitions of the key terms are provided in the glossary in Appendix B.

The effects of acute stress on the body reflect the brain’s appraisal of the perceived threat and the stimulation of physiology and behaviour to be able to respond appropriately [90, 94, 95]. Table 2.1 provides a summary of behavioural and physical changes during acute stress [92].

<table>
<thead>
<tr>
<th>Behavioural adaptation: Adaptive redirection of behaviour</th>
<th>Physical adaptation: Adaptive redirection of energy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased arousal and alertness</td>
<td>Oxygen and nutrients directed to the CNS and stressed body sites</td>
</tr>
<tr>
<td>Increased cognition, vigilance and focused attention</td>
<td>Altered cardiovascular tone, increased blood pressure and heart rate</td>
</tr>
<tr>
<td>Euphoria or dysphoria</td>
<td>Increased respiratory rate</td>
</tr>
<tr>
<td>Heightened analgesia</td>
<td>Increased gluconeogenesis and lipolysis</td>
</tr>
<tr>
<td>Increased temperature</td>
<td>Detoxification from toxic products</td>
</tr>
<tr>
<td>Suppression of appetite and feeding behaviour</td>
<td>Inhibition of growth and reproduction</td>
</tr>
<tr>
<td>Containment of the stress response</td>
<td>Containment of the inflammatory/immune response</td>
</tr>
</tbody>
</table>

The stress response works well when it is of limited duration – long enough to deal with the perceived threat. However, prolonged or chronic stress may impair growth and development and depending upon genetic, environmental and developmental factors may “result in a variety of endocrine, metabolic, autoimmune and psychiatric disorders” [92 p.316].

2.2.1 Chronic Maternal Stress and Preterm Birth

An assumption underpinning this research is that women whose needs for holistic wellness are being met are more likely to be healthy. Conversely, “women who have chronic stress are more likely to experience physical and mental illness” [96 p.72]. While maternal stress is a known predictor of preterm birth, the etiological mechanisms are not well described in the available research, possibly because there are so many confounders [12, 93, 97]. The effects of prolonged stress on the pregnant woman and her baby can be deduced from considering the effects of prolonged stress. Even relatively low-level, chronic stress can have significant
effects if it is prolonged. What is known physiologically is that in chronic stress blood flow to the uterus is reduced [95]. Reduced uterine blood flow is associated with babies being small for their gestational age and also with preterm births [97]. The role of the fetus in triggering the initiation of labour is well known [95]. The role of the fetal HPA axis, however, is not clear. One possible mechanism is that the increased levels of cortisol from chronic maternal stress crosses the placenta and passes into the fetal circulatory system where the rising cortisol level stimulates the fetal HPA axis which in turn initiates the cascade of hormones involved in labour [98, 99].

There are three interconnected pathways from stressors to preterm birth [97]. Firstly, stress in pregnant women can stimulate the maternal HPA system and therefore the production of cortisol. Cortisol regulates the increase of hypothalamic CRH and placental CRH which may stimulate preterm birth [100-102]. As a result, placental CRH plays an important role in gestational length; a rise in fetal cortisol is a predictor of preterm birth [100, 103]. Secondly, chronic maternal stress can suppress immune function, leading to inflammation and infection which are also associated with preterm birth [93, 97]. Lastly, chronic stress is associated with living in low-socioeconomic situations [104] and experiencing or participating in high risk behaviours such as poor diet, unsafe housing, and domestic violence [93, 97]. The connection between unmet needs and chronic maternal stress are discussed in Section 3.2.2.3.1 in Chapter Three. The theoretical arguments I am presenting here will prove pivotal to understanding and predicting preterm births, and ultimately to intervening to prevent them via women’s antenatal groups.

The theoretical relationship between maternal stress and preterm birth is supported in the research literature. For example, increasing maternal anxiety or psychological stress has been found to significantly increase uterine artery resistance [105] and stimulate premature uterine contraction [100, 106]. Decreasing uterine blood flow affects oxygen and nutrient transport to the fetus; this causes fetal stress, resulting in growth restriction and low birth weight [105, 107]. When the fetus is stressed, there are high levels of placental CRH and if the high levels continue for a long period, they may ultimately initiate preterm labour and birth [100, 103, 108]. Maternal CRH levels at 16–20 weeks gestation are a good predictor of whether the birth will be preterm, term or post term [101]. Research by Wadhwa et al [102] has shown that CRH levels could affect preterm birth, and that increased CRH levels at 28–30 weeks of gestation accurately predict gestational length.
Discussion

In this section I have argued that chronic maternal stress is caused by a multitude of factors including psychological, physiological and socio-economic influences. These factors have been shown to be causally related to preterm birth [12, 102]. There are mediating factors that seem to influence whether a particular woman experiences a preterm birth. These factors are related to a woman’s response to stress such as her perception of the stressful event, the other stressors in her life, the timing of stress during pregnancy, whether the woman lives a healthy or unhealthy lifestyle, the number and severity of other stressful life events and her level of social support [93, 97]. Pregnant women who feel they have control over what happens to them have been found to have reduced levels of cortisols in their peripheral circulation [109]. Therefore, a primary health care approach would be to increase a woman’s sense of control, prioritise stress reduction where possible, and to optimise women’s psychological and/or physiological resilience. These outcomes will, theoretically, reduce maternal CRH and cortisol levels and placental CRH levels [93] and therefore minimise or even avoid fetal cortisol level increases prior to term [110]. In this way the risk of preterm birth will be potentially reduced [107, 110].

2.3 Primary Health Care

The basic premise of a primary health care approach is better health for all [111]. Health is defined holistically by WHO [111] as a state of complete physical, mental, and spiritual wellbeing as well as emotional, social and cultural wellbeing across the person's life span. With a primary health care lens, ‘health’ is placed within the broad environmental context of the individual and their community, and includes the environmental determinants of health such as the social, cultural, political, economic and geographical aspects of the environment. Therefore the emphasis of primary health care is on health promotion, and disease and injury prevention together with activities aimed at reducing health inequalities [112, 113].

World Health Organisation has identified five key elements to achieving better health for all:

- reducing exclusion and social disparities in health (universal coverage reforms)
- organising health services around people's needs and expectations (service delivery reforms)
integrating health into all sectors (public policy reforms)

pursuing collaborative models of policy dialogue (leadership reforms)

increasing stakeholder participation [112].

Consistent with a primary health care philosophy, in designing the midwifery/primary health care approach to preventing preterm birth that was used in this study I ensured that:

- the focus was on the factors that create health and disease in the community rather than on trying to find individual factors
- health status was conceptualised as an outcome of multiple determinants (discussed below under Maslow’s hierarchy)
- disparities between women in higher and lower socio-economic groups were ameliorated by a midwife-led woman-centred group
- networks between women were built to help promote the health of women and their babies.

2.4 Maslow’s Theory of Human Needs

A search of the literature showed that Maslow’s theory is still in use today for understanding human motivation and behaviours, including health behaviours. A hierarchy is defined as a system for organising people or ideas into different levels of importance [114]. Motivation is defined as a drive or a desire to fill a need or address a deficit; it is about the reasons for an action or the inducement to act [115]. I’ve used Maslow’s landmark definition of a ‘need’ as his definition has had long-term value and fits the purposes of my study as he states that something is a need if:

(1) the chronic lack of the satisfier produces pathology, especially if this lack occurs early in life (2) restoration of the missing satisfier, it is not too late, restores health (more or less) and cure illness (more or less) to the extent that the pathology is not irreversible (3) suitable availability of a real satisfier throughout the life span avoids pathologies [116 pp.382,384].
I therefore understand from Maslow’s definition of ‘need’ that unmet human needs create disease directly and/or indirectly. For example under-nutrition causes starvation, nutritional deficits and a stress response. Maslow’s theory is particularly relevant to midwifery because of the holistic nature of his hierarchy of needs. Maslow argues that this hierarchy explains the motivations for human behaviour; that is, that people are motivated by the desire to satisfy a range of unmet needs [88] (see Figure 2.1).

**Figure 2.1: Maslow’s Hierarchy of Needs’ Theory**

![Maslow's Hierarchy of Needs](image)

This section begins by outlining the framework of Maslow’s hierarchy of needs with its five levels. In Maslow’s hierarchy, the base level includes the most basic physiological needs or necessities for survival. This categorisation is meant to show that the lower level needs have first priority and must be met, at least to some extent, in order for the person to be able to turn their attention to meeting their higher-order needs [88]. As soon as one need is satisfied, another emerges. In this way, humans can be understood to have unlimited needs and, therefore, they ceaselessly feel motivated to meet unsatisfied needs. This section ends with discussion the development of the tool as a way of analysing holistic health data (in Chapter Five) over the course of the antenatal groups.
2.4.1 The Physiological Needs

The physiological needs are the basic needs such as air, food and fluids. They are satisfied by breathing, eating and drinking, as well as adequate sleep, physical exercise and sexual release. The physiological needs also include “the concept of homeostasis which refers to the body’s automatic efforts to maintain a normal state of health” [88 p.15]. A human who lacking everything in life would be motivated to have these physiological needs met prior to any other needs. For example, if the person cannot breathe properly or is starving, then that person longs for oxygen or food. A basic, unmet need results in the person having an all-consuming motivation to have that need met [88]. Having basic physiological needs met means greater biological efficiency, greater longevity and less disease, as well as better sleep and a good appetite. However, unmet physiological needs lead to physiological and psychological stress which, as discussed above, is related to ill health generally and in the case of pregnant women, is linked to preterm birth [88].

2.4.2 The Safety and Security Needs

The next layer of needs on the hierarchy includes:

- “safety and concern for personal security
- the state of being stable and dependent
- protection from violence
- freedom from fear, anxiety, and chaos
- security of body, health, family, and employment
- Security of personal property
- social structure, law and order” [88 p.18].

A human who is homeless, and has inadequate access to safe and secure shelter would have the motivation to have those safety needs met prior to any other needs [88]. “Satisfaction of the safety needs produces, at best, a feeling of relief and relaxation” [88 p.57]. Feeling relaxed is an expression of parasympathetic dominance of the autonomic nervous system. The
need to be safe is a powerful unmet need and feeling unsafe causes a stress response which for pregnant women is linked to preterm birth.

2.4.3 The Love and Belonging Needs

Love and belonging needs are social needs and intrinsic within affectionate relationships. These needs include:

- to love and to be loved
- to give and receive care, affection, warmth, appreciation
- support by friendships and family
- sexual intimacy
- support from others, including interactions and associations with both primary and extended relationships [88, 116, 117]

Maslow said, “Two people who love each other well will react to each other’s needs and their own indiscriminately, indeed the other’s need is one’s own need” [88 p.57]. Being loved is import to health because “a person who is loved will be happier and healthier than one who is rejected and unloved” [88 p.38]. Being unloved or not feeling as if one belongs are indications of powerful unmet needs and cause a stress response which, in pregnant women, is linked to preterm birth.

2.4.4 The Self-Esteem Needs

Higher needs satisfaction produces more desirable subjective results, that is, “more happiness, serenity and richness of the inner life” [88 p.57]. For a person to have self-esteem (pride in one's person), one needs to be happy with one's opinion of one's self and also with the opinions of other people. To face the world with confidence, one needs to feel strong, to be happy with one's achievements, to have a feeling of adequacy or competence and to feel one is in charge of the situation. Also involved is the need to be able to make one’s own decisions, free of the influence of others. Maslow said, for example, that “people who have enough basic satisfaction tend to develop such qualities as loyalty, friendliness” [88 p.58]. The needs for satisfaction of self-esteem produce feelings of increased self-confidence, worth, strength, capability and adequacy, and of being useful and necessary in the world [88, 116, 117].
Feeling worthless or inadequate are indications of powerful unmet needs and they cause a stress response which, for pregnant women, is linked to preterm birth.

2.4.5 Self Actualisation Needs

The need for self-actualisation becomes dominant after a reasonable fulfillment of love, belonging and self-esteem needs [88]. Self-actualisation needs are the need for:

- creativity
- personal growth
- spiritual experiences
- spontaneity
- realisation of potential
- expressing acceptance of the past
- forgiveness of self and others [88, 116, 117].

People living at the level of “self actualisation are found simultaneously to love mankind and to be the most developed individuals” [88 p.58]. Satisfaction of “self-actualisation needs leads to greater, stronger and truer expressions of one’s unique self” [88 p.58]. Maslow said that, “What humans can be, they must be; they must be true to their own nature” [88 p.22]. Not growing as a person, not being creative or self-expressive, and living according to rigid expectations of others suppresses the inner need for self-actualisation. These are powerful needs and if not met, cause a stress response which, for pregnant women, is linked to preterm birth.

Discussion

Maslow’s hierarchy of needs provides a useful framework to consider the holistic health of women at risk of preterm birth and to take account of the complexity of their lives. For the purposes of this thesis, health is defined as a state of complete physical, psychological and spiritual wellbeing and not just the absence of disease [118]. ‘Holism’ in this context, refers to the wellbeing/health of the whole woman, encompassing all factors that impact on the woman’s body, mind and spirit. However, a search of the midwifery and nursing textbooks
highlighted that there is no existing clear, specific model that conceptualises holistic health. Maslow wrote a well-accepted theory that simply and graphically describes a hierarchy of human needs. I believe, in agreement with many nursing and midwifery theorists, that unmet human needs lead to disease and ill health, both physical and psychological [119-124].

The key assumption behind Maslow’s hierarchy of needs is that all humans share the same basic physiological needs. Without meeting the physiological needs at the base of the hierarchy, humans will not be able to move upward in the hierarchy to meet subsequent levels of need and hence grow as human beings. Maslow’s theory has been criticised because it suggests that a human cannot meet higher-level needs unless lower-level needs are sufficiently met. Although there are explorations of situations where Maslow’s theory is inadequate, overall I see it as a useful guiding framework for this research project. It is reasonable to postulate that when human needs are not fulfilled; physical and psychological stress result bringing with them an increased risk of disease. Equally, when a person is ill it is reasonable to postulate, as many nurse theorists have done, that supporting the person in their efforts to meet their human needs promotes healing and rehabilitation [120-122, 125, 126]. Adapting Maslow’s theory to apply to childbearing women and preterm birth required little alteration.

A strength of Maslow’s theory of human motivation, from a midwifery perspective, is that he believes that becoming a self-actualised, holistically satisfied human being is the goal of all people. This holistic perspective is consistent with the midwifery philosophy described in Section 2.6.1. Maslow’s theory is also consistent with the bio-psycho-social-spiritual paradigm that considers a human being as body, mind and spirit [96, 127]. Maslow’s theory emphasises the positive nature of humankind and the free will that is necessary to be able to change [88]. Maslow’s concept of wholeness, like midwifery’s [96, 127-129], consider the interactions between body, mind, emotion, spirit, family, community and environment. Maslow’s theory focuses on the motivations behind human behaviour and sees individuals as powerful participants in their own lives, which is again, consistent with midwifery [96, 128, 129]. Therefore, following Maslow’s theory, if a woman is consistently able to meet her needs, then health is much more likely than if a her needs are consistently not met. A woman with one or more unmet needs would be more likely to be unhealthy and at an increased risk of disease; including preterm birth. As a result, Maslow’s hierarchy of needs was adapted to create a framework to help the midwife understand, assess and support holistic health and wellness of the childbearing women in this study.
I made qualitative judgements about women’s holistic health based on multiple observations and conversations with each woman. I used Maslow as a loose framework for guiding my questions when interviewing each woman to ensure that I asked the right type of questions and I was discerning about the right time to elicit relevant information about each woman’s needs and the extent to which these needs were met. Holistic health is clearly a concept which is both broad and abstract and cannot be ‘measured’ or ‘determined’: indeed these words are associated with reductionistic ways of thinking about health and are not relevant to the assessment of holistic health.

The way in which I conducted holistic health assessment is not presented as if it is precise or as if it is a validated assessment tool which indeed it isn’t. I wanted some way to think holistically both in terms of assessing women’s health status and in terms of considering how to address sensitive and important human needs with each woman and within the group.

**Conclusion**

Maslow’s theory of human needs can be a framework for midwives to assess health and care for women and their baby. The theory is holistic in nature in that Maslow considers humans as the balanced connection between body, mind and spirit. Maslow’s theory is hierarchically categorised with the most basic needs for survival at the lowest level. This reminds midwives to be considering basic needs for food and safety are met, at least to some extent, before trying to influence higher-order needs. Therefore, the midwifery health assessments based on Maslow’s theory can help women to see all the factors that influence their health and the health of their baby. Midwives can then educate and encourage women to meet their needs and avoid risks to their health.

**2.5 Feminist Theory for Antenatal Groups**

**2.5.1 Feminism**

Feminism is the theory, research and practice of identifying, understanding and changing the intrapersonal and social factors that sustain women’s disempowerment [130]. Feminism is women-centred, beginning and ending with women’s experiences. Feminists are concerned with raising women’s consciousness so that they can make empowering changes in their own lives. Consciousness raising helps women to see the sexism inherent in different aspects of culture, and to appraise reality more accurately [8]. Feminism is an important foundation for
midwifery because midwifery is also a women-centred discipline. The philosophy and principles of feminist research and practice as applied to this study are presented in Chapter Four: Methodology.

2.5.2 Feminist Group Processes

The process for conducting midwife-facilitated, group-based antenatal education used in this study was based on an adaptation by Fahy [131] of the principles of feminist group processes which were first described by Wheeler and Chinn [132, 133]. These principles have been modified for the present study and are presented below.

2.5.2.1 Principles of Feminist Group Processes and Agreements for Consideration

Common principles and agreements that are associated with feminist groups and which were adopted by the researcher for facilitating the groups in line with the feminist philosophy underpinning this research project are:

- Feminist ways of relating are based on openness, power sharing, and not necessarily being ‘perfect’ but instead being respectfully and sensitively honest [131].

- A distinguishing feature of a feminist group is that the women all have the same purpose. Therefore, identifying the group purpose is a crucial first step. This unity of purpose helps women to reach a degree of cohesion which supports women to open their lives to each other [132, 133].

- The group norms are developed by women and facilitators who ideally work together effectively. Mutual trust, respect, empathy, caring and responsibility are important values that each woman needs to make a commitment to [132, 133].

- The group should be large enough to create a sense of group support and small enough for every member to feel a sense of belonging [134]. A large family size is ideal – that is from 8 to 12 members.

- Women join in a group with different backgrounds, beliefs, and personalities but these differences are valued resources to strengthen the integrity of the group [132, 133].

- The facilitator/s have formally defined roles and powers (related to their position descriptions) but they are considered and positioned as being no more important than
other group members. For many activities, the facilitators will be equal group members [131].

- All women of the group are valuable and equal; each member should have an equal opportunity to share their experiences and feelings.

- Language and non-verbal communications should aim to reduce the power imbalances between women and facilitators.

- How each woman participates is an individual decision. Participation will no doubt vary from activity to activity [131].

- Having a private, comfortable and welcoming space to meet as a group helps women to feel safe to share and express their feelings and thinking about their expectations.

- The group should be organised to allow for sitting in a circle so that everyone has eye contact with one another.

- Each group member should aim to be self-aware and, at the same time aware of the feelings of the other group members [132, 133].

- In this research, the facilitator of the group aimed to promote self awareness and awareness of, and respect for, others.

- Responsibility for effective group process rests not just with the facilitator but with all group members [131].

- Feminists value diversity of opinion, belief, and expression whilst simultaneously acknowledging that this can be quite challenging [131]. Women should feel able to question (or challenge) each other about group participation issues.

- Conflict is part of all human interaction and relationships; it may emerge in any stage of group meeting. Conflict should be acknowledged and addressed respectfully so that the group is able to move forward and be strengthened [131].

- Group participation has an ethical dimension that means that women should both give to, and receive from the group. It also means that no one should dominate the group with their own needs or opinions [131].
During participation only one person speaks at a time when called on to do so by the facilitator. There is an agreed way of indicating a desire to speak; usually by raising hands.

When one is speaking one should be sensitive to sharing time equally among group members and one should not talk too much or too often. When one is listening one should not interrupt or talk over the speaker.

It may happen that women, at different times, may find themselves emotional and/or upset and then the group may need to give support to some extent. One of the facilitators should offer to take responsibility for being a ‘supportive other’ to assist the individual to take immediate and appropriate self-care. The role of the ‘supportive other’ will not be that of therapist [131].

In summary

Feminist group principles and agreements emerge from an understanding of group processes. These principles and agreements relate to how to organise effective group-based antenatal education in Thailand. The feminist group principles and agreements above had to be modified to support the health empowerment of Thai women in a culturally suitable way. These changes occurred during the study and are discussed in the finding and conclusion chapters (see Chapters Five, Six and Seven)

2.5.2.2 Stages of Feminist Group Processes

Feminist group processes include stages of group forming, checking-in, working, closing and evaluating [132, 133]. Please also see Appendix 2 for the organisation for the groups and the detailed stages.

2.5.2.2.1 The group forming stage (First meeting)

This stage is concerned with a creating the friendly environment, group norms and midwife or researcher’s roles and ethics. The stage involves an equal atmosphere where everyone feels they are on the same footing during group discussion.
2.5.2.2.2 The check-in stage

The group begins with checking in with each other. Honouring this stage creates the commitment to the power of the group. The check-in aims to involve each woman, including women who are usually silent. The aim of checking in is to help each woman to leave other matters behind and to focus on the shared group purpose. During the check-in, each woman is invited to talk briefly about any matter that she feels she needs to address as a way of checking in or connecting with the group. During the check-in, each woman has an opportunity to share her own specific expectations for the gathering so that it can be integrated into the group process [132, 133].

2.5.2.2.3 The working stage

In the working stage, the agenda for the content of each meeting is woman-centered. This stage creates a commitment to power-sharing within the group and aims to promote group integration. It is also geared to raise individual and group consciousness and to encourage shared responsibility for the process of the meeting.

The key strategy of the working stage is a shared responsibility for facilitating group interactions [132, 133]. Each woman is encouraged to participate and listen respectfully. Women share experiences freely and directly and this leads them to trust each other and to feel better understood. Additionally, women should feel that they are more accepting and accepted and feel a sense of loving and belonging. In this way, a climate of collaboration and mutual respect is created.

2.5.2.2.4 The closing stage

The aim of the closing stage is to help each woman reflect on what had a significant effect on her during the process [132, 133]. Closing is also used to close a lengthy or intense discussion on a topic. “Reflection and evaluation is included in this stage” [132 p.36, 133]. The closing stage is “the time for women to consolidate their knowledge and experiences, and to learn how to transfer what they have learnt in the group to daily life”[134 p.267].

The last ten to fifteen minutes are devoted to group reflection on, and evaluation of, the meeting. The strengths and weaknesses of the group meeting are identified and members plan the agenda for the next meeting. During closing, women are given time to reflect on their experiences within the group. Wheeler and Chin [132, 133] refer to closing as an important
part of the meeting where women are invited to give accolades to each group member, to affirm something that each woman wants, to show that her needs are important and valid and to give constructive criticism aimed at improving group processes.

2.5.2.2.5 The evaluating stage (After giving birth)

This stage is organised after birth, concerned with a collective evaluation including the impacts of this on women’s health and wellbeing including networking or friends who influence women to have a healthy pregnancy.

When feminist group processes are adapted into antenatal education to improve the interaction of women who are at risk of preterm births, it can be “a powerful strategy for transformation” [132 p.52, 133]. The way in which feminist group process was adapted to group based antenatal education in Thailand is addressed in Chapter Four.

2.6 Midwifery Theory

2.6.1 Philosophy of Midwifery (The Australian College of Midwives)

“Midwife means with woman and this meaning shapes midwifery’s philosophy, work and relationships. Midwifery is founded on respect for women and on a strong belief in the intrinsic value of women’s work in the bearing and rearing of each generation. The processes involved in pregnancy, childbirth and early parenting are viewed as profound and precious events in each woman’s life. These events are also seen as inherently important to society as a whole. Midwifery is emancipatory because it protects and enhances the health and social status of women, which in turn protects and enhances the health and wellbeing of society. Midwifery is a woman-centred, political, primary health care discipline founded on the relationships between women and their midwives” [135].

ACM Philosophy statement for midwifery [135]. Good midwifery:

- Focuses on a woman’s health needs, her expectations and aspirations and encompasses the needs of the woman’s baby, and includes the woman’s family, and her other important relationships and community, as identified and negotiated by the woman herself
➢ is holistic in its approach and recognises each woman’s social, emotional, physical, spiritual and cultural needs, expectations and context as defined by the woman herself.

➢ recognises every woman’s right to self-determination in attaining choice, control and continuity of care from one or more known caregiver

➢ recognises every woman’s responsibility to make informed decisions for herself, her baby and her family with assistance, when requested, from health professionals

➢ is informed by scientific evidence, by collective and individual experience and by intuition

➢ aims to follow each woman across the interface between institutions and the community, through pregnancy, labour and birth and the postnatal period so all women remain connected to their social support systems; the focus is on the woman, not on the institutions or the professionals involved

➢ includes collaboration and consultation between health professionals”.

In my study I used these characteristics of good midwifery to guide me in my practice to work effectively with Thai women.

2.6.2 Midwifery Partnership

This section describes how midwifery partnerships guide midwives to work effectively with individuals and groups of women. The midwife/woman partnership is a woman-centred approach where the midwife and the woman work together with the woman’s agenda/needs being the focus of the relationship. A midwifery partnership is a ‘friendship-like professional relationship’ that is based on trust. The midwife is ‘present’ to the woman and supports her to be in control of decision-making [136]. The woman’s partner and family are fully involved in the care as the woman chooses.

Midwives recognise the value of ‘being female’, ‘being accessible’, ‘giving support’, ‘being with the woman’ [136 p.325]. At the same time, the important factors for women are: ‘being
female’, ‘seeking professional care’, ‘seeking trust, respect, equality and openness’, ‘seeking 
active participation’, ‘self-responsibility and control’ [136 pp.324-325].

As mentioned already, midwifery is woman-centred and this means working with a woman to 
satisfy her needs. “Individual negotiation is a process to guide a woman and a midwife to 
work together by power-sharing, decision-making, reciprocal right and responsibilities” [136 
p.329]. Negotiation is also based on ‘equality and reciprocity’ between the midwife and the 
woman and this helps to build a good relationship [136 p.328]. When a woman has 
exchanged or shared with the midwife as an equal, she will have positive feelings and a close 
relationship. Women and midwives also believe that equality in decision making with 
reciprocity is the way to achieve a sense of personal control and as mentioned previously in 
this chapter, a sense of control is associated with reduced glucocorticoids in the woman’s 
peripheral circulation [109]. In a partnership, starting with negotiation, equality and 
reciprocity form the foundations of continuity of care. In this type of relationship it takes time 
to build trust. Trust develops over the time which elapses from early pregnancy through to 
about six weeks post-partum. When a woman and a midwife trust in each other, they are more 
likely to share information and to make joint decisions. The commitment to share the power 
and responsibility are also important for women and midwives to create their relationship. 
The two parties share the power and responsibility of the important tasks at hand. They are 
willing to expose their whole truth or vulnerabilities. Midwives are responsible for their 
judgments and actions whereas women take responsibility for the results of sharing power and 
decisions [136-139].

‘Empowerment and emancipation’ in midwifery partnerships aim to encourage women to 
understand their personal power, strengths, sense of autonomy and confidence. A woman can 
them trust in herself enough to be able to use her inner resources to adapt to “the challenges of 
pregnancy, birth and the realities of parenting and breastfeeding a newborn, all of which are 
huge achievements” [140 p.21]. If a woman is not empowered, her potential, her inner self 
and her inner power are suppressed, and this can culminate in a loss of self-confidence [140]. 
Empowerment and emancipation can help women to create their support networks rather than 
depending on midwives. Working with women in a midwifery partnership helps women to 
take responsibility for their own health care and therefore they can detect health problems 
early, before they become serious. This self responsibility is particularly important for women 
who are at risk of preterm birth. The following section outlines an approach to women’s
antenatal groups that has had some success in working with women in lower socio-economic groups and in lengthening pregnancies for these women.

2.6.3 The CenteringPregnancy Group Prenatal Care Model

The CenteringPregnancy group prenatal care model guided the planning of the antenatal group-based intervention used in this study. The CenteringPregnancy model emphasises dynamic group antenatal care. In this model of care, the maternity health providers aim to empower and encourage pregnant women to take responsibility to care for their own health by sharing experiences, exchanging information, learning and developing connections with other pregnant women [5, 141]. The design of the model includes health assessment, health education, and support activity as essential elements of the model [5, 141].

2.6.3.1 Health Assessment

The traditional model of antenatal assessment is that obstetricians or health care providers assess pregnant women. Following this assessment, many pregnant women still do not know their health status. In contrast, using the CenteringPregnancy model, after pregnant women have physical and pelvic examinations, they will join the group [5]. Within the group, pregnant women complete their own self assessment by measuring their own and each other’s weight and blood pressure and record this information on their charts [5]. In private space adjacent to the group space, a licensed health care provider measures fundal height and listens to fetal heart rate. This way empowers and encourages each pregnant woman to take responsibility and care for their own health and their baby’s health. Each woman has an opportunity to share her concerns, to review the progress of her pregnancy. Moreover, women will observe and compare their health with other women [5, 141]. Therefore, they have the opportunity to understand their health status and the health of their babies and to maintain their prenatal care charts.

2.6.3.2 Education

The educational session, facilitated by the health care provider, is divided into two main sections: formal discussion and health education. “In health education, women have access to handouts, worksheets and videos” [5 p.49]. Topics relevant to pregnancy and post-partum are discussed in these sessions. The following list is a guide to what may be included in the sessions [5 p.49, 141, 142 p.287]:

1. Health assessment
2. Health education
3. Support activity
I used this list as a basis for deciding what topics to suggest at the beginning for the women enrolled in the groups in Thailand.

### 2.6.3.3 Support Activities

Support activities place an emphasis on connection, sharing and exchanging experiences and information between the pregnant women’s group and others, including partners, neighbourhoods and communities [141]. During each session, pregnant women develop their network by exchanging telephone numbers and addresses [141]. Positive social support and self-esteem can provide a sense of mastery and reduce feelings of helplessness [5].

### 2.6.3.4 The Essential Elements of the Model

The CenteringPregnancy model invites 8–12 pregnant women with similar gestational ages (14–16 weeks) to meet together in a group. Ten sessions are conducted for approximately 60–90 minutes each during the prenatal period. A maternity health care provider leads each session. Within the group, women focus on the experiences of pregnancy and parenting [5, 141]. The essential elements of the CenteringPregnancy model that guide maternity health providers to work effectively and facilitate the group. The remainder of this section lists and describes those elements [5, 141 p.399-401, 142 p.289]:

- “early pregnancy concerns, adjustment to pregnancy, fetal development
- nutrition, lactation, and early infant care
- physical exercise and psychological wellbeing
- harm from substance abuse and appropriate referrals
- preparation for childbirth including relaxation and breathing methods
- breastfeeding and infant feeding
- baby care – items needed and early coping techniques
- parenting techniques and self-esteem building
- post-partum issues including contraceptive methods and postpartum depression.
- communication, personal relationships and sexuality”
➢ **Health assessment occurs within the group**

The aim of physical assessment is to encourage women to take responsibility for their own health and the health of their babies. This includes listening to the fetal heartbeat and measuring the fundal height by a licensed health care provider during group time and in the group space. Health assessments occur on the mat on the floor in a corner of the group room [5, 141].

➢ **Women are involved in self-care activities**

Pregnancy is seen as a normal life event. Women are seen as competent to take responsibility for their own health [141]. Women assess each other’s body weight and blood pressure, and then record the data [5, 141].

➢ **A facilitative leadership style is used**

The leader facilitates women in the group to address their needs and share their experiences. The leader allows time for listening and encourages women to share knowledge with each other. When midwives support women to be empowered, the women can obtain the awareness to use their own strengths and the confidence to use their own knowledge [5, 141].

➢ **Each session has an overall plan; attention is given to core content**

Educational sessions start with the planned content which is based on normal gestational changes and childbirth preparation and parenting [141]. The plan for each session guides a maternity health provider and a co-facilitator to work effectively with pregnant women. Each session begins with women completing a self-assessment sheet; the aim is for them to identify their problems and needs. Using this process, some women identify concerns and needs that were not on the plan for the session. Knowing what women are actually concerned about allows the facilitators to be able to deal with the situation to balance the plan with the group-generated discussion [141].

➢ **There is stability of group leadership**

In most cases, women want continuity of care throughout their pregnancy rather than fragmented care [141]. Therefore, using the same facilitator for the group is important because the facilitator aims to gain the trust of the group. The facilitator ensures that each
woman feels known by them. In this way, women become confident in the group and the leader. “The stability of group leadership helps to develop strength of group process and build the sense of empowerment of women” [141 p.401].

- **The group is conducted in a circle**

  The circle emphasises the equality of women in the group [141]. When pregnant women listen to each other, they begin to feel confident to address their health concerns [141]. A sense of empowerment ensues and women believe in their own ability and can make health care decisions based on their own experiences.

- **Group composition is stable but not rigid**

  Group stability is desirable because it enhances the natural bonding and relationship of women in the group. However, if group members do drop out, new members can replace them [141].

- **Involvement of family support people is possible with group permission**

  Whether the group is open to support people or not is a group decision that is reached by consensus. Sometimes women may not want support people attending, particularly men, because trust and confidentiality within the group is important for women due to the sensitive issues that are shared [141].

- **Opportunity for socialisation is provided**

  The focus of socialisation is to build connections between the women in the group, their partners, their neighborhoods and their communities [141]. Women have an opportunity to find companionship and develop their networks by sharing experiences and exchanging telephone numbers [141]. Also there is ongoing assessment of the program which is evaluated in terms of women’s satisfaction and health care providers are also assessed.

The Centering Pregnancy model seems to be compatible with feminist group process but Rising [5] has not explicitly grounded the model in feminism. The model would have been stronger had it been so. For example, the key content of each meeting is predetermined by Rising’s agenda, not by either women’s choice or women’s health needs. That predetermination of the education agenda is not only contrary to feminist philosophy, it is also
inconsistent with midwifery philosophy, in that midwifery “focuses on a woman’s health needs, her expectations and aspirations” [143, 144].

The second concern with Rising’s model is that the essential elements of the model, “health assessment occurs within the group and women are involved in self-care activities”. These elements are difficult to provide for Thai women because of profound cultural differences, most importantly, differences in the much less autonomous role of the nurse/midwife Thailand. Another concern is the essential elements of the model, “stability of group leadership”, is inappropriate for my research as it is focused on the equality of the women and the midwives in the group. Therefore, CenteringPregnancy, as conceptualised by Rising et al cannot be implemented in it original conceptualisation, as midwife-only care, because of the high-risk status of my participants. The women in my groups were at medical risk of preterm birth but this was not the case in the CenteringPregnancy studies in the USA, the UK and Australia (where the women were not medically diagnosed as being at risk of preterm birth).

In Section 3.4 of Chapter Three, I have critiqued the effectiveness of the CenteringPregnancy program by examining the formal evaluation of the model.

**2.7 Conclusion**

This chapter has presented the theoretical foundations that influenced my understanding of the association of maternal stress with preterm birth, including how to work effectively, culturally and suitably with Thai women who are at risk of preterm birth. Section Two discusses the neurophysiology of stress in childbearing women. I argue that maternal stress results from multiple psychological, physiological and socio-economic factors have been revealed to be causally related to preterm birth [12, 102]. These factors are related to a woman’s perception of the stressful life event, to the timing of stress during pregnancy, to whether the woman lives a healthy or unhealthy lifestyle, to the number and severity of other stressful life events and to her level of social support [93, 97].

Section Three considers primary health care principles and the multiple determinants of health, many of which are social and economic. In this section I contend that the focus of primary health care should be health promotion and disease prevention at the population level, and that there should be equity in health care provision.
Section Four presents Maslow’s theory and framework of human needs used to conceptualise childbearing women’s needs. I provide a brief overview of Maslow’s theory and identify it as a useful guiding framework to this study because, like midwifery, Maslow’s concept of wholeness considers the interactions between body, mind, emotion, spirit, family, community and environment. It is reasonable to claim that when women’s needs are not fulfilled, physical and psychological stress including potential disease result. I argue that if a woman is able consistently to meet her needs, then health is much more likely than if her needs are consistently not met. A woman with one or more unmet needs would be more likely to be unhealthy and at an increased risk of disease, including preterm birth.

In Section Five feminism and feminist group processes were examined. Feminism is a significant underpinning for midwifery practice because midwifery is also a women-centred discipline. I conclude that not all aspects of feminist group processes are appropriate to conducting effective antenatal groups, and that they required adaptation to make them culturally suitable. Hence, in this study, feminist group principles had to be modified to support the health empowerment of Thai women.

Section Six presents midwifery theory included a discussion of the ‘philosophy of midwifery’ in Australia (ACM), the ‘midwifery partnership’ and the ‘CenteringPregnancy group prenatal care model’. I conclude that for working with women from lower socio-economic backgrounds and in order to lengthen pregnancy for these women, midwifery philosophy and midwifery partnership can facilitate women to be aware of and take responsibility for their own health. Women can detect health problems early, before they become serious. This self-responsibility is particularly important for women who are at risk of preterm birth. The next chapter presents a review of the literature about predicting and preventing preterm birth.
CHAPTER THREE

LITERATURE REVIEW: PREDICTING AND PREVENTING PRETERM BIRTH

3.1 Introduction

This chapter reviews the medical and midwifery research literature which is aimed at predicting and/or preventing preterm birth. Approximately 45% of preterm births are spontaneous and have unknown causes [13, 15, 16, 145]. The processes used to prevent preterm birth can be classified into primary, secondary and tertiary interventions [16, 146]. As a midwife engaged in antenatal care (primary health care) I am involved in the primary prevention of preterm birth whereas medical treatments are aimed at secondary and tertiary prevention. Hence, this study focuses on developing an evidence-informed, theoretical understanding of the causes of preterm birth so that effective primary prevention strategies can be developed.

The chapter is organised into three main sections. In Section 3.2 the established medical theories and evidence are considered. Additional factors that are known to be associated with preterm birth are then presented and their causal pathways are theorised from a holistic midwifery perspective. In Section 3.3 the effectiveness of medical treatments aimed at preventing preterm births are critically reviewed. This section has been published [84]. Thus, that paper is included in Section 3.4 in Appendix 3. Then the effectiveness of midwifery interventions aimed at preventing preterm birth are critically reviewed in Section 3.4. Interventions discussed include the use of the CenteringPregnancy group prenatal care and other group-based antenatal care.

3.2 What Factors are Associated with Preterm Birth?

In this section, the question guiding this review is: what factors are associated with preterm birth? The section begins with a description of the systematic search of the literature. The research evidence for risk factors associated with preterm birth is then presented.
Literature Search Strategy

The search was conducted from 1990 to 2010 and updated in 2011 for this dissertation. Textbooks, electronic books and journals as well as the databases Google Scholar, CINAHL, Medline and Embase were searched. The search terms were derived from the key words in the question guiding this review. The search key terms were ‘preterm birth/labour’ OR ‘premature birth/labour’ OR ‘review’; ‘labour, preterm’ including ‘causes’ OR ‘factors’ OR ‘predict’. Articles were selected only if they were written in English, and published after a peer review process. The material chosen came from academic journals, textbooks and electronic books.

The literature review found a large number of risk factors to be associated with preterm birth. Two main explanations are given for preterm birth. The first is that preterm births are often induced due to medical illness or obstetrical complications. The other main explanation concerns the risk factors that are correlated to spontaneous preterm birth [13]. There are multiple factors that are known to be associated with preterm birth but only a few are good predictors.

Section 3.2.1 presents the medically and obstetrically accepted indications of preterm birth in two categories: factors that are relatively the more common causes of preterm birth and those that are less common. Section 3.2.2 presents factors that are associated with spontaneous preterm birth and critically discern the reasons why these factors have been accepted as having a causal relationship with preterm birth. Understanding such casual relationships assists midwives to be more effective in the primary prevention of preterm birth. As this study progressed and I practised, reflected and understood more literature, I began to find other factors and a possible causal pathway that explained much more of the available evidence – that is, the Chronic Stress Hypothesis [93]. A summary of multiple risk factors are presented in Section 3.1 of Appendix 3. From these factors I then developed the screening tool that was used by the midwives in the antenatal clinic to recruit participants to my study (see Appendix A5).

3.2.1 Medical and Obstetrical Factors Relating to an Induced Preterm Birth

This section presents factors that are associated with an induced preterm birth. Induced births are those in which doctors intervene in a woman’s pregnancy for maternal and fetal health reasons. The most common factors that trigger such medical interventions are incompetent
cervix, preeclampsia, placental abruption, and placenta previa [13-16, 145, 147]. Preeclampsia is strongly associated with preterm birth because it causes intrauterine growth restriction, which is a common reason for the induction of preterm labour [12, 13, 15]. Placental abruption, placenta previa and fetal distress are also common reasons for preterm birth via caesarean section [13, 15].

The relatively less common factors that are associated with preterm birth are chronic hypertension, unexplained bleeding, diabetes, anaemia, renal disease, Rh isoimmunisation, infection/bacterial vaginosis, cardiovascular disease, urogenital infections, periodontal disease hyperthyroidism and asthma [13, 14, 147-151]. A summary of the factors associated with induced preterm birth is presented in Table 3.1.

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<tr>
<th>Table 3.1 Most and Less Common Factors Relating to an Induced Preterm Birth</th>
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<td><strong>Most Common Factors</strong></td>
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<td>Incompetent cervix</td>
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<td>Placental abruption</td>
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**3.2.2 The Risk Factors for Spontaneous Preterm Birth**

As discussed in the introduction, the causes of spontaneous preterm birth are not entirely understood [13, 15, 16, 145]. Multiple risk factors have been statistically associated with preterm birth. The three following subsections review the factors that are known predictors of spontaneous preterm birth: (1) preterm premature rupture of membranes, (2) historical indicators such as previous preterm birth, previous spontaneous abortion and a family history of preterm birth [13] and (3) other multiple risk factors associated with preterm birth. An explanatory theory is then tentatively proposed.
3.2.2.1 Preterm Premature Rupture of Membranes

Preterm premature rupture of membranes (PPROM) is the main cause of the activation of the cascade of labour, causing preterm birth. Once the membranes rupture prematurely a preterm birth is inevitable [13, 15]. Previous PPROM is a high risk factor for preterm birth in a subsequent pregnancy [13]. PPROM is related to factors such as low socio-economic status, low body mass index and smoking [13].

3.2.2.2 Previous Preterm Birth, Previous Abortion and Family History of Preterm Birth

Strong predictors of spontaneous preterm birth include having a previous preterm birth or a previous spontaneous abortion whether or not the membranes ruptured before the start of labour [12-16, 145, 152]. A single previous preterm birth is a strong predictor for a preterm birth in a current pregnancy. Multiple previous preterm births (or miscarriages in the second trimester) are also strong predictors for preterm birth in the current pregnancy. The precise mechanism by which previous preterm birth can lead to preterm birth in subsequent pregnancy is, as yet, unclear [12-15, 153].

A family history of preterm birth is a well known risk factor for preterm birth [12-15, 145, 154, 155]. The possible causal pathways may be that there is an underlying biological impairment of the women in that family or, more likely, that there are environmental influences in the lives of the women that cause them stress and undermine their health (see Section 3.2.2.3.1). These environmental influences are not entirely understood [12-15, 155-157]. Race/ethnicity is known to be strongly associated with preterm birth and low birth weight babies [12, 13]. Palomar et al. [158] found that a black father and a white mother are associated with a higher risk of preterm birth. He also found that there is a strong correlation between having both a black mother and black father and risk of preterm birth. Rather than believe that a whole race of people are biologically impaired, it seems more plausible that preterm births in Indigenous Australian women and black women in the USA are related to other factors such as socioeconomic status and lifestyle [156] – the social determinants of health [104].
3.2.2.3 Multiple Risk Factors Associated with Preterm Birth

The sections above have discussed the medically related factors that are associated with preterm births. Midwives, however, also want to understand the causes of spontaneous preterm birth when there are no medical risk factors. A basic premise is that the vast majority of women are biologically capable of sustaining a pregnancy to full term. Focusing on risk factors creates a negative and reductionist perspective which limits our thinking. A holistic perspective offers more hope of understanding the interactions among multiple factors because familial, economic, psychological, emotional, spiritual, cultural, environmental and social aspects of the person are included in a holistic approach to health and disease [159]. I argue that multiple unmet needs work synergistically to multiply the woman’s risk of preterm birth (see details in Section 2.4 of Chapter Two). Maslow’s Hierarchy of Needs provides a suitable framework for exploring and understanding the health effects of women’s unmet needs in a holistic way. I argue that women’s unmet needs are linked to socio-economic disadvantage and that there are ways that midwives can help mitigate and alleviate negative factors in the woman’s life whilst working to support her empowerment and health.

3.2.2.3.1 Stress and Preterm birth

This section describes the relationship between a woman’s unmet needs, stress and preterm birth. Multiple unmet needs, particularly when they persist over a long period of time, can cause chronic stress, ill-health and preterm birth. The physiological explanation is that when a woman experiences chronic stress due to unmet needs her cortisol levels are raised and, via the maternal stress response, cortisol is able to cross the placenta and enter the fetal circulation. This rise in cortisol leads to the onset of preterm labour and birth [98, 99, 160]. This explanation is consistent with a study by Dole et al. [161] which found that severe stressful life events predict preterm birth (RR = 1.8, 95% CI: 1.2, 2.7) [161]. Brown, Yelland, Sutherland, Baghurst, & Robinson [162] produced similar results.

Women who have low socioeconomic status are less likely to finish high school. Lack of knowledge and an inability to read well both undermine a woman’s ability to understand how to be healthy. Without information and an understanding of what is required to be healthy, women may not meet their basic needs which may then lead to preterm birth [12, 160]. Socioeconomically disadvantaged women have multiple unmet needs and are more likely to engage in unhealthy behaviours (such as smoking, drinking and drug taking) as a way of
coping with feelings of stress and anxiety [160, 163]. A number of research papers on smoking and alcohol consumption during pregnancy, for example, have demonstrated that these behaviours are correlated with higher rates of fetal mortality, morbidity and preterm birth [164-169]. What is not clear from previous research is the combined impact of multiple factors, each of which is correlated with preterm births.

An example of the way that multiple compounding factors intersect to increase someone’s risk of giving birth preterm is found in the fact that childbearing women under 20 years of age in Western societies are at increased risk of preterm birth [12, 15, 170-173]. teenage childbearing is not, in itself, a health risk factor, but the poverty, unstable housing, family rejection, discrimination and lack of education associated with pregnancy for a teenage woman are all likely to be causally related to preterm birth. In the next section, I present the current research on factors related to the rate of preterm birth in the categories used by Maslow in his Hierarchy of Needs.

**Biological and Physiological Factors**

Biological and physiological factors include maternal age, hydration, nutrition, air quality, amount of sleep, and physical activity. Socioeconomically disadvantaged pregnant women are less likely to get enough good quality food. Pregnant women who are malnourished will have low body mass index and low weight gain during pregnancy [174, 175]. Maternal undernutrition contributes to the risk of low birth weight babies and preterm births [176, 177]. Fetal growth is regulated by the mother’s nutrition, oxygen, hormones and metabolism [178]. Therefore, the mother’s health directly affects fetal health. Barker has shown that a pregnant woman’s physiology during pregnancy affects fetal anatomy and physiology which has lifelong consequences for that baby’s health [178]. Additionally, an undernourished fetus is particularly vulnerable to fetal distress, a condition which is also a predictor for preterm birth [179].

Socio-economic disadvantage is associated with maternal obesity which may be due to consuming low quality food as a pleasure-giving addictive behaviour to cope with stress and anxiety [160]. Obese and morbidly obese nulliparous women are at increased risk of developing pre-eclampsia and gestational diabetes which puts them at increased risk of requiring an elective preterm delivery (OR= 2.13; 95% CI 1.75, 2.58; p =.001) [177].
Morbidly obese nulliparous women are also at increased risk of spontaneous preterm birth (OR= 1.34; 95% CI 1.15, 1.56; \( p =.001 \)) [177].

A qualitative study about sleep patterns and dreams during pregnancy conducted by Van, Cage and Shannon [180] reported that dreams in women who had a prior pregnancy loss could affect pregnancy outcomes, especially the rate of preterm births. A recent systematic review of physical activity during pregnancy and the birth weight of the babies together with the rate of preterm birth [181] found that too much and/or not enough physical activity negatively affects pregnancy outcomes. The impact of working and physical activity during pregnancy has been unclear because it is dependent on socio-economic conditions and the nature of the work or activity [12]. However, the reviewed literature suggests that pregnant women whose work involves high levels of physical exertion appear to be at an increased risk of preterm birth [182-184]. Pregnant women who work at night may also have an increased risk of preterm birth [182, 185, 186]. The fact that more cortisol is released in the evening than in the morning has been suggested as the reason for the increased risk of preterm birth for night shift workers [110].

Exposure to air pollution during pregnancy has been found to be associated with increased risk of preterm birth [12, 187-191]. Recent research on environmental factors and the incidence of preterm birth by Wilhelm et al. [189], Yorifuji et al. [192], Llop et al. [193] and Wu et al. [188] produced similar results. Air pollution affects both the pulmonary and cardiovascular systems. Exposure to air pollution can decrease the oxygen carrying capacity of blood cells. Reduced oxygen carrying capacity of the pregnant woman’s blood cells would affect oxygen levels in the woman’s blood and therefore the oxygen available to her fetus. Air pollution is also thought to affect the metabolism of pregnant women. These alterations in physiological functioning are stressors which are believed to be implicated in the increased risk of preterm birth for women exposed to air pollution [189, 190].

In considering the multiple, intersecting biological and physiological factors which contribute to the risk of preterm birth, it is significant that socio-economically disadvantaged women are more likely to live in places where there is air pollution, be employed in physically demanding jobs and to work night shift.
**Safety and Security Factors**

Safety and security factors include steady employment which is adequate for meeting financial needs, feeling safe at home, and feeling safe in one’s neighbourhood. A lack of shelter, especially homelessness, is associated with poverty, poor nutrition, hypothermia and limited access to medical and other health care. These factors are associated with an increased risk of preterm birth and low birth weight babies [194]. A more in-depth explanation is that women who are poor and homeless have unmet needs within many if not every aspect of Maslow’s Hierarchy of Needs, and that they therefore have high levels of cortisol in response to the multiplicity of stressors. The ways in which stress can cause preterm birth were already discussed in Chapter Two.

Safety and security within the community or neighbourhoods in which a pregnant woman lives may influence her psychological homeostasis [195]. When the surroundings are unsafe, the residential disturbance and insecure environment will affect a pregnant women’s lifestyle and may be emotionally stressful resulting in an increased risk of preterm birth [195, 196]. For example, Hillemeier et al. [197] found that women who lived in a large rural area in Pennsylvania had a lower probability of preterm birth and low birth weight than did urban women [197].

**Factors of Love, Affection and Belongingness**

These factors are associated with psychosocial conditions and are to do with the power of love and a sense of belongingness. Self-love, giving love and receiving love are considered at the ‘love and belonging’ level of the hierarchy [88]. Love and belonging needs are linked to feelings of safety and survival for pregnant women and their unborn babies. Feeling unloved and not belonging to a family or group can cause significant psycho-emotional stress that influences self-esteem and self-actualisation [88]. The stress from these unmet needs raises cortisol levels in the same way as all other unmet needs and negatively impacts childbearing experiences.

An unwanted pregnancy, divorce, domestic violence and loss of family members are all associated with the incidence of preterm birth [198-201]. Women who do not live with their partners or who are confronted with domestic violence have psychological stress such as high levels of anxiety and antenatal depression which leads to increased risk of spontaneous preterm birth [202-207]. A number of studies report that unmarried women have an increased
risk of preterm birth because they lack psychosocial support [208-210]. Unmarried status may be not be an independent issue associated with preterm birth, but it may reflect the presence of other risk factors such as the woman’s socio-economic condition, health behaviours and the stress associated with these factors [209]. The ways in which stress can cause preterm birth were already discussed in Chapter Two.

*Factors for Self-Esteem and Self-Actualisation*

The factors of self-esteem and self-actualisation are dependent on the development of feelings of self-worth which is related to the meaning that a person’s life has for them. Aspects of self-worth include self-perceived control, optimism, self-efficacy and self-mastery. These concepts are associated with individual values and beliefs that have an effect on women’s health [12]. Higher-level needs involving a spiritual perspective and religiosity are associated with substantial social support and higher levels of self-esteem [211]. The level of a woman’s self-esteem is a predictor of her risk of having a low birth weight baby and giving birth preterm [196, 212]. Low self-esteem and a woman’s negative perception of her pregnancy, for instance, increases the likelihood of a preterm birth and a low birth weight baby ($p < .05$) [212]. The reason seems to be that pregnant women who have low levels of self-esteem are less likely look after and care for their own health during pregnancy [212]. However, there may be a confounding factor that provides some explanation for the effect of self-esteem on preterm birth: socio-economic disadvantage is associated with low self-esteem, whereas higher socio-economic status, as measured by high educational attainment and sufficient income, is associated with higher self-esteem [211, 213, 214].

*Summary*

From the literature review, there is clearly an abundance of medical and obstetrical factors relating to induced preterm births and yet 45% of preterm births are unexplained and spontaneous. Therefore, current measures are ineffective and a holistic understanding of risk factors such as socioeconomic disadvantage and unmet basic needs is needed. The complex interactions between socio-economic disadvantage and unfulfilled needs can create chronic stress for pregnant women and they can negatively impact on their lives and the lives of their babies. Spontaneous preterm birth can therefore result from the intersection of multiple risk factors which can usefully be conceptualised as women’s unmet needs. Unmet needs undermine health by creating chronic stress. In Chapter Two I presented chronic maternal
stress as a causal pathway between socio-economic disadvantage, unmet needs and preterm birth. The best approach when dealing with preterm birth from unknown causes is therefore to consider the idea of primary prevention through focusing on the modification of these multiple factors for preterm birth.

3.3 Medical Interventions Aimed at Prevention of Preterm Birth

A starting assumption of this study was that Thailand needs to make the medical treatments for preterm labour more widely available as a way of reducing the rate of preterm birth. A review of the epidemiological evidence led me to questions this assumption because in Western countries, despite the increasing availability and variety of medical treatments, the rates of preterm birth have not declined over the past 30 years. Worse, in some countries, the rates are actually increasing [12, 22-24]. Along with rising preterm birth rates, survival rates for preterm babies have also gone up; approximately 75% of perinatal morbidity is related to preterm birth [27, 29-31].

The question guiding this review is: how effective are the medical interventions that aim to reduce the rates of preterm birth? This section begins with a systematic search of the literature. This is followed by the research evidence for the four main categories of medical therapy that are used to prevent preterm birth: (1) anti-infective medications (2) tocolytic agents, (3) progesterone and (4) cervical cerclage. I acknowledge that there are sometimes benefits in using these therapies for particular women in specific circumstances. However, in this section I argue that medical interventions aimed at preventing, rather than just delaying, preterm birth, are not effective at a population level. The discussion part of this section considers the idea of primary prevention by focusing on the modification of known risk factors for preterm birth. These risk factors are widely accepted within the obstetric and midwifery literature [13, 15, 16, 145]. The risk factors are mostly socio-economic, which suggests that a primary health care strategy may be more promising than medical interventions in reducing preterm birth rates. In conclusion, I briefly discuss the benefits of midwife-led, woman-centred, group-based, interactive antenatal models of care/education. There is some evidence that these models of care provide an effective primary health care preventative strategy. Further, these midwife-led models could be made widely available to virtually all childbearing women at a fraction of the cost of medical interventions.
**Literature Search Strategy**

The search was conducted from 1998-2010 and updated in 2011 for this dissertation. The databases searched were CINAHL, Cochrane, Medline and Embase. The search terms were derived from the key words in the question guiding this review. MeSH terms, synonyms and variants spellings were used. The search key terms were research OR clinical trial OR random* OR ‘review’; ‘labour, preterm’ including threatened preterm labour; ‘cervical cerclage’ ‘cervical incompetence’, ‘short cervix’; ‘antibiotics’ OR ‘tocolysis’ OR ‘progesterone’ OR ‘periodontitis’. Articles were selected only if they were meta-analyses or randomised controlled trials (RCTs), written in English, and published after a peer reviewed process. Thirty two articles fulfilled the criteria for selection: 13 were single RCTs and 19 were systematic reviews which incorporated 183 RCTs. This means that a total of 196 RCTs have contributed findings that are incorporated in this review. For the systematic reviews, I only returned to the original RCTs if there was confusion or discrepancy noted in our reading of the systematic review. Methodological quality for most of the studies was assessed by the reviewers who conducted the 19 systematic reviews. For the remaining 13 studies I used some simple questions based on the Cochrane Collaboration’s recommendations about quality scores. The questions were: 1. Was a control group present? 2. Were appropriate randomisation procedures used? 3. Did the study involve more than 30 subjects and 4) Was the reviewed paper published within the last 10 years? All the included studies met these criteria [215].

**3.3.1 Findings**

Four types of medical and surgical intervention are currently used to prevent preterm birth and/or treat preterm labour. Each paper was summarised in table which is found in Section 3.2 of Appendix 3. When discussing the findings from RCTs and meta-analyses Odd Ratios (OR) or Relative Risk (RR) is used along with Confidence Intervals (C.I.). See the Table 3.2 for definitions [216] and discussion of the statistical terms and how to interpret them.
Table 3.2 How to Interpret the Statistics

<table>
<thead>
<tr>
<th>Statistical Concept</th>
<th>Meaning and Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative risk (also called Risk Ratio and reported as RR)</td>
<td>“An association between exposure to a factor and the development of a particular outcome; usually a disease. It is a ratio of the probability of the event occurring in the exposed group versus a non-exposed group” [216 p.179]. “A relative risk of 1 shows that no association; a value of &gt;1 shows a positive association (possibly causal); a value of &lt;1 shows a negative association (possibly protective)” [216 p.179]. In the case of treatments for preterm birth, a relative risk means the risk of giving birth prematurely in that group of women who were exposed to a specific treatment compared with those women in the other group who were not exposed to the treatment (or were exposed to a different treatment).</td>
</tr>
<tr>
<td>Odds ratio (reported as OR)</td>
<td>The proportion of the cases that were exposed to a treatment and the proportion of the controls that was not exposed to the treatment or was exposed to a different treatment. “Odds ratio is used in a case-control study as an estimate of the relative risk when the risk of disease is low”. [216 p.182]. An odds ratio of 1 show that there is no association between two groups in terms of the effect of a treatment on an outcome. A value of &gt;1 shows a positive association (possibly causal); a value of &lt;1 shows a negative association (possibly protective)” [216 p.184].</td>
</tr>
<tr>
<td>Confidence Interval (reported as CI)</td>
<td>The CI comprises two numbers which represents the boundary within which the sample means fall. The CI equates to a range of values where the true population value really lies. The mean is always in the centre of the confidence interval which is set at 95% confidence.</td>
</tr>
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Statistical Concept

How to Interpret OR, RR and CI within this paper

Here is example of an OR and CI which is statistically significant (OR 0.48; CI 0.28-0.81). The numeral ‘1’ does not fall between the two boundaries of the CI which means that there is a significant difference in the OR between the two groups. If the numeral ‘1’ occurs; for instance (OR 0.48; CI 0.28-1.02) this CI includes the numeral ‘1’ which indicates that there was ‘no difference’ between the two groups. There is one further piece of information which will aid the interpretation of statistics in this paper; if the sample mean accurately represents the true mean, then the CI will be narrow e.g. CI 0.28-0.81 ranges from which is only 0.53 in range. Conversely, if the CI is wide then the sample mean could be very different from the true mean, indicating that I am quite uncertain about where the true population mean lies [217]. For example (CI 1.21-24.86) indicates a significant finding because the numeral 1 is not within the boundaries of 5.21-24.86 however the range is wide at 19.65 meaning I are less sure of where the population mean lies.
3.3.1.1 Anti-infective Medications

Ascending infections from the urinary and genital tract are strongly associated with preterm birth [218, 219]. Scores of studies have examined the effectiveness of anti-infective drugs for these infections on reducing the rate of preterm birth. The main antibiotics tested have been erythromycin, clindamycin and amoxicillin. Metronidazole has been the most tested anti-fungal agent. Thinkhamrop, Hofmeyr, Adetoro & Lumbiganon [220] found antibiotic treatment was effective in reducing the rate of preterm birth but only in women with previous preterm birth who also have bacterial vaginosis in the current pregnancy (OR 0.48; CI 0.28-0.81). A meta-analysis involving 14 RCTs by Okun, Gronau & Hannah [221] evaluated the effectiveness of clindamycin, and metronidazole for bacterial or trichomonas vaginosis during pregnancy for reducing the risk of preterm birth. Neither metronidazole nor clindamycin were effective in reducing preterm birth rates. A later meta-analysis of 17 RCTs by Simcox, Sin, Seed, Briley & Shennan [222] evaluated antibiotic treatment in pregnant women at risk abnormal flora (12 trials e.g. trichomonas vaginalis, group B Streptococcus, ureaplasma urealyticum and Gardnerella vaginalis and/or bacterial vaginosis), previous preterm birth (3 trials), positive fetal fibronectin (2 trails). No significant association between antibiotic treatment and reduced rates of subsequent preterm birth were found (RR 1.03, 95% CI 0.86-1.24) [222]. In 2008, a meta-analysis of 7 RCTs found no benefit in screening and treating women with low or moderate risk pregnancies [223]. Another 2008 meta-analysis assessed the effects of the use of anti-infectives. Women were treated for actual or possible vaginosis regardless of whether the women actually had vaginosis [224]. The reviewers found that anti-infective treatment was not effective in reducing preterm birth rates (15 trials involving 5888 women; OR 0.91, 95% CI 0.78 to 1.06) (McDonald, et al., 2008). However, when women with vaginosis were treated with anti-infectives before 20 weeks gestation, preterm birth rates were reduced (5 RTCs, 2387 women; OR 0.72, 95% CI 0.55 to 0.95) [224].

A more recent meta-analysis involving 14 trials by Morency and Bujold [225]evaluated the effect of second trimester anti-infectives i.e. one or more of: erythromycin; clindamycin; metronidazole, in women with high risk of preterm birth. Metronidazole alone was found to increase preterm birth rates, however, erythromycin and clindamycin in mid-trimester were both related to lower rates of preterm births in women at high risk (3 trials; OR 0.72; 95% CI 0.56-0.93) (5 trials; OR 0.68; 95% CI 0.49-0.95) respectively [225]. The meta-analysis did not distinguish between RCTs that used anti-infective (erythromycin and metronidazole) for
women who had vaginosis and those trials for women who did not have any infection. RCTs using anti-infectives were included in the meta-analysis, but did not differentiate between women with or without infection.

Periodontal disease is correlated with preterm birth and low birth weight [226-236]. There are so many confounding variables in the studies that the effect of periodontal disease is difficult to discern [237]. If periodontal disease was a cause of preterm birth, then treating periodontal disease early in pregnancy would reduce preterm birth rates. A systematic review of the evidence by the European Academy of Periodontology concluded that treating periodontal disease does not reduce preterm birth rates [238]. Treating periodontal disease, as early in pregnancy as possible, is safe, and contributes to the woman’s general good health [239]. Treating periodontal disease is therefore recommended for all pregnant women but not as a way to reduce preterm birth rates [233, 234, 238-240]. Thus, the effectiveness of periodontal treatment needs to be further validated through larger population [227].

3.3.1.2 Tocolytic agents

Nifidipine (Calcium Channel Blocker) is commonly used to delay preterm births. A meta-analysis of the effectiveness of Nifidipine (12 trials; 1029 women) for inhibiting preterm birth was conducted by King, Flenady, Papatonis, Dekker & Carbonne [241]. Nifidipine does reduce the rate of preterm birth prior to 34 weeks (RR 0.83; CI 0.69-0.99) [241] but does not prevent preterm births (as defined prior to 37 weeks) overall. The administration of a Calcium Channel Blocker does reduce the number of births within seven days after treatment (RR 0.76; CI 0.60-0.97) [241]. This delay is beneficial because it allows time to mature the babies’ lungs and get the women to units which have high level neonatal intensive care facilities.

Betamimetics effectiveness was assessed by a systematic review of 11 trials involving 1320 women [242]. Betamimetics are effective in stopping preterm labour for a short time (RR 0.63; CI 95% 0.53-0.75) but do not reduce the preterm birth rate (RR 0.95; CI 95% 0.88-1.03) [242]. More adverse effects for the woman such as chest pain, dyspnea, hyperglycemia, hypokalaemia, headaches, nausea, palpitation, tachycardia, and tremour, were found with the use of betamimetics, compared to the use of a placebo (RR 11.38; CI 5.21-24.86) (Anotayanonth, et al., 2004). A meta-analysis of oral betamimetics for maintenance of uterine quiescence after threatened preterm labour by Dodd, Crowther, Dare & Middleton [243]
reviewed 11 RCTs involving 1238 women. The key findings were that oral betamimetics for preventing preterm birth did not reduce the rate of preterm birth after threatened preterm labour. Whitworth & Quenby [244] produced similar results.

**Magnesium sulfate** (MgSO₄) effectiveness in threatened preterm birth was evaluated by a systematic review of 23 RCTs involving 2000 women [245]. The trials compared MgSO₄ with other tocolytic agents. No difference in effectiveness was seen in the rate of preterm birth within 48 hours of treatment (RR 0.85; CI 0.58-1.25) [245]. There was a high risk of fetal and neonatal death for the group having MgSO₄ (RR 2.82; CI 1.2-6.62) [245]. Crowther & Moore [246] reported similar results from systematic review of three trials involving 303 women. There is no beneficial effect of MgSO₄ for preventing preterm birth after threatened preterm labour compared with placebo or no treatment (RR 0.85; CI 0.47 to 1.51) [246].

**Indomethacin** (a Cyclo-oxygenase (COX) inhibitor) has been used as a treatment aimed at preventing preterm birth. A meta-analysis, involving 13 RCTs and 713 women was conducted to examine the effectiveness of Indomethacin [241]. Only one of the reviewed trials, involving only 36 women, actually reported on preterm birth rates and found that COX inhibitors were effective in reducing preterm birth rates (RR 0.21; CI 0.07-0.62) [247]. COX inhibitors, however, have many unwanted and serious effects for women and babies including the premature closure of the baby’s ductus arterious. This use of Indomethicin in women can lead to a bleeding disorder, hepatic or renal dysfunction, gastrointestinal ulcerative disease and/or asthma [247].

In summary, the use of tocolytic agents does seem to delay preterm birth for several days. These extra days enable the administration of glucocorticosteroids to stimulate surfactant production in the lungs of the fetus. Also, the extra time is valuable for transferring women to hospitals that can provide neonatal intensive care.

### 3.3.1.3 Progesterone

A recent meta-analysis of 11 RCTs (intramuscular progesterone (7 RCTs) and intravaginal progesterone (4 RCT) involving 2714 women and 3452 babies by Dodd, Flenady, Cincotta & Crowther [248] evaluated the benefits and harm of progesterone for preventing preterm birth in women considered to be at increased risk of preterm birth. In women with a history of spontaneous preterm birth, progesterone was effective in decreasing in the risk of preterm birth (4 RCTs; RR 0.80; 95% CI 0.70–0.92) and low birth weight (2 RCTs; RR 0.64; 95% CI...
0.49 to 0.83) [248]. In women following presentation with threatened preterm labour, progesterone reduced the preterm birth rate (1 RCT; RR 0.29; 95% CI 0.12–0.69), and low birth weight (1 RCT; RR 0.52; 95% CI 0.28–0.98) [248]. The meta-analysis of progesterone treatment confirmed that progesterone reduces the rate of preterm birth, but cautioned that the potential for harm from the treatment is unknown [248, 249]. ACOG [250] recommends the use of progesterone and emphasises that the treatment be restricted to women with a very high risk including those women who have had a previous preterm birth. Further studies need to be done to determine dosage and route of administration including indication for use of progesterone [250]. Research on the long term effects and safety for both women and infants of using progesterone for prevention of preterm birth is greatly needed.

### 3.3.1.4 Cervical cerclage

Cervical cerclage is traditionally used in the second and third trimester for women with a short cervix and when cervical insufficiency has been diagnosed [251]. A systematic review (6 RTCs involving 2,190 women) was conducted to determine the effectiveness of cerclage compared with expectant management in preventing preterm birth [252]. The main finding was that cerclage is able to prevent preterm birth < 34 weeks (OR 0.77, 95% CI, 0.59–0.99) (p = .049) but not preterm birth rates between 34-37 weeks. In addition, the poor quality of the research undermines confidence in the findings. Another systematic review studied the effectiveness of cerclage. The review involved 7 RCT’s and 2,354 women [253]. Cerclage was effective in preventing preterm birth before 34 weeks’ gestation; however, this finding was limited to one study (ORs 0.72; 95% CI 0.53-0.97) [253]. Four studies in this review reported unwanted effects associated with the use of cerclage i.e. increased rates of perinatal death, premature rupture of membranes, chorioamnionitis and puerperal pyrexia [253]. In 2005, a meta-analysis evaluated the use of cerclage for preventing preterm birth for women with a short cervix [254]. Four RCTs (607 women with mixture of singleton and twin pregnancies) were included. Cerclage is effective in preventing preterm births only for women with singleton gestations and a history of prior preterm birth (RR 0.61, 95% CI 0.40–0.92). Cerclage does not prevent preterm birth in the total population (RR 0.84, 95% CI 0.67–1.06) [254]. There was a significant increase in preterm birth in twin gestations suggesting that cerclage should not be used in multiple pregnancies (RR 2.15, 95% CI 1.15–4.01). Therefore, the effectiveness of cerclage was not confirmed by Drakeley, Roberts & Alfirevic (2003)
in this review of six RCTs. There was no reduction in preterm delivery in the group treated only with the cerclage (RR 0.88, 95% of CI, 0.76-1.03) [255].

3.3.2 Discussion

In spite of 30 years of medical research and multiple modes of intervention aimed at reducing preterm birth rates, the rates are increasing worldwide. The vast amount of contemporary literature on the medical treatments aimed at preventing preterm birth is summarised below.

Anti-infective medications have been extensively studied and the findings are nuanced. Firstly, giving anti-infective drugs to a healthy group of women with no risk of preterm birth does not reduce preterm birth rates. Secondly, screening all women and treating those who are found to have vaginosis is not effective in reducing preterm birth rates. However, giving erythromycin with metronidazole is effective in reducing preterm birth rates for a small and select group of women who have a previous of preterm birth and/or whose pre-pregnancy weight is less than 50 kilograms [256]. One trial found that, for women diagnosed with bacterial vaginosis, treatment with intravaginal erythromycin daily for six weeks is effective in reducing the preterm birth rate [225].

Treating periodontal disease is recommended for all pregnant women, but evidence does not support the claim that preterm birth rates will be reduced by doing so. The delay in birth that accompanies the use of tocolytic drugs is beneficial because it improves neonatal mortality and morbidity rates. Tocolytic medications, however, are not effective in reducing preterm births rates. There is no beneficial effect of betamimetics and MgSO₄ in preventing preterm birth. Nifidipine (Calcium Channel Blocker) does reduce the number of births within seven days after treatment. Indomethacin (COX inhibitors) is effective in reducing preterm birth rates but it has unwanted and serious side-effects. In selected high-risk cases, progesterone may be of some benefit in preventing preterm births [257]. Therefore, the Food and Drug Administration in the USA approves Makena (Hydroxyprogesterone caproate) for reducing preterm births in women who have had previous preterm births [258]. However, the unwanted effects for the woman and baby are not known. The research concerning the effectiveness and unwanted effects of cerclage shows mixed results, perhaps due mainly to poor design of the studies. What is clear is that cerclage has only a small and occasional role to play in preventing preterm birth. Cerclage is not recommended for the prevention of preterm births at the population level.
As shown in this review, medical treatments aimed at preventing preterm births are of limited effectiveness. Surgical and medical treatments usually only commence once a woman has a history of multiple miscarriages and/or previous preterm birth. Thus first-time preterm births are generally not prevented [259]. In addition, in general medical treatments, do not address the socio-economic risk factors for preterm birth. These socio-economic risk factors are widely accepted within the obstetric and midwifery literature [13, 15, 16, 145]. The causes of preterm birth are mainly socio-economic. They are multiple and interactional. Many of these causes are modifiable, including: poverty; poor education; poor nutrition; smoking; being underweight; not getting enough exercise; high stress levels and poor immune system functioning.

Medical treatments are secondary or tertiary responses that usually require specialised hospital care [257]. In addition, they are very expensive and out of the reach of developing nations. Medical treatments are never going to be the answer to this common, widely distributed, health care problem. A much less expensive, midwife-provided primary health care strategy seems to hold some potential for reducing preterm birth rates. Recent midwifery research, aimed at primary prevention of preterm birth for all pregnant women, has provided some promising evidence of effectiveness in terms of decreases in perinatal morbidity.

**Summary**

This review has answered the guiding question: How effective are the medical interventions which aim to prevent preterm births? This section has demonstrated that medical interventions are not very effective at the level of the individual woman and not effective at all at a population level because the rates of preterm births are rising around the world. Holistic, woman-centred antenatal care/education holds great promise for reducing preterm birth rates at the population level in a way that is economically sustainable. In the next section, midwifery research aimed at prevention of preterm birth is reviewed.

**3.4 Midwifery Research Aimed at Prevention of Preterm Birth**

Midwives do not often ‘intervene’ in pregnancy, labour and birth as obstetrics does. Midwifery care usually involves encouraging, being present with, providing health information and offering psychological or social support to childbearing women. Midwifery care therefore is not invasive and should not be framed by medical discourses. In this section, the effectiveness
of CenteringPregnancy and other group antenatal care programs aimed at preventing preterm birth are described and critiqued.

**CenteringPregnancy group prenatal care**

The philosophy and theory of CenteringPregnancy are discussed in Chapter Two. In brief, for CenteringPregnancy eight to twelve pregnant women with similar gestational ages (14–16 weeks) are invited to meet together in a group. Ten meetings of 60–90 minutes of group prenatal care during pregnancy and an early post-partum meeting are organised. Within the group, women are invited to participate in health assessment, education and support activities [5, 141]. Women are encouraged to participate in antenatal health assessment including taking each other’s blood pressure and weighing themselves. CenteringPregnancy groups are led by two or more maternity health care providers and are offered to women who are at socio-economic disadvantage [2-4, 260]. The aim of CenteringPregnancy is to increase awareness and promote networking among the women in the group and to support individual and collective health empowerment.

The following section discusses research papers on the effectiveness of CenteringPregnancy for reducing preterm birth and low birth weight rates including increased gestational age.

**Literature Search Strategy**

The question guiding the search strategy was: What is the effectiveness of CenteringPregnancy and other antenatal interactive groups for preventing preterm birth? A search using MEDLINE, CINAHL, Embase and Mosby’s Index (from 1998 to 2011) was undertaken for the CenteringPregnancy program and other group antenatal care that was undertaken by midwives or nurses to prevent preterm birth and not outlined by medical treatments. The search terms were derived from key words in the question guiding this review. The search key terms were ‘research’ OR ‘review’; ‘preterm, premature, birth’ including midwifery/nursing care; ‘CenteringPregnancy’ OR ‘group prenatal care’, ‘group antenatal care’; ‘high risk pregnancy’. Articles were selected only if they were to do with a CenteringPregnancy program or group prenatal care or antenatal care for preterm birth. They had to be written in English and published after a peer review process within the past ten years. Attempts were made to search for studies on the key terms that had been undertaken by midwives or nurses. However, three difficulties with the search process were that the CenteringPregnancy model was constructed in 1993 [5, 261] so there was only a small number of research papers that could be included in
the review literature. Secondly, the majority of research papers were done by other health care providers such as psychologists, dentists and nutritionists. Lastly, as much of the previous research by midwives or nurses was done more than fifteen years ago, these research papers were out of date.

Twenty-one articles were found and read. Fifteen articles were found to be irrelevant to the guiding question and were removed. A total of six research articles fulfilled the criteria for selection. The findings section discusses each article in terms of objective, subjects, methodology and key results relevant to preterm birth and my comments.

3.4.1 Findings

Six research papers on the effectiveness of CenteringPregnancy program for preventing preterm birth were analysed. I found that the description of the CenteringPregnancy model in each article was consistent with the pattern and philosophy of the original program that was described in the section above. I assumed therefore, that the quality of the CenteringPregnancy group work was consistent for each of the six research projects because the researchers were trained by the program experts and each study strictly followed the same pattern. Each paper was summarised in a table which is found in Section 3.3 of Appendix 3.

The first was a pilot study of CenteringPregnancy reported by Rising [5] in the USA. This descriptive study aimed to develop the model of CenteringPregnancy to see if it was acceptable to women and if it was a good alternative to standard care (described above in the section on the CenteringPregnancy program). The model was being developed for a group of ethnically diverse women who were relatively socio-economically disadvantaged and less likely to attend standard antenatal care. All women were less than twenty weeks pregnant when the groups began to meet. As there was no control group, the key findings can only be compared with the rate of preterm birth at a population level in the USA where the study was conducted. The rate of preterm birth in the USA was 12.3 % in 2010 [33]. The model of group antenatal care was popular with the women: 96 % preferred CenteringPregnancy to standard care, and 96% of the women birthed at or after term. There were only five preterm births (4.5 %) which is about one-third of the national preterm birth rate, an impressive finding given that the participants were at higher risk for preterm birth compared with the general population. Even the few preterm births that did occur happened relatively late in the pregnancy: three of the five birthed in the 36th week.
A matched cohort study which evaluated the effectiveness of CenteringPregnancy versus standard antenatal care was undertaken by Ickovics and colleagues [3]. The study’s participants were described as ethnically diverse and socio-economically disadvantaged: only five per cent were white women. An intention-to-treat analysis was used in this study. There was no difference in preterm births (9% in both groups) [3]. However, there was a significant difference in the weight of preterm babies born to women in the intervention group: 2397.8 grams versus 1989.9 grams, a difference of 407.9 grams ($p < .05$) [3]. The higher birth weights were due to the increased gestational age of babies in the CenteringPregnancy group. Further, women in the CenteringPregnancy group maintained their pregnancies for two weeks longer ($p< 0.001$) than women in the standard care group. The strength of the study was that the participants were from two cities and matched by health centre, race, age, parity and baby birth date.

A retrospective study which evaluated the effectiveness of CenteringPregnancy on the rate of preterm birth and low birth weight babies was conducted by Grady and Bloom [2]. Data of a group that took part in a CenteringPregnancy program was matched with data on two groups of adolescents in 1998 and 2001 from the same hospital. The CenteringPregnancy group was similar to two groups of adolescents (1998 and 2001) based on age, education and socio-economic status. The key findings were that the CenteringPregnancy group had a lower percentage of preterm births than the other two groups (CenteringPregnancy: 10.5 %; 2001: 25.7 %; 1998: 23.2 %) ($p< .02$). The incidence of low birth weight in the CenteringPregnancy group was also lower than the other two groups (CenteringPregnancy: 8.9 %; 2001: 22.9 %; 1998: 18.3 %) ($p< .02$). Weaknesses of the study were that there was no randomisation and there was a self-selecting bias because a majority of the research subjects were pregnant teenagers. This bias, however, became a key issue that made the research result a remarkable finding because the subjects were non-Hispanic Black adolescents who were at increased risk for preterm birth compared with the general population.

A randomised controlled trial of CenteringPregnancy was conducted to evaluate the effectiveness of group prenatal care compared with standard care [4]. A blocked randomisation was used for this study because the subjects within each site needed to be randomised separately, the use of block randomisation fits well with a multisite study [262]. The two groups shared similar characteristics in terms of race, age, parity, income and education. Overall the women enrolled in the study were aged less than 25 years and socio-economically and educationally disadvantaged. Data was analysed by ‘intention to treat’ and
by ‘treatment received’. On an intention to treat basis, the key findings were women assigned to CenteringPregnancy group care were less likely to have preterm births than those in individual care: 9.8% versus 13.8% (61 of 623 versus 51 of 370 respectively). This is equivalent to a risk reduction of 33% (OR 0.67, 95% CI 0.44–0.99, P=.045) [4]. However, there were no significant differences in gestational age, birth weight, percentage of low birth weight infants, or percentage of small for gestational age infants.

On a treatment received basis there was a dose/response relationship which showed that the more groups the women attended the more beneficial the effect. The key findings based on a ‘treatment received; analysis were women in CenteringPregnancy had more pregnancy knowledge (p=0.001), more prepared for labour (p=0.001) and infant care (p = 0.056) than standard care. Women were also significantly more satisfied in CenteringPregnancy (p=0.001). The CenteringPregnancy played a huge benefit for the most disadvantaged women. The number of visits was significantly associated with both gestational age (r=0.31, P<.001) and birth weight (r=0.28, P<.001); when the women came to the groups the more they attended the greater the benefit [4]. Strength of the study was the use of rigorous research methodology with a blocked randomisation including allocation which was concealed from researchers.

In 2009, a quasi-experimental design study involving forty-nine Latino women (24 women in CenteringPregnancy with similar due dates and 25 women in traditional care) was conducted by Robertson, Aycock & Darnell [263]. The study aimed to compare the effectiveness of CenteringPregnancy and traditional care on maternal outcomes. Questionnaires were used for data collection at three periods. At the initial visit, questionnaires were used for demographics data, pregnancy history and self-esteem scales. At 34–36 weeks gestation, questionnaires were used for prenatal and postnatal knowledge and health behaviours. At the post-partum visit, questionnaires were given to the CenteringPregnancy group only to evaluate infant outcomes, self-esteem scale and women’s satisfaction. The key finding was that there was no preterm birth in either group. There were also no differences for preterm births, infant birth weight and prenatal and postnatal knowledge as well as health behaviours and self-esteem scores. This similarity between the two groups may be because the sample size for the study was too small, so there was not enough power for validating the difference in two groups. Another weakness was the lack of randomisation. The strength of the study was that it strictly followed the pattern of CenteringPregnancy that is described above.
A pilot study which aimed to compare the effectiveness of CenteringPregnancy and individual antenatal care was undertaken by Klima & colleagues [264]. One hundred and ten African-American women completed the CenteringPregnancy program. Data were collected from three sources: focus groups, questionnaires and medical record reviews for maternal and infant outcomes. The key findings were that there were no significant differences in the percentages of preterm births, gestational age at birth and mean birth weight between the CenteringPregnancy and individual care groups. The percentage of preterm births in the CenteringPregnancy group was higher than in the individual care group. Women in CenteringPregnancy had significantly more weight gain but there was no significant difference in the percentage of babies born prematurely and with a low birth weight. This outcome may be because there was only a small number of African-Americans who were thought to be women with a high risk of preterm birth so the study may not have had enough power to prove the differences [13]. Most women were satisfied with the interventions which were offered by CenteringPregnancy. The authors concluded that CenteringPregnancy may be a good option for African Americans. The limitation for this study was the lack of a randomised control group and its small sample size. The major limitation however, seemed to be that those women who were willing to attend the groups may have been the very women who cared enough about their health to be willing to make a change. The strength of the study was that the research staffs who were involved in this study were trained by the CenteringPregnancy team.

3.4.2 Discussion

The CenteringPregnancy model is effective in reducing the rates of preterm birth and low birth weight [2, 4, 5]. This conclusion was found to be especially true in a randomised controlled trial of CenteringPregnancy which found that preterm births decreased for women who were assigned to group care compared to standard care [4]. Other studies did not find a difference in preterm birth rates for women in CenteringPregnancy compared to traditional groups. However, preterm babies born to women in CenteringPregnancy had higher birth weights than those traditional groups [3, 263, 264]. Further, women in CenteringPregnancy maintained pregnancy for two weeks longer than women in individual care which is clinically very important and could mean the difference between a healthy or ill newborn [3].
Some of the CenteringPregnancy studies have been criticised for lack of randomisation, which makes self-selecting group bias possible [2, 5, 263] Some studies have been criticised for small sample size [2, 263, 264].

Based on the literature review it is apparent that medical and midwifery research conducted in relation to preterm birth prevention is atheoretical. Likewise CenteringPregnancy had no explicit theoretical base. I know, informally from the author of Peace and Power that CenteringPregnancy was originally designed to be based on feminist principles but this was never done.

I argue that the CenteringPregnancy group prenatal care is a useful option for midwives to work with groups of women who are at increased risk of preterm birth. When considering the implementation CenteringPregnancy in Thailand I was conscious that CenteringPregnancy research and practice have been conducted in the USA with a focus on particular racial groups generalisation to other contexts is problematic. Thailand has a different culture with different geography, socio-politico-economic environment and health care systems. The philosophical and theoretical frameworks for this program are under-developed, making it difficult to be sure how to replicate the model of CenteringPregnancy. For example, the discussion topics are provided by Rising, not from the women themselves based on their perceived health needs.

Summary

Although only a small number of research papers have been undertaken on CenteringPregnancy for women who are at increased risk of preterm birth, those research papers were focused on midwifery care, and there was no harmful side-effects for the women and their babies. There is growing evidence that compared to standard individual care, the interactivity of CenteringPregnancy results in increased birth weights for preterm infants. The causes of preterm birth are socio-economic and multiple and interactional (see Chapter Two). Many of these causes are modifiable, including: poverty, poor education standards, nutrition, smoking, being underweight, not getting enough exercise, stress levels and poor immune system function. Thus, research involving holistic and woman-centred antenatal care/education interventions holds promise for reducing preterm birth rates on a population level.
3.5 Conclusion

This chapter has presented a review of the literature on ways of predicting and preventing preterm birth. Section 3.2 discussed the well-known medical and obstetrical causes of preterm birth and what is known about the causes of spontaneous preterm birth. There are two strong predictors for a preterm birth identified from my review of the literature: the first is a history of a previous preterm birth and the second is a family history of preterm birth. However, for the majority of spontaneous preterm births, according to the medical perspective, the cause is idiopathic. A holistic perspective offers more hope of understanding the interactions among multiple factors in any health related condition. Preterm birth is ideally suited to being explored from a holistic viewpoint. Maslow’s hierarchy of needs provides a useful framework to illustrate the way that multiple unmet needs work synergistically to multiply the woman’s risk of preterm birth. In Section 3.3, the effectiveness of medical treatments aimed at preventing preterm births was critically reviewed. I conclude that medical interventions aimed at preventing preterm birth are only slightly effective at the level of the individual woman and not effective at all at a population level. In Section 3.4, the effectiveness of midwifery interventions aimed at preventing preterm birth, specifically, the use of the CenteringPregnancy group prenatal care is critically reviewed. I conclude that CenteringPregnancy results in an increase in the birth weight of preterm infants but there are only a small number of research papers. Additional research in other countries is therefore needed.
CHAPTER FOUR

RESEARCH METHODOLOGY AND METHODS

4.1 Introduction

This chapter presents and explains the methodology used for this research project. The chapter begins with a description of feminist methodological principles that provided the framework for this qualitative study. Examples of how each principle was honoured during the research process are given. I then briefly describe action research in relation to feminism. I then demonstrate that there is strong methodological compatibility between emancipatory feminism and more generic forms of action research because both have their roots in critical social theory [265]. The next section describes the feminist action research (FAR) spiral by starting with ‘Planning: preparing for practice’. The remaining phases of FAR – ‘Practising’, ‘Reflecting’ and ‘Revising the plan to change practice’ occurred concurrently with data collection. Then details of the methods for data analysis and interpretation, including the development of a new model, are included.

4.1.1 Definition of Key Terms

A ‘conceptual model’ is defined as “a representation, generally in miniature, to show the simplified description of a complex entity or process” –in this case, midwife-facilitated group-based antenatal education [115 p.1072]. According to Brayer and Sinclair [266 p.21] “a conceptual model is a set of relatively abstract concepts and propositions which state relationships between concepts”. In this thesis the model provides a guide for midwifery practice and education.

This research project is embedded in Western philosophical discourses, which provide the ontological, epistemological and methodological commitments in research [267]. Ontology is that branch of Western philosophy that “concerns itself with what exists or what is real” [85 p.269]. Epistemology concerns ‘the theory of knowledge’. “It deals with questions centring on the origins of knowledge; the place of experience in generating knowledge; and the place of reason” [85 p.123]. Epistemology refers to “What is known and how it comes to be known” [267 p.23].
Methodology is “a theory of how research is done or should proceed” [268 p.3, 269]. A method concerns “a technique or a way of proceeding in gathering evidence” [268 p.2]. Thus, this chapter first presents the feminist ontological and epistemological principles on which the thesis is based, and explains then the action research design and finally the methods for data collection and data analysis.

### 4.2 Feminist Methodological Principles

The methodology for this study reflects “a feminist standpoint which places women’s experiences and women’s ways of knowing at the centre of knowledge generation” [6 p.45]. The feminist methodological principles of this study are described and applied below.

1. **As all knowledge is value laden, the perspective and values of the researcher should be made explicit.** Feminists believe that “Knowledge and truth are situated, subjective, power imbued and relational” [270, 271 p.130] and that “women’s experience is a valid basis for knowledge” [272 p.68]. Therefore, the values and perspective of the researcher influence everything about the study from choosing to do the research through to how the study is conducted, and what knowledge claims are made. I have introduced myself and have discussed my values in Chapter One to enable the reader to understand my perspective and interest in the study. My experiences were included and recorded during data collection as I maintained a reflective journal. Where I have made interpretations during data analysis, my perspective is clearly identifiable because these observations are written in a different font (Sections 6.1 and 6.2 of Appendix 6).

2. **Women’s experiences are at the centre of the research** [268, 273]. The lived experiences of Thai women who were at increased risk of preterm birth were the central focus of my research. A potential new role for Thai midwives was also a central interest. My lived experiences during the time of this research were also of equal concern. Putting the concerns of Thai women and midwives at the centre of the research is consistent with what Stanley & Wise [8 p.157] who assert that “Feminist researchers should upgrade the personal as an object of study”. The practice of keeping the personal lived experiences of a group of women (including me) at the centre of inquiry was honoured in this study. For example, the women who participated in this research made the decisions about the content and process of group-based antenatal education. At each group meeting, I focused on working together on the
concerns of the women. They were also encouraged to share their life experiences and learning with each other [8, 9, 274, 275].

3. “The researcher’s own experiences and consciousness will be involved in the research process” [9 p.58, 268]. My experiences and changing consciousness affected every stage of the research process. I kept a reflective journal and I engaged in reflective clinical supervision with my supervisors. My experiences and reflections formed part of the data. My increasing consciousness and changing experiences have been integrated into data analysis (see Chapter Six, Sections 6.1 and 6.2 of Appendix 6).

4. Feminist researchers pay attention to reflexivity in self and others [274]. This study is highly reflexive throughout the research process; a reflexive spiral approach was used in the feminist action research (FAR) design. For the duration of the study period, I maintained a reflective journal and during the data collection phase, I regularly participated in reflexive supervision with my principle supervisor via Skype.

5. Feminists recognise power and seek to equalise power relationships with the research participants [6 p.50, 276]. Power relationships between the research participants and the researcher need to be considered by the researcher in all stages of data collection, with mindfulness of the potential for inequality during both individual and group interviews [9]. As a Thai person, I knew that getting research participants to act as equals towards me and towards each other would be one of my main challenges. How this feminist principle of equality was realised is made clear in the finding chapter. The women felt empowered in the group and individual meetings as evidenced by their increasing willingness to engage in conversation and disclosure during the groups and meetings. Their degree of empowerment was demonstrated in their changed health status (Chapter Five and Appendix 5) as shown in the group evaluations and the findings chapter (Chapter Six, Sections 6.1 and 6.2 of Appendix 6).

6. The goal of feminist research is to improve the experiences and lives of women. Feminists usually express this principle as liberating women from oppression [8, 274]. Patti Lather argues that the goal of feminism is “emancipatory knowledge-building” which means creating knowledge that women can use to empower themselves [276 p.54]. My study involved two specific groups of women whose lives I sought to improve: women who were at increased risk of preterm birth and midwives in Thailand. Findings from this study outlined
in Chapter Five and in Appendix 5 show that the lives and experiences of the research participants improved. My life and experience as a woman and midwife were also improved and are described in the findings chapter and discussion (Chapters Six and Seven).

7. The researcher should explicitly consider the categories of oppression such as age, gender and sexuality, as well as race, class and ability [6, 9]. I respected this principle particularly in relation to participants in my study. For example, the group had three teenage participants, and one refugee participant all of whom had a low socio-economic status; some women in the group were extremely poor and relied on Buddhist monks to give them food. I explicitly considered the categories of oppression by being genuine and accepting so as to develop trust with the women. I used open-ended questions to avoid the possibility of individual women feeling vulnerable. I explicitly valued the right of each woman to be in control of what information she chose to share or keep private.

8. Feminist researchers pay careful attention to the use of non-oppressive language [276 p.8, 277, 278 p.212]. I was careful during the individual and group interviews to ensure I used plain, easily understood everyday language that did not include technical terminology and ambiguous words. I also ensured my body language was consistently appropriate for the purposes of the study and the participants. For instance, when showing the models or photos to the participants, I used my right hand (palm down) with all fingers extended. I would not point to the participants with my forefinger as this would have caused offence.

9. Experiences of research participants and the researcher in both theory and practice are related to each other [8, 268]. During data collection and analysis, the experiences of the women and my own experiences shaped my interpretation of the data and the development of a theoretical model of midwife-facilitated women’s health groups during childbearing (Chapters Two, Four, Five, Six and Appendix 5).

10. Feminist analysis may include both emic and etic perspectives [279]. ‘Emic’ means the perspective of the research participant or participants. ‘Etic’ means an outsider perspective, including the use of theory to illuminate interpretation. During data collection

4 Body language in Thailand: Thai people consider the head to be the most important part of the body as it is at the highest level. The feet are the lowest part of the body both physically and symbolically. The hands are also important in Thai culture. It is not considered polite to point to anyone with the forefinger. When receiving things or welcoming people, using the right hand shows politeness and respect. Use of the right hand is required because the left hand is associated with cleaning after toilet routines (Press World Trade, 2010).
and analysis, I moved back and forth between an insider’s view (of the women’s beliefs and experiences) and an outsider’s view (my interpretation of the same beliefs and experiences). The women’s stories were translated from Thai language, but I attempted to stay as close to their own meaning as possible [280-282]. When I analysed and interpreted the data, I brought my own knowledge and experience to bear and my supervisors provided critical advice and references to theory.

11. Feminist analysis considers experience as the basis of data analysis and interpretation. The analysis also considers and/or explains gaps and silences in the data [9, 277]. My analysis includes consideration of the way the participants were silent at times. I thought about the gaps in the data which sometimes imply what was left unsaid or what might have been said or done. In the findings chapter, I analyse the gaps and silences that occurred between teenagers and mature women in the groups to see how social discrimination could operate silently but effectively to cause a teenage girl to feel ‘less than’ the married, middle-class group members.

12. The research results will provide information for women, rather than about women [9 p.30, 275]. The research project was designed to support Thai woman and Thai midwives to work together more effectively and appropriately. The findings and the conclusions provide a new culturally appropriate model of midwifery care for supporting Thai women.

4.3 Action Research

Kurt Lewin 1940 [283], a social psychologist, is recognised as the pioneer of action research. From the beginning, action research was about the combination of action and research where theory and practice develop reflexively and inform each other [284, 285]. Kurt Lewin [283 p.40] intended action research to contribute to ‘more precise theories of social change’ which aimed to improve human interrelationships in social and organisational settings. Lewin’s conception of action research is of a systematic dynamic spiral of assessing, planning, implementing and evaluating change in organisational settings [265]. His action research spiral has also been widely used to improve the quality of education [265, 284-286]. Lewin emphasises democratic collaboration, group participation, group reflection and personal reflection [265, 284, 285].
Paulo Freire (1972) [287] emphasises ‘praxis’ or theory/practice integration to develop or change personal and collective consciousness in order to bring about changes in behaviour which can then change oppressive social situations. Whitehead and McNiff [267] argue that human action should be informed by understanding. Another way of saying the same thing is to say that action should be informed by theory. Despite the fact that the meaning of the word ‘theory’ is debated within the action research community, the basic understanding of theory being the ideas in our minds that guide us in practice is not really challenged [267, 288]. What is clear is that within action research, ‘theory’ is much less formal and much more practical compared with ‘text book’ theories (see glossary in Appendix B for a definition of theory).

Action research primarily aims to produce practical theory that is “useful to people seeking to understand the experiences in their everyday lives” [265 p.4]. A wider aim of action research is “to use practical theory to enhance health and wellbeing, including sustaining a healthy living environment” [265 p.4, 286].

4.3.1 Common Features of all Forms of Action Research

There are multiple forms of action research; however the following are common features of the various methods. All of these features are integrated into this study.

Action research:

1. “involves a spiral of self-reflective cycles of the following: planning a change, acting and observing the process and consequences of change; reflecting on these processes and consequences; re-planning, acting and observing again and so on” [289 p.563]

2. should be preceded by a period of engagement and rapport building with key stakeholders [290]

3. should include a formal evaluation of the whole process from the perspective of the group [265, 284-286]

4. is practice-centred in “a manner which encompasses the practitioner’s professional and personal values base with the aim of improving practice” [288 pp.12,16]

5. is collaborative and involves a group of co-researchers or associate researchers [265, 290, 291]
6. incorporates local expertise into each phase of the action research spiral [290, 292]

7. is best conceptualised as a solutions focussed approach rather than a problem-focussed approach [267, 286, 293]

8. integrates individual and group reflexivity at all stages of the action research spiral [294, 295]

9. aims to transform both theory and practice [289]

In considering the form of action research to use for my study:

1. An experimental design was rejected because a planned intervention needed to be developed.

2. A phenomenological or grounded theory approach was rejected because the aim of this type of interpretive or constructivist research is to gain an understanding of the participants’ perspective, but I wanted to go further and design a study that engaged the women in real, active change to promote their health.

I therefore decided to choose Feminist Action Research because of its conceptual and methodological frameworks.

**4.4 Feminist Action Research**

Critical social theory and emancipatory feminist research are derived from both neo-Marxism and the Frankfurt School of philosophy [296]. The goals of both critical research and emancipatory feminist research are to develop enhanced consciousness in all the research participants and the researcher, leading to social transformation [273]. Another sought-after outcome of critical research, including emancipatory feminist research, is to create theory (a new knowledge/model) that can be used to build a more just society [273, 279, 297, 298]. This echoes the aims and aspirations of both feminist research and action research. Feminist research and action research share values and goals that seek to promote knowledge construction, collaborative learning and transformative action [273, 279]. The relationships between feminism, action and research are conceptualised in the model presented as Figure 4.1 [279, 299].
Feminist action research (FAR) is a group-based methodology in which the research is conducted to solve practical problems in the real world; in this case preterm birth. FAR is a tool that facilitates creating knowledge, enhancing awareness, consciousness and power to change women’s lives both individually and collectively [273, 279, 300]. Feminist action research is therefore consistent with my belief that pregnancy is a healthy condition, not a sickness; meaning that with support and information, all pregnant women are capable of taking care of themselves and their unborn babies to be healthy.

FAR researchers take a critical perspective and pay particular attention to the socio-political contexts in which practice occurs [273]. Understanding the context is essential in order to be able to support change in practice in line with what is most beneficial to women [273, 279, 289, 296, 299].

The phases of FAR specifically modified from Kemmis & McTaggart [301] in this study include planning, practising, reflecting and revising plan to change practice. This is shown in Figure 4.2 below.
4.4.1 Planning: Preparing for Practice

The following section describes the FAR planning that was undertaken prior to travelling to Thailand. Before I left Australia, I presented a written and oral research proposal and a defence of my planned research. I successfully completed a confirmation of candidature process at the end of my first year. An ethics application was developed and submitted for the research project in English at the University of Newcastle and in Thai language at the research site in Bangkok in Thailand. How the research quality was appraised in this project is discussed in Section 7.8 of Chapter Seven.

4.4.1.1 Ethical Considerations

The study was approved by the Human Research Ethics Committee (HREC) of the University of Newcastle (Appendix A1) and the Human Research Ethics Committee of the Bangkok
Metropolitan Administration, Thailand (Appendix A2). The major ethical issues that I had to address were: ensuring fully informed consent for publication a photograph including those women who could not read and/or who were younger than 18 years of age (Appendix A4); maintaining confidentiality within the groups and ensuring anonymity in the way that very personal data is presented. All of these issues and more were successfully addressed as described in the ethics proposal (Appendix A11).

4.4.1.2 Modified Midwifery Partnership

The intervention plan involved a modified midwifery partnership with each woman and antenatal health education groups. The midwifery philosophy and the partnership model of care (as explained in Section 2.6.1-2 of Chapter Two) were modified because in Thailand prenatal care is provided exclusively by obstetricians. I was unable to provide antenatal, intrapartum or postpartum care. It would have been culturally inappropriate for me to try to take over the provision of full antenatal care for this study as I would have been unlikely to get the cooperation of the hospital staff. The modified version of the midwifery partnership I planned to offer included a 15 to 20 minute one-to-one interview at the beginning of the study so each woman and I could get to know each other and build our relationship. I planned to give each woman my mobile phone number so she would be able to talk to me if she wished to. In order to build trust, I intended to start the conversation by giving some details about me, both personal and professional. My aim was to build a sense of equality by talking to each participant using plain language. During our conversation, I planned to invite and welcome each participant to call me by my nickname. (Calling a person by their nickname is associated with friendly relationships in Thai society.) My intention was to provide continuity of relationship via regular meetings with the antenatal health education groups and follow up each woman after the birth of her child. Some aspects of this plan changed as a result of the action research process and my personal reflections. These changes are described in Sections 6.2, 6.3 of Chapter Six and Sections 6.1 and 6.2 of Appendices 6.

4.4.1.3 Group-Based Antenatal Education

The planned model of conducting Group-Based Antenatal Education was based on Feminist Group Processes (see Appendix 2 for the organisation for the group-based discussion) and the CenteringPregnancy model as described by Rising [5] (Section 2.6.3 of Chapter Two). I decided that antenatal education group meetings in Thailand would be:
1. designed for women who are at risk of preterm birth

2. welcoming of women who were most likely to be culturally, socially and/or economically disadvantaged

3. women-only groups

4. additional to standard medical antenatal care but held on the same day as antenatal clinic visits

5. based on equality and consensus with health topics for discussion to be selected by the group with a suggested structure but no imposed content

6. based on the stages of feminist group process – that is, group forming, checking-in, working, closing and evaluating

7. focused on the women’s experiences, helping them to express their thoughts and feelings, and creating an environment in which they felt safe enough to talk about their health-related behaviours

8. conducted using open-ended questions to encourage the participants’ thoughtful responses

9. conducted reflexively – that is, practising and researching simultaneously (see Figures 4.2 and 4.3).

The group discussions were designed to provide a safe space where women could obtain information and share their experiences with the goal of increasing their ability to take responsibility for their health. This planned model was developed as the model of ‘Midwifery Primary Health Care Groups’ (see Section 6.6 of Chapter Six).

4.4.1.4 Possible Health Topics for Group Discussion

After reviewing the literature, I had a list of topics associated with preterm birth and women’s wellbeing. This list provided me with a framework of potential and relevant topics for facilitating the discussion groups. My intention was that the group would discuss topics that the participants identified as important to them. However, if the participants did not volunteer any suggestions, I had the following items prepared for discussion [15, 88, 302-306]:

- [Insert list of potential health topics here]
- nutritional issues; eating habits, body weight and elimination
- physical activity, exercise, relaxation and lifestyle
- psychological health, love, friendship, fun, creativity, spiritual practice relationship and coping
- sleep patterns
- smoking (active and passive), alcohol and drug abuse
- signs and symptoms of labour pain and labour
- self care, detection of adverse conditions; birthing the baby
- preparing for breast feeding
- preparing for childbirth.

4.4.1.5 Reconnaissance and Engagement

As described by Walsh and Moss [290], the success of an action research project is founded on knowing and understanding the context of the research and the key players in the field. Prior to leaving Australia, I communicated via email and telephone and shared my research plan with the chief obstetrician, the antenatal clinic midwives and midwifery lecturers at my college (Appendix A6, A7 and A8). The obstetrician agreed to be a research consultant and the midwives in the antenatal clinic also agreed to be assistants.

Once in Thailand, I established a good working relationship with the obstetrician in charge prior to commencing data collection. I then coordinated the group-based discussion times to match with the obstetrician’s schedule. I established and maintained cordial working relationships with the midwives in the antenatal clinic. I found a private room with a whiteboard where I could arrange the chairs in a circle and obtained permission from the midwife in charge of the antenatal clinic to use the room to conduct the groups. I organised morning tea to be available after each meeting to encourage the women to stay and socialise with each other.
The antenatal midwives and I discussed recruitment of participants in the antenatal clinic and they agreed to recruit women. My primary supervisor visited me at the start of the data collection and met with the obstetrician, the midwives and the midwifery lecturers. My supervisor’s visit supported me and demonstrated the value of the research to my colleagues. I believe her visit was a key factor in gaining my colleagues’ support and commitment to the research.

4.4.1.6 Recruitment of Participants

I developed a set of screening criteria for midwives in the antenatal clinic to use to select appropriate participants to be invited to join the study. I was interested in those at high risk of preterm birth with gestational age less than 24 weeks. The screening tool (Appendix A5) is evidence-based but it is also quick and easy to use for the midwives. When a participant was identified as being at increased risk of preterm birth, the midwives gave her the information statement and consent form for the study (Appendices A3 and A4). Women who returned the completed consent form were then contacted to organise the first meeting. Sixteen women were recruited, interviewed and formed into two groups of eight women.

4.4.2 Practising

For me, Practising involved the practice of midwifery as a modified ‘partnership’ with each woman, the practise of facilitating groups and the practise of research.

4.4.3 Reflecting

In this study, I reflected on my own practice (described in more detail in the methods for data analysis and interpretation section below) and each meeting there was time allocated for group reflection. In group reflection I particularly encouraged women to focus on their experiences and knowledge in ways that seemed to offer the most potential for learning about health promotion. At the end of this study, the last group was devoted to reflective evaluations. The women’s individual reflections are contained within the women's changing health status (Chapter Five) whereas group reflections are contained within Chapter Six.
4.4.4 Revising the Plan to Change Practice

Following reflection on practice I made changes to my practice for the subsequent groups. Essentially I identified key learnings and then devised ways to practise as a midwife and group facilitator in different and better ways. These changes will be described and justified in Chapter Six.

4.5 Methods for Data Collection

Data collection occurred during the phases of FAR – ‘Practising’, ‘Reflecting’ and ‘Revising the plan to change practice’ (Section 4.4.2-4.4.4 and Figure 4.2 above). The methods for data collection were (1) recorded one-to-one interviews; (2) notes taken during the group-based discussions and (3) personal reflective journaling.

4.5.1 One-to-One Interviews

During the first interviews (15–20 minutes), I began to realise that providing group-based discussion only was not going to be enough for the women. I sensed that they needed my attention, care and concern as a midwife and a woman. I therefore conducted a semi-structured one-to-one interview with each participant; there were at least two private interviews for each participant, more if required. A semi-structured interview is flexible, allowing new questions to be brought up during the interview as a result of what the woman said in her efforts to understand the world [273]. The researcher in a semi-structured interview has a framework of themes to explore. In this study, Maslow’s hierarchy of needs was used as the framework for the one-to-one interview (see Table 5.1 of Chapter Five). For assessing women’s health status, each meeting I recorded changes in each woman’s life and how she appeared to me in terms of her self esteem and self confidence: I recorded these changes in my reflective journal. I evaluated their changes over the course of antenatal groups from women’s reflections on themselves by comparing each meeting with subsequent meetings.

I wanted the women to feel relaxed, I met each one either in the hospital grounds in a grassed area with benches under a big shady tree or in the hospital coffee shop. I did not even think about wearing my uniform to these meetings; I wore a shirt and pants. After a few minutes of small talk to connect, I began an interactive and engaging discussion with each woman about her health-related behaviours. During the conversation, I asked about such topics as eating
habits, elimination, physical activity and sleep. At the beginning of each interview, I would check that the woman was happy to be interviewed and for our conversation to be recorded.

At the end of our conversation, I reviewed and clarified what the women had said about each topic and obtained agreement on the validity of my note taking. In order to stay as close to the women’s own meaning as possible and to retain the integrity as well as tone of the participant’s own perspective including confidentiality, the one-to-one interviews were recorded and transcribed by myself. This process is consistent with ethical considerations as outlined in the Ethics Application (Appendix A11).

4.5.2 Group-based Discussions

The group-based discussions were organised in the meeting room, which was approximately 40 square meters, and contained one white board, one table, 10–12 chairs, and curtains. During group discussion, eight participants sat in the circle. A midwife volunteer who was an academic colleague acted as my research assistant. She sat, unobtrusively, outside the circle of research participants and at least every 15 minutes, took field notes, recording what was said, who said it, and what was happening in the group. Please also see Appendix 2 for the organisation for the group-based discussion and the detailed stages. At the end of each group-based discussion, the research assistant and I immediately reflected and discussed what happened during the group from the beginning to the end. I audio-recorded our discussions on my digital recorder and transcribed them later on the same day. I assessed the women’s changes over the course of antenatal groups from their reflections on themselves by comparing each time of women’s participation with subsequent meetings. I used the three-phase process consisted of: “Reviewing, Reflecting and Emphasising” (see Question 12 in Chapter Six).

4.5.2.1 Stages of Group-based Discussion

The stages in the meetings included group forming, checking in, working, closing and evaluating [5, 6]. These stages are related to the method for data collection.

4.5.2.1.1 The group forming stage (first meeting):

- This stage was concerned with creating a friendly environment, group norms and explaining the midwife/researcher’s role and ethics.
• I worked to create an atmosphere where everyone felt they were on the same footing during group discussions.

• I introduced myself and my roles as a midwife and researcher. I described my educational background, work experience, my current workplace and educational background.

• I then described the background, objectives, and the details of the research project and discussed teamwork, including the ethical guidelines for recording and photographing.

• The women were encouraged to feel free to express their experiences, values, beliefs and opinions without concern about whether other members of the group agreed or disagreed.

• I worked to empower the women to choose pregnancy health topics for group discussion.

• Group norms were developed by the women and facilitators during the early stages and were based on equality, mutual respect, listening and shared responsibility.

4.5.2.1.2 The checking-in stage:

A checking-in stage begin with creating a commitment to the power, unity and sharing of the group. The aim of checking in was to help each woman to leave other matters behind and to focus the attention of each member of the group on shared purpose for being together.

• I welcomed the women and thanked them for participating in the meeting. Then I encouraged each woman to focus on herself by telling the group about her pregnancy development and self-care in past two weeks.

• Each woman was invited to talk for about 15 minutes at this stage. It was a chance for each woman to reflect her thoughts, feelings, knowledge and experiences since the last meeting.

• Each woman was encouraged to reflect on whether she could remember what she expected her pregnancy to be like.
4.5.2.1.3 The working stage:

Active discussion on the agreed topic (about 45–60 minutes), during this stage created commitments to the power of group and promoted group integration, raised individual and group consciousness and created a shared responsibility for the content and process of each meeting.

- Each woman was encouraged to participate and listen respectfully. The women were encouraged to share experiences freely and directly in order to develop trust of the other women and mutual understanding.

- The women were invited to tell stories of their experiences as they related to each topic and also to contribute their journal reflections, drawings, photographs or any other form of contributions they wanted to make and to describe their experiences.

- The women were encouraged to identify action strategies that they wanted to use either individually or collectively with the aim of promoting health.

- Each woman in the group was encouraged by the others to take actions that would promote greater self-responsibility, the development of greater self-awareness and consciousness-raising for her own health.

- The groups were encouraged to think about the factors that either promoted or diminished healthful behaviours with a particular emphasis on social and cultural factors.

4.5.2.1.4 The closing stage:

The aim of closing stage was to help each woman to reflect on someone or on something that had happened during the group process [5, 6].

- Each woman was invited to express her appreciation of the gathering, or to voice concerns on the processes of the group before moving forward.

- Approximately 10–15 minutes was devoted to reflection, evaluation and recommendations regarding the strengths and weaknesses of the group meeting and planning what needed to happen next time the group met.
• Each meeting ended with refreshments being served and socialisation. Women were given time to reflect on their practising, feelings and thinking including an evaluation of group process and content in each session.

4.5.2.1.5 The evaluation stage (after giving birth):

• The last meeting was organised after all the births had taken place and was concerned with a collective evaluation including an evaluation of the impacts of the group on women’s health and wellbeing.

• Each member was encouraged to express her experiences, and describe the impacts on her health and wellbeing. They were encouraged to mention networking or friends who had assisted or influenced them to have a healthy pregnancy.

• Women were invited to identify action strategies that they would like to use either individually or collectively with the aim of promoting health and creating networks and relationships for transformation.

4.5.3 Reflective Journal

At the end of each group-based discussion, I immediately reflected and recorded my reflections using a notebook and a digital recorder. I often discussed practice situations of concern with my supervisor, or my friends and colleagues. During data collection, analysis and interpretation, I identified a number of practice situations that were particularly challenging for me, such as whether or not to wear a uniform to the groups. A new model of reflection was developed during this study and is summarised in Figure 4.3 below (more details are provided in the findings Chapter Six.)
Figure 4.3: The Model of Reflection in and on Practice

4.6 Methods for Data Analysis and Interpretation

Consistent with critical feminist research methodology, data collection and analysis commenced concurrently [273]. Data analysis began with the first interviews and concluded, not with the last group-based discussion, but months later in Australia as I continued to dwell on and interpret the data. Data analysis was guided by Maslow’s hierarchy of needs (see Section 2.4 of Chapter Two), feminist research principles (see Section 4.2 of Chapter Four), feminist group processes (see Section 2.5.2 of Chapter Two) and midwifery philosophy (see Section 2.6.1 of Chapter Two) as well as the research question. I had planned for two main outcomes that required specific data analysis techniques for this study.

- Narrative construction: the stories of individual participants from their emic perspectives (Chapter Five, Appendix 5)
Construction of a model of midwifery primary health care groups: a new midwifery model which was developed from a description of the changes to the roles of the Thai midwives that are needed in order to be culturally effective when working with groups of women (Chapter Six and Sections 6.1 and 6.2 of Appendix 6).

4.6.1 Narrative Construction

This section describes how the narratives of individual participants were constructed (Chapter Five). I used personal narratives to construct the women’s stories. According to Susan Chase [307 p.430] “Narrative is a retrospective meaning making – the shaping or ordering of past experiences” to make sense of one’s life or situation. There are a number of advantages to using personal narrative as a way of collecting and presenting qualitative data [308-315].

The key advantages for using personal narratives in this study were:

1. they placed the experiences of individual women at the centre of the research [308, 316, 317]

2. they invited women to tell stories in which they could represent themselves in their own voices [311, 317-319]

3. they enabled the women to integrate their past and present experiences into a meaningful whole [312, 313, 320]

4. they brought to light the way that power and perspective had come together to shape each woman’s life and health [308, 316, 317]

5. publishing the narratives demonstrated respect for the women’s own perspectives [310].

One major challenge in this study was that the women spoke only Thai; the researcher therefore had to translate their words into English. The process of translation creates the risk that the “researcher’s voice or perspective will be imposed on the women’s stories” [307 p.663]. Susan Chase identifies three ways in which the researcher’s voice may be involved in the final narrative (1) the researcher’s authoritative voice (an etic imposition of the researcher’s view). (2) The researcher’s supportive voice (seeking to provide an emic presentation of the woman’s own view), and (3) the interactive voice (where the voices of
both participants in the dialogue are presented). My approach to narrative construction was to be the supportive researcher and promote the woman’s own perspective.

Narratives fit well with FAR because they help women to make meaningful wholes out of the various elements of their lives “and of connecting and seeing the consequences of actions and events over time” [307 p.421].

The steps in narrative construction in this study were:

1. I listened to the recording of each one-to-one interview in the Thai language at least three times. I also used the notes taken by the research assistant during group sessions. I selected sections of data that were spoken by that particular participant. This process was repeated for each participant’s data.

2. I transcribed the data and engaged in story construction by moving data around to create a chronological order. I removed repetition and parts of the interview that were not relevant to the research question and sub-thesis.

3. I focused on each participant by considering her life story – including “her early life experiences, current experience, beliefs and cultural context as well as the social relationships of each participant” [314 pp.16-18]. “The focus included her history and other people in her family and environment who were affecting her pregnancy, health and wellbeing” [314 p.17]. I was mindful that different participants responded differently to the same situation [314].

4. To ensure the validity of the final narrative I wrote each story in the Thai language at first and gave it to the woman.

5. Once the participant had validated her story, I translated it to English, attempting to stay as close to the participants’ meaning as possible. During translation I was careful to retain the integrity and tone of the participant’s own perspective whilst recognising the difficulties of doing so. This process was consistent with the techniques and reviews by Temple [280, 281].

6. Each participant’s story was edited and proofread by a professional English translator. Each story was also reviewed and validated by my supervisors. I then included the story in the findings chapter.
4.6.1.1 Analysis to Determine Health Status

As mentioned above, action research aims to transform both theory and practice. Action researchers do not “regard either theory or practice as pre- eminent in the relationship; rather (action research) aims to articulate and develop each in relation to the other through critical reasoning about both theory and practice and their consequences” [289 p.568]. The theory that was guiding me in understanding the dimensions of ‘health’ was Maslow’s hierarchy of needs (Chapter Two). Through my engagement in the lives of the women participants, I developed and used a holistic health assessment form (based on Maslow’s work) to interview women about their health. In this way, both the theory and my practice were affected by my engagement in action research.

The holistic health assessment form (see Section 2.4 of Chapter Two) was used as a way of interpreting each participant’s changing health status systematically and also as a way of identifying additional risk factors for preterm birth. This assessment was done when the women first joined the research project. I added to it based on discussion at subsequent meetings. The results of these assessments are included in data analysis (Chapter Five). The steps in assessing the holistic health and medical risk factors were as follows:

1. I created a table for each participant to present her holistic health assessment (Part A) and medical risk assessment (Part B) (Chapter Five). Four factors of Maslow’s theory were assessed and recorded in Part A. Self-actualisation was not included in the assessment because I did not systematically collect data from each participant on this highest level of need. For Part B, I used the known medical risk factors (Appendix A5) to evaluate the participant’s medical risk of preterm birth.

2. After the first meeting with each participant I placed comments on each factor into the table (see Table 5.1 of Chapter Five). I continued to assess the health status of each woman throughout the duration of the study. I considered each preterm risk factor and each basic human need for each woman and evaluated: what had changed and what had remained the same; and I recorded my findings in Table 5.1. For example, in evaluating the self-esteem factor, I assessed the participant’s confidence in herself including within the group at the first meeting and compared this with any change to her level of confidence at the subsequent meetings.
3. Next I analysed each participant’s changing health status as a result of her participation in the groups and her one-to-one care from me as her midwife by using both emic and etic perspectives. How I classified the level of health status for each woman is discussed in the findings chapter (Chapter Five). I then interpreted each participant’s story, mindful of her cultural context, her beliefs, and her past and present experiences.

4. Finally, my own thoughts and interpretations were added from my journal. I paid particular attention to the participant’s health challenges, her strengths and ways of coping.

4.6.2 Construction of a Model of Midwifery Primary Health Care Groups

The section describes and justifies the strategies I used in order to construct a new model of “Midwifery Primary Health Care Groups”. To extract the data, I listened to the recorded group discussions at least three times, transcribed them in Thai and translated them into English later. I reviewed the notes taken by the research assistant while I listened to the recorded sessions. I made notes about critical incidents in the conversations, such as when I observed myself misusing my power or using technical terms. I often discussed this process and the issues emerging from the data with my supervisor. All qualitative data analysis involves a process of data reduction. I used a modified grounded theory approach to do so. This grounded theorising involves engaging in multiple iterations of analysis and conceptualisation in the direction of higher levels of abstract conceptualisation until a theory or model is created [321 pp.336-9]. The model I developed was grounded in my learning from experience. My reflections on experience and the resulting model are presented in Chapter Six.

4.6.2.1 Process of Model Development

As mentioned above, action research aims to transform both theory and practice. Feminist researchers make explicit the interactive links between developing theory and method; theory and practice do not stand apart from each other [322 p.90]. Because theory and practice are intertwined in this study, it is not possible to describe the model development process that I used as if it occurred separately or as if it was designed before the actual engagement with the data. The process of model development was guided by the research question and the research aim. From the aim the development of a model of midwifery practice that focuses on the capacity building of Thai childbearing women’s sense of self, I knew that what I learned,
during my experiences with the groups would be important to understanding the way that a Thai midwife would need to change and develop in order to successfully facilitate group-based health education. This understanding shaped the way that the model was developed.

As shown in Figure 4.3 above, the outcomes of each reflective learning cycle were key learnings. Each of the new ‘learnings’ was added to a table. As the table grew, I organised the ‘learnings’ into two types: (1) midwifery strategies to promote women’s health education and (2) midwifery aims related to each midwifery strategy (see Table 6.5.1 of Appendix 6). The table went through a number of iterations, which were included in Section 6.5 of Appendix 6 and Tables 6.5.1-9, which ensured that a robust data trail was maintained [323]. During analysis and data reduction, I used abbreviations in the table; this made the table easier to fill in and easier to ensure consistency of expression to avoid conceptual slippage or confusion [324, 325].

Stage 1: Identifying Supra-concepts

The first stage in developing the supra-concepts involved subsuming a number of related lower-level themes (described as ‘learnings’ above). For example, ‘wearing normal clothes’ and ‘being positive and encouraging’ were both examples of the midwifery strategies which aim at ‘equalising power’ and ‘enhancing self-confidence and health empowerment’. Through a process of ongoing analysis and sub-subsumption of lower level ‘learnings’, higher levels of abstract conceptualisation were created. In this example ‘equalising power’ and ‘enhancing self-confidence and health empowerment’ fitted under the supra-concept of ‘Actualise Midwifery Philosophy’ and ‘Promote Holistic Health’ (see Table 6.5.3 of Appendix 6).

Stage 2: Grouping Supra-concepts

Grouping involved combining supra-concepts with similar characteristics into meaningful concepts [269]. In this stage, I considered the supra-concepts together and reduced their number by further subsumption of lower-order concepts. For example, ‘Promote Holistic Health’ was the supra-concept derived from lower-order concepts which included ‘Promote Health’, ‘Promote Mother-Infant Love’ and ‘Promote Active Learning’ (see Table 6.5.4 of Appendix 6). I gave the developing model the heading “Midwifery Primary Health Care Groups”.
Stage 3: Comparing and Modifying Theoretical Foundations

The final model is empirically grounded in the data but has also been informed by the extant literature. This stage involved comparing the feminist group rules discussed in Chapter Two with the guidelines that were actually used (described in Chapter Six). This comparison provided a further foundation for the developing model. I therefore compared midwifery strategies with the review of theoretical foundations so that I could be sure that I included all relevant concepts in the finished model (see Table 6.5.5 of Appendix 6).

Stage 4: Embedding Theoretical Foundations

In this stage, I was seeking higher-level integration between the developing supra-concepts which now encompassed both the theoretical literature and the concepts that were unique to my experiences with the groups in Thailand. For instance, I decided to group and embed the foundational theories/philosophies as: ‘Actualise Midwifery Philosophy’, ‘Promote Holistic Health’, ‘Promote Networking among Women’ and ‘Promote Group Process’ (see Table 6.5.5- 6.5.8 of Appendix 6).

Stage 5: Tentative Model Building

The process of model development was highly iterative, moving between findings, theories, philosophies and back again. The steps in model development will make more sense when the findings are read and the whole process is discussed as it actually happened (see Table 6.5.9 of Appendix 6). I created a new model which was appropriate for Thailand and which fitted the goal of Midwifery Primary Health Care Groups by summarising the key elements under the following high-order categories:

1. Theoretical foundations
2. Group process
3. Midwifery strategies
4. Midwifery aims
5. Goal

For full details see Section 6.6 and Figure 6.4 of Chapter Six.
4.7 Conclusion

Feminist Action Research is practice-centred. Preparing for practice by focusing on engagement and building rapport precedes any attempts to change practice. Feminist action research is conceptualised as a spiral of activity involving planning, acting and reflecting on action. Knowledge construction is incorporated into each phase of the action research spiral. Feminist action research is a ‘solutions-focused approach’. In this case the aim is to enable each woman to optimise her own holistic health and that of her baby. In this chapter, I have presented the framework of the methodological principles, the research design and the actual phases of the feminist action research spiral used in this research project. The spiral included ‘Planning, Practising, Reflecting and Revising to change practice’. The research setting, participants and ethical issues were described. The methods of data collection were described and included one-to-one interviews, group-based discussion and reflective journals. Methods of data analysis, interpretation and the process of model development have been presented as specific techniques for this study. Overall, the plan and preparation for practice that I had when I began this research was modified based on theoretical/philosophical foundations. As my study progressed and my practice more fully developed I felt more confident in the strategies I used enhance the individual health empowerment of each woman with the aim of helping to ensure that each baby would be born healthy and at term.
CHAPTER FIVE

KEY FINDINGS: THE WOMEN

5.1 Introduction

The purpose of this chapter is to present findings which support the thesis in this chapter that: 

For women who are at increased risk, improving their holistic health by optimising their health empowerment is the best way to prevent preterm births.

My analysis and interpretation of the collected data is based on Maslow’s hierarchy of needs and the premise that having multiple unmet needs creates maternal and fetal stress that predisposes women to preterm birth and babies that are small for their gestational ages. The data was collected via one-on-one interviews; group-based discussions; and during my interactions with and observations of each of the participants and my reflective journal. My relationships with the women, in most cases, included the first interview, our group meetings and visits to some women in hospital as well as in many cases talking with them again at the postnatal evaluation group meeting. The starting point for each woman was the one-to-one interview, which was held with her shortly after recruitment. The key for understanding the women’s conversations, I use Arial font with the single inverted commas to present what the women said to me and their friends within the group.

The focus of this chapter is on the health status of the women as individuals and how their health status changed or did not change during their engagement with the groups. For the sake of understanding about how the women’s health improved, this chapter is best read along with the record of the group-based discussions which were related to women’s learning (see Sections 6.1 and 6.2 of Appendix 6). The discussion on group processes provides women with different points of view about many aspects of birth and pregnancy. Learning from facilitated groups like those conducted in this study helps women to change their views to more beneficial ones. The women are supported through the group process to manage their daily lifestyle in a healthier way by improving their nutrition\(^5\), drinking, eliminating and chatting with the unborn baby.\(^6\) Through discussion, they also become aware of the risk of preterm

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\(^5\) Nutrition is related to: Chapter 6, Section 6.4, Q9: What should a midwife do when information is required in a facilitated group discussion on nutrition in pregnancy? Section 6.5, Q3: How should a midwife support women to apply theory to real-life practice?

\(^6\) Chatting with the baby is related to: Chapter 6: Section 6.4, Q5: How can positive mother-baby connection be facilitated?
birth\textsuperscript{7} and the regular meetings and discussions help them to be knowledgeable and conscious of how to take care of their health during pregnancy.

The chapter has two main parts. Part one presents the findings of the participants as individuals. Discussion about each woman starts with the woman’s summarised story. Next, in a health assessment table of each woman’s history, her health is assessed both holistically and from a reductionist standpoint. Please see Section 4.5.1 of Chapter Four for an outline of the steps in constructing women’s stories and steps for assessing their holistic health and medical risk factors. Each woman’s health status was assessed based on her medical risk profile in relation to the preterm birth-screening tool (Appendix A5), which was administered prior to my interview and first group meeting. During the study however, my understanding concerning the factors in women’s lives which undermined or promoted her health deepened. I found that women’s health status had much to do with basic needs such as good nutrition, safe housing, and adequate social support. Consequently, I decided to use Maslow’s hierarchy of needs [88] (see Table 5.1) as a framework to examine women’s health status in a holistic way (see Section 5.2 and 5.3, part A of the table which was completed for each woman).

<table>
<thead>
<tr>
<th>Table 5.1 Criteria for Assessing Woman’s Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
</tr>
<tr>
<td><strong>Factors to be Assessed on Basic Needs</strong></td>
</tr>
<tr>
<td>1. Bio-physiological:</td>
</tr>
<tr>
<td>• Nutrition and hydration</td>
</tr>
<tr>
<td>• Elimination</td>
</tr>
<tr>
<td>• Physical exercise and relaxation</td>
</tr>
<tr>
<td>• Sleeping and rest</td>
</tr>
<tr>
<td>• Exposure to damaging substances</td>
</tr>
<tr>
<td>• Reproductive health (sexual expression as appropriate)</td>
</tr>
<tr>
<td>2. Safety and security:</td>
</tr>
<tr>
<td>• Adequacy and security of housing</td>
</tr>
<tr>
<td>• Quality of available water, air and food</td>
</tr>
<tr>
<td>• Baby’s environmental context</td>
</tr>
<tr>
<td>• Adequacy and security of income</td>
</tr>
<tr>
<td>• Physically safe at home</td>
</tr>
<tr>
<td>3. Love and belonging:</td>
</tr>
<tr>
<td>• Love and belonging needs met within family</td>
</tr>
<tr>
<td>• Love needs met by partner and/or friends</td>
</tr>
<tr>
<td>• Express an inner personal relationship with unborn baby</td>
</tr>
<tr>
<td>• Feels known and cared about by the midwife</td>
</tr>
</tbody>
</table>

\textsuperscript{7} Preterm birth is related to: Chapter 6: Section 6.4, Q10: How should a midwife facilitate women to share a sensitive topic? Section 6.5, Q4: How should a midwife help each woman to find the strength and commitment to lifestyle choices that promote full-term birth?
Table 5.1 Criteria for Assessing Woman’s Health (continue)

<table>
<thead>
<tr>
<th>Name:</th>
<th>Meetings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors to be Assessed on Basic Needs</td>
<td>1st</td>
</tr>
<tr>
<td>• Feels respected and cared about by other health care providers</td>
<td></td>
</tr>
<tr>
<td>4. Self esteem:</td>
<td></td>
</tr>
<tr>
<td>• Perception of self as a woman</td>
<td></td>
</tr>
<tr>
<td>• Adaptation during pregnancy</td>
<td></td>
</tr>
<tr>
<td>• Self-confident and strong</td>
<td></td>
</tr>
<tr>
<td>• Sense of self-worth</td>
<td></td>
</tr>
</tbody>
</table>

In regard to assessment for changes in health status, at each meeting I assessed each woman’s holistic health status from her reflections on herself using the question: How did you feel about the development of your pregnancy and your self-care in the last two weeks? My assessment included my comparing their health status at successive meetings. This approach was consistent with Stanley and Wise [9]. For assessing women’s self esteem and confidence, I evaluated their changes over the course of antenatal groups from women’s reflections on themselves and women’s participations with me and within the groups. I compared women’s self esteem of each meeting with subsequent meetings. A woman who had self esteem she could:

Review the knowledge and experiences that she had gained from the last meeting and how it had influenced her in the previous two weeks.

Reflect on her thoughts and feelings. She could tell the development of her pregnancy and her self-care in the previous two week.

Emphasise her health behaviours and her changes. She could tell what she was aware of to improve or change her lifestyle. For clarification Table 5.2 shows how to classify the health status and risk of preterm birth of each woman.

Table 5.2 Classification Health Assessments and Risk Evaluation

<table>
<thead>
<tr>
<th>Level of health status</th>
<th>Poorly met</th>
<th>Partially, but not adequately met</th>
<th>Reasonably met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk of preterm birth</td>
<td>High</td>
<td>Medium</td>
<td>Low</td>
</tr>
</tbody>
</table>

Footnote: The question related to facilitating groups is in Chapter 6: Section 6.4, Q12: How can a midwife facilitate empowerment in the women?
Women who had multiple unmet needs, as determined by Maslow’s hierarchy of needs, are defined as having ‘Poor’ health status, which means that she and her baby are considered to be at high risk of preterm birth. This determination of risk exists independently of her medical risk factors for preterm birth, focusing instead upon risks emerging from unmet needs within Maslow’s model [88]. Where a woman’s needs are partially, but not adequately met, then the health status is termed ‘Moderate’, the woman and baby are therefore classified as being at medium risk of preterm birth. Where the woman’s needs are all reasonably met the woman’s and baby’s health are classified as ‘Good’ and therefore from a holistic perspective, they are at low risk of experiencing a preterm birth.

I decided that:

- if the woman’s assessed needs did not change, then her health status would be assessed as unchanged
- if the woman’s assessed needs changed positively, the health status would be assessed as improved
- if the woman’s assessed needs changed negatively, the health status would be assessed as deteriorated

For the reductionist health assessment, (Part B of the table completed for each woman) I used the known medical risk factors (see Appendix A5) to evaluate the woman’s medical risk of preterm birth. Part one of this chapter culminates with a discussion of the table (Table 5.3) that summarises the holistic and reductionist risk statuses of all participants. The chapter then moves to part two, which is a discussion highlighting the impact of my intervention and key findings.

5.2 Findings about the Women Participants

This section presents the summary of fifteen women’s circumstances and my reflections on each woman’s situation. I did not include the story of a woman who had a blighted ovum (miscarriage). The stories and health statuses of the women who had term births are presented followed by those of the women who had preterm births. The full stories and reflections of the women on their experiences in the groups are presented in Appendix 5.
5.2.1 A Summary of Each Woman Who Gave Birth at Term

Kai

Kai, aged 28, was 19 weeks pregnant with her third pregnancy when I first met her. Kai and her husband Chai had one five-year-old child who was born by caesarean section following a prolonged second stage of labour and maternal exhaustion. Kai had miscarried in between these two pregnancies. Even though the current pregnancy was unplanned, Kai and her husband wholeheartedly welcomed it.

Kai was born in Bangkok. She had one younger sibling. At birth she weighed only 1,200 grams. As a newborn, Kai was nursed in a neonatal intensive care unit for three months before her mother took her to Kai’s grandparents. As a child, Kai grew up with her peasant grandparents, who always found it hard to make ends meet. At age 12, Kai left school and moved to Bangkok where she was re-united with her mother. She married Chai when she was 21. Kai became pregnant with their first child two years after their marriage. For the current pregnancy, at first meeting, Kai said,

‘I am uninformed about what I should do or how I should care for myself during pregnancy. Eating, drinking or sleeping is just the usual daily routine for me. I am ignorant about nutrition and the benefits of drinking enough water. I always delay voiding because my roadside stall is far from the toilet. I am not getting enough sleep because I usually finish my work at 1 a.m. My normal bedtime is from 2 a.m. to 7 a.m’.

Kai has had 13 antenatal visits at the hospital and regularly attended the group, completing her group-based discussion just before she gave birth. Kai said,

‘Because of my learning through the group, I reorganise my life, paying greater attention to my daily routine. I change my lifestyle to take care of my health during this pregnancy. I make sure that I have three full meals each day and carefully select healthy foods for myself and my unborn baby. I learn a lot about the importance of an appropriate intake of water from the group. When I increase my water intake, my urine becomes less concentrated, and this helps
me recover from the urinary tract infection, excessive vaginal discharge and itchiness’.

Kai’s weight gain (17 kilograms) was appropriate. Her iron status also improved during her pregnancy. At 24 weeks gestation, Kai had a periodontal check-up and dental fillings. Because of her previous caesarean section, Kai had an elective caesarean section with a tubal ligation at 39 weeks. A healthy boy weighing 3,400 grams was born. Kai breastfed and intended to breastfeed for as long as she could. Kai and her baby were postnatally well and discharged home on their third postnatal day. At the last group meeting, Kai said,

‘My feelings about the current pregnancy are very different from how I felt the first time I was pregnant. This is because of the way I learn to share with my husband what happens at the group. I am very happy and surprised to see how he is truly sensitive to my needs and consistently make an effort to look after me while I enjoy home rest’.

Kai’s changing health status is summarised in the table below.

<table>
<thead>
<tr>
<th>Kai: Health Status Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PART A</strong></td>
</tr>
<tr>
<td>Factors to be Assessed on Basic Needs</td>
</tr>
</tbody>
</table>
| Bio-physiological | - Poor nutrition  
- Works in polluted air  
- Inadequate water intake  
- Delays voiding  
- Insufficient sleep | Poor | Good |
| Safety and security | - Feels safe at home | Good | Good |
| Love and Belonging | - Married  
- Unplanned but wanted pregnancy  
- Relationship quality ‘fair’  
- Can count on 2 people for support | Moderate | Good |
| Esteem | - Low self-confidence  
- Low confidence when participating in groups | Poor | Good |
| Self-Actualisation | Not assessed | Holistic Evaluation of Risk of Preterm Birth |

<p>| Poor Health | = High Risk |
| Good Health | = Low risk |</p>
<table>
<thead>
<tr>
<th>PART B</th>
<th>REDUCTIONIST MEDICAL RISK ASSESSMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Known Medical Risk Factors</td>
<td>Level of Risk of Preterm Birth</td>
</tr>
<tr>
<td>- Born preterm herself</td>
<td>Very high risk</td>
</tr>
<tr>
<td>- One full-term birth and one miscarriage</td>
<td></td>
</tr>
<tr>
<td>- Kai’s aunt born preterm baby</td>
<td></td>
</tr>
<tr>
<td>- Anaemia</td>
<td></td>
</tr>
<tr>
<td>- Low BMI</td>
<td></td>
</tr>
<tr>
<td>- Periodontal disease</td>
<td></td>
</tr>
<tr>
<td>- Bleeding per vagina at 16 weeks</td>
<td></td>
</tr>
<tr>
<td>- Excessive vaginal discharge and itchiness</td>
<td></td>
</tr>
</tbody>
</table>

**My reflections on Kai**

Kai had a high risk of preterm birth on both the holistic and reductionist scales but she did not have a preterm birth. The improvement in her holistic health status was a key influence in protecting her and her baby from an adverse outcome. Her change in health status from poor to good was in part due to her participation in the groups and her one-to-one care from me as her midwife. At our first meeting Kai was not confident in her ability to look after herself during her pregnancy. However, during her time in the study, Kai was willing to learn from the group about looking after herself, including her pregnancy. She dramatically changed her lifestyle and reorganised her daily activities such as nutrition, sleeping and voiding. Her positive experiences and skilful dealing with stress and emotion, together with her fairly easygoing attitude were also factors which had a beneficial effect on her health and consequently her pregnancy. My interpretation of Kai’s situation is that as her ability to meet her multiple needs increased, her physical and emotional stress diminished.

**Mary**

Mary, aged 34, was 22 weeks pregnant in her fourth pregnancy. Mary is the eldest of two siblings. She was born a preterm baby in Bangkok. Weighing only 1,000 grams at birth, she was therefore nursed in neonatal intensive care unit for three months and she grew up with health challenges including a congenitally crippled right arm. Mary’s parents were very poor and they always found it hard to make ends meet.

Mary’s first child is 12 and was born a preterm baby with a birth weight of 2,100 grams. Her second child is nine and he was born a full-term baby. Both Mary’s and her husband’s educational levels are to year six. She is a housemaid for a company while Robert is a
temporary employee whose income is irregular. Mary, her husband and their children live with her parents under the same roof. When I first met Mary, she said,

‘I am not fortunate enough to enjoy food and water in sufficient degrees. Eating, drinking or sleeping is just the usual daily routine for me. When I know that I have a high-risk pregnancy I feel worried about my unborn baby. I do not want to have a small baby again. I know how suffering it is. So, knowing about my risk status during pregnancy is good for me because it helps me to be more aware of focussing on my health’.

For this pregnancy, Mary received approximately five antenatal care sessions and attended three group discussions before she gave birth. Her weight gain (12 kilograms) was appropriate. Her iron status also improved. Mary confided,

‘I develop some healthy eating and drinking habits from the antenatal group activities. I then carefully select healthy foods for my unborn baby. Eating eggs do helps to keep me in good health as well as encourage baby growth because eggs are relatively affordable, easily available and highly nutrititious. I always eat vegetables and tropical fruits. I am aware of my water intake; I drink three to four litres of water per day. I know that drinking a sufficient amount of water is very good for pregnancy because it can prevent yellow baby (hyperbilirubinemia)’.

At 37 weeks, Mary gave birth to a healthy baby girl weighing 3,150 grams. Following the birth she received a tubal ligation. Mary planned to breastfeed for only three months because she had to return to her job. Mary’s parents looked after her baby following her return to work. Mary’s changing health status is summarised in the table below.
## Mary: Health Status Assessment

### PART A

<table>
<thead>
<tr>
<th>Factors to be Assessed on Basic Needs</th>
<th>Comments</th>
<th>Level of Health Status</th>
<th>At 1st meeting</th>
<th>At birth</th>
</tr>
</thead>
</table>
| Bio-physiological                    | - Not enough money to cover cost of living  
- Gets support for cost of living by pawning their possessions  
- Poor nutrition  
- Inadequate water intake  
- Lives in polluted air and noise | Poor | Good |
| Safety and security                  | - Not enough money for shelter  
- Feels unsafe at home in a slum | Poor | Poor |
| Love and Belonging                   | - Married  
- Wanted pregnancy  
- Relationship quality ‘fair’  
- Can count on 2 people for support | Moderate | Good |
| Esteem                               | - Low self-confidence  
- Low confidence when participating in groups | Poor | Good |
| Self-Actualisation                   | Not assessed | Holistic Evaluation of Risk of Preterm Birth |
|                                      | Poor Health = High Risk  
Good Health = Low risk |

### PART B

<table>
<thead>
<tr>
<th>Known Medical Risk Factors</th>
<th>Level of Risk of Preterm Birth</th>
</tr>
</thead>
</table>
| - Born preterm herself  
- One preterm birth  
- One miscarriage  
- Anaemia  
- Periodontal disease | Very high risk |

### My reflections on Mary

Mary was at high risk of preterm birth on both the holistic and reductionist scales but she did not have a preterm birth. Mary’s improvement in her holistic health status was a key influence in protecting her and her baby from an adverse outcome. Her change in health status from poor to good was in part due to her participation in the groups and her one-to-one care from me as her midwife. Mary improved her lifestyle, paying greater attention to her daily routines such as eating, drinking and sleeping. Although her unmet needs for safety are linked to socio-economic disadvantage, she was willing to learn about healthy behaviours. Thus, safety and security factors were not barriers to her changing her behaviour and meeting her physiological, love and belonging needs. As she met those multiple needs, her self-esteem grew and her psychological stress reduced. However, as Mary only attended three group
discussions before she gave birth, it remains difficult to determine the impact of the group upon her outcomes.

**Kelly**

Kelly, aged 27, was 18 weeks pregnant in her fourth pregnancy. Kelly is the fourth of six siblings by different fathers (Kelly’s mother remarried four times). By age 10, Kelly’s father had died. Her mother had an alcohol addiction and indulged in gambling. At that time, Kelly became inactive because she was not sleeping well, was not eating well and was abused by her mother. Kelly skipped school frequently because she had to look after her younger twin sisters when her mother did not. However, by age 13, Kelly completed the compulsory school grades. She continued her study in non-formal education until she graduated from year nine.

By age 16, Kelly had begun a sexual relationship with the man who later became her husband. Kelly first began to menstruate at 17 years old. Unaware of the risks of getting pregnant, she quickly became pregnant three times in succession before she was 21. The first two pregnancies were terminated. Her third pregnancy produced a small baby (2,500 grams). She said, ‘I gave birth a small baby; it might be because I did not take vitamins. I received vitamin supplements but I stopped taking them because each time I took them I felt dizzy’. At the first meeting, Kelly said,

‘I am uninformed about what I should do or care for myself during pregnancy. I do not care about water intake, and I always delay voiding. I eat two meals a day only, and I am ignorant about good nutrition. Mostly, my meals consist of high carbohydrates and sugars. I do not take any vitamin supplements because they cause constipation, even if I drink a lot of water’.

For her latest pregnancy, Kelly received 12 antenatal care sessions and regularly attended the group discussions, completing her program just before she gave birth. Her weight gain (13.6 kilograms) was appropriate and her iron status also improved. Kelly said,

‘As a result of my engagement with this project, I reorganise my life, paying greater attention to my daily routine such as eating, drinking, sleeping, talking to the baby and even dealing with my stress and
emotion. I always take vitamins supplements because I do not want my baby born prematurely'.

At 24 weeks, Kelly had a motorcycle accident and had vaginal bleeding. At 30 weeks, Kelly had spontaneous bleeding; the ultrasound examination showed placenta previa and the doctor mentioned the possibility of a caesarean section. Kelly expressed,

‘I am very worried about a caesarean section because I plan to have a normal birth that normally takes only two to three days to recover. I want to be a healthy mother as quick as I can’.

Fortunately, Kelly had no further bleeding. At 36 weeks, the ultrasound result showed no placenta previa; Kelly was very happy. At 39 weeks, Kelly had a caesarean section due to foetal distress. A healthy baby boy weighing 3,100 grams was born. Kelly commenced breastfeeding and planned to continue for three months or as long as she could. She also wanted to keep a close relationship with her second child. Kelly’s changing health status is summarised in the table below.

<table>
<thead>
<tr>
<th>Kelly: Health Status Assessment</th>
</tr>
</thead>
</table>

<p>| PART A | HOLISTIC HEALTH ASSESSMENT |
|--------------------------------|</p>
<table>
<thead>
<tr>
<th>Factors to be Assessed on Basic Needs</th>
<th>Comments</th>
<th>Level of Health Status</th>
<th>At 1st meeting</th>
<th>At birth</th>
</tr>
</thead>
</table>
| Bio-physiological                      | - Poor nutrition  
- Inadequate water intake  
- Delays voiding  
- Insufficient sleep  
- Lives in polluted air and noise | Poor | Good |
| Safety and security                    | - Feels safe at home | Moderate | Moderate |
| Love and Belonging                     | - Married  
- Wanted pregnancy  
- Relationship quality ‘fair’  
- Can count on 1 people for support  
- Relieves her stress by writing on her note book | Poor | Good |
| Esteem                                 | - Low self-confidence  
- Low confidence when participating in groups | Poor | Good |
| Self-Actualisation                     | Not assessed | | |

<table>
<thead>
<tr>
<th>Holistic Evaluation of Risk of Preterm Birth</th>
</tr>
</thead>
</table>
| Poor Health = High Risk  
Good Health = Low risk |
PART B

REDUCTIONIST MEDICAL RISK ASSESSMENT

<table>
<thead>
<tr>
<th>Known Medical Risk Factors</th>
<th>Level of Risk of Preterm Birth</th>
</tr>
</thead>
<tbody>
<tr>
<td>- One low birth weight baby at birth</td>
<td>High risk</td>
</tr>
<tr>
<td>- Two abortions</td>
<td></td>
</tr>
<tr>
<td>- Anaemia</td>
<td></td>
</tr>
<tr>
<td>- Husband is a heavy smoker</td>
<td></td>
</tr>
<tr>
<td>- Bleeding per vagina at 24 and 30 weeks gestation</td>
<td></td>
</tr>
</tbody>
</table>

My reflections on Kelly

Kelly was at high risk of preterm birth on both the holistic and reductionist scales and yet she had a healthy full-term birth. Kelly’s improvement in her holistic health status was a key influence in protecting her and her baby from an adverse outcome. Her change in health status from poor to good was in part due to her participation in the groups and her one-to-one care from me as her midwife. Kelly’s sense of love and belongingness with the group and her midwife improved significantly during the course of the study. She was attentive, open and positively willing to learn and share her experience with the group as well as taking action by changing her unhealthy lifestyle. She always took vitamins supplements. Kelly emphasised that she wanted to have a normal baby. My interpretation of Kelly’s situation is that as her ability to meet her multiple needs increased, her physical and emotional stress diminished.

Pauline

Pauline, aged 16 and 20 weeks pregnant with her first pregnancy, insisted that she had been menstruating normally and she had become pregnant without being aware of it. Pauline’s mother (Lucy) noticed her abdomen was big so Lucy punished Pauline for lying. She confessed that she had been having a sexual relationship with her boyfriend. Pauline came to the antenatal clinic for the first time accompanied by her mother. Pauline was found to be pregnant and suffering from large genital warts. Pauline’s parents wanted her to terminate the baby; they were worried about the baby having a congenital abnormality.

Pauline was born in Bangkok and was a healthy baby who was breastfed for two years. She has one younger sibling. Pauline’s parents moved from the north-eastern Thailand 15 years previously and worked as road sweepers in Bangkok. Pauline’s boyfriend (Mark) was 21 years old and only finished year nine, consequently he has an uncertain income. Pauline and Mark had a sexual relationship for six months before Pauline became pregnant. She did not know that Mark had condylomata acuminata until she attended antenatal care.
Pauline’s parents separated Mark from Pauline because they wanted Mark’s parents to make a marriage proposal first. Mark visited Pauline once a fortnight but they did not stay together.

At the first meeting, Pauline said,

‘I do not know about how I should care for myself during pregnancy. My lifestyle is just daily routine for my whether or not I am pregnant. Sometimes, I eat only 1-2 meals a day and I am ignorant about the nutrition. Any kind of food will be good for me. I do not care about water intake so I always have constipation’.

Pauline expressed,

‘I am concerned about the spread of genital warts and preterm birth as I read from the internet that they are extremely difficult to treat for some women during pregnancy’.

During Pauline’s current pregnancy, despite nine weeks of treatment with weekly applications of Trichloro-acetic acid, the warts continued to grow and spread. The warts were then treated with electrocautery. Following the electrocautery, Pauline had an episode of uterine contractions and was admitted to the labour ward for two days during which she rested without medical treatment. The uterine contractions then resolved spontaneously.

Pauline received approximately seven antenatal care sessions and regularly attended the group discussions, completing her program just before she gave birth. Her weight gain (12.5 kilograms) was appropriate and her iron status also improved. Treating the warts by electrocautery was successful. Pauline said,

‘As a result of my engagement with antenatal groups, I reorganise my lifestyle by paying greater attention to my daily routine such as eating, drinking, and sleeping. I begin to take care of my health and my pregnancy. I also chat with my unborn baby and even deal with my emotional stress’.

At 39 weeks, Pauline had a normal birth. A healthy baby boy weighing 3,200 grams was born. Pauline commenced breastfeeding and planned to continue for at least one year or as long as
she could (Pauline’s parents encouraged breastfeeding). At the last group meeting, Pauline said,

‘Joining the group build a good relationship between me and my parents. My relationship is much better because I always tell my mother what happens in the group each time. Now, my parents accept me and my unborn baby including plan for my life. They encourage me to continue my study’.

‘I feel proud and self-assured in my pregnancy after participation. I am proud that I give a full term healthy baby. I never think my baby will be healthy and my parents still love me and my baby’.

Pauline’s changing health status is summarised in the table below.

<table>
<thead>
<tr>
<th>Pauline: Health Status Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PART A</strong></td>
</tr>
<tr>
<td>Factors to be Assessed on Basic Needs</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
| Bio-physiological | - Teenager  
- Genital warts  
- Gets support for cost of living by her parents  
- Poor nutrition  
- Inadequate water intake  
- Delays voiding  
- Insufficient sleep | Poor | Good |
| Safety and security | - Feels safe at home | Moderate | Moderate |
| Love and Belonging | - Single  
- Unwanted pregnancy  
- Relationship quality ‘bad’  
- Can count on 2 people for support  
- Separated from her boy friend | Poor | Good |
| Esteem | - Low self-confidence  
- Low confidence when participating in groups  
- Feels unhappy and psychologically stressed  
- has fears about genital warts | Poor | Good |
| Self-Actualisation | Not assessed | Holistic Evaluation of Risk of Preterm Birth |
| | Poor Health = High Risk | Good Health = Low risk |
**PART B**  
**REDUCTIONIST MEDICAL RISK ASSESSMENT**

<table>
<thead>
<tr>
<th>Known Medical Risk Factors</th>
<th>Level of Risk of Preterm Birth</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Large genital warts</td>
<td>Very high risk</td>
</tr>
<tr>
<td>- Anaemia</td>
<td></td>
</tr>
<tr>
<td>- Periodontal disease</td>
<td></td>
</tr>
<tr>
<td>- Threatened preterm birth at 32 weeks</td>
<td></td>
</tr>
</tbody>
</table>

**My reflections on Pauline**

Pauline was at high risk of preterm birth on both the holistic and reductionist scales but she did not give birth prematurely. Pauline’s improvement in her holistic health status was a key influence in protecting her and her baby from an adverse outcome. Her change in health status from poor to good was in part due to her participation in the groups and her one-to-one care from me as her midwife. As a result of her participation in this study, a good relationship between Pauline and her parents was gradually built. Pauline’s parents, with love and understanding, supported her to become increasingly aware of her nutrition, sleep and hydration needs on a day-to-day basis. Pauline’s sense of love and belongingness with her parents, with the group and with her midwife were also enhanced. Pauline positively changed her lifestyle because she recognised her risk of preterm birth and what she needed to change to avoid it. Based on her data, it can be seen that meeting her multiple needs reduced her physiological and psychological stresses so her health and her pregnancy improved amazingly.

**Tammy**

Tammy was 16 years old and 22 weeks pregnant with her first pregnancy when I first met her. The pregnancy was unplanned, but her mother accepted it. Tammy was born in the north-eastern region and is the first born of two children of the same parents. Tammy was born a full term baby with a weight of 3,300 grams. Tammy confided to me that as she grew up her parents always quarrelled because her mother was addicted to alcohol. Tammy’s parents had divorced by the time she was 12 years old. As a child, she lived with her grandparents with whom she had a good relationship. Tammy’s grandmother always supported her. Tammy went to live with her mother in Bangkok after she completed year nine.

Tammy met her partner David (aged 19) because he works at the same place as her mother. David is Laotian and an illegal immigrant. Tammy became pregnant a year after meeting David. Tammy’s grandparents and mother advised her to conceal her relationship because David
did not have a passport or identity card to give to the hospital. Thus, her marital status in the obstetric record was single. When I first met Tammy, she said,

‘I am not sure about what I should do to care for my health and my pregnancy. I do not eat much because I do not have a big appetite. I eat only two meals a day and was ignorant about good nutrition because I do not know how to select beneficial foods and thus thought any kind of food is good for me. I always buy breakfast, lunch, snacks and desserts from road side stalls in the morning. All these practices are just the usual daily routine for me whether or not I am pregnant’.

Tammy expressed,

‘I felt concerned about my unborn baby when I first met midwives at antenatal clinic. I am afraid that my baby may be born prematurely because I know from a midwife that teenage pregnancy is a risk factor for preterm birth’. 

Tammy had seven antenatal care visits and regularly attended the group discussion until quite close to the birth of her baby. Her weight gain (12.5 kilograms) was appropriate. Her iron status also improved. At 24 weeks of pregnancy, Tammy had periodontal treatment (dental filling). Tammy said,

‘As a result of my participation with the group activities, I definitely change my daily lifestyle and how I take care of my pregnancy. I change my drinking and eating habits after the second group meeting. I always eat three meals a day and carefully select healthy foods for my unborn baby’.

Tammy said,

‘When I return home, my experience at the group discussion often becomes topics for my mother’s conversation, for example, how talking with the unborn baby can create even more intimate bonding. I make it daily routine to talk to my unborn baby, and I
even make a point of involving my baby in daily decisions. For example, shall we eat lunch? Shall we take a shower?'

At 39 weeks of pregnancy, Tammy gave birth normally to a healthy baby girl weighing 2,800 grams. She planned to breastfeed her baby as long as she could. Tammy’s mother and grandmother also encouraged her to breastfeed. Now, Tammy and her baby live with her grandparents in her hometown while David works and lives in Bangkok. Tammy’s changing health status is summarised in the table below.

<table>
<thead>
<tr>
<th>Tammy: Health Status Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PART A</strong></td>
</tr>
<tr>
<td><strong>HOLISTIC HEALTH ASSESSMENT</strong></td>
</tr>
<tr>
<td>Factors to be Assessed on Basic Needs</td>
</tr>
<tr>
<td>At 1st meeting</td>
</tr>
<tr>
<td>________________</td>
</tr>
</tbody>
</table>
| Bio-physiological | - Teenager
- Lack of pregnancy knowledge
- Gets support for cost of living by her parents
- Poor nutrition
- Lost her appetite
- Inadequate water intake | Poor | Good |
| Safety and security | - Feels safe at home
- Concealed her marital status because she felt unsafe to share with midwives
- Feels uncertain with her partner’s status | Poor | Moderate |
| Love and Belonging | - Single
- Unplanned pregnancy
- Relationship quality ‘good’
- Can count on 2 people for support | Moderate | Good |
| Esteem | - Obedient and submissive woman
- Low self-confidence
- Low confidence when participating in groups
- Feels unhappy with marital status | Poor | Good |
| Self-Actualisation | Not assessed | Holistic Evaluation of Risk of Preterm Birth
- Poor Health = High Risk
- Good Health = Low risk |

<table>
<thead>
<tr>
<th><strong>PART B</strong></th>
<th><strong>REDUCTIONIST MEDICAL RISK ASSESSMENT</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Known Medical Risk Factors</td>
<td>Level of Risk of Preterm Birth</td>
</tr>
</tbody>
</table>
| - Anaemia
- Periodontal disease | High risk |
**My reflections on Tammy**

Tammy was at high risk of giving birth prematurely on both the holistic and reductionist scales but did not do so. Tammy’s improvement in her holistic health status was a key influence in protecting her and her baby from an adverse outcome. Her change in health status from poor to good was in part due to her participation in the groups and her one-to-one care from me as her midwife. Tammy was an obedient and submissive woman; she was neither confident in herself nor with her pregnancy when I first met her. As a result of her engagement with this study, she gained knowledge and understanding and became more mindful of her health and the state of her pregnancy. She positively changed her lifestyle in activities such as eating, drinking, sleeping and voiding. She was willing to learn about healthy behaviours and to share her experience with the group. Her relationship with her partner was stable, and therefore posed no threat to her growing self-awareness and behaviour change. Along with her positive experiences and increasing skill in dealing with stress and emotions learned through the group, the support of her mother and grandparents were a strong influence. These factors had a beneficial effect on her pregnancy. As she met her multiple needs, her self-esteem grew and her psychological stress reduced.

**Vicky**

Vicky (aged 16) was 17 weeks pregnant with her first pregnancy. Although, the pregnancy was unintended and unwanted, her boyfriend (Mike) felt comfortable with it. At first she wanted to terminate the baby but she had no money for the operation and termination of pregnancy is illegal in Thailand. Vicky became pregnant after six months of sexual contact with Mike. She said she often had sex without contraception but never realised she could become pregnant. Mike is 19 years old and is studying in his third year of technical school. He is addicted to alcohol and enjoys spending more time with friends than Vicky.

Vicky was born a healthy 3,300 grams baby in Bangkok and did not breastfeed. She is the youngest of three siblings by the same parents. Vicky graduated from year nine at school. She seemed to be addicted to cigarettes and misuses alcohol. Vicky’s mother was a mistress of her father’s. Her mother earns a living by washing clothes whereas her father quit his job because he is sick from prostate cancer.
At first meeting, Vicky said,

‘I eat only one to two meals a day. I do not eat vegetables at all. I am fond of snacks and am addicted to alcohol and smoking. I drink very little water. My normal bed time is about 2-3 a.m. or at dawn. Some days I did not sleep because I went to the nightclub; I slept again in the morning of the next day. I am rather uninformed about what I should do or care for myself during pregnancy because I want to terminate the baby, but I have no money for the expense’.

Vicky said,

‘My lifestyle is just the usual daily routine for me whether or not I am pregnant. My relationship with Mike is inconsistent because he is addicted to alcohol, friends, and other women. If he did not return home or quarrel with me, I would smoke heavily. I sometimes went to the nightclub and drank alcohol’.

Vicky had 14 antenatal care visits and regularly attended the group discussion up until the birth of her baby. While she was staying with her mother, Vicky was able to eat more food, and have more choice in what she ate, because most of her food was provided from her uncle who is a temple boy\(^9\) at a nearby Buddhist temple. Vicky’s weight gain (11 kilograms) was appropriate and her iron status also improved. As a result of my engagement with the group, Vicky expressed,

‘I gradually change my daily lifestyle and begin to take care of my pregnancy. I attempt to reorganise my life, paying greater attention to my daily routine. My eating style is changed; I choose to eat beneficial foods for my baby. I try to consider whether I have all five categories of nutrition or not, and I try to eat vegetables more often. I do not like to eat eggs, but I eat an egg daily because I learn from group that eggs contain with high protein, I drink more water; 500 mL to 1500 mL. I also drink 500-750 mL of milk. I continually take

\(^9\) A temple boy helps the monk and carries the alms bowl of the monk during the morning alms collection, and then prepares the monk’s food before eating the left-over. A temple boy gets free food from monks.
vitamin supplements. Sometimes I do not have an appetite but when I think about my unborn baby and the encouragements from friends in the group, I change my mind’.

Vicky said,

‘After attending the group discussion twice, I stop going to the nightclub and drinking. I smoke only one or two cigarettes per day. After seeing the preterm babies in the Neonatal Intensive Care Unit, I do not smoke or drink alcohol at all. I begin to accept Mike’s behaviour while I become more empowered and conscious of how to take care of myself. Vicky expressed, my life do not depend upon him’.

Vicky confided,

‘I really love the word cards (HBCs), they are very good. They remind me to consciously take care of myself. The positive companionship gives me a great moral support and reassured me of my own worthy role as a group member. For example, when I have problems/doubts, I can talk or discuss with the researcher and the group’.

Vicky was successfully treated for a urinary tract infection and vaginal discharge at 28 weeks. She was given two courses of three doses of antibiotics (Cef-3) and anti-fungal medication (Clotrimazole) Vicky was hospitalised three times with threatened premature labour at 32, 34 and 35 weeks gestation, respectively. She was treated with magnesium sulphate injections and rest.

At 38 weeks, Vicky gave birth naturally to a healthy baby girl weighing 2,700 grams. She commenced breastfeeding and planned to continue for three months. Vicky told me that she wanted to breastfeed but has flattened nipples and was forced to supplement with a bottle.

At the last group meeting, Vicky expressed,

‘I feel proud and self-assured in the pregnancy after participation in the group because I am encouraged by the researcher and friends
in the group. I am amazed and very proud that I can carry the pregnancy to a full term. If I had not joined the group, I would have given birth at 24 weeks. I accept that listening to friends in the group help me understand how to behave in order to be a healthy mother.’

Vicky’s changing health status is summarised in the table below.

<table>
<thead>
<tr>
<th>Vicky: Health Status Assessment</th>
<th>HOLISTIC HEALTH ASSESSMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PART A</strong></td>
<td><strong>Factors to be Assessed on Basic Needs</strong></td>
</tr>
<tr>
<td><strong>Bio-physiological</strong></td>
<td>- Teenager</td>
</tr>
<tr>
<td></td>
<td>- Not enough money for food and for cost of living.</td>
</tr>
<tr>
<td></td>
<td>- Gets support for cost of living by her mother by pawning or loaning</td>
</tr>
<tr>
<td></td>
<td>- Poor nutrition</td>
</tr>
<tr>
<td></td>
<td>- Insufficient sleep and sleep deprivation</td>
</tr>
<tr>
<td></td>
<td>- Drinks alcohol and smoking</td>
</tr>
<tr>
<td></td>
<td>- Peptic ulcer</td>
</tr>
<tr>
<td></td>
<td>- History of preterm birth concerns</td>
</tr>
<tr>
<td></td>
<td>- Sexually transmitted disease</td>
</tr>
<tr>
<td><strong>Safety and security</strong></td>
<td>- Not enough money for shelter</td>
</tr>
<tr>
<td></td>
<td>- Feels unsafe at home</td>
</tr>
<tr>
<td><strong>Love and Belonging</strong></td>
<td>- Single</td>
</tr>
<tr>
<td></td>
<td>- Unwanted pregnancy</td>
</tr>
<tr>
<td></td>
<td>- Relationship quality 'bad’</td>
</tr>
<tr>
<td></td>
<td>- Can count on 1 person for support</td>
</tr>
<tr>
<td><strong>Esteem</strong></td>
<td>- Chronic emotional and psychological stress</td>
</tr>
<tr>
<td></td>
<td>- Low self-confidence</td>
</tr>
<tr>
<td></td>
<td>- Low confidence when participating in groups</td>
</tr>
<tr>
<td><strong>Self-Actualisation</strong></td>
<td>Not assessed</td>
</tr>
</tbody>
</table>

| **PART B**                      | **REDUCTIONIST MEDICAL RISK ASSESSMENT** |
| **Known Medical Risk Factors**  | **Level of Risk of Preterm Birth**      |
| - Anaemia                        | Very high risk                        |
| - Smoking                        |                                           |
| - Alcohol drinking               |                                           |
| - Periodontal disease            |                                           |
| - Teenager                       |                                           |
| - Low body mass index            |                                           |
| - Urinary tract infection        |                                           |

Holistic Evaluation of Risk of Preterm Birth

<table>
<thead>
<tr>
<th><strong>Poor Health</strong></th>
<th><strong>Good Health</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>= High Risk</td>
<td>= Low risk</td>
</tr>
</tbody>
</table>
My reflections on Vicky

Vicky was at high risk of preterm birth on both the holistic and reductionist scales. Even though she was hospitalised three times for preterm labour, she eventually gave birth at term. I argue that she ended up giving birth at term because she became empowered and took responsibility for herself and her daily life. She learned from the group discussion and applied her knowledge and understanding in observing herself. She brought her problems/doubts to discussions with me and the group. When she noticed she was having premature uterine contractions, for example, she recognised that they could be a problem and went to hospital before labour could establish.

At our postnatal meeting, Vicky was a totally different person from the first time I met her. Her awareness, her consciousness and her sense of responsibility for health and pregnancy matters were enhanced dramatically. Her changes in health status from poor to good were in part due to her participation in the groups and her one-to-one care from me as her midwife. Meeting her multiple needs meant Vicky was able to reduce her stress levels physically, emotionally and psychologically. Vicky was open and willing to learn from the group about looking after herself and her pregnancy. Because of her participation in the group, for instance, she became aware that smoking and drinking caused preterm birth and harmed her unborn baby so she stopped drinking alcohol and smoking. During her time in the study, Vicky’s physiological health and her love for her mother as well as her relationships with her friends in the group improved remarkably. Her improved ability to cope with problems reduced her stress levels considerably. She focused on the pregnancy outcome she wanted, which was a healthy happy baby and mother. For example, she turned her attention away from her problems with her boyfriend and focused on her unborn baby and herself. The positive companionship of the group gave her great moral support and reassured her of her own worthy role as a group member.

I argue that medical treatments may be effective for inhibiting premature uterine contractions but not preventing them. If medical treatment was effective to prevent preterm birth, Vicky would not have had three occasions of hospitalisation for threatened preterm labour. Hence, without women’s health empowerment, awareness and consciousness, giving birth

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10 Learning from group is related to Chapter 6: Section 6.5:
Q2: How should a midwife work with a pregnant teenager who drinks and smokes?
Q3: How should a midwife support women to apply theory to real-life practice?
Q4: How should a midwife help each woman to find the strength and commitment to lifestyle choices that promote full-term birth?
prematurely is still highly likely for those women at risk. This conclusion is consistent with the literature review in Chapter Three.

**Linda**

Linda (aged 24) was 18 weeks pregnant with her fourth pregnancy when she joined the study. She was known to have Thalassemia and had the facial features, pale skin and thin shape consistent with that condition. Linda was born in Bangkok weighing only 2,100 grams. Her parents had one other child after her. She graduated from school at the end of year nine. Linda had two pregnancies terminated when she was 17 years old, but became pregnant again when she was 20 years old. Her ex-partner (Alex) was a hot tempered, heavy drinker and was violent with Linda on several occasions. She separated from Alex when she was 16 weeks pregnant and returned home to live with her parents. Linda was very stressed and afraid that people would gossip about her. That baby was born prematurely at 34 weeks, weighing only 2,300 grams and was breastfed for more than two years. Two years later, Linda married her current husband (Tiger) and once she became pregnant, gave up her job selling beer and being a security guard.

At the first meeting, Linda said,

‘I am uninformed about how I should care of my pregnancy. I am ignorant about good nutrition. I eat only two meals a day erratically because I normally wake up late about 10 a.m. My normal bedtime is around midnight. I am fond of soft drink; I do not care about the benefits of drinking a sufficient amount of water’.

Linda went to approximately 11 antenatal care visits and regularly attended the group discussions up until the birth of her baby. Although her weight gain (11 kilograms) was appropriate, her iron status did not improve. At 24 weeks gestation she had periodontal check-up and dental filling. Linda expressed,

‘As a result of my engagement with this project, I change my daily lifestyle, paying greater attention to my daily eating and sleeping patterns. I come up with the idea of what kinds of foods are beneficial and what can help the baby to grow. My eating habits have changed; I always make sure that I eat three nutritious meals.'
I consider the healthiness of each meal and eat many kinds of fruit. I do not suffer from any stomach ache symptoms because I stop drinking soft drinks.

At 39 weeks, Linda gave birth normally to a healthy baby boy weighing 3,100 grams. She commenced breastfeeding and planned to continue as long as she could. Linda said,

‘I feel proud and self-assured in the pregnancy. Before attending the group, I would pay 170 AUD to the doctor for a special pregnancy attention. However, I change my mind because I am confident in taking care of myself and in how to be healthy mother. I gained more experiences from the group, and feel like I have group counselling and a private consultant already’.

Linda’s changing health status is summarised in the table below.

<table>
<thead>
<tr>
<th>Linda: Health Status Assessment</th>
<th>HOLISTIC HEALTH ASSESSMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PART A</strong></td>
<td></td>
</tr>
<tr>
<td>Factors to be Assessed on Basic Needs</td>
<td>Comments</td>
</tr>
<tr>
<td></td>
<td>At 1st meeting</td>
</tr>
<tr>
<td>Bio-physiological</td>
<td>Poor nutrition</td>
</tr>
<tr>
<td></td>
<td>- Inadequate water intake</td>
</tr>
<tr>
<td></td>
<td>- Delays voiding</td>
</tr>
<tr>
<td></td>
<td>- Insufficient sleep</td>
</tr>
<tr>
<td></td>
<td>- Addicted to soft drinks</td>
</tr>
<tr>
<td></td>
<td>- Peptic ulcer</td>
</tr>
<tr>
<td>Safety and security</td>
<td>Feels safe at home with 14 relatives</td>
</tr>
<tr>
<td>Love and Belonging</td>
<td>Married</td>
</tr>
<tr>
<td></td>
<td>- Wanted pregnancy</td>
</tr>
<tr>
<td></td>
<td>- Relationship quality ‘fair’</td>
</tr>
<tr>
<td></td>
<td>- Can count on 2 people for support</td>
</tr>
<tr>
<td>Esteem</td>
<td>Low confidence</td>
</tr>
<tr>
<td></td>
<td>- Low confident when participating in groups</td>
</tr>
<tr>
<td>Self-Actualisation</td>
<td>Not assessed</td>
</tr>
</tbody>
</table>

**Holistic Evaluation of Risk of Preterm Birth**

Poor Health = High Risk

Good Health = Low risk
PART B

REDUCTIONIST MEDICAL RISK ASSESSMENT

<table>
<thead>
<tr>
<th>Known Medical Risk Factors</th>
<th>Level of Risk of Preterm Birth</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Born preterm herself</td>
<td>Very high risk</td>
</tr>
<tr>
<td>- One preterm birth</td>
<td></td>
</tr>
<tr>
<td>- Linda’s mother born preterm</td>
<td></td>
</tr>
<tr>
<td>- Very low BMI</td>
<td></td>
</tr>
<tr>
<td>- Anaemia</td>
<td></td>
</tr>
<tr>
<td>- Thalassemia</td>
<td></td>
</tr>
<tr>
<td>- Periodontal disease</td>
<td></td>
</tr>
<tr>
<td>- Two pregnancy terminations</td>
<td></td>
</tr>
<tr>
<td>- Peptic ulcer</td>
<td></td>
</tr>
</tbody>
</table>

My reflections on Linda

On both the holistic and reductionist scales, Linda was at high risk of preterm birth and yet she had a healthy full-term birth. Linda’s improvement in her holistic health status was a key influence in protecting her and her baby from an adverse outcome. Her change in health status from poor to good was in part due to her participation in the groups and her one-to-one care from me as her midwife. Linda was willing to learn how to look after herself and her unborn baby. She changed her lifestyle by paying greater attention to eating, drinking and sleeping. Linda had more self confidence to look after herself and her pregnancy so she changed her plan by not registering her pregnancy as a private case. My impression is that as she improved her physiological health and addressed her multiple needs, her stress levels fell and together with her improving psychological health. Love, friendship and her relationship with her family and friends improved. Her sense of wellbeing became dominant with obvious benefits to her pregnancy.

Nancy

When Nancy (aged 30) joined the research project, she was 20 weeks pregnant with her third pregnancy. Her first pregnancy was miscarried. Her second pregnancy produced a preterm baby, Tee, now three years old, was born prematurely weighing only 2,150 grams. Nancy was born a healthy baby in the northern region of Thailand and she is the fourth of five children to the same parents. Nancy has lived in Bangkok for ten years.

At the first meeting, Nancy said,

‘I eat less food and drink less water because I do not understand my pregnancy needs. My neighbours told me not eating many things so I feel unsure about nutrition during
pregnancy. I just drink milk and eat three meals. I am unaware about how I should look after my pregnancy. Eating, drinking or sleeping is just my usual daily routine for my whether or not I am pregnant’.

The current pregnancy was unplanned but although Nancy was not overly excited about it, she and her husband (Cavin) have accepted it. Nancy said that her lack of excitement might be because she was busy looking after her first child. Nancy had 14 antenatal visits and regularly attended the group discussions, completing her program just before she gave birth. Her weight gain (17 kilograms) was appropriate and her iron status improved. Nancy expressed,

‘As a result of participation with the groups, I completely change my daily lifestyle. I pay greater attention to my daily routine and food and water intake. I eat more and focus on more protein. I select beneficial foods that contain the five categories of nutrition for all three meals. Now I have more appetite than during my last pregnancy. I also drink more water. Sometimes, I eat non-beneficial foods, but I stop eating them when I think about the group discussions’.

At 40 weeks, Nancy had a normal birth of a healthy girl, weighing 3,900 grams. Nancy underwent a tubal ligation procedure. Nancy felt proud of her success of reaching full term in the pregnancy. However, she was disappointed about the birthing difficulties she experienced, which resulted in her perineum having a third degree tear. She commenced breastfeeding, but only planned to continue for one month because she had to return to her job.

At the last meeting, Nancy said,

‘I feel proud and self-assured in this pregnancy after joining the group. I am astonished by getting my pregnancy to term. Attending the group changes my understanding, especially my eating habits. I am more confident in what I should eat and know how to rest and how to take care of my mind. I love the word cards (HBCs) from the group discussion, they remind and encourage me, particularly when I feel stressed. Group discussion empowers me to feel confident in my pregnancy and to be able to take care of myself and my baby’.
Nancy stated, after participation in the group,

‘Now, I understand the causes of my previous preterm birth: (1) inadequate food and water intake and I was unsure about nutrition needs so my weight gain during the last pregnancy was only 10 kilograms (2) I walked too much (3) chronic psychological stress from my job and my husband’.

Nancy’s changing health status is summarised in the table below.

<table>
<thead>
<tr>
<th>Nancy: Health Status Assessment</th>
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</thead>
<tbody>
<tr>
<td><strong>PART A</strong></td>
</tr>
<tr>
<td>Factors to be Assessed on Basic Needs</td>
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<tr>
<td>---</td>
</tr>
<tr>
<td>Bio-physiological</td>
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<tr>
<td>Safety and security</td>
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<td>Love and Belonging</td>
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<td></td>
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<tr>
<td>Esteem</td>
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<tr>
<td></td>
</tr>
<tr>
<td>Self-Actualisation</td>
</tr>
<tr>
<td><strong>PART B</strong></td>
</tr>
<tr>
<td>Known Medical Risk Factors</td>
</tr>
<tr>
<td>- One preterm birth</td>
</tr>
<tr>
<td>- One miscarriage</td>
</tr>
<tr>
<td>- Vaginal infection</td>
</tr>
<tr>
<td>- Anaemia</td>
</tr>
<tr>
<td>- Excessive vaginal discharge</td>
</tr>
</tbody>
</table>

My reflections on Nancy

Nancy’s status on both the holistic and reductionist scales indicated that she was at high risk of preterm birth, but she did not give birth preterm. Nancy’s improvement in her holistic health status was a key influence in protecting her and her baby from an adverse outcome.
Her change in health status from poor to good was in part due to her participation in the antenatal groups and her one-to-one care from me as her midwife. As a result of the study process, Nancy attended to and addressed her physiological needs, such as nutrition, hydration, elimination and sleep as well as her love and relationship needs with her family. Nancy had experienced a previous preterm birth. She recognised the suffering that came from giving birth too early and so was motivated to change be healthy. Nancy stated that she understood the causes of her previous preterm birth. That meant that her self-confidence increased. Hence, I contend that her efforts to meet her multiple needs reduced her stress levels.

**Doran**

Doran (aged 28) joined the study when she was 22 weeks pregnant with her fourth pregnancy. Doran was born in the north-eastern region of Thailand, the youngest of six children from same parents. When she graduated from year twelve, she moved to Bangkok for work. Doran had two miscarriages during an unhappy relationship with an unfaithful boyfriend. A year after that relationship ended, she married Tom, the eldest of three children, and became pregnant with her third pregnancy. Tom finished school in year nine and worked as a builder with his father. That pregnancy ended with a term stillbirth of unknown causes. Understandably, Doran and Tom were very worried about the current pregnancy. Tom ordained as a monk to dedicate his acquired merits to the benefit of the dead following the birth of their stillborn baby. Two months after ordination as a monk, Tom and Doran felt confident in their lives and were not always so fearful. Tom left the monastery after Doran gave birth to their healthy baby.

At the first meeting, Doran said,

‘I am ignorant of what I should do or care for myself during pregnancy. I am not aware of the nutrition requirements in my pregnancy; any kind of food will be good for me. I am fond of papaya salad with fermented fish. I also eat vegetables and chilli sauce without meat. I eat only two meals a day. I do not care about drinking a sufficient amount of water. I drink only milk. I do not know how to be healthy mother and what is beneficial for the unborn baby’.
During the group sessions, Doran spoke about her deep distress during her last pregnancy. Tom’s parents were verbally violent, her father-in-law was addicted to alcohol and he had a violent temper so the parents quarrelled frequently. From the group discussion, Doran said,

‘After participating the group activities, I begin to realise how the household quarrelling affects my last pregnancy. I believe that the domestic violence and my own upset cause the baby extreme emotional distress. At that time, I was deeply distressed in my last pregnancy because of the verbal violence of my parents-in-law. My father-in-law was addicted to alcohol, and he had a violent temper, so they quarreled frequently. I heard their fracas all the time. Sometimes they fought at midnight then my mother-in-law cried with me until 1-2 a.m. so I only got to sleep at 2-3 a.m. ’.

Doran said, 

‘After joining the group, I become aware of what is a beneficial diet for my baby. I always think about what to select or what to cook in order to complete the five categories of nutrition. I certainly change my daily lifestyle during this pregnancy. I reorganise my lifestyle, including food, water and sleep’. 

‘For this pregnancy, I share my learning from group to my parents-in-law. They agree with me and are afraid that the current unborn baby will be stressed. They intend to change their behaviour and they finally succeed in doing so to increase their chances of having a healthy full term grandchild’.

Doran expressed, 

‘I want to do whatever is good for my baby because my baby feels what I do. When I laugh, my baby also moves. I talk with and read tales to my unborn baby. I turn on Thai country music for my baby’.

At 32 weeks, Doran decided to attend antenatal care in her hometown because it was free. She was also keen to move away from the home of her parents-in-law, whose home was a camp which was built in the temple’s area. She experienced fear when witnessing funerals at the
temple so she took action by moving to live with her sisters. She established a better social environment for herself; she took herself away from a negative environment. During moving, she was always supported by her sisters and her husband.

At the last group meeting, Doran attended, she was reflective about her knowledge and experiences gained through group discussion. She reviewed information about her pregnancy records, so she would know how to interpret what was being said about her health and her unborn baby’s health. Before moving, Doran attended seven antenatal visits at hospitals in Bangkok. Doran had also been part of five group discussions. Her weight gain (12 kilograms) was appropriate and her iron status also improved.

(Doran looked back to her last pregnancy and then reflected on her knowledge and experiences), Doran expressed,

‘After attending the group, I realise that the impacts on my previous pregnancy are (1) nutrition (2) emotional and psychological stresses (3) relationship (4) quantity and quality of rest. Sharing experiences with friends definitely helped expand my own knowledge and equipped me with sharper self-awareness’.

At 40 weeks gestation, Doran had a caesarean section due to oligohydramios (Doran told the doctor that she had history of stillbirth). A healthy baby boy weighing 3,700 grams was born. Doran commenced breastfeeding and planned to continue for two years or as long as she could.

Doran’s changing health status is summarised in the table below.
### Doran: Health Status Assessment

#### PART A

<table>
<thead>
<tr>
<th>Factors to be Assessed on Basic Needs</th>
<th>HOLISTIC HEALTH ASSESSMENT</th>
<th>Level of Health Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Comments</td>
<td>At 1st meeting</td>
</tr>
<tr>
<td>Bio-physiological</td>
<td>- Got food from Buddhist monks</td>
<td>Poor</td>
</tr>
<tr>
<td></td>
<td>- Poor nutrition</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Inadequate water intake</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Insufficient sleep</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Lacks of pregnancy knowledge</td>
<td></td>
</tr>
<tr>
<td>Safety and security</td>
<td>- Feels unsafe at home</td>
<td>Poor</td>
</tr>
<tr>
<td></td>
<td>- Lives in a camp which was built in a temple area</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Feels fear of funerals</td>
<td></td>
</tr>
<tr>
<td>Love and Belonging</td>
<td>- Married</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>- Wanted pregnancy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Relationship quality ‘fair’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Can count on 2 people for support</td>
<td></td>
</tr>
<tr>
<td>Esteem</td>
<td>- Low self-confident</td>
<td>Poor</td>
</tr>
<tr>
<td></td>
<td>- Low confidence when participating in groups</td>
<td></td>
</tr>
<tr>
<td>Self-Actualisation</td>
<td>Not assessed</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Holistic Evaluation of Risk of Preterm Birth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor Health = High Risk</td>
</tr>
<tr>
<td>Good Health = Low risk</td>
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</tbody>
</table>

#### PART B

<table>
<thead>
<tr>
<th>REDUCTIONIST MEDICAL RISK ASSESSMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Known Medical Risk Factors</td>
</tr>
<tr>
<td>------------------------------</td>
</tr>
<tr>
<td>- Two abortions</td>
</tr>
<tr>
<td>- Previous stillbirth</td>
</tr>
<tr>
<td>- Periodontal gum disease</td>
</tr>
</tbody>
</table>

### My reflections on Doran

Doran was at high risk of preterm birth on the holistic scale and at moderate risk on the reductionist scale but she did not give birth prematurely. Doran’s holistic health status improvement was a key influence in protecting her and her baby from an adverse outcome. Her change in health status from poor to good was in part due to her participation in the groups and her one-to-one care from me as her midwife. Doran’s birth at term was due to her increased ability to deal with stress and improvements in her nutrition and because she was able to ensure adequate sleep. During her time in the study, her health improved remarkably because Doran was keen to learn and to do whatever was good for her baby. She changed her daily lifestyle and how she took care of her health during this pregnancy in a positive way. She always made sure that she had three meals a day and carefully selected healthy foods for
herself and her unborn baby. Her husband and parents-in-law always supported her. By addressing her multiple needs, Doran’s psychological stress was reduced.

**Orlene**

When Orlene (aged 30) joined the study, she was 12 weeks pregnant with her fourth pregnancy. The second child of three, Orlene was born in Bangkok. Her father is a shoemaker. He is also an alcoholic. Orlene’s parents are divorced and her mother has worked in Germany since Orlene was twelve years old. Her mother provides money for everybody on a monthly basis.

When she was 15 years old, Orlene’s first pregnancy miscarried, possibly because of stress in her personal life. She temporarily dropped out of school, but returned to continue her studies and graduated with a bachelors degree. Her husband, Peter (aged 27) also graduated at bachelors degree level. Peter smokes regularly and he sometimes drinks alcohol. Peter does not speak much. Orlene’s relationship with her husband was fair. Orlene gave birth to her first child (second pregnancy) weighing 2,750gms when she was twenty-two years old.

Orlene’s third pregnancy was a hydatidiform mole. She said she had severe vaginal bleeding, very high levels of human chorionic gonadotropin (hCG) and very high blood pressure along with a protein level of 4+ in the urine. Following uterine suction and curettage, she was cautioned about getting pregnant again and given oral contraceptives which she took as prescribed. Orlene said that she felt unhealthy after the treatment for the hydatidiform mole and she was easily exhausted which she attributed to the amount of vaginal bleeding she had had. After nine months she felt pregnant unintentionally. Even though the current pregnancy was unplanned, Orlene and her husband wholeheartedly welcomed it. Her husband always supported her. During the current pregnancy, Orlene still had laundry work and her husband worked with her at home.

When I first met Orlene, she said,

‘I am not aware, of how I should care for myself during pregnancy. Eating, drinking and sleeping are everyday activities and no different when I am pregnant. I do not like to eat vegetables, but I always eat fruit. I take an hour to eat lunch because I eat while doing laundry work’. 
Orlene attended 12 antenatal visits and regularly attended the study group discussions up until she gave birth. Her iron status improved and her weight gain (15.5 kilograms) was appropriate. At 20 weeks, she had a periodontal check up and a filling.

Orlene said,

‘As a result of my engagement with the group, I definitely change my daily lifestyle during this pregnancy, paying greater attention to my daily routine, including my food and water intake. I have three meals and carefully select healthy foods for myself and my unborn baby. The kinds of food are changed after I have joined the group. I focus more on protein, such as, egg, liver, fish, shrimp and pork. I begin to eat more vegetables when I become pregnant. I want to eat vegetables for my baby’.

At 40 weeks, Orlene gave birth normally to a healthy baby girl weighing 2,550 grams. The baby was small for gestational age (SGA). Orlene commenced breastfeeding and planned to continue as long as she could because she worked from home.

On the last group-based discussion, Orlene expressed,

‘I feel satisfied and self-assured in this pregnancy after participation in the group. Attending the group help me to realise, observe, and pay attention to myself. I feel more confident. I learn many things I have never known before. I become more knowledgeable and observant. The group reminds me that I have a high-risk pregnancy. Therefore, I have to change my nutrition and behaviour in order to give birth maturely’.

‘Before attending the group, I would register my pregnancy as a special case. However, I change my mind because I feel proud and confident in taking care of myself and preparing to be a healthy mother. I gain more experiences from the group, and feel like I have a group counseling service and a private consultant already’.
Orlene’s changing health status is summarised in the table below.

<table>
<thead>
<tr>
<th>Orlene: Health Status Assessment</th>
<th>HOLISTIC HEALTH ASSESSMENT</th>
<th>Level of Health Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>PART A</td>
<td>Factors to be Assessed</td>
<td>At 1st meeting</td>
</tr>
<tr>
<td>on Basic Needs</td>
<td>Comments</td>
<td>At birth</td>
</tr>
<tr>
<td>Bio-physiological</td>
<td>- Poor nutrition</td>
<td>Poor</td>
</tr>
<tr>
<td></td>
<td>- Eats while doing laundry work</td>
<td>Good</td>
</tr>
<tr>
<td></td>
<td>- 2 meals a day</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Inadequate water intake</td>
<td></td>
</tr>
<tr>
<td>Safety and security</td>
<td>- Feels safe at home</td>
<td>Moderate</td>
</tr>
<tr>
<td>Love and Belonging</td>
<td>- Married</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>- Wanted pregnancy</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>- Relationship quality ‘fair’ with husband but ‘bad’ with her father and her brother</td>
<td>Moderate</td>
</tr>
<tr>
<td>Esteem</td>
<td>- Low self-confident</td>
<td>Poor</td>
</tr>
<tr>
<td></td>
<td>- Moderate confidence when participating in group</td>
<td>Good</td>
</tr>
<tr>
<td>Self-Actualisation</td>
<td>Not assessed</td>
<td></td>
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<tr>
<td></td>
<td>Holistic Evaluation of Risk of Preterm Birth</td>
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<tr>
<td></td>
<td>Poor Health = High Risk</td>
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<td></td>
<td>Good Health = Low risk</td>
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<table>
<thead>
<tr>
<th>PART B</th>
<th>REDUCTIONIST MEDICAL RISK ASSESSMENT</th>
<th>Level of Risk of Preterm Birth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Known Medical Risk Factors</td>
<td></td>
<td>Moderate risk</td>
</tr>
<tr>
<td>- Pregnancy after 9 months of hydatidiform moles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Severe anaemia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- One miscarriage</td>
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<td></td>
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<tr>
<td>- Periodontal disease</td>
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</tbody>
</table>

**My reflections on Orlene**

Orlene was at high risk of preterm birth on the holistic scale and at moderate risk on the reductionist scale but she did not give birth prematurely. The enhancement of Orlene’s holistic health status was a key influence in protecting her and her baby from an adverse outcome. Her change in health status from poor to good was in part due to her participation in the groups and her one-to-one care from me as her midwife. Improvements in her ability to deal with stress maintain good nutrition and establish good sleeping patterns were an influence on Orlene’s birth at term; however the baby was of small gestational age possibly due to her severe anaemia in early pregnancy. Orlene had more self confidence so she did not register as a private case. During her time in the study, Orlene positively changed her daily lifestyle and reorganised her life, paying greater attention to her daily routines such as eating, drinking and sleeping.
Yari

Yari (30) was 22 weeks pregnant with her third pregnancy when I first met her. Yari said that she was born a low birth weight baby in her hometown, the eldest of two children in the southern region. When she finished year 12, her parents divorced, her father moved to live in Bangkok and her mother stayed behind. Yari married her first husband when she was 18 and she had her first pregnancy. Yari and her ex-husband had one eight-year-old child who was born at term. Yari then divorced. After one year, Yari married Ronald, her second husband when she was 26 years old. Yari had a second pregnancy but it was Hydropfetallis which implies that she was Rh Negative and her first husband was Rh positive but that this was undiagnosed and untreated (Cunningham, 2010). After one year, Yari had her current pregnancy.

Yari and Ronald worked for a landowner for low wages in their home town. Yari and Ronald travelled between Bangkok and her home town regularly: it was a three hours drive. When she was in her home town, she lived with her husband, her mother and her child. When she was in Bangkok, she stayed with her father and his new family. When I first met Yari, she said,

‘I am rather uninformed about what I should do for myself during pregnancy whether or not I am pregnant, eating, drinking or sleeping is just usual daily routine for me. I do not eat all five categories of foods or three meals; I also drink water less because I work as a peasant, so I sometimes focus on my job. However, I drink milk and bread because they are simple meals for me’.

Yari stated,

‘Because of my engagement with the group, I change my daily lifestyle during this pregnancy. I update my life by paying more attention to my daily routine. I select beneficial foods that contain five categories of nutrition and emphasise on protein. I am aware of my water intake and the benefits of drinking a sufficient amount of water. I always consider of whether it is beneficial or not. Issue from the group discussion also remind me when I eat non-beneficial foods, I then stop eating immediately’.
Yari and Ronald travelled to Bangkok for each antenatal visit. She attended 12 antenatal visits and regularly attended the group discussion up until she gave birth. Yari’s iron status improved and her weight gain (17 kilograms) was appropriate.

Yari stated,

‘I always share my experiences from the group activities to Ronald and his mother. Hence, group discussion often becomes matters for family conversation. Conversation with the unborn baby, for example, can build more intimate bonding, I feel as if I can communicate with the baby because the baby moves hardly at 5 a.m. to remind me getting up’.

At 39 weeks, Yari gave birth normally to a healthy baby girl weighing 3,200 grams. Yari felt proud of herself giving birth to a healthy baby at term. She breast-fed her baby, intending to do so for as long as she could.

Yari expressed,

‘Joining the group has changed my thought, especially eating and drinking habits. My taking care about the current pregnancy is very different from the first one. I am more self-assured in what I should eat and how to take care of myself. Attending from the group encourages me to be aware and be conscious on myself’.
Yari’s changing health status is summarised in the table below.

<table>
<thead>
<tr>
<th>Yari: Health Status Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PART A</strong></td>
</tr>
<tr>
<td><strong>Factors to be Assessed on Basic Needs</strong></td>
</tr>
</tbody>
</table>
| Bio-physiological | - Poor nutrition  
- Lacks of pregnancy knowledge  
- Inadequate water intake | Poor | Good |
| Safety and security | - Feels safe at home | Moderate | Moderate |
| Love and Belonging | - Married  
- Wanted pregnancy  
- Relationship quality ‘fair’  
- Can count on 1 person for support | Moderate | Good |
| Esteem | - Low self-confident  
- Low confidence when participating in groups | Moderate | Good |
| Self-Actualisation | Not assessed | | |

**Holistic Evaluation of Risk of Preterm Birth**

| Moderate Health | Good Health |
| Medium Risk | Low risk |

| **PART B** | REDUCTIONIST MEDICAL RISK ASSESSMENT |
| **Known Medical Risk Factors** | **Level of Risk of Preterm Birth** |
| - Born low birth weight herself  
- Anaemia  
- History of Hydropsfetalis  
- Periodontal disease | Moderate risk |

**My reflections on Yari**

Yari was at moderate risk of preterm birth on both the holistic and reductionist scales and yet she had a healthy full-term birth. Yari’s improvement in her holistic health status was a key influence in protecting her and her baby from an adverse outcome. Her change in health status from moderate to good was in part due to her participation in the groups and her one-to-one care from me as her midwife. Yari’s improvement in her holistic health status was due to her improved knowledge enabling her to take responsibility and improve her nutrition, hydration and sleep patterns. During her time in the study she positively changed her life and paid more attention to her daily routine. She selected beneficial foods that contained the five categories of nutrition with emphasis on improving her intake of protein. She also was aware of her water intake needs and the benefits of drinking enough water. Yari’s ability to meet her physiological and other multiple needs meant her health was optimised, leading to a great birth outcome.
5.2.2 A Summary of Each Woman Who Gave Birth Prematurely

Terri

Terri, aged 31 is a refugee from Myanmar. She came from a poor, illegal refugee family. She is the youngest of the five siblings by the same parents. She was born a healthy baby in the Myanmar frontier. As her family were poverty-stricken and socially disadvantaged, Terri’s siblings had to disperse to live with their relatives. Poverty affected Terri’s lifestyle and eating behaviour; she had to often eat beans and sesame seeds instead of meat because she had so few choices. Terri was then moved to Mae Sai, in Chiang Rai Province, Thailand. She has no birth certificate in Thailand; her nationality is ‘registered refugee’. She finished high school through non-formal education.

Terri was married to Thai man (Tony) who lives in Bangkok. She always thought of herself as Thai and denied that she was Burmese, however, she had no official nationality, no original birth certificate and she was not counted in the Thai census. For this reason Terri was not entitled to free medical care in Thailand. Terri was 16 weeks pregnant with her first baby when I first met her. It was an unintended pregnancy so she planned to terminate it. However, her husband felt comfortable with the pregnancy.

When I first met Terri, she confessed,

‘I had only two meals a day, and I was ignorant about the components of good nutrition. I did not have a good water intake, and as such I had constipation’.

During pregnancy, in order to meet government requirements to renew her refugee permit, Terri travelled to Mae Sai in the northernmost district of Chiang Rai (800 kilometres or 14 hours by bus from Bangkok). Terri confided in the group, ‘I lost my appetite when I travelled from Bangkok because I was tired from inadequate sleep. Also, food at Mae Sai was not easily affordable’.

At 20 weeks, Terri had vaginal bleeding; she thought it was because of straining to pass faeces when she was constipated. As a result of this realisation and learning from the group, Terri changed her eating and drinking habits. Terri confided,
‘Knowledge and experiences from group members encourage me to consciously change my lifestyle and eating habits. I eat three meals daily, and my meals contained five categories of foods. I improve my lifestyle and eating habits becoming more selective about what to eat and drink and carefully considering whether it will be good and beneficial for my baby. I need adequate sleep; otherwise I will not be able to eat’.

At 28 weeks, Terri was concerned about her pregnancy and her nationality because she had expected to get Thai nationality before giving birth. Thus, she thought that if she lived in her hometown it would be easy for her to contact about it. Hence, she decided to attend antenatal care at her hometown (Mae Sai). Before moving, Terri made four antenatal visits to a hospital in Bangkok and also joined the antenatal study group for four sessions. Terri’s weight gain of nine kilograms was inadequate during pregnancy and her iron status did not improve.

At the last meeting, Terri reflected on her knowledge and experiences from being part of the group discussion and learnt how to interpret the pregnancy records thoroughly so that she would understand the status of her health and her baby’s health. Terri confided,

‘After joining the group discussions, I relieve my worries because the group is like having a private counselor. The groups help in the following ways: (1) I know whether I have the same symptoms as friends. It is more effective than the normal antenatal care. In the group antenatal education, friends create and discuss the topics that relate to their situations’.

Terri emphasised,

‘(2) Participation in the group is necessary for me and similarly poor groups of people, it benefits for socially economic disadvantage group. Group discussion is about pregnant women’s language, Talking with women helps the women to understand easier’. Terri said,
'(3) Sharing experiences with friends definitely helps to expand my own horizons and equip me with sharper self-awareness. I greatly enjoy the group discussions'.

In our follow-up meeting via phone call, Terri said,

‘I am informed at the first antenatal visit at Mae Sai that the antenatal clinic opened only one day a week and had only one doctor. Even though I was 28 weeks pregnant, I can not get another antenatal appointment for four weeks. My weight decrease before I have a preterm rupture of my membranes. This may have been because I lost her appetite while living in my hometown and because I am stressed about my changing nationality’.

At 35 weeks, Terri had a preterm premature rupture of her membranes. She gave birth to a healthy baby boy weighing 2,050 grams who was small for gestational age. The baby was healthy and was nursed in the nursery for five days of antibiotic therapy as infection prophylaxis as Terri’s membranes had ruptured prematurely. Terri was healthy and stayed in hospital for two days. She planned to breastfeed her baby as long as she could. Overall, my impression was that Terri did not want to have this baby and was generally unhappy with her life. Terri’s changing health status is summarised in the table below.
### Terri: Health Status Assessment

#### PART A

<table>
<thead>
<tr>
<th>Factors to be Assessed on Basic Needs</th>
<th>Comments</th>
<th>Level of Health Status</th>
<th>Holistic Evaluation of Risk of Preterm Birth</th>
</tr>
</thead>
</table>
| Bio-physiological                     | - Refugee (Burmese)  
- Not enough money for cost of living  
- Poor nutrition  
- Under weight gain  
- Inadequate water intake  
- Delays voiding  
- Insufficient sleep  
- Long distance bus travel 12 hours | Poor | Poor | Poor Health = High Risk |
| Safety and security                   | - Feels unsafe at home  
- Could not go anywhere except Chiang Rai or Bangkok | Poor | Poor | Poor Health = High Risk |
| Love and Belonging                    | - Married  
- Unwanted pregnancy  
- Relationship quality ‘fair’  
- Can count on 1 person for support  
- Feels uncertain with her citizen status | Poor | Moderate | |
| Esteem                                | - Low self-confident  
- Low confidence when participating in groups  
- Chronic psycho-physiological stress  
- Feels unhappy | Poor | Poor | |
| Self-Actualisation                    | Not assessed | | |

#### PART B

<table>
<thead>
<tr>
<th>Known Medical Risk Factors</th>
<th>Level of Risk of Preterm Birth</th>
</tr>
</thead>
<tbody>
<tr>
<td>- History of preterm birth in family</td>
<td>Very high risk</td>
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<tr>
<td>- Anaemia</td>
<td></td>
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<tr>
<td>- Low BMI</td>
<td></td>
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<tr>
<td>- History of bleeding per vagina at 20 weeks</td>
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</tbody>
</table>

### My reflections on Terri

Certainly by both the holistic and reductionist scales, Terri was at high risk of preterm birth and she eventually had a preterm birth. Terri’s holistic health status did not change so she remained at high risk of an adverse outcome. The chronic psychological and physiological stress that was linked to social inequality, economic disadvantage and negative life events was a strong barrier to consistent change and predisposed her to preterm birth. During her short time in the study group, Terri tried to improve her lifestyle by becoming more selective about
what to eat and drink and carefully considering whether it would be good and beneficial for her baby. However, she lost her appetite as she travelled to Mae Sai and she was tired from insufficient sleep. Also, food at Mae Sai was not easily affordable. Terri therefore continued to be anaemic and had poor weight gain during pregnancy. These factors are consistent with the research findings by Allen [326], Moore, Davies, Wills, Worsley & Robinson [327], Siega-Riz, Savitz, Zeisel, Thorp & Herring [328] (see Section 2.2.3.1 of Chapter Three) and a systematic review and meta-analysis by Han, Mulla, Beyene, Liao & McDonald [329].

**Tukta**

When she joined the study, Tukta was 39 years old and 22 weeks pregnant with her second pregnancy. Tukta is the fourth of six children with the same parents. A sickly child due to asthma and chronic common colds, Tukta required special attention and care during childhood. As a teenager, she had to live with her aunt whose close friend was a doctor. Poor health prevented Tukta from physical exercise, sport activities and social activities. Tukta became pregnant in year 11 and dropped out of school. Tukta said,

‘At that time, I felt victimised by my ex-boyfriend who took advantage of my love and trust. He was an unscrupulous and irresponsible playboy, who ruined my life and made me very unhappy. I lived with my ex-boyfriend for the next three years. At the end of relationship, I moved to Bangkok, leaving my baby with my ex-boyfriend’s family’.

Tukta’s first child, Jessica is now 21 and lives with her paternal grandparents. For the next 17 years, Tukta lived and worked as a sales assistant in Bangkok. During this time she never visited her daughter and nor did she have any romantic relationships. She moved in with a new partner, Mac, who was 34 years old when she was 38 years old. Within the first year of living together, Tukta became pregnant. She had told the midwives it was her first so she was recorded as being a primigravida in her obstetrical records. At first meeting Tukta, I also thought that she was a primigravida. However, after four weeks of knowing each other, Tukta confided to me that it was her second pregnancy. At the first group meeting, Tukta said,

‘I want to withdraw from the project because I hate to get up a little earlier than usual. Besides, I think that my health was fairly stable because my screening score indicates that my risk of preterm birth is
less than those of the others. Later I have decided to come because I believe that my age may affect my pregnancy. Now I am here’.

Tukta said,

‘I eat two meals per day with a few of vegetables, which are mixed with rice (fried rice) or noodle. However, I eat a lot of fruits such as durian, rambutan, mango and mangosteen (These fruits contain of lots of carbohydrate and sugar). My usual water intake is only four glasses a day’.

Between 8 and 12 weeks gestation Tukta had vaginal bleeding. Tukta had three antenatal visits and attended three group discussions only. Her iron status was stable. Tukta was extremely irritable with the baby’s kicking; she over slept – her desire to sleep all the time had been a problem in this pregnancy and she also complained of extreme tiredness. Tukta said,

‘I do not engage any exercise; I spend most of my free-time sleeping. I hardly go out at all, so I do not get much walking. My normal bed time is 10 p.m.-10 a.m and I usually find time for more sleep during the day. If not for this morning ritual, I will not even get out of bed because I feel sleepy. I am so annoyed with too much baby kicking, particularly at bedtime’. Tukta stated,

‘I do not like to socialise with people. At home, I hardly talk to neighbours preferring to spend time with myself. I hate gossip, so I do not like to socialise with people’. However, after the second session, Tukta confided, ‘I think about the group meeting and think of friends. I do not know why I feel that way’.

During the third meeting, Tukta complained within the group meeting,

‘How easily I become fatigued’. Other women said, ‘This can result from too much indulgence in sleep and the lack of physical activities and exercises’. Tukta said, ‘I agree with you and promise to change my lifestyle’.
At 32 weeks, she had preterm premature rupture of membranes. At 35 weeks, Tukta had a caesarean section due to oligohydramios and a healthy baby boy weighing 2100 grams was born, small for gestational age [13]. The baby was nursed in the nursery for one day but then the baby had hyperbilirubinemia so he was treated by phototherapy for another two days. Tukta was hospitalised for five days and her health was relatively good. Tukta expressed,

‘If I could go back on time, I would have changed my lifestyle. If I had looked after myself, I wouldn’t have water from the vagina. I feel that I am not careful with my health, so I end up in the hospital. Actually, I intend to change my lifestyle’.

Tukta told me that she wanted to breastfeed but she said that she simply did not have enough milk flow to do full breastfeeding and she was therefore forced to supplement with a bottle. The baby lives with Mac’s parents because Tukta returned to work. Overall, my impression was that Tukta did not want to have this baby and was unhappy throughout her pregnancy. Tukta’s changing health status is summarised in the table below.
## Tukta: Health Status Assessment

<table>
<thead>
<tr>
<th>PART A</th>
<th>HOLISTIC HEALTH ASSESSMENT</th>
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</thead>
<tbody>
<tr>
<td>Factors to be Assessed on Basic Needs</td>
<td>Comments</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Bio-physiological | - Ignore nutrition and benefit of drinking and physical activities  
- Did not like to eat vegetables  
- Suffering from chronic constipation  
- Poor nutrition  
- Inadequate water intake  
- Too much sleep  
- Inactive | Poor | Poor |
| Safety and security | - Lives in a rented 12 square meters room which contains a bed, a bath and a kitchen.  
- Lives in polluted air | Poor | Poor |
| Love and Belonging | - Married  
- Unintended pregnancy  
- Can count on 1 person for support  
- Social isolation  
- Seems to be obsessed by fear and mistrust  
- Hardly talked to neighbours  
- Unresolved issues from first relationship and pregnancy | Poor | Poor |
| Esteem | - Low self-confidence in herself and when participating in groups  
- Feels unhappy with too much kicking of unborn baby.  
- Seems to have depression | Poor | Poor |
| Self-Actualisation | Not assessed | |

### Holistic Evaluation of Risk of Preterm Birth

| Poor Health | Poor Health |
| = High Risk | = High Risk |

## PART B

| REDUCTIONIST MEDICAL RISK ASSESSMENT |
| --- | --- |
| Known Medical Risk Factors | Level of Risk of Preterm Birth |
| - Anaemia  
- History of bleeding per vagina at eight and twelve weeks gestation | Moderate risk |

### My reflections on Tukta

Tukta had high holistic risk factors and moderate reductionist risk factors for preterm birth and she gave birth preterm. Tukta’s holistic health status did not change so she continued to be at risk of an adverse outcome. During her time in the study, I found that all the factors of Maslow’s hierarchy of needs were not fulfilled in relation to Tukta’s health and the health of her unborn baby and she was unwilling to change anything. Tukta was extremely irritable.
with her baby’s kicking; she slept too much, was physically inactive and easily became fatigued. Tukta developed some unhealthy lifestyle habits during childhood resulting in malnutrition in terms of protein, vitamins and minerals with consequent anaemia and chronic dehydration with constipation. I considered that it was possible that her mood fluctuations were related to unresolved issues from feeling heartbroken about her ex-boyfriend’s behaviour and the loss of her first baby to his family. These concerns were not addressed. However, if she received counselling, the loss of her first child behind and her unsolved issues in her heart might be resolved. Her experience of this pregnancy hopefully told her clearly that although she lost her first child, she could look forward with some optimism to a better life with her baby and her husband.

**Jinny**

At recruitment to the study, Jinny (aged 32) was 16 weeks pregnant with her fourth pregnancy. Jinny was born at home in the north-eastern region of Thailand. Jinny is the youngest of two children born to a farming couple. Jinny graduated with a bachelor degree and works as a police officer stationed in Bangkok. Jinny married John when she was 20 years old. Her first two pregnancies were spontaneously aborted. Her third pregnancy was successful and she gave birth to a 2,400 gram baby. She was not sure whether it was born maturely because her menstruation was irregular.

Jinny’s husband, John, works as an art teacher in a private school. He drinks and smokes. Jinny said that she is the leader in the family because John lacks confidence in decision making and she has to plan and make decisions on everything. Jinny therefore takes more responsibility than John and says that she has a serious type of personality and needs to plan for the future and think in advance. Jinny said,

‘I am rather uninformed about taking care for myself during pregnancy. Eating, drinking and sleeping patterns are just standard daily routines for me whether or not I am pregnant. I eat only two meals a day, and I am ignorant about proper nutrition. I do not care about drinking water, I normally only drink a glass of water after each meal’.
Jinny attended nine antenatal visits and joined in only four group discussion sessions. Her iron status remained low and her weight gain (10 kilograms) was inadequate implying that her nutrition was poor. Jinny said,

‘As a result of my engagement with the group activities, I gradually change my daily lifestyle during the pregnancy. Group meetings affect my thoughts; I realise that I should drink more water, and thus I change my behaviour. Although I am not thirsty, I try to drink at least eight glasses of water. I eat more vegetables during my pregnancy. I also add more protein to each meal such as egg, pork, chicken and meat. I make sure I eat three meals a day, but I do not like to eat in between meals. Additionally, I drink 500 mL of milk, although I never drink it before’. 

Jinny expressed,

‘Insomnia is my problem that disturbs me. I can not solve it. My normal sleep period is from 10 p.m. to 5.30 a.m. I am not actually getting adequate sleep because I usually only get to sleep at 2 a.m. I always dream; sometimes I am exhausted from dreaming. I adjust myself by following the groups’ suggestions, but I still have insomnia. I have had insomnia for a long time, and I cannot solve it. There are many trivial things affecting me. For instance, I am not confident in myself when my colleagues criticised me. This is one reason why I am not able to sleep’.

At 36 weeks, Jinny had a normal birth of a healthy, but small for gestational age girl of 2,100 grams [13]. Jinny’s baby was observed for respiratory distress for three days in the incubator. Jinny planned to breastfeed for three months because she had to return to work and the baby would then go to live with her parents.
Jinny’s changing health status is summarised in the table below.

<table>
<thead>
<tr>
<th>Jinny: Health Status Assessment</th>
<th>HOLISTIC HEALTH ASSESSMENT</th>
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<tbody>
<tr>
<td><strong>PART A</strong></td>
<td></td>
</tr>
<tr>
<td>Factors to be Assessed on Basic Needs</td>
<td>Comments</td>
</tr>
<tr>
<td>Bio-physiological</td>
<td>- Poor nutrition</td>
</tr>
<tr>
<td></td>
<td>- Inadequate water intake</td>
</tr>
<tr>
<td></td>
<td>- Insufficient sleep</td>
</tr>
<tr>
<td>Safety and security</td>
<td>- Feels safe shelter</td>
</tr>
<tr>
<td>Love and Belonging</td>
<td>- Married</td>
</tr>
<tr>
<td></td>
<td>- Wanted pregnancy</td>
</tr>
<tr>
<td></td>
<td>- Relationship quality ‘fair’</td>
</tr>
<tr>
<td></td>
<td>- Can count on 1 person for support</td>
</tr>
<tr>
<td></td>
<td>- To be a leader in family</td>
</tr>
<tr>
<td></td>
<td>- Quarrelled about the 1st child</td>
</tr>
<tr>
<td>Esteem</td>
<td>- Feels unhappy with work</td>
</tr>
<tr>
<td></td>
<td>- Low self-confident</td>
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<td></td>
<td>- Low confidence when</td>
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<td></td>
<td>participating in groups</td>
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<tr>
<td></td>
<td>- Psychological chronic stress</td>
</tr>
<tr>
<td></td>
<td>- Many trivial things affect her</td>
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<tr>
<td></td>
<td>- A serious character and needs to think in advance</td>
</tr>
<tr>
<td>Self-Actualisation</td>
<td>Not assessed</td>
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</tbody>
</table>

**Holistic Evaluation of Risk of Preterm Birth**

<table>
<thead>
<tr>
<th>Poor Health</th>
<th>Moderate Health</th>
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<tbody>
<tr>
<td>High Risk</td>
<td>Medium risk</td>
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<tr>
<th><strong>PART B</strong></th>
<th>REDUCTIONIST MEDICAL RISK ASSESSMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Known Medical Risk Factors</td>
<td>Level of Risk of Preterm Birth</td>
</tr>
<tr>
<td>- Previous preterm birth or low birth weight</td>
<td>High risk</td>
</tr>
<tr>
<td>- Anaemia</td>
<td></td>
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<tr>
<td>- Low BMI</td>
<td></td>
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<tr>
<td>- Two spontaneous abortions</td>
<td></td>
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</tbody>
</table>

**My reflections on Jinny**

Jinny was at high risk of preterm birth on both the holistic and reductionist scales and she had a preterm birth. Jinny partially improved her holistic health status but not enough to protect her and her baby from an adverse outcome. However, her change in health status from poor to moderate was in part due to her participation in the groups and her one-to-one care from me as her midwife. Jinny was faced with chronic psychological stress and chronically insufficient sleep. These factors influenced her health and the health of her unborn baby. During her time in the study, Jinny’s basic needs of nutrition and hydration were partially improved but her inadequate sleep was not. Jinny had insomnia and was often exhausted from her dreams.
Jinny said followed the groups’ suggestions but she still had insomnia. Poor quality sleep is associated with preterm birth [330].

**Cherene**

Cherene (aged 23) was 14 weeks pregnant with her eighth and planned pregnancy when she joined the study. Cherene is the first born of two children. Cherene said her birth weight was 2,400 grams but she did not know whether she was born full term or not. Cherene’s family lives in Bangkok. Her father works for a beer company while her mother is a housewife. Her family’s income is quite good. Cherene’s mother does not speak much but her father is very fierce. Her father always scolds her. Cherene now lives in her husband’s family home and she is less scolded. Cherene graduated from year twelve at high school. Her first pregnancy was when she was fourteen years old. She illegally terminated six pregnancies between 2000 and 2004, which weakened her cervix and made her prone to preterm births [13]. The seventh pregnancy was ectopic and as a result her right fallopian tube was removed. Cherene said that she did not want to explain the details of her abortions. Cherene’s husband (Son) (aged 23) graduated from year twelve also. They have been married for about two years. He is a humorous man and has a good temper. At the first meeting, Cherene said,

‘I am rather uninformed about what I should do or care for myself during pregnancy. I do not change my usual daily routine when I am pregnant. I am not fortunate enough to understand my pregnancy needs prior to my association with the group’.

Cherene said,

‘I am fond of snacks and soft drink. I do not consider good nutrition and only eat what I want. I drink very little water. I cannot sleep. I have several nightmares about my baby. Sometimes I take sleeping pills. I sleep about three to four hours a day. Because of insomnia and nightmare, I am addicted to playing games and reading books until about 1-2 a.m’.

Cherene was worried when she was 20 weeks pregnant because the ultrasound scan showed that the baby was too small for its gestational age. Cherene said,
‘I want the baby so much. My greatest concern is that the umbilical cord might get caught around the baby’s neck; the baby can be dead in the womb without its mother’s knowledge. I have read about this from a newspaper. Thus, I am worried about my baby’s health and always take notice of my baby’s movement. If the baby do not move, I will bend my body to make my baby move; I feel relieve when the baby moves. I do this regularly’. Cherene said,

‘Sometimes I have abdominal pain but I can not tell where the pain comes from. My abdomen hurts all the time after removing of my fallopian tube’.

When Cherene was in the group, she participated well and discussed the subject in detail and often looked serious. She confessed, ‘I fear that my husband will divorce me if I miscarriage again’. Cherene expressed,

‘As a result of my engagement with the group, I change my daily lifestyle during the pregnancy. I reorganise life, paying greater attention to daily routine. After attending the group, I always make sure that I have three full meals and carefully select healthy foods for myself and my unborn baby. I eat and drink more, but I still confront with insomnia’.

She attended four antenatal care sessions and joined four group discussions. At 26 weeks gestation, Cherene’s baby had decreased foetal movements and the ultrasound scan result showed oligohydramios. The baby’s Amniotic Fluid Index was decreased which implies fetal growth restriction [13]. Cherene’s baby boy was stillborn. Data from obstetrical records indicated that the baby weighed 860 grams. She said,

‘The baby's cord was tightly spiralled around the neck and legs, which was the probable cause of death. I believed that this baby died because the other previous babies who were terminated did not want him to be born’. When talking with me she seemed to feel guilty.
Before the baby died, Cherene confessed, ‘Last night, I dreamt that I saw a baby sleeping in a box’. At the last meeting with the researcher, Cherene said,

‘I gain a lot of knowledge and experiences from the group. Friends in the group share with me about how to count the foetal movement and how to choose healthy foods. It is good that I learn from them, so I can observe myself and my baby. I am thankful that the researcher suggests me to join the group. I now know that I will be high-risk pregnancy if I am pregnant, so I will be more aware of and carefully look after the subsequent pregnancy’.

Cherene’s changing health status is summarised in the table below.

<table>
<thead>
<tr>
<th>Cherene: Health Status Assessment</th>
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<tbody>
<tr>
<td><strong>PART A</strong></td>
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<tr>
<td>Factors to be Assessed on Basic Needs</td>
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<tr>
<td>Bio-physiological</td>
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<td>Safety and security</td>
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<td>Love and Belonging</td>
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<tr>
<td>Self-Actualisation</td>
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**Holistic Evaluation of Risk of Preterm Birth**

<table>
<thead>
<tr>
<th>Poor Health</th>
<th>Moderate Health</th>
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<tr>
<td>= High Risk</td>
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<tr>
<th><strong>PART B</strong></th>
<th><strong>REDUCTIONIST MEDICAL RISK ASSESSMENT</strong></th>
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<tbody>
<tr>
<td>Known Medical Risk Factors</td>
<td>Level of Risk of Preterm Birth</td>
</tr>
<tr>
<td>- History of 6 induced abortions</td>
<td>Very high risk</td>
</tr>
<tr>
<td>- History of ectopic pregnancy (fallopian tube removed)</td>
<td></td>
</tr>
<tr>
<td>- Vaginal bleeding at 12 weeks gestation</td>
<td></td>
</tr>
</tbody>
</table>
My reflections on Cherene

Cherene was at high risk of preterm birth on both the holistic and reductionist scales and she had already had a miscarriage and several induced terminations. Cherene partially improved her holistic health status but not enough to protect her from an adverse outcome. Her change in health status from poor to moderate was in part due to her participation in the groups and her one-to-one care from me as her midwife. Cherene’s insomnia, unhealthy eating and drinking habits, plus her chronic psychological and physiological stress caused by multiple unresolved losses and fears about losing her partner were barriers to Cherene’s health and wellbeing. During her time in the study, I also found that along with her physiological health needs, her love and belonging as well as esteem factors were unfulfilled which impacted her health and the health of her unborn baby.

5.2.3 Summaries of Participants

There were sixteen women who participated in this study, eight women in each group. One woman withdrew from group one because she was diagnosed with a blighted ovum after the third meeting. Another woman withdrew from group two after the fourth meeting because her pregnancy was terminated following the discovery of a major fetal abnormality on ultrasound. These two women have been removed from the table below because the conclusion of their pregnancy bore no relationship to their membership of the group. Of the fourteen women remaining in the project, three gave birth prematurely and eleven went to term. The brief summary of changes to women’s health is presented in Table 5.3

<table>
<thead>
<tr>
<th>Women’s Name</th>
<th>GA at Birth (Weeks)</th>
<th>BW (Grams)</th>
<th>Medical Risk Status</th>
<th>Holistic Health Status at Start</th>
<th>Holistic Health Status at Birth</th>
<th># of Groups Attended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kai</td>
<td>T</td>
<td>3,400</td>
<td>HR</td>
<td>HR</td>
<td>LR</td>
<td>6</td>
</tr>
<tr>
<td>Mary</td>
<td>T</td>
<td>3,100</td>
<td>HR</td>
<td>HR</td>
<td>LR</td>
<td>3</td>
</tr>
<tr>
<td>Kelly</td>
<td>T</td>
<td>3,100</td>
<td>HR</td>
<td>HR</td>
<td>LR</td>
<td>6</td>
</tr>
<tr>
<td>Pauline</td>
<td>T</td>
<td>3,000</td>
<td>HR</td>
<td>HR</td>
<td>LR</td>
<td>5</td>
</tr>
<tr>
<td>Tammy</td>
<td>T</td>
<td>2,800</td>
<td>HR</td>
<td>HR</td>
<td>LR</td>
<td>5</td>
</tr>
<tr>
<td>Vicky</td>
<td>T</td>
<td>2,700</td>
<td>HR</td>
<td>HR</td>
<td>LR</td>
<td>6</td>
</tr>
<tr>
<td>Linda</td>
<td>T</td>
<td>3,100</td>
<td>HR</td>
<td>HR</td>
<td>LR</td>
<td>5</td>
</tr>
<tr>
<td>Nancy</td>
<td>T</td>
<td>3,900</td>
<td>HR</td>
<td>HR</td>
<td>LR</td>
<td>5</td>
</tr>
<tr>
<td>Doran</td>
<td>T</td>
<td>3,700</td>
<td>MR</td>
<td>HR</td>
<td>LR</td>
<td>5</td>
</tr>
<tr>
<td>Orlene</td>
<td>T</td>
<td>2,550</td>
<td>MR</td>
<td>HR</td>
<td>LR</td>
<td>6</td>
</tr>
<tr>
<td>Yari</td>
<td>T</td>
<td>3,200</td>
<td>MR</td>
<td>HR</td>
<td>LR</td>
<td>5</td>
</tr>
<tr>
<td>Terri</td>
<td>35</td>
<td>2,050</td>
<td>HR</td>
<td>HR</td>
<td>HR</td>
<td>4</td>
</tr>
<tr>
<td>Tukta</td>
<td>35</td>
<td>2,100</td>
<td>MR</td>
<td>HR</td>
<td>HR</td>
<td>3</td>
</tr>
<tr>
<td>Jinny</td>
<td>36</td>
<td>2,100</td>
<td>HR</td>
<td>HR</td>
<td>MR</td>
<td>4</td>
</tr>
</tbody>
</table>

GA: Gestational Age; T: term; BW: Birth Weight; HR: High Risk; MR: Medium Risk; LR: Low Risk
Table 5.3 combines the information about the medical risk status and changes to each woman’s holistic health during the time of their participation in the study. In this table, I have added a column so that the number of groups that each woman attended can be considered in relation to changes in her holistic health and the gestational age of the baby when she gave birth. A detailed summary of each woman is presented in Section 5.3 of Appendix 5 (Table 5.3.1) to allow for verification of the data upon which this summary is based.

From Table 5.3, it can be seen that ten women presented with a high medical risk of preterm birth and four with a moderate medical risk. Of the ten women with high risk of preterm birth, two gave birth prematurely. Of the four women with a moderate risk of preterm birth, one gave birth prematurely. An interesting observation can be made looking at the number of times the women participated in the group discussions. It is apparent that those women who participated in the groups five or six times gave birth at term; those who gave birth prematurely joined the groups between three or four times. However, the number of women in the study is too small to claim anywhere that the women who attended more groups were less likely to experience a preterm birth.

When Maslow’s hierarchy of needs is applied as a framework for holistic health assessment, it can be seen that of the thirteen women with factors indicating a high risk of preterm birth at first meeting, three gave birth prematurely. Related to holistic health status, 11 women did change to low risk whereas three women did not change. Those factors were physiological (nutrition, hydration, adequate sleep, safety, environment etc.), love and belonging as well as esteem needs. Unfulfillment of these needs is associated with maternal stress which contributes to the development of chronic stress, ill-health and preterm birth [160, 331-335]. These findings from the application of Maslow’s framework in assessing the participants’ holistic health status are consistent with the literature review in Chapter Three [98, 99, 160] which found that multiple factors are associated with preterm birth.

When considering each medical risk factor for preterm birth, I found that the findings were consistent with the literature in Section 3.2 of Chapter Three.

- One of the seven women who had had two or more miscarriages before 20 weeks gave birth prematurely [13, 152, 326, 336, 337].
- Two of the five women who had a low body mass index of less than 20 gave birth prematurely [326-328].
• One of the four women who had had a previous preterm birth gave birth prematurely [13, 152, 326, 336, 337].

• One of the four women who had family history of preterm birth gave birth prematurely [12-15, 338].

Of the two women with a moderate medical risk of preterm birth, one gave birth prematurely, the factors that seem to have influenced her preterm birth being anaemia and two episodes of vaginal bleeding between 8 and 12 weeks gestation. Of the three women who gave birth prematurely, two had a history of vaginal bleeding in pregnancy and gave birth following preterm premature rupture of membranes. Vaginal bleeding in the first trimester is associated with preterm birth and preterm premature rupture of membranes [13, 339]. These medical risk factors and subsequent preterm births are consistent with the literature discussed in Section 3.2 of Chapter Three [12-15, 339]. Anaemia is the common medical risk factor that is associated with preterm birth for those three women who gave birth prematurely [13, 14, 147-149, 151, 340].

However, there are some findings from this research project which are not consistent with the literature. None of the three teenage pregnant women gave birth prematurely. This outcome is in part at least, a consequence of the effectiveness of the research project both in the group process and one-to-one midwifery care. After joining this study, the teenagers gradually built good relationships between themselves. With love and understanding built through the group processes, their parents supported the teenagers to be aware of themselves in fulfilling their daily life needs, such as nutrition, sleeping and hydration. The teenage women’s sense of love and belongingness with their parents, with the group and with their midwife were also improved. The teenage women became empowered in their understanding about health matters, which enhanced their self-awareness, self-consciousness and self-responsibility. These findings from this research project are consistent with the CenteringPregnancy program which evaluated the effectiveness of the program in non-Hispanic black adolescents and showed that the CenteringPregnancy group prenatal care had a lower rate of preterm birth 10.5% ($p < .02$) [2].

None of the nine women with periodontal disease gave birth prematurely. This finding may be because the women had treatment for periodontal disease and had their dental cavities filled. Dental treatment as early in pregnancy as possible, is safe, and contributes to the woman’s
general good health [239]. This conclusion is consistent with the literature review in Section 3.3 of Chapter Three [238-240].

5.3 Discussion

The women who gave birth at term changed their eating habits: they stopped eating unhealthy food and drinking unhealthy beverages such as high sugar, high caffeine soft drinks. They ate more nutritious food and increased the amount of food they ingested. Instead of having only a cup of milk for breakfast, they ensured they had three good meals a day. The women increased their level of hydration and ensured adequate rest and sleep and instituted strategies to manage their levels of stress. By focusing on her baby’s well-being, one woman was able to stop smoking cigarettes and drinking alcohol. The women learnt to observe their urination and if their urine was yellow, they recognised that they needed to drink more water and did so. Their level of physical activity was increased with many of the women walking more. With improved physical activity, nutrition, food and water intake, constipation was addressed and women found themselves stooling normally. I argue that the most likely contributor to the women’s good outcomes is that each level of each woman’s health needs, using Maslow’s hierarchy of needs as a framework for assessment, was met.

The women who gave birth at term enjoyed the positive companionship of the others in the group. The way the group was structured and facilitated meant that the women set the agenda for the group. As the weeks of the group process went on, the women became more and more confident in sharing ideas, feelings and concerns. These women also became more self aware and more able to express their vulnerabilities in the group; they were also willing to take advice and direction from the others, whereas the women who gave birth at term became more open and trusting of the other group members, the women who gave birth prematurely were more closed and did not disclose significant personal issues, and nor did they take advice from the others.

The women who gave birth prematurely had erratic and abnormal sleeping habits which did not change. These women had a haphazard approach to changing their eating and drinking habits. They were unable to manage their reaction to stressful life events and they did not increase their physical activity. For example, Terri was faced with severe social inequality according to a variety of indicators including income, education, career, social class, and deprivation [341]. These factors were related to psychological stress which appears to be a
strong barrier to any satisfaction of her basic human needs in everyday life, affecting her health i.e culminating in a preterm birth [331-334].

There were many adverse factors related to Tukta’s health and behaviour. Negative experiences seem to have been strong barriers to her ability to satisfy her needs, affecting her health and culminating in her baby’s preterm birth. She was sent away from home as a child. She was pregnant while still a teenager and her personal history included negative experiences with her health. Her feelings about her ex-boyfriend, also deeply affected her health and behaviour. Tukta’s behaviours can be likened to the visible and submerged parts of an iceberg because many memories, beliefs, cultural values and notions are hidden below the surface. This conclusion is consistent with the research finding that negative impacts of stressful life events were associated with psychological stress and increased risk of preterm birth [161, 333, 334].

Furthermore, Jinny had low self-esteem and was not confident in herself. She thought things over and over and was unable to sleep when someone criticised her. She was faced with chronic psychological stress from sleep deprivation and intrusive dreams. This conclusion is consistent with research that shows inadequate sleep and troublesome dreams are associated with preterm birth and women with prior pregnancy loss tend to have anxious and emotionally charged experiences during their pregnancies [180, 333, 334, 342]. These factors appear to have been a barrier to her ability to influence her wellbeing, affecting her health and culminating in the preterm birth of her baby.

Regarding sleep and dreams, Cherene too struggled with insomnia and nightmares about her pregnancy losses which included six induced abortions [330] and fears about whether her relationship would survive another pregnancy loss. Cherene could not sleep so she took sleeping pills. Her nightmares about her baby showed that she was worrying. Complex interactions of multiple risk factors and unfulfilled needs undermine health by creating chronic stress. The stressful events in Cherene’s life created high levels of maternal and therefore fetal stress that adversely affected her health and could possibly have been a factor in the demise of her fetus in utero [343]. This conclusion is consistent with research which demonstrates the high rate of stillbirth in chronically stressed or severely acutely stressed pregnant women [344]. Furthermore, Cherene was at high risk, she had had several induced terminations which are associated with a significantly increased risk of still birth and preterm
birth [345]. This is also consistent with a systematic review by Swingle, Colaizy, Zimmerman & Morriss [346].

5.4 Conclusion

This chapter demonstrates that all of the women improved their health through their participation in the research project, specifically through their involvement in the group process and in the one-to-one meetings with the midwife. There is something healing about a group where women can learn from each other and talk about their issues and feel listened to and cared about their health and well-being. I argue that using Maslow’s hierarchy of needs as a framework to assess the health effects of unsatisfied maternal needs shows how multiple unmet needs work synergistically to magnify women’s risk of preterm birth. However, as this study suggests, when pregnant women have their physiological, safety, security, love, belongingness and self esteem needs met, their psychological stress is reduced, and their holistic health status improves, increasing their potential to give birth at term.

All of the women who attended the Primary Health Care Groups improved their health status. No baby was born before the 35th week of pregnancy which is remarkable because these were all women at medically defined ‘increased risk of preterm birth’. No baby needed neonatal intensive care unit admission which is a saving to the health care system in the short, medium and long term.

This finding chapter has supported the sub-thesis that: For women who are at increased risk, improving their holistic health by optimising their health empowerment is the best way to prevent preterm births.
CHAPTER SIX
KEY FINDINGS ABOUT THE MIDWIFE’S ROLE

6.1 Introduction

This chapter is the second part of the research findings which help to answer the research question: “How can midwives facilitate effective group-based antenatal education in ways that are most valued by Thai women at increased risk of preterm birth?” This chapter focuses on the midwife’s role which relates to the key findings from my practice in facilitating the two women’s groups as well as the new midwifery model: Midwifery Primary Health Care Groups. The data is derived from group-based discussions, from one-on-one interviews and from my reflective journals.

The chapter is divided into six sections. Section 6.2 describes how I practised as a midwife/researcher in Bangkok, Thailand. In this section, I summarise the rules guiding how I worked in partnership with women, because these rules differ from those that I had planned to use at the beginning. The discussion on how I ran the groups includes outlining the rules and format for facilitating the groups as they occurred. Section 6.3 presents a summary of the agreed topics that the groups collaboratively decided. Also, a comparison between the agreed topics with my planned possible health topics is discussed (see Table 6.1) to identify similarities and differences. Section 6.4 presents the key findings from Group One and a summary of the recommendations for the midwife’s role following changes in my practice before Group Two. Section 6.5 discusses the key findings from Group Two and a summary of the recommendations arising from the learning from this group. Section 6.6 presents the development of a new midwifery model. Section 6.7 provides a summary of the women’s evaluation of Group One and Group Two. The chapter ends with Section 6.8 which is the conclusion.

6.2 Feminist Group Agreements and Processes for Thai Women

This section summarises the feminist group agreement and stages of feminist group processes which actually occurred when I was facilitating the groups in Thailand. These feminist processes, therefore, were modified for developing a new midwifery model (see Section 6.6.5). (See also feminist group processes in Section 2.5.2.1 and 2.5.2.2 of Chapter Two and
Appendix 2 which deal with concepts I considered before starting the groups in this research project).

6.2.1 Feminist Group Agreement Used

This section outlines the way that groups were actually organised and functioned in Thailand. I have included this information so that other midwives who want to conduct similar groups are able to make decisions about the transferability of the model [347].

6.2.1.1 The environment:

- A private, comfortable and welcoming space was created as it is important for women to feel safe to engage with the group

- The chairs were placed for sitting in a circle so that everyone had eye contact with one another

- The group size was thought to be good at eight members as this size was large enough to create a sense of group support and small enough for every woman to feel a sense of belonging [133, 134 p. 119, 348].

- The group was held on the same day as the standard antenatal appointments the women attended with the obstetrician to minimise travel and time inconvenience.

- To form relationships, build trust and provide continuity of care, meetings were held on a fortnightly basis. The final postnatal meeting was held with partners and babies included.

- To give enough time for good discussion, the group meeting usually went for around 90–120 minutes.

6.2.1.2 The midwife/facilitator:

- had certain formal roles such as: contemporary midwife, and health educator/promoter.

- used language and non-verbal communication that balanced the power relationships between the women and the facilitator.
supported women in the groups to feel able to question (or challenge) the midwife and/or each other about group participation issues.

6.2.1.3 Promoting effective group processes:

- Within the group, women and midwives had a known and shared purpose: to optimise health to prevent preterm birth.

- The following group norms were established by group consensus to ensure mutual trust, respect, empathy, caring and responsibility:
  - only one person spoke at a time.
  - participants indicated a desire to speak by raising their hands.
  - when one woman was speaking others should not interrupt
  - each woman agreed to be careful not talk too much or too often.

- Differences between women were seen as valued resources to strengthen the integrity of the group.

6.2.2 Stages of Group Processes Used

The processes outlined below include the stages of group forming, checking-in, working, closing and evaluating that were actually used.

6.2.2.1 The group forming stage (First meeting)

The role of the midwife at this first meeting, the group forming stage was to:

- create an equal and friendly environment, group norms
- create a sense of unity among the women during group discussion
- share self and roles as a midwife (spARINGLY)
- inform the women about the background of the project and objectives of group-based discussion
- support women to feel free to express their experiences, values, beliefs and opinions

**6.2.2.2 The checking-in stage**

At each group meeting, the midwife-facilitator:

- aimed to help each woman to leave other matters behind
- focused the attention of each member on the shared purpose for being together
- encouraged each woman to look at herself, her pregnancy development and self-care in past two weeks.
- invited each woman to talk briefly for about 15 minutes.

**6.2.2.3 The working stage**

At each group meeting, the midwife-facilitator:

- aimed to create commitment to the power of the group
- aimed to promote group integration, raised individual and group consciousness and encouraged shared responsibility for the content and process of each meeting
- facilitated active discussion on the agreed topic (for about 45–60 minutes)
- encouraged women to share experiences freely and directly
- invited the women to tell stories of their experiences as they related to each topic
- encouraged the women to identify action strategies that they would like to use either individually or collectively with the aim of promoting health
- encouraged the women to think about the factors that either promote or diminish healthful behaviours with a particular emphasis on social and cultural factors.
6.2.2.4 The closing stage

At each group meeting, the midwife-facilitator:

- aimed to help each woman to reflect on someone or something that happened during the process
- spent the last 10–15 minutes of the group time facilitating the women’s reflection on the group process, sharing recommendations and planning what needed to happen next time the group met.
- ended each meeting with refreshments and encouraged socialisation.

6.2.2.5 The evaluating stage (after giving birth)

At the final meeting, the midwife-facilitator:

- facilitated the sharing of experiences, and sharing from each woman about the impact of the overall group process and what effect their experiences had on their health and wellbeing
- facilitated discussion about the development of friendships with other group members in assisting women to make changes to have a healthy pregnancy.
- invited women to identify action strategies that they would like to use either individually or collectively with the aim of promoting health and networking.

In summary, the conduct of these feminist groups and the learning gained from facilitating the groups was integrated into the development of a new midwifery model (see Section 6.7.1.3, 4 and 5).

6.3 A Summary of Agreed Topics for Discussion

This section presents a summary of agreed topics for discussion that emerged from group consensus at the first meeting of both groups. My planned possible health list (see also Section 4.4.1.4 in Chapter Four) of preferred topics was based on basic health needs associated with preterm birth and women’s wellbeing [15, 88, 302-306]. The list of topics the women wanted to discuss and my list were somewhat different. There were only two topics
that I thought were important that were on the lists of preferences from both of the groups (see Table 6.1).

<table>
<thead>
<tr>
<th>Table 6.1: The Similarities, Differences of Agreed Health Topics and My Planned Possible Health Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health Topics for Discussion</strong></td>
</tr>
<tr>
<td><strong>Group One</strong></td>
</tr>
<tr>
<td>Nutrition in pregnancy</td>
</tr>
<tr>
<td>Preparation for normal birth</td>
</tr>
<tr>
<td>Sharing experiences of preterm birth</td>
</tr>
<tr>
<td>Changes during the third trimester of pregnancy</td>
</tr>
<tr>
<td>Exercise and physical activities during pregnancy</td>
</tr>
<tr>
<td>Preparation for caesarean section</td>
</tr>
<tr>
<td>Talk about sex during pregnancy</td>
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<td></td>
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</tbody>
</table>

Table 6.1 presents my list of possible health topics. These topics provided a framework for facilitating the discussion groups in case the women did not volunteer any suggestions. The information in the table shows that by using feminist group processes, the actual topics discussed in each group differed based on the interests of participants in the group. There were four topics on my list that I thought were really important. These topics were not chosen by the women initially, but they emerged during group discussion as women shared their concerns and problems. These topics were:
- sleep patterns
- smoking: active and passive, alcohol and drug abuse
- self care, detection of adverse conditions; birthing the baby
- preparing for breast feeding.

6.4 Key Findings from Group One

As described in Chapter Four (see Section 4.5.3), I used a model of reflection on practice as a way to think about and examine questions, concerns or problems so that learning took place. I recorded my reflections using a notebook and a digital recorder. I often discussed situations of concern with my supervisors, or my friends and colleagues. During data collection, analysis and interpretation, I identified a number of practice situations that were particularly challenging for me. This section describes twelve issues, concerns or problems that arose in my practice with the women in Group One (see Table 6.2). Each issue or concern led to the formulation of a question that guided me to identify the midwife’s role in ways that are culturally appropriate for Thai women. For the first question “Should a midwife wear a uniform to facilitate group-based antenatal education?”, a summary of the reflective process is provided below as an example of how the reflection process worked in practice [349]. The reflections on the subsequent questions in Table 6.2 below are summarised and presented along with key findings (new knowledge) from each reflective process. The full version of each problem/question can be found in Section 6.1 of Appendix 6.
Table 6.2: Group One: Summary of Concerns/Problems/Questions That Arose in My Practice

| Q. 1 Should a midwife wear a uniform to facilitate group-based antenatal education? |
| Q. 2 How should a midwife encourage equality of power among women? |
| Q. 3 What is the role of the midwife if it is not to be the ‘expert’? |
| Q. 4 Can the groups have two topics scheduled for the same session? |
| Q. 5 How can positive mother–baby connections be facilitated? |
| Q. 6 How should a midwife facilitate the sharing of vulnerabilities? |
| Q. 7 Should I act as a Thai nurse or as a contemporary midwife? |
| Q. 8 How should a midwife use her power when facilitating antenatal groups for vulnerable women? |
| Q. 9 What should a midwife do when information is required in a facilitated group discussion on nutrition in pregnancy? |
| Q.10 How should a midwife facilitate women to share their thoughts and feelings about a sensitive topic? |
| Q.11 How should a midwife “break the ice” when talking about taboo subjects? |
| Q.12 How can a midwife facilitate empowerment in women? |

Q. 1 Should a midwife wear a uniform to facilitate group-based antenatal education?

This question was used as the basis of the reflective model for midwifery practice (see Figure 6.1). The model has also been used in this section and Section 6.5 for data analysis. Before I began group-based antenatal education at the hospital, my primary supervisor had suggested that I should not wear a uniform (see Figure 6.1) during the groups so as to equalise power relationships and enhance communication with women in the learning cycle (she left the decision up to me). However, I was not sure if the recommendation of my supervisor was correct in the Thai context. I knew that Thai midwives had a different perspective; they were proud of wearing the uniform and they thought I should wear it with pride. I had to think carefully about whether I should wear the uniform.

During recruitment at the antenatal clinic I wore the uniform and looked just like the other midwives in the clinic. In one sense it was good for me to look like the other midwives as I blended in with them and felt that I would be more easily accepted. During the initial conversations with the women I spoke with, I tried to build rapport.
When I reflected on the feelings of the women they seemed inhibited and showed submissiveness towards me. For example they looked down, spoke very little and agreed with anything I said. I felt that the women looked up to me with great respect because my uniform indicated that I was part of a powerful institution. Maybe that submissiveness was just part of Thai culture but maybe if I wore normal clothes it would symbolise equality and the women would feel more equal and free to talk.

I felt conflicted about what I should do. The research aim of the feminist action research study was to develop a culturally appropriate model of group-based antenatal education that was valued by Thai women. I wondered if there was a difference between what is culturally expected of me – that is, to wear a uniform, and what would be most valued by Thai women? I thought about the meaning of the word ‘midwife’, which means ‘with woman’ and my feminist research methodology which aimed to promote equality and empowerment for women. I realised that if I wanted women to be empowered in relation to their own health, then I needed to avoid setting myself up as ‘the expert’. In order to build equal relationships in group discussion then, it might be best to wear normal clothes. I knew that not wearing a uniform would bring criticism from my Thai nursing and midwifery colleagues. I thought I could withstand that criticism if my wearing normal clothes would help women to feel more empowered.
Because of my experiences before and during recruitment I wondered if more knowledge about the meaning of the uniform would help me and I wondered if I should change my attitude. I decided to review the literature about uniform wearing to see how other midwives and nurses had thought about the role of the uniform in their practice. All the articles that I retrieved were written from the Western perspective. There is a lack of consensus about whether a midwife should wear a uniform [350-354].

The benefits of midwives wearing a uniform are said to include: ease of identification for hospital patients, staff, and the public [355, 356] together with increased personal confidence for the midwife [357, 358]. Some argue that the patient feels safe and secure knowing that the person they are dealing with is a health professional [356]. When all members of a profession wear a uniform, a sense of professionalism is projected to the public [356-358] which is what my Thai midwifery and academic colleagues were saying was important about wearing one. Even though there are no published papers on uniform wearing by midwives or nurses in Thailand, from my experience I can attest that midwives are expected to wear uniforms. This expectation is universal; it is held by Thai women, nurses, midwives, doctors and hospital administrators. In Thailand, the uniform is usually perceived as a symbol of cleanliness, politeness, generosity, compassion and conveys a sense of power and authority [355].

Although seen as a positive by many, the conveyance of a sense of power and authority by wearing a uniform has its detractors. According to several authors [355, 359, 360] the sense of power and authority that is conveyed by wearing a uniform creates an atmosphere of inequality in both the woman and the midwife, leading the woman to think she needs the midwife’s permission before taking action [351, 356, 357, 359, 361]. The uniform may create more interpersonal detachment and less relationship [361]. Women are more likely to feel passive and dependent and therefore relinquish control to the midwives [359] which I sensed was happening when I wore the uniform in the antenatal clinic during recruitment. Midwives may be less likely to share decision-making with the woman [353]; some claim that ‘uniform wearing actually delays patient recovery’ [356, 359 p.149]. When health professionals act ‘just’ like ordinary people in their interactions with their clients, those clients are more likely to take an active role in decision making [356, 359]. I decided that my most important aim as a midwife and as a feminist researcher was to encourage the women to take an active role in decision making about their health and health care. The key findings from this question were that:
➢ Wearing normal clothes to midwife-led group-based antenatal education would equalise power relationships and encourage the women to feel confident to speak and share experiences.

➢ Wearing the uniform created a barrier and could stifle effective communication.

Q. 2 How should a midwife encourage equality of power among women?

The following reflection about power relationships was initiated by my practice at the first group meeting. The meeting began with eight women who sat in a circle with me so that the women felt equal (see Figure 6.2).

Figure 6.2: The Women Sat in a Circle

I offered details about myself to give the women a sense of who I was as a midwife, a woman and a researcher. I tried to create a friendly atmosphere, to enhance relationships, and to create connections with the pregnant women. I reflected that sincerely and sparingly sharing my relevant personal details could equalise the power relationships and could build trust to the women and gain the women’s trust. What I did was culturally appropriate for me and Thai women [70, 362]. When the women felt trust towards me and were comfortable talking in the group, they began to reveal details about their lives. Therefore, many issues from the women’s experiences gradually appeared in the group.

When the group discussion was finished, I listened to the recorded session. I then reflected on my role immediately by talking and recording my reflections with the digital recorder. Due to the use of technical terminology, the use of English and my exercising professional power over the women, I saw that my demeanour had weakened the group process by positioning
myself as more powerful than other group members. I realised that I had made a mistake because I did not follow the plan that I had made in Australia. I knew that I overemphasised some sentences and words many times. These sentences seemed to be orders because I used words such as, “do not…” or “…should not …”. I had used English and technical terms such as high risk, preterm birth, ANC (antenatal clinic), project and review and I had asked questions that were too complex. I forgot to take into account the educational level of the group members. This was not consistent with feminist group processes (see Chapter Two). The way I talked to the women was asserting my professional power over them.

The key findings from this question were that the midwife should:

- selectively and sparingly share relevant personal details so as to enhance communication and build trust
- equalise power relationships and encourage the women to feel confident to share experiences in groups
- be careful not to say things like “do not…” or “should not…” and to use positive encouraging language instead
- be aware of the sensitive use of verbal and non-verbal language in ways that are not intimidating to Thai woman
- use plain language that is educationally appropriate and can be understood by someone with a grad six level of education (no technical terminology or ambiguous language).

**Q. 3 What is the role of the midwife if it is not to be the ‘expert’?**

The following reflection was initiated by my practice towards the end of the first group meeting where the women were encouraged to set topics to be discussed at the next meeting. After the women began talking more naturally with each other, I encouraged them to set topics they would like to discuss at future meetings. The only caveat I made was that discussion topics be related to women’s health in pregnancy and preterm birth. By doing this, I was aiming to facilitate growth in the individual group members’ ability to be autonomous.
At the meeting, the women were silent when I asked them to suggest topics for discussion. I was not surprised as it was normal for Thai women to be submissive with doctors and nurses [362]. Normally Thai women do not even think that their opinions and/or experiences are valuable when they are in the presence of a health professional. This submissiveness, in my opinion and experience, is because doctors and nurses normally, and usually unconsciously, use power over women so that women feel that they have to believe what they say and do as they are told [362]. The women therefore, expected me to take the lead, to tell them what they needed to know.

Because I wore normal clothes, my appearance made me seem more approachable. I felt that we were on a more even footing and that I was less intimidating than when I was wearing the Thai nurse’s uniform. I was aware that what I was doing in not providing a list of topics or beginning to ‘teach’ the women was unexpected for them. Indeed I was a little uncomfortable too because I did not have a clear role as a nurse/midwife. However, guided by feminist group processes I continued to kindly encourage the women to contribute topics and then they began to feel empowered and began to speak. I reflected that I had encouraged the women over and over again to speak up. That encouragement was useful and necessary because some women would not have offered any topics without that extra encouragement. I was patient, I allowed for silence, giving women time to think and to get the courage to speak. I was pleased when I saw the women beginning to share what they wanted to discuss.

I treated each topic with respect and wrote it on a white board for all to see. In this way the topics that the women wanted to discuss were gradually identified and the conversation flowed more and more easily during the group process. My interpretation was that the women began to feel confident to speak and to trust each other and me. I was pleased to see the women taking responsibility for the topics that would be discussed.

A woman said, “safe sexual relationships during pregnancy. I do not know which position is suitable and safe” At the time the other women did not say anything. I was anxious about this topic being discussed in the group because it was a topic that was usually taboo in public discussion. I knew this topic was sensitive for Thai women; I worried and was not confident in speaking about this topic. I am a single woman and I do not feel comfortable myself (this situation became a reflection in itself; discussed below (see Question 11). I thought, however, that as my research was woman-centred, I should follow the women’s suggested topics.
The key findings about the role of the midwife when she was not to the expert were that the midwife:

- should focus on women’s needs and wants related to their health.
- should encourage each woman to feel like the expert on her own life.
- should be genuine and accepting so as to develop trust with the women.
- should be patient. Allowing women time to think is important for getting the group interaction going.
- is an expert in normal pregnancy and birth but does not have to be the expert on everything.

Q. 4 Can the groups have two topics scheduled for the same session?

The following reflection was initiated by my practice towards the end of the first group meeting. After the women had identified the list of topics they wanted to discuss. I asked the women to suggest the topics for the next and subsequent meetings. Some women said, “Diet is important for us; we are not sure how to eat or choose food for our pregnancy”. Some women said, “Miscarriage and preterm birth are also interesting because we have never known about them”. At that time I was not sure how to make a decision. However, I knew I had to facilitate the group based on equality following feminist group agreements (see Chapter Two). I sought a consensus agreement. The women said, “Let’s talk about diet and preterm birth”. All women agreed with this idea. I followed the women’s decision by including two health topics on the same session (diet and preterm birth for the second meeting; sex during pregnancy and preparation for childbirth for the third meeting). I did not realise that the decision to have two topics at a session would create difficulties.

After finishing the second meeting, I reflected on the discussion of two topics within the same session. The women finished their discussion on one topic, but the other one could not be drawn to a close on time. The women needed to add preterm birth to the list for the next meeting (the third meeting). As I reflected, I began to see the difficulties in having two topics on the agenda in the 90 minute timeframe of the meetings because for both topics there was so much detail to discuss. I therefore planned to change my practice as the key findings from my reflection on this question were that the midwife should:
provide a list of possible topics but allow women to set the health-related agenda.

facilitate only one planned topic for the session to enable rich and deep discussion.

Q. 5 How can positive mother-baby connections be facilitated?

The following reflection was about how I facilitated positive mother-baby connection. At the first meeting, some women in the group complained about the baby kicking too much, especially when they went to bed; they did not know how to cope with this feeling. This openness about their feelings was a good sign for the first group meeting. I reflected that the women may have felt bad when they made negative comments about their babies’ movements and wanted to know how to deal with their feelings of discomfort and annoyance.

A woman in the group suggested turning on music and talking to the unborn baby as a way to cope with feelings of discomfort due to babies’ movements. The women discussed how this was a way to communicate with their unborn babies. This sharing experience was quite challenging for the women because they had not thought about talking with their unborn babies before. Women who had been having difficulty coping with their babies’ movements started stroking their abdomens and talking to their unborn babies, undertaking these behaviours as a result of advice from the other women, advice that enabled the women to bond more effectively with their babies. Bonding with the unborn baby is recognised as the source of feelings of responsibility, love and compassion for the baby [363]. When women bond with their unborn babies, their sense of responsibility and their self-awareness have increased.

Reflecting on my 15 years of experiences as a Thai midwife, including the one year of experience in working with the two groups of women, I realised that women talking with their unborn baby seemed unusual for the women in my study group because they did not know that they could communicate with their unborn babies. Also, midwives at antenatal clinics never mention this. For instance, Kelly was attentive, open and willing to share her experience with the group. She confided,

“I felt somewhat odd and awkward talking to the unborn baby. I was shy to talk in front of other people. I also discussed this issue with friends. They agreed with me. This was true with most women in the group as well so I was reluctant to do it at first”.

“
This group discussion provided a good opportunity for the socioeconomically disadvantaged women in this study to learn how to bond and develop love for their babies, as well as a sense of protectiveness that increased over time. This intimate connection based on safety, trust, love and consistency [363] also extended to the women’s partners as they shared their experiences in the group.

The key findings from this question were that the midwife should:

- support women to bond with their unborn babies from the beginning of pregnancy by encouraging them to communicate by touch and voice with their unborn babies
- support women to talk about their unborn babies
- educate women about the needs of the unborn baby. This knowledge can increase women’s awareness and confidence to be able to keep her baby healthy.

Q. 6 How should a midwife facilitate the sharing of vulnerabilities?

The following reflection was initiated by my practice towards the end of the first group meeting. I encouraged the women to share their risk factors for preterm birth by beginning to talk about the words, ‘High Risk Pregnancy’ stamped in red at the top of each woman’s antenatal record. I then asked the women to tell their ages. I did this because I wanted the women to understand why they had this stamp on their records. I was trying to focus attention again on risk factors for preterm birth. The way that I maintained a focus on risk factors reflected my clinical approach, which was consistent with my training and the standard nursing approach in Thailand. The way I asked these questions was like a nurse or doctor in a private consultation.

I reflected later that the risk factors for preterm birth were very sensitive topics. Also, some women in the group had experienced previous preterm births and the associated suffering and grief that come with having a baby prematurely. I had not made any adjustment for the impact of having a group of women listening to each answer talking about these sensitive areas.

The key findings from this question were that the midwife should:

- facilitate in such a way that women can elect to share or not share their experiences of or risk factors for preterm birth
ensure that each woman’s health information is kept private and is shared only with her consent

use open-ended questions to avoid the possibility of individual women feeling vulnerable.

Q. 7 Should I act as a Thai nurse or as a contemporary midwife?

This question emerged following my first meeting with Tammy. Tammy was a teenage woman attending her initial booking-in visit, at which time she was twenty weeks pregnant. I conducted the planned brief interview in the open waiting room area of the antenatal clinic. During the initial 15 minutes of interview, in which she appeared unhappy and avoided eye contact, I learned that Tammy was sixteen years old, single and living at home with her mother. I thought she might not trust me so I invited Tammy to make another appointment with me. At the next meeting both Tammy and I felt more relaxed. We ate lunch together in a park within the hospital grounds. I did not even think about wearing my uniform; I wore a shirt and pants. We began a discussion with about daily lifestyle. I could see Tammy had begun to trust me because she smiled, laughed and talked more freely. She was letting me know her.

I had not planned to have more than one appointment with any of the women. However, when I reflected on the first meeting with Tammy (and the other women in the first group) I thought that 15 minutes was not enough time to establish mutual understanding and trust to talk about her risk factors and health. As a result, I began to realise if I acted as a Thai nurse (as described in Chapter One and in the reflection on uniform wearing above and in Section 1 of Appendix 6), I was not going to adequately respond to women’s health needs. I sensed that they needed my attention, care and concern as a midwife who cared about each of them as an individual. I stepped outside what is my understanding and experience of normal nursing practice in Thailand with my decision to meet with them again individually and in doing so I crossed an unwritten nursing practice boundary. I did this knowing that in contemporary models of midwifery partnership [136, 139], what I was doing was good midwifery practice.

The key findings from my reflection were that the midwife should:

act as a contemporary midwife which is an appropriate role for working with each woman in response to her health needs
be aware that women need to be treated as individuals and require one on one meetings with a midwife in addition to group-based antenatal education.

Q. 8 How should a midwife use her power when facilitating antenatal groups for vulnerable women?

This question is a direct follow-on from Questions 6 and 7, and also from the first meeting. Immediately before this question arose for me, I had been talking to the group about the known risk factors for preterm birth, including the age of the mother so that the women could think about whether age was a risk factor for them. I knew the ages of the women from the initial interviews. I also knew that, except for Tammy, they were all married. The other women were aged between 28 and 39 years old. Tammy was faced with a direct request to tell her age. As soon as I asked the question I immediately felt regretful that I raised the topic of ‘age’. I thought that Tammy might be embarrassed about having to tell her age.

On reflection and in discussion with my supervisors, I realised that age was a sensitive topic. I saw that I had a temporary lack of empathic consideration as a health professional. I was more focused on risk status than I was on facilitating the group process and individual self-determination. To be consistent with midwifery philosophy I should have ensured each woman was in control of what information she chose to share or keep private. On reviewing feminist group processes, I have noted that this issue is not explicitly addressed.

The key findings from this question were that the midwife should:

- explicitly value the right of each woman to be in control of what information she chose to share or keep private
- work thoughtfully and sensitively when collaborating with women, especially disadvantaged women
- avoid stimulating any reactions within the group that could disadvantage any woman on the basis of age, marital status, race or social class etc.
Q. 9 What should a midwife do when information is required in a facilitated group discussion on nutrition in pregnancy?

This question emerged from the discussion in the second meeting. I began the session by putting examples of healthy and unhealthy food models on the table. I encouraged the women to look at the food models and discuss the nutritional values in each choice of food (This activity is consistent with the International Definition of a Midwife in Chapter Two).

On reflection, I recognised that the women in the group only had a very superficial understanding of nutritional issues. Sharing knowledge and experiences on this topic was therefore ineffective because they had low educational attainment. I realised that this method would not help the women to understand how to change their eating and drinking habits. I carefully thought about my role as a midwife and a researcher and how I could best facilitate the women’s knowledge base about nutrition and hydration and develop a culturally appropriate model that would be most valued by Thai women. Therefore, to be consistent with my feminist methodological framework (Chapter Four), I decided that sharing my own experience (both theory and practice) should be an appropriate way to support women to feel confident and to experience health empowerment. The appropriate approach was to provide a summary of food models including all of the information that was raised during the discussions and then to include more information from me. I made reference to the Asian Food Pyramid. Knowing about and understanding this food pyramid allowed the women to feel confident and increased their health empowerment.

The key findings from this question were that the midwife should:

- act as a health counsellor to help address women’s health needs on this topic
- add more information after the women’s discussion as an appropriate way to support socioeconomically disadvantaged Thai women
- use simple language with good diagrams of the different foods to eat and to avoid
- encourage the women to share and analyse their eating habits with each other which helps the women to be aware of their own nutritional status.
Q.10 How should a midwife facilitate women to share their thoughts and feelings about a sensitive topic?

During the second meeting, women with a previous preterm birth were encouraged to share their experiences; Renee and Mary smiled but hesitated to describe their experiences. I thought they might be embarrassed if they said something wrong and they were not yet sure of me or the other women in the group as this was only the second meeting. I recognised that, to be consistent with feminist group processes (see Chapter Two), I needed to build the mutual trust and empathy first before any discussion about sensitive topics because these are important values that need to have the commitment of each woman.

I thought that the smiles from Renee, Mary and the other women were a good sign that trust was building. Then I said to everyone, “Today we are honoured to have two women who have directly experienced preterm birth” I continued, “We feel grateful to Renee and Mary. Both of them want to help us in the group to learn about preterm birth”. All the women smiled and applauded for Renee and Mary. Every woman in the group had a different background, beliefs and personality but these differences were valued resources to strengthen the group. In this way, I tried to build unity in the group and this helped the women to feel that they had the same purpose. This approach to sharing information was consistent with feminist group processes and the feminist methodological framework of this study. I also knew my aim was to help the women to improve their lives, so I briefly explained what preterm birth was and some of the risk factors that predispose particular women to preterm birth. This information helped the women to understand their health status and what preterm birth was.

I observed that as the women began to learn more about themselves they wanted to have more knowledge. During this second session, I gave them an opportunity to share their experiences and to have a discussion between themselves; I did not need to talk or direct the conversation. I was pleased that the women were feeling confident and were taking more control. However, I noticed that nobody talked about how to look after themselves so as to be healthy and have a full term, healthy baby. I reminded the women that our aim was for each woman in the group to reach full term in their pregnancy and give birth to a healthy baby. I also pointed out that if a woman had preterm labour signs before her due date, she should be aware of her health status and seek medical attention for inhibition of uterine contractions and a lung stimulant for the baby.
The key findings from this question were that the midwife should:

- maintain a strengths-based approach by focusing on the positive thinking, attitudes and behaviours that are needed for the best chance of a healthy pregnancy and full term birth
- add information after the women’s discussion to increase their knowledge and understanding
- be aware that women were experts about themselves and that if they were healthy their babies would also be healthy
- be aware that trust and unity are required for women to share about sensitive topics because experiences of previous preterm birth are associated with suffering and grief.

Q.11 How should a midwife “break the ice” when talking about taboo subjects?

The following reflection was concerned with how the midwife could facilitate women to talk about sex during pregnancy; a taboo topic for Thai women. This question arose at the third meeting as I was worried about and lacked the confidence to facilitate and encourage the group to discuss this topic. At that time, the midwives I consulted with all agreed that if a woman was at increased risk of preterm birth then she should not have sex during pregnancy. I knew that the nurses and obstetricians at antenatal clinics never asked women about sex during pregnancy. I also knew that four of the eight women had experienced bleeding in their current pregnancy and generally, such women were advised against sex in pregnancy.

As a Thai woman and a Thai midwife, my lived experience was that talking about sex was taboo, which is consistent with Thai culture and the belief that sex should be discussed only in private with family or very close friends. I then thought about how I could facilitate the group discussion in ways that are most culturally appropriate for Thai women. I decided that at the end of session I would use a short power point presentation to summarise this topic after the women had the opportunity to discuss sex in pregnancy. I did this because as a single Thai woman, I felt very uncomfortable with the topic and I reverted to a more didactic approach as a way of trying to protect myself from potentially embarrassing questions.
At the meeting, I began by asking whether sex was important during pregnancy or not. There was no response to this enquiry. I recognised that the women might have been reluctant to speak because of the taboo nature of the topic and as such they were not likely to speak even if they had had experiences. I also considered that the women might not have known much about sex and pregnancy. I smiled and looked around at the women, they smiled but nobody said anything. I then encouraged the women again to share their ideas and experiences of the topic being discussed. I said, “We can share about this in the group because now we have only women in this room!” I was saying that having a woman-only group made it culturally OK to talk about sex. I knew that I was using my power in this conversation, but I was using it thoughtfully as it seemed important in this instance to encourage the women to engage in the group discussion.

Everyone laughed and the atmosphere lightened. I noticed the women relaxed and took control of the group discussion because I had told them we were all women. The sense of shared fun and talking about a taboo topic in a women-only group seemed to have ‘broken the ice’ which was very encouraging for me as the group facilitator. Having fun together with women was consistent with feminist group aims of promoting a sense of group unity. I knew that the women were united in the same purpose. I therefore needed to decide how I could best support and encourage the women to trust in the group and feel safe. This would enable them to open up about their lives.

I reflected about sex in pregnancy and wondered if having sex in pregnancy did actually increase the risks of preterm birth. Since my return to Australia I have checked the current recommendations about sex in pregnancy. According to Cunningham [13] penetrative sex and female orgasm are safe if there has been no vaginal bleeding or ruptured membranes in the current pregnancy. Also, for women with a prior preterm birth sexual intercourse in second and third trimester does not lead to an increased risk of recurrent preterm birth [13].

The key findings from this question were that the midwife:

- needs to learn to be more comfortable to talk about sex with women
- should be able to help women feel confident and comfortable to ask about sex
- needs to create a sense of shared fun. This is important for group development
needs to use open-ended questions early in the meeting and then be patient to allow women time to think and to answer. This is important for getting the group interaction going

- does not have to answer every question and does not have to be the expert on everything

- should facilitate and encourage respectfully and sensitively by considering the religion, culture and beliefs of each woman

- should be empowering of women by encouraging them to look at their strengths rather than just focussing on risks.

- should encourage the other women in the group to respond and/or share their experiences when the women share stories of happy and unhappy sexual relationships.

**Q.12 How can a midwife facilitate empowerment in women?**

This question emerged at the second meeting. The key findings of the reflection in response to this question were applied in the facilitation of every subsequent group meeting. I wanted to support the women to improve their lifestyle by developing more self-awareness and by enhancing their own consciousness. I thought about ways I could accomplish what I wanted to do. I developed a three-phase process to meet my goals. The three-phase process consisted of: “Reviewing, Reflecting and Emphasising.” At the beginning of each group meeting, the women were asked:

1. To ‘review’ the knowledge and experiences that they had gained from the last meeting and how it had influenced them in the previous two weeks (What have we learned together from the last meeting?)

2. To ‘reflect’ on their thoughts and feelings. (How did you feel about the development of your pregnancy and your self-care in the previous two weeks?)

3. To emphasise health behaviours (What should you be aware of to improve or change your lifestyle?)

The three-phase process facilitated and encouraged the women’s review and reflection on themselves in the previous two weeks. For instance, Kai said with an unhappy face,
“I was sorry, I delayed voiding from 5 p.m. to midnight because the toilet is far from my shop and there were many customers; I could not go off. I voided only once after working. Thus, now, I have pain while voiding; the urine was so yellowish. I know that I should not retain urine so I will change myself.”

Kai looked unhappy because she had already learned and knew about the importance of voiding and the adverse outcomes of delay. As Kai did not follow these guidelines, she felt guilty. However, because of her learning from the group, Kai realised the benefits of looking after her health. I reflected that this was a good sign because Kai began to be aware of her health status and intended to take more responsibility. I thought that Kai trusted the group and me as a midwife so she told the truth by opening her mind and expressing her feelings. When the women reflected on their feelings and actions, they began to recognise behaviours and attitudes that were not conducive to good health. They began to think about what they would rather do or what they wanted to change.

I reflected that the fortnightly reflection process helped the women recognise their health responsibilities to themselves and their babies. I stressed that the person who took care of the babies at all times was the woman herself, and that each woman was and would always be the expert in knowing her own baby and his/her needs.

All the women were motivated by the other women’s experiences. The life experiences of the other women became the motivator that encouraged them to think and change their health behaviours. The sharing led to the women’s empowerment. The key findings were that the midwife needs to:

- be aware that sharing everyday life experiences with each other in a safe learning environment leads to women’s empowerment
- provide information about health topics in ways that are non-didactic and non-judgemental
- encourage the women to reflect on their own experiences in order to develop more self-awareness and self-acceptance
- encourage the women to share their experiences with each other and offer each other non-judgemental support
support each woman as she gained an increased level of self-acceptance and a sense of being accepted by the group, leading to empowerment and taking more responsibility for their holistic health

use active experiential learning to stimulate women’s reflection.

Summary

In my reflection on problems/questions that arose in my practice with the women in Group One, I found a total of 46 key learnings which I used to change my practice in subsequent groups. All key learnings from Group One are shown in Table 6.5.1 of Appendix 6, numbers 1–46. They were used, together with key learnings from Group Two, to construct a new midwifery model (see Section 6.6).

6.5 Key Findings from Group Two

This section presents the key findings from my reflections on the events during each of seven antenatal education/action research group sessions and the post-natal evaluation group session (eight sessions in all) for Group Two (see Section 6.2 of Appendix 6.5). There are five concerns/problems/questions (see Table 6.3); the full version can be found in Section 6.2 of Appendix 6. The key findings are presented below.

| Table 6.3: Group Two: Summary of Concerns/Problems/Questions That Arose in My Practice |
| Q. 1 How should a midwife deal with unplanned topics? |
| Q. 2 How should a midwife work with a pregnant teenager who drinks and smokes? |
| Q. 3 How should a midwife support women to apply theory to real life situations? |
| Q. 4 How should a midwife help each woman to find the strength and commitment to make lifestyle choices that promote full-term birth? |
| Q. 5 Should a midwife encourage a woman with a high risk of preterm birth to bond with her unborn baby? |

Q. 1 How should a midwife deal with unplanned topics?

The following reflection explores the way a midwife manages the issue of unplanned topics. This situation was encountered at the first group meeting. I provided an opportunity for open-ended discussion and encouraged the women to consider their ideas and contribute to the conversation. I used this as a facilitating strategy because I thought it might help those women who did not talk much to share their concerns and ask questions. In relation to the key
findings from Group One, as a midwife and a researcher, my role involved health counselling, education and facilitation. I thought that some women might have concerns or doubts about their pregnancy, which they might want to clarify but they might be unsure how to ask about. I thought that giving the women an opportunity to share their needs at the end of each meeting might allow them to answer their doubts.

The women in the group had different backgrounds and beliefs, but these differences were also valued resources that helped to strengthen the unity and harmony within the group. The women had an equal opportunity to share their experiences, feelings and even conflicts, which are also part of human relationships. I helped the women to clarify their concerns by facilitating open-ended discussion to motivate the women to reflect on their feelings and their behaviours. When I encouraged the women to reflect on their concerns and their doubts, questions arose quickly, so unplanned topics gradually emerged in the group discussion. The way that I encouraged the women’s contribution to the discussion was consistent with the philosophy of midwifery and feminist group processes. The open-ended discussion at the end of each meeting was an appropriate technique for facilitating discussion with a group of women. The women felt free to share and to question because this practice was an approach that recognised each woman’s social, emotional and physical needs as well as their cultural needs and expectations. The key findings were that the midwife should:

- use open-ended discussion to effectively and collaboratively work with the women to address their concerns
- provide the women with an opportunity to discuss issues and then support the women to answer their questions.

Q. 2 How should a midwife work with a pregnant teenager who drinks alcohol and smokes?

Vicky, aged 16 was 17 weeks pregnant with her first baby. Her pregnancy was unintended and unwanted. Vicky smoked six cigarettes a day and was also a regular alcohol drinker. She had an unhappy relationship with her boyfriend (Mike). He was addicted to alcohol and spent lots of his time with his friends, and other women. Following my experiences of Group One, I knew that the women needed my individual attention, continuity of care and concern as a midwife and a woman. The group meeting was not enough for them. I therefore chose to
provide several individual meetings, telephone conversations as well as group-based antenatal education to support Vicky to become more empowered about her health. This support was consistent with the philosophy of midwifery (ACM) (see Chapter Two). I took Vicky, Mike and her mother to see preterm and term babies. I tried to gauge the level of Vicky’s understanding about her pregnancy and health by asking how many months she had left of her pregnancy and what she wanted for her baby. Vicky said,

“I have five months left. I don’t want my baby to be in the incubator. Do I have enough time for having a full term baby?” Mike also said, “The babies in the incubators were tiny. How can they survive? I don’t want my baby to be like those babies. When I am with her, she does not dare to smoke and drink. However, I cannot be with her all the time.”

I saw that Mike realised Vicky’s unhealthy behaviours affected the unborn baby. He began to be worried about the unborn baby. I also advised Mike that he was the key person to support Vicky. Mike promised that he would support Vicky by spending his time with her as much as he could. I knew that both Vicky and Mike were teenagers so their loving relationship was inconsistent. I planned to continually work with them. However, I reflected that Vicky’s good health and wellbeing were in her control. Her life could not depend only on Mike because her life was her own responsibility. I considered that continuity of care by me as a midwife, together with the group meetings could support Vicky to become an empowered and strong woman.

In the group, the atmosphere was relaxed and friendly which was conducive to information sharing. I saw that Vicky felt comfortable to discuss issues with the other women in the group because she smiled and said that she wanted to stop drinking. I believed in Vicky’s commitment to stop drinking because I knew her and we had a good relationship. Vicky listened to all the suggestions about being healthy and she endeavoured to apply these to her own life. Vicky said,

“I did not smoke or drink alcohol at all. I gradually changed my daily lifestyle, for instance, most of the foods come from the temple. I decided to eat healthy foods that are beneficial for my baby. Sometimes I did not have an appetite but when I thought about my unborn baby and encouragements from friends, I changed my mind. I focus on my unborn
baby by not paying as much attention to Mike. Although Mike is not a perfect man, he is better than other men who I know. He always supports me when he is with me”.

In regards to the discussion with Vicky, I recognised that the way she was taking increasing responsibility for her own health and empowerment was strongly related to her partner/family and group support including continuity of care from me as a midwife. The key findings were that:

- working with teenagers who drink and smoke requires support from their partner/family
- women need continuity of care and concern from a midwife.
- reflection upon experiences from real situations can help women to become empowered to strive for a healthy life.
- both individual and group meetings are important for working with teenagers who drink and smoke while they are pregnant
- teenage women need friendly relationships with midwives, as well with other women in the group.
- midwifery partnerships and continuity of care help to guide the midwife in working with teenage women.
- the midwife should aim to prevent judgmental comments from occurring in the group to protect teenage women.

Q. 3 How should a midwife support women to apply theory to real life situations?

The following reflection is about how I supported the women to apply theory to situations in their own lives (see Figure 6.3). I wondered how conscious the woman was of what they needed to do for healthy eating and drinking generally as well as during pregnancy and for the health of their baby. I facilitated the group based on my experiences and on the recommendations for practice identified from Group One. Beneficial and non-beneficial food
models were mixed and put on the table. The women were encouraged to select food models and were asked what they wanted to cook and why.

Figure 6.3: Learning from Real Life Situations

Orlene showed her selection and said, “I would like to cook mackerel almost every day because it contains minerals and calcium and it is not expensive’. Doran said, “Yes we can eat every part of fried mackerel if we fry it to be crispy”. Orlene said, “Yes, I eat all of it, including the head, tail and bones. They contain lots of calcium”. Orlene added, “I will cook noodles with eggs, meat, onions, vegetables and tomato sauce”. Orlene said, “It is enough and contains five categories of foods”. Doran then showed the selected food models and said, “I would like to cook sour soup with agasta flower and shrimp. It contains protein and minerals”. Doran said, “I will cook it by myself because I will add more omelette and use little oil. If I bought the prepared food, it might not contain enough protein because they just add a little of protein”.

I reflected that encouraging the women to actively learn from the group in their own real life situations was appropriate and effective. This strategy helped me to understand the eating behaviour of each woman; it also helped the women to understand each other. In addition, the
women could help and share their experiences with those women who had unhealthy eating behaviours. The key findings were that the midwife should:

- enhance women’s awareness and consciousness by supporting women to apply theoretical knowledge to their daily lives in a safe practice situation.
- promote active learning to promote knowledge transfer to change daily life practices
- support experiential learning to allow women to think and understand before acting [364].

**Q. 4 How should a midwife help each woman to find the strength and commitment to make lifestyle choices that promote full-term birth?**

This situation happened at the third group meeting, which was about influencing health empowerment by the use of Healthy Behaviour Cards (HBCs) (see Figure 6.4). This strategy was a strengths-based approach to increase the consciousness and awareness of the women participants. The details of the HBCs were created based on the women’s discussion and their concerns (see Section 6.4 of Appendix 6).

**Figure 6.4: Healthy Behaviour Cards: Commitment to Lifestyle Choices**
I reflected that these cards helped the women to have more self-awareness and to take more responsibility. The women began to realise that if they wanted to have a full term healthy baby, they would need to be more aware of their health-related behaviours and habits. They seemed to accept that some of their behaviours affected their health and wellbeing. For instance, Vicky said,

“The first card I chose was, ‘Mum, whatever makes you stressed, just let it go. You need to stay with me’. I chose this card because I have felt stressed since I conceived. I am sleepless and have had headaches for a long time. This card will remind me to relax. The second card I selected was, ‘Mum, we would be better to go to sleep at 10 p.m. and wake up around 6-7 a.m.’ I chose this card because I always go to sleep late. I used to go nightclubs frequently. Sometimes I did not sleep at all and I returned home in the morning. Sometimes, even if I did not go to the nightclub but I was stressed I could not sleep. If it is possible, I would like to try not going to bed late but it will be difficult. I have difficulty sleeping and I have to get up early. This card will remind me and I will try to do that. Sometimes I have a headache too and I cannot sleep.”

The messages on these cards encouraged the women to share about their daily lifestyle and some of their concerns. The use of the HBCs also helped me to learn more about the women’s lifestyles and how to work with them in an appropriate way. The women began to reflect on themselves and their lifestyles. They seemed to understand their own feelings and had a commitment to change unhealthy habits. For example, all women said,

“We will paste these cards our wall to remind ourselves. These cards are like making a commitment to our babies. The HBCs will remind us to focus on positive thinking. HBCs will also encourage us when we are discouraged”.

The individual and collective actions of the women produced changes in their health and wellbeing, including positive mother-baby connections.

I reflected that the use of HBCs was a strengths-based approach which encouraged the women to focus on positive thinking, attitudes and behaviours. The cards selected by each woman reminded them to strive to enhance consciousness, awareness and health responsibility during
the week. Also, taking and reading the cards frequently was a commitment to mother-baby love. I supported the women to accept responsibility for their own health and recognise that their good health was also their babies’ good health. The incorporation of the HBCs in Group Two was an improvement on Group One’s activities because the use of the HBCs encouraged an overt expression of mother-baby love and commitment to their babies. The key findings were that:

- making a commitment to their babies can increase women’s consciousness, awareness and the amount of responsibility they take for their health.
- a strengths-based approach through the use of HBCs can provide a way for women to exert some control over their concerns.
- positive thought through the use of HBCs can encourage the women to reflect on their experiences, feelings, attitudes and practices.
- collaborative learning with the use of HBCs can help the midwife learn more about each woman.

Q. 5 Should a midwife encourage a woman with a high risk of preterm birth to bond with her unborn baby?

Cherene was a twenty-three-year-old woman who had experienced six induced abortions and one ectopic pregnancy which resulted in the removal of one of her fallopian tubes. When I first met Cherene she was already 16 weeks pregnant. There had been some bleeding at 12 weeks in this pregnancy. She gave birth to a stillborn baby at 26 weeks.

One session with Group Two had focused on strengthening bonding by inviting women to select HBCs based on promoting positive thinking in relation to concerns they had raised during their discussion. Key concepts of this strategy were: ‘A mother’s love is of great value, positive thinking is more likely to lead to positive physiology and positive health outcomes, and empowerment through providing knowledge’. I used two key learning strategies identified through my reflection on practices from Group One. These were to: (1) ‘maintain a strengths-based approach’ (particularly when working with women who are at increased risk of poor outcome) and (2) ‘to keep the focus on positive thinking and behaviours’.
Cherene selected seven HBCs, which contained the following positive statements written in ‘Arial’ style font below:

1. ‘Mum, your health is my health. What you eat, what you think, what you do, I am as well.’

2. ‘Mum, you are a good Mum, excellent Mum, and wonderful Mum. Thank you that you’ve looked after me very well.’

3. ‘Mum, my handsome dad talks to me every day.’

4. ‘Mum, I’ll be a full term healthy baby because of you.’

5. ‘Mum, five more months and we will see each other, I’m excited.’

6. ‘Mum, please select for me five varieties of food every day.’

7. ‘Mum, my brain and ears are developing; I want to listen to mellow music.’

Then Cherene said,

“After each session, I normally shared with my husband what happened in the group meeting. Last time, the group discussed the benefits of talking to the baby so I told him. He liked to talk and read fables to the baby. So, I’m quite sure, these cards will remind me and my husband every day too. I’ll paste them on the wall in my room.”

Cherene said, “My husband and I really like your cards. They remind us every day”.

I saw that Cherene had high hopes for this pregnancy, so she focused on her needs by consciously doing things following the group discussion.

When I reflected on this situation, I felt regretful that I had encouraged Cherene to bond with the baby by using the HBCs. I had focused on the woman’s needs and her expectations but I forgot to consider the loss and grief that could occur in her pregnancy. I felt I had made a mistake because the style of midwifery I used in this research project was different to the way I normally practised. I got involved in her journey. When Cherene and her husband suffered, so did I. I blamed myself that I had dwelt on bonding by using the HBCs.

My supervisors supported and increased my consciousness by discussion. Their suggestions reminded me that what happened to this woman was a human possibility. Every woman
knows that miscarriage and preterm birth are possible. As a midwife and research student, I aimed to support the women to take self-responsibility, to promote consciousness and self-awareness and to build bonds with their babies. This encouragement had helped Cherene to identify how much she loved her baby. The key findings were that:

- encouraging women to consciously bond with their babies is still important
- parents’ experiences of prenatal bonding are the source of responsibility, love and compassion for the baby.
- the use of the HBCs and encouraging self-empowerment through positive thinking, the adoption of positive attitudes and healthy behaviours, are good concepts.
- as a researcher and midwife I am on the right track in developing a holistic midwifery practice and am aware of the theoretical basis of the importance of collaboration with every pregnant woman.
- midwives encourage women to consciously bond with their prenatal babies. Parents’ experiences of prenatal bonding are the source of responsibility, love and compassion for the baby.
- although I have a compassionate heart, I now seek to consciously separate myself from the person I am working with. I will now apply this new knowledge and understanding to the group situation.

**Summary**

Learning from the problems/questions that arose in my practice with the women in Group Two, I found 19 key learnings in total. These key learnings are shown in Table 6.5.1 of Appendix 6, numbers 47-65. The key learnings from Group Two were combined with the key learnings from Group One to develop a new midwifery model (see Section 6.6).

**6.6 Development of a New Midwifery Model**

This section presents how the new midwifery model was developed. Model development began after the data gathered from the group processes was analysed and synthesised. The methods of data analysis are presented in Chapter Four, in Section 4.6.2. Twenty-four
midwifery strategies aimed at facilitating effective antenatal group education sessions (see Table 6.5.2 of Appendix 6) were derived from the data synthesis. The process for model development is described and justified in Section 4.6.2.1 of Chapter Four and Audit trails in Section 6.5 of Appendix 6.

6.6.1 Stage 1: Identifying Supra-concepts

I created a new table from the combined midwifery aims and strategies derived from the reflective processes around the concerns/problems/questions from Group One and Group Two (discussed above). The 24 midwifery strategies were placed in the first column and supra-concepts, which were possible concepts that related to midwifery aims, were placed in the first row (see Table 6.5.3 of Appendix 6). By a process of induction and subsumption the midwifery aims were reduced initially to the following:

1. To actualise midwifery philosophy
2. To promote holistic health
3. To promote mother–infant love
4. To promote networking among women in the group
5. To enhance individual health empowerment
6. To promote active learning
7. To promote group processes.

I started with ‘Actualise Midwifery Philosophy’ as these were the theories that actually guided me, a Thai midwife, to understand midwifery practice as primary health care which aimed to promote holistic health and the wellbeing of childbearing women. Based on my reflections on the concerns, problems/questions (see Section 6.4 and 6.5) that arose as I worked with the women in Thailand, I recognised that in order to enhance women’s health empowerment, ‘Mother–Infant Love and Networking among Women in the Group’ should be promoted by midwives. These concepts influenced each other. These concepts were consistent with the theoretical foundations discussed in Chapter two.
This research project involved ‘group-based discussion’ not didactic classes to promote learning and behaviour change. Engaging the women in the group required active learning experiences. Based on my reflections on the various experiences within the groups, it was clear that the incorporation of effective group processes was the best way to promote active learning. These concepts were the foundations for facilitating, encouraging and empowering Thai women in the study.

To incorporate all the original ‘midwife’s aims’, each one was placed under the relevant supra-concept as shown in Table 6.5.3 of Appendix 6.

### 6.6.2 Stage 2: Grouping Supra-concepts

I began to realise that the midwife’s ultimate goal should be to ‘promote individual health empowerment’. This was a higher order concept than any of the other aims because all the other aims served this goal. In order to aid conceptualisation, I moved columns that were like each other closer together (see Table 6.4). I then grouped the seven supra-concepts into four supra-concepts which were:

1. ‘To actualise midwifery philosophy’
2. ‘To promote holistic health’
3. ‘To promote group processes’
4. ‘To promote networking among women’

I gave the developing model the heading “Midwifery Primary Health Care Groups” (MPHCGs).
<table>
<thead>
<tr>
<th>Table 6.4 Grouping Supra-concepts</th>
<th>Ultimate Goal</th>
<th>Midwifery Primary Health Care Groups (MPHCGs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Enhance Individual Health Empowerment</td>
<td>Promote Health</td>
</tr>
<tr>
<td>Midwife’s Strategy</td>
<td>Actualise Midwifery Philosophy</td>
<td></td>
</tr>
<tr>
<td>1. Wear normal clothes</td>
<td>-</td>
<td>equalise power</td>
</tr>
<tr>
<td>2. Share relevant personal details (sparingly)</td>
<td>- build trust</td>
<td>build trust</td>
</tr>
<tr>
<td>3. Use simple language</td>
<td>- build trust</td>
<td>equalise power</td>
</tr>
<tr>
<td>4. Use learning resources models, diagrams or videos</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5. Be positive &amp; encouraging</td>
<td>enhance self-confidence</td>
<td>enhance self-confidence</td>
</tr>
<tr>
<td>6. Be culturally sensitive</td>
<td>-</td>
<td>build trust</td>
</tr>
<tr>
<td>7. Focus on women’s expressed health needs</td>
<td>-</td>
<td>Fulfil women’s health needs</td>
</tr>
<tr>
<td>8. Encourage the women to focus on their inner strength</td>
<td>enhance self-confidence</td>
<td>enhance self-confidence</td>
</tr>
<tr>
<td>9. Encourage women to touch and talk to their unborn babies</td>
<td>enhance self-confidence</td>
<td>promote mother-infant love</td>
</tr>
<tr>
<td>10. Be real and accepting with self and others</td>
<td>-</td>
<td>build trust</td>
</tr>
<tr>
<td>11. Talk comfortably and non-judgementally about taboo topics if women want to</td>
<td>-</td>
<td>build trust</td>
</tr>
<tr>
<td>12. Encourage the women to reflect on everyday life experiences relevant to</td>
<td>enhance self-confidence</td>
<td>promote active learning</td>
</tr>
<tr>
<td>Step</td>
<td>Enhance Health Empowerment</td>
<td>Enhance Self-Awareness and Self-Responsibility</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-----------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>13. Ask the women set the group health related agenda</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>14. Limit the topics to one per session</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>15. Allow each woman to speak or not on a particular topic</td>
<td>Enhance self-confidence</td>
<td>Enhance health empowerment</td>
</tr>
<tr>
<td>16. Use open-ended questions</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>17. Be a Health Educator/Promoter</td>
<td>-</td>
<td>Promote Group Interaction</td>
</tr>
<tr>
<td>18. Be a contemporary midwife by working with women as individuals as in a group</td>
<td>- Enhance self-confidence Enhance health empowerment</td>
<td>Promote Continuity of Care</td>
</tr>
<tr>
<td>19. Encourage the women to take active role in learning</td>
<td>Enhance self-confidence</td>
<td>Enhance health empowerment</td>
</tr>
<tr>
<td>20. Create activities which involve having fun</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>21. Allow the women to speak first and only add additional information at the end as needed</td>
<td>-</td>
<td>Enhance health empowerment</td>
</tr>
<tr>
<td>22. Encourage women to make decisions by consensus</td>
<td>-</td>
<td>Create Support Networks</td>
</tr>
<tr>
<td>23. Work collaboratively with the woman’s partner/family (with consent)</td>
<td>-</td>
<td>Promote Holistic Health</td>
</tr>
<tr>
<td>24. Encourage the women to focus on what they want as an outcome of the pregnancy; healthy happy baby and mother.</td>
<td>Enhance self-confidence</td>
<td>Enhance health empowerment</td>
</tr>
</tbody>
</table>
6.6.3 Stage 3: Comparing and Modifying Theoretical Foundations

Not everything that was important to conducting effective antenatal groups was presented as a problem which required a reflective learning cycle. In constructing the model that was appropriate for Thailand, I considered and compared the differences between the review of theoretical foundations in Chapter Two and the midwifery strategies developed from my actual practice (Section 6.2 above) in this research. This comparison allowed me to further identify what I actually practised (see Table 6.5.5 of Appendix 6), to pinpoint 17 strategies that were modified into tentative stages of model building (see Section 6.6.5 below). These strategies were midwifery strategies that I learned from experience in Thailand. For example, wearing normal clothes and sharing relevant personal details (sparingly) were both new and modified strategies aimed at being appropriate to Thai women.

6.6.4 Stage 4: Embedding Theoretical Foundations

I linked strategies and supra-concepts with the review of theoretical foundations (see Table 6.5.6 in Appendix 6) by considering their similar meanings, aims and relevant concepts. I decided to group the concepts and embedded the foundational theories/philosophies as: ‘Actualise Midwifery Philosophy’, ‘Promote Holistic Health’, ‘Promote Networking among Women’ and ‘Promote Group Process’. Finally, the supra-concepts included (see Tables 6.5.7 and 6.5.8 in Appendix 6):

1. ‘Actualise Midwifery Strategies’

2. ‘Ultimate goal: Individual Health Empowerment’.

6.6.5 Stage 5: Tentative Model Building

Next, I created a beginning model on a single page (see Table 6.5 below). The ‘Feminist Group Rules’ and ‘Feminist Group Processes’ that were used in Thailand, were modified for two reasons:

(1) to be appropriate for Thailand

(2) to fit the goal of Midwifery Primary Health Care Groups.
The notion of holistic health incorporates both Maslow’s hierarchy of needs and the aim of Primary Health Care philosophy. The Philosophy of Primary Health Care and Midwifery, including Midwifery Partnership, underpin the ‘Midwifery Strategies and Aims’ identified in this study. Finally, a conceptualising linkage was developed to form a new midwifery model (see Figure 6.5).
### Table 6.5 Tentative Model Building

<table>
<thead>
<tr>
<th>Feminist Group Agreements That Were Used in Thailand</th>
<th>Stages of Group Process That Were Used in Thailand</th>
<th>Midwifery Strategies Learned from Experience in Thailand</th>
<th>Midwifery Aims Learned from Experience in Thailand</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The environment</strong></td>
<td>1. The group forming stage (first meeting)</td>
<td>➢ Be:</td>
<td>➢ Build trust</td>
</tr>
<tr>
<td>➢ A private, comfortable and welcoming space is important for women to feel safe to engage with the group.</td>
<td>➢ Creating an equal and friendly environment, group norms</td>
<td>➢ A Health Educator/Promoter</td>
<td>➢ Equalise power</td>
</tr>
<tr>
<td>➢ The chairs were placed for sitting in a circle so that everyone has eye contact with one another.</td>
<td>➢ Creating an equal footing during group discussion</td>
<td>➢ A contemporary midwife by working with women as individuals as well as in a group</td>
<td>➢ Encourage:</td>
</tr>
<tr>
<td>➢ The group size was thought to be good at 8 members.</td>
<td>➢ Sharing the self and the roles as a midwife</td>
<td>➢ Positive &amp; encouraging</td>
<td>➢ Group interaction</td>
</tr>
<tr>
<td><strong>The facilitator/midwife</strong></td>
<td>➢ Informing the background, objectives of group</td>
<td>➢ Use simple language</td>
<td>➢ Networking among women</td>
</tr>
<tr>
<td>➢ The midwife/facilitator had certain formal roles.</td>
<td>➢ Helping women to feel free to express their experiences, values, beliefs and opinions</td>
<td>➢ Use open-ended questions</td>
<td>➢ Unity</td>
</tr>
<tr>
<td>➢ Language and non-verbal communications should aim to reduce the power imbalances between women and facilitators.</td>
<td>2. The checking-in stage</td>
<td>➢ Limit planned topics to one per session</td>
<td>➢ Mother-infant love</td>
</tr>
<tr>
<td>➢ Women should feel enabled to question (or challenge) the midwife each other about group participation issues.</td>
<td>➢ Encourage each woman to look on her pregnancy development and self-care in past 2 weeks.</td>
<td>➢ Focus on women’s expressed health needs</td>
<td>➢ Holistic health</td>
</tr>
<tr>
<td>➢ A midwife-facilitator facilitates every group meeting.</td>
<td>➢ Invite each woman to talk briefly for about 15 minutes</td>
<td>➢ Use learning resources models, diagrams or videos</td>
<td>➢ Enhance women’s:</td>
</tr>
<tr>
<td>➢ Work collaboratively with obstetricians or social workers</td>
<td>3. The working stage</td>
<td>➢ Create activities which involve having fun</td>
<td>➢ Self-awareness</td>
</tr>
<tr>
<td><strong>Promoting effective group processes</strong></td>
<td>➢ Facilitate active discussion on the agreed topic (about 45-60 minutes)</td>
<td>➢ Share relevant personal details (sparingly)</td>
<td>➢ Self-confidence</td>
</tr>
<tr>
<td>➢ The group on the same day of the week.</td>
<td>➢ Encourage women to share experiences freely and directly that lead women trust other women and to be better understood.</td>
<td>➢ Work collaboratively with the woman’s partner/family</td>
<td>➢ Self-responsibility</td>
</tr>
<tr>
<td>➢ A fortnightly basis and one final postnatal meeting with partners and babies.</td>
<td>➢ Invite the women to tell stories of their experiences as they relate to each topic</td>
<td>➢ Encourage women to:</td>
<td>➢ Health knowledge</td>
</tr>
<tr>
<td>➢ The group meeting 90-120 minutes.</td>
<td>➢ Encourage women to identify action strategies that they would like to use either individually or collectively with the aim of promoting health.</td>
<td>➢ Speak first (and midwife only add additional information as needed)</td>
<td></td>
</tr>
<tr>
<td>➢ A known shared purpose was Optimising Health to Prevent Preterm Birth.</td>
<td>➢ Encourage the women to think about the factors that either promote or diminish healthful behaviours with particular emphasis on the social and cultural factors.</td>
<td>➢ Focus on the health outcome they want</td>
<td></td>
</tr>
<tr>
<td>➢ The group norms had the aim of creating mutual trust, respect, empathy, caring and responsibility.</td>
<td>4. The closing stage</td>
<td>➢ Reflect on relevant everyday life experiences</td>
<td></td>
</tr>
<tr>
<td>➢ Only one person should speak at a time.</td>
<td>➢ Spends 10 minutes to reflection, evaluation and recommendations of the group and planning what needs to happen next time the group meets.</td>
<td>➢ Touch and talk to their unborn babies</td>
<td></td>
</tr>
<tr>
<td>➢ The agreed way of indicating a desire to speak was by raising hands.</td>
<td>➢ Ends the each meeting with refreshments being served and socialisation being encouraged.</td>
<td>➢ Set the group’s health-related agenda</td>
<td></td>
</tr>
<tr>
<td>➢ When one woman was speaking others should interrupt</td>
<td>➢ 5. The evaluating of the whole process (After giving birth)</td>
<td>➢ Wear normal clothes</td>
<td></td>
</tr>
<tr>
<td>➢ Each woman should be careful not talk too much or too often.</td>
<td>➢ Facilitates each member to express her experiences, the impacts and feelings from meeting on their health and wellbeing including networking or friends.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>➢ Differences are valued resources to strengthen the integrity of the group.</td>
<td>➢ Invite women to identify action strategies that they would like to use either individually or collectively with the aim of promoting health as well as the creation of networking and relationships for transformation.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 6.5: Model of Midwifery Primary Health Care Groups

**Midwifery Primary Health Care Groups**

**GOAL**

Individual Health Empowerment = Healthy Woman & Healthy Term Baby

**MIDWIFERY AIMS**

- Build trust
- Equalise power
- Encourage:
  - Group interaction
  - Networking among women
  - Group unity
  - Mother-infant love
  - Holistic health promotion
- Enhance each woman's
  - Self-awareness
  - Self-confidence
  - Self-responsibility
  - Health knowledge

**THEORIES**

1. Maslow’s Hierarchy
2. Primary Health Care
3. Feminist Group Processes
4. Midwifery Philosophy & Partnership

**GROUP PROCESSES**

1. Group forming
2. Checking in stage
3. Working stage
4. Closing stage
5. Evaluation of whole process

**MIDWIFERY STRATEGIES**

- Be in partnership with each woman
- Wear normal clothes
- Be a health promoter/educator
- Be positive & encouraging
- Use simple language
- Use open-ended questions
- Limit planned topics to one per session
- Focus on women’s expressed health needs
- Use learning resources models, diagrams or videos
- Create activities which involve having fun
- Share relevant personal details (sparingly)
- Work collaboratively with the woman’s partner/family
- Encourage women to:
  - Speak first, midwife only adds additional information as needed
  - Focus on the health outcomes they want
  - Reflect on relevant everyday life experiences
  - Touch and talk to their unborn babies
  - Set the group’s health-related agenda

Created by Peeramy Wisunthoonwong & Kathleen Fahy (2011)
A new model for Midwifery Primary Health Care Groups (see Figure 6.5) was developed from the integration of learning from practice and the underpinning theories: Maslow’s Hierarchy of Needs (holistic health), Primary Health Care, Feminist Group Processes, Philosophy of Midwifery and Midwifery Partnership, of this study. As the aim of the research project was to review the existing research on interventions aimed at reducing preterm birth rates and to develop a culturally appropriate model of midwife-facilitated group-based antenatal education that focused on capacity building of Thai childbearing women’s sense of self, the model included feminist group rules and group process used in Thailand together with the midwifery strategies identified by the researcher during practice with the research groups in Thailand.

6.7 Evaluation of Midwifery Primary Health Care Groups

The evaluation of Midwifery Primary Health Care Groups (MPHCGs) was scheduled to take place four weeks after the last woman gave birth. Women brought their babies, their partners/relatives to join in the groups for this evaluation session (see Figure 6.6). There were two main aims for this final session: firstly to encourage friendships and mutual support and secondly to invite the women to evaluate their experiences within the group and make recommendations for changes to future groups.

Of the 14 women who participated in the groups, only 10 could join the evaluation session. The other four women were in their hometowns; however, these women filled out the evaluation questionnaires and forwarded these via post. The two-hour evaluation session was conducted at the Kuakarun Faculty of Nursing, Navamindradhiraj University. At the end of the evaluation session, the women, their partners/relatives and I had lunch together.

In the following section, the evaluation process is presented in two parts. The first part provides a brief summary of the women’s qualitative evaluation. The second part depicts the responses to the evaluation questionnaire.

6.7.1 Summary of the women’s qualitative evaluations

This section presents the summary of the qualitative evaluations on the benefits and areas for improvement of the antenatal education groups. The detailed evaluations are provided in Section 6.3 of Appendix 6.
1. What have been your thoughts about the benefits of working together in antenatal groups?

Most women concurred that this was a brilliant project. All the women agreed that the group helped them to have more friends on the same footing; they understood each other. Sharing experiences with friends definitely helped expand their ideas and knowledge and equipped them with sharper self-awareness. The women all said that they changed their views and managed their daily lifestyle better and became more aware of how they took care of their
health during pregnancy. This included attention to behaviours such as, eating, drinking and sleeping, as well as talking to the baby and even dealing with their stress and emotion.

Most women felt awkward and odd when others talked about communicating with an unborn baby. However, all the women agreed that communicating with their unborn baby had a bonding effect for their partner/family as well as for themselves and helped them take more responsibility.

Most women felt that group discussion was like private counselling for them because when they had doubts/concerns, they could discuss them in the group. The women said that if they had not joined the project, they would have been at great loss when trying to decide how best to care for themselves and their unborn babies in pregnancy.

2. Have you made any changes to your way of living in order to improve your health and/or your baby’s health?

All the women had consciously modified their ways of life to bring about improvements to their health. This improvement included what they ate and drank, managing their emotions and stress, improved physical activity, ensuring adequate sleep and chatting with the unborn baby. In short, all the women became more careful with regard to day-to-day activities, both for themselves and their babies.

One woman explained that she used to feel irritated with too much or too frequent baby movements but this feeling changed after joining the group. She vowed to change her lifestyle and habits. Although she ended up in hospital with a premature rupture of membranes, she was aware and responsive about health and pregnancy. She said she would have liked to turn the clock back because she would have changed her lifestyle earlier if she’d known what to do and perhaps she wouldn’t have suffered a preterm delivery.

3. How has this group influenced you to have a more healthy pregnancy?

All the women agreed that participation in the group influenced them to more consciously observe themselves. Being in the group also helped them to have the self confidence to take responsibility for their health when they had health problems. The fact that the discussions were conducted by the women on topics the women wanted to discuss, meant the sharing of knowledge and experiences was in a common language and was easy to understand. Group members were able to influence women to change unhealthy to healthy behaviours. In short,
all the women concurred that they had a more healthy pregnancy because the group meeting gave them much-needed boost in self-confidence. Group sessions therefore acted as a catalyst for change, family bonding, teamwork and the taking of personal responsibility.

4. What activities did you find really helpful and why?

The really helpful activities from group-based discussion identified by the women included:

- Exploring nutrition (eating, drinking, eliminating)
- Sharing experiences about preterm birth
- Communicating with the unborn baby
- Spirit of teamwork
- Healthy Behavioural Cards
- Exercise and physical activity
- Drinking alcohol and smoking
- Moral support of the researcher and group members.

The women thought that these activities were helpful because they learned about real lives and experience from each other. Questions from the facilitator helped the women to review and to reflect on themselves. These reflections made them aware of their lives and their pregnancies.

5. What activities did you find less helpful?

Most women found the ten topics beneficial (see Table 6.1 above) but found the discussion on sexual relationships during pregnancy the least helpful. Perhaps that session needs to be facilitated differently as described in the reflection above for question 11 (see Section 6.4).

6. What specific advice would you give me about improving groups like this in future?

  - All women agreed that the venue and duration for group-based discussion were perfectly suitable.
All women said they wanted obstetricians to tell them about their health and pregnancy at their antenatal visits. If women were unhealthy, they could look after their health as early as possible if they had this information.

All women suggested that obstetricians should have an opportunity to participate in the group meetings so they could understand women’s needs.

All women found that the summary from the midwife after their discussion helped them to understand the content of the session.

Two women would have preferred not to have the group-based discussion and their antenatal visit to the obstetrician on the same day.

One woman thought teenagers should be in a different group to adult women.

6.7.2 Summary of the women’s evaluation questionnaires

The evaluation questionnaires were created by using rating scales. Each woman completed the questionnaires that were distributed and collected by the research assistant. The detailed evaluation questionnaires are provided in Section 6.3.2 of Appendix 6. Briefly, I concluded from working in the groups that:

All the women gained more knowledge and experience about how to look after their pregnancy and their unborn baby. Groups were instrumental in helping them understand and become more mindful of their health and the state of their pregnancies.

All the women better understood their own health and the health of their baby; they felt confident and proud of themselves because of that understanding.

All the women felt more bonded with their babies and understood that babies’ movements in pregnancy are a sign of health.

All the women became more careful about selecting healthy food for themselves.

Group-based discussion exposed the women to discourse about health and pregnancy. This new discourse then supplied material to talk about with friends, partners and families.
Summary

Conducting MPHCGs based on individual and collective action, participation, empowerment and collaboration principles is seen as central to building knowledge that can produce changes in women. Such groups result in women taking greater self-responsibility, developing more self-awareness and increased consciousness.

6.8 Conclusion

In this chapter, I have reported on the key findings about the midwife’s role with the aim of answering the research question: How can midwives facilitate effective group-based antenatal education in ways that are most valued by Thai women who are at risk of preterm birth. Section 6.2 summarised the guidelines used to facilitate the groups and includes an outline of the feminist group processes as they actually occurred in the groups conducted in Thailand. These guidelines and processes were integrated to develop a new midwifery model. Section 6.3 summarised the agreed topics for discussion by comparing these lists with my planned possible health list. Similarities and differences are identified in the lists. In Sections 6.4 and 6.5, I present the data that was analysed and interpreted by using the steps of the reflective ‘Model of Reflection for Midwifery Practice’. The key learnings of both groups were synthesised to become midwifery strategies and aims for facilitating effective antenatal group-based discussion. These strategies and aims were incorporated into a new midwifery model. Section 6.6 focused on the development of a model of ‘Midwifery Primary Health Care Groups’ which developed from the study’s theoretical foundations and the actual midwifery practice of the researcher in Thailand. Then Section 6.7 presents a summary of the women’s qualitative evaluation and questionnaires.

The chapter has shown how the discussion topics were chosen and how the facilitation of MPHCGs actually happened. The chapter also discusses the way the problems from my practice were reflected upon and analysed to change my practice in the subsequent group discussions. These reflections also influenced how the new model was developed. The model has integrated learning from practice with the underpinning theoretical elements: ‘Feminist Group Processes, Maslow’s Hierarchy of Needs (holistic health), Primary Health Care, Midwifery Philosophy and Midwifery Partnership’. I have found that the Midwifery Strategies learned from my experiences in Thailand have one ultimate goal: Individual Health Empowerment. The inclusion of the aims was crucially important for a culturally
appropriate model of midwifery practice that focuses on capacity building of Thai childbearing women’s sense of self. I have also found that when the power differences were equalised, the women felt confident about having freedom in their thinking, speaking and acting. This openness and power sharing in the group enabled the women to become empowered in their health and their pregnancy. The chapter therefore concluded that self-consciousness, self-awareness and self-responsibility were enhanced in the study participants.
CHAPTER SEVEN
DISCUSSION AND CONCLUSION

7.1 Introduction

This dissertation reports on the research into midwife-facilitated primary health care groups with the aim of preventing preterm birth for women at high risk. The research sought to answer the question; ‘How can midwives facilitate effective group-based antenatal education in ways that are most valued by Thai women who are at increased risk of preterm birth?’ The aim of this study was to review the existing research on interventions aimed at reducing preterm birth rates and to develop a culturally appropriate model of midwife-facilitated group-based antenatal education. A feminist action research approach was used and the resulting model was named: Midwife-facilitated Primary Health Care Groups’ (MPHCGs).

“MPHCGs are series of group meetings of pregnant women with a midwife facilitator. The goal of the group is the health empowerment of each individual woman, which will help to ensure that each baby is born healthy, and at term. The focus of all group discussion is health-related but there is no predetermined agenda. When conducting MPHCGs the midwife’s practice is guided by (1) Midwifery Philosophy, (2) Maslow’s Hierarchy of Needs, (3) Primary Health Care Principles, and (4) Modified Feminist Group Processes”.

This chapter concludes that for women at increased risk of preterm births:

*MPHCGs aimed at health optimisation during pregnancy are effective in engaging with Thai women who are at known risk of preterm birth.*

*MPHCGs have been shown to be effective in reducing preterm birth rates.*

This thesis is supported partly from the present study and partly from the literature presented in this dissertation.

Section 7.2, drawing mainly on Chapter One, presents the background and significance of this study. Section 7.3, using evidence provided by the research findings presented in Chapter Five, argues in support of the first part of this thesis statement: that ‘MPHCGs aimed at health
optimisation during pregnancy are effective in engaging with Thai women who are at known risk of preterm birth’. Section 7.4, drawing on Chapter Three, argues in support of the second part of this thesis statement: that ‘MPHCGs have been shown to be effective in reducing preterm birth rates’. Then, section 7.5, drawing mainly in Chapters Two and Three, discusses the interrelationships between the theory and practice of MPHCGs including how these work to reduce preterm births. Section 7.6 discusses theory and evidence to argue that MPHCGs represent a feasible model of care. The recommendations for policy, practice, education and future research are presented in Section 7.7. Next, Section 7.8 appraises the overall quality of feminist action research in this study by using Waterman and colleagues’ criteria. Section 7.9 considers the strengths of the study. Section 7.10 discusses the limitations of the study. Finally, Section 7.11 concludes this chapter.

### 7.2 The Background and Significance of the Study

Chapter One reported that the average rate of preterm birth around the world is around 9.6% [17 p.3]. Forty-five percent of preterm births [25] are due to unknown causes and not medically predicted [13, 15, 16]. Preterm birth (PTB) and low birth weight (LBW) are leading causes of neonatal and infant mortality. In addition PTB and LBW are major causes of short- and long-term morbidity which is associated with poor pregnancy outcomes [12, 365] including respiratory distress syndrome [366], heart rate anomalies [367], cerebral ventriculomegaly [50, 51, 368], cerebral palsy [50, 51, 56, 369], mental retardation [370], blindness [51, 371], deafness [370], learning disabilities [62, 372], behavioural disorders [373], and motor impairment [374]. Preventing PTB and LBW births is also of critical importance to the overall health of the community because babies who are born with LBW have an increased risk of diabetes, obesity and cardiovascular disease in adulthood which are all major causes of early death [375-377].

There are substantial economic costs to the health care system in addition to the individual and community health burden that PTB causes. While minimal data exist on the family and social costs of providing care for babies, children and adults who have long-term disabilities that are attributable to preterm birth, the Institute of Medicine in the USA has estimated that the annual cost of neonatal care of a preterm baby in 2006 was approximately $51,600 per preterm infant [12].
Each year in Thailand, there is approximately 87,230 preterm births. This equates to a preterm birth rate of 11.3%, which is high by international standards [20]. The high rate of preterm births in Thailand is similar to Australia’s Northern Territory where a large part of the population is Indigenous women and preterm birth rates are at 13.1% [43]. A high rate of preterm birth of 11.9% can also be found in African-American women [25]. What these women have in common is that they come from groups in society who are socioeconomically disadvantaged (discussed below).

7.3 MPHCGs Engage Thai Women in Health Optimisation

In Chapter Five, the stories of the women were summarised and the changes to their health status were presented. All of the women who attended MPHCGs improved their health status. Of the 14 babies born, only three were born before term and no baby was born before the 35th week of gestation, which is remarkable because these were all women at medically defined increased risk of preterm birth. No baby needed neonatal intensive care unit admission, a probable significant saving to the health care system and to the families in the short, medium and long term.

Similar to other women at medically known risk and also to those in their first pregnancy who go on to have a preterm birth, the women in this study were from socioeconomically disadvantaged groups. They were at increased risk of preterm birth not just because they had identified medical factors but because they had other factors that are associated with socio-economic disadvantage such as poor nutritional status (often over a life time), lack of access to culturally appropriate health care, domestic violence, unwanted pregnancy, unsafe abortions and low body mass index as well as smoking and the use of alcohol and other drugs [45].

The findings in Chapter Five support the primary health care postulate that when pregnant women have their physiological, safety, security, love, belongingness and self esteem needs met, their psychological stress is reduced, their holistic health status improves and this increases their ability to carry their pregnancies to term. Thus, the stories of the women demonstrate that MPHCGs were effective in engaging Thai women in their own health optimisation.
7.4 MPHCGs are Effective for Reducing Preterm Birth Rates

This section argues that MPHCGs are more effective in reducing preterm birth than any existing medical technologies. I recognise that the present study alone does not provide sufficient evidence of their effectiveness in improving health outcomes for women and babies. Therefore, the key evidence from the review of research literature (Chapter Three) is highlighted to support that crucial argument.

Over the past 30 years, there have been vast amounts of biomedical research aimed at preventing preterm births. This biomedical research literature was reviewed in Section 3.3. The review concluded that surgical and/or pharmacological strategies that focus on delaying preterm labour have some immediate benefits for some women and babies, and so are obviously worthwhile. These strategies alone, however, have not changed the rate of preterm birth [84]; indeed the rate has generally increased over the past 30 years [28]. This failure to reduce the preterm birth rate is, I argue, because the medicalised approach to preterm birth is based on the faulty assumption that there is a reductionistic causal pathway that can be interrupted at a specific point or points. I argue that what is needed is a holistic understanding of the multiple determinants of ill-health and how they can operate synergistically to cause low birth weight or a premature births.

MPHCGs used in this study have been adapted from the CenteringPregnancy group antenatal care as conducted in the USA [5] and as adapted for Australia [378]. A randomised controlled trial demonstrated that women assigned to CenteringPregnancy group care were significantly less likely to have preterm births than those in individual care: 9.8% versus 13.8% (61 of 623 versus 51 of 370 respectively). This is equivalent to a risk reduction of 33% (OR 0.67, 95% CI 0.44−0.99, P=.045) [4]. Women in the CenteringPregnancy programme had more knowledge about pregnancy and how to look after themselves (p=0.001) when compared with women who had standard care [4]. The largest benefit from CenteringPregnancy is obtained by women who can be described as being the most disadvantaged; that is, it helps most those who need it most. Women attending the groups most frequently appear to have had the greatest the benefit in terms of both increased gestational age (r=0.31, P<.001) and birth weight of the baby (r=0.28, P<.001) [4]. An earlier study by Ickovics et al. [3] demonstrated that socio-economically disadvantaged women in CenteringPregnancy continued their pregnancy on average for two extra weeks and increased the birth weight of their preterm infants (p< 0.001).
These positive findings stand in contrast to the disappointing ineffectiveness of medical drugs and surgical interventions aimed at preventing preterm birth. Thus, group-based antenatal education is the only known way of reducing preterm birth rates, and it can be done without side effects and without major costs to the health care system or society.

7.5 MPHCGs: Theory and Practice

Chapters Two and Three outlined and discussed the theoretical foundations for MPHCGs that I developed in this study. The biological evidence which explains the association of stress with preterm birth was reviewed. Essentially, when a woman is under prolonged acute and/or chronic stress, her chances of having a preterm birth are significantly increased. What is known physiologically is that in chronic stress blood flow to the uterus is reduced [95] and that this reduced uterine blood flow is associated with babies being small for their gestational age and also with preterm births [97].

Maslow’s concept of health as wholeness aligns well with midwifery’s view that the interactions between body, mind, emotion, spirit, family, community and environment, all contribute to a woman’s holistic health status. Maslow’s hierarchy of needs integrates well with a biological understanding of stress because unmet human needs are, in themselves, stressors. Further, some unmet human needs also have other direct harmful biological effects such as malnutrition, dehydration and violence. Likewise, using Maslow’s hierarchy of needs as a health assessment framework works well with the Primary Health Care lens. Health is placed within the broad environmental context of the individual and their community and includes the environmental determinants of health such as the social, cultural, political, economic and geographical aspects of the environment [111, 112]. The principles of Primary Health Care direct the focus of maternity care providers to health promotion and disease prevention which aligns strongly with the MPHCGs as conducted in this study.

Chapters Two and Three theorised about the relationship between socioeconomic disadvantage and preterm births and babies that are small for their gestational age [89, 92, 95]. Socioeconomically disadvantaged women are less likely to get enough good quality food. Pregnant women who experience poor nutrition will have a low body mass index and low weight gain during pregnancy [174, 175]. Maternal under-nutrition contributes to the risk of low birth weight babies and preterm births [176, 177]. An undernourished fetus is particularly vulnerable to fetal distress, a condition which is also a predictor for preterm birth
I argued that the unhealthy lifestyles that socioeconomically disadvantaged women engage in are both responses to stress and result in a further intensification of the stress response [100, 103].

### 7.5.1 Modifications to Feminist Group Process

The design of MPHCGs is based on modified feminist group processes. The modifications were necessary because the purpose of MPHCGs were different from the original guiding “Peace and Power: Feminist Group Process” developed by Wheeler and Chinn [132, 133] as presented in Chapter Two. Wheeler and Chinn’s group aim was to run a feminist book store. My aim as the midwife-facilitator was to create primary health care groups that promoted safe spaces for women to interact, connect and make decisions about their health. Please see Table 7.1 that demonstrates the similarities and differences between my approach and the approach of Wheeler and Chinn.

<table>
<thead>
<tr>
<th>Table 7.1: Similarities and Differences of Peace and Power and MPHCGs</th>
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<td><strong>Build</strong></td>
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<td>➢ Unity</td>
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<td>➢ Increase responsibility</td>
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<td>➢ Use reflection</td>
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<td>➢ Promote holistic health empowerment</td>
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<td>➢ Knowledge of pregnancy, birth and postpartum</td>
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<td>➢ Promote mother-infant love</td>
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<td>➢ Create and sustain a midwifery-relationship</td>
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<tr>
<td>➢ Continuity of care</td>
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<td>➢ Iterative process</td>
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</table>

As Table 7.1 shows, my study was consistent with the principles of peace and power that were appropriate for primary health care groups. The six issues for which the approaches are different in the table reflect what occurred in my practice. Upon reflection I believe that the changes I made are appropriate because my focus was on health promotion in pregnancy.
7.5.2 Comparing Models of Midwifery Primary Health Care Groups

Before starting the groups in Thailand, I considered the Centering Pregnancy group antenatal care. I realised that the Centering Pregnancy model would need to be adapted to be more culturally appropriate. Further, the Centering Pregnancy approach involves a midwife giving clinical antenatal care to women who are at known risk of preterm birth and the medical administrator at the hospital where I conducted my groups would not have allowed this. The key similarities and differences of both models are presented in Table 7.2.

<table>
<thead>
<tr>
<th>Table 7.2: Similarities and Differences of Centering Pregnancy and MPHCGs</th>
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<td>Build</td>
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<td>➢ Continuity of care</td>
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<td>➢ Iterative process</td>
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<td>➢ Conduct antenatal checks during group time</td>
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</table>

Upon reflection I believe that the changes I made which made my approach different to the Centering Pregnancy approach are appropriate for a number of reasons. Firstly, Centering Pregnancy is offered instead of any other form of antenatal care and thus eliminates midwifery partnerships which were highly valued by the participants. MPHCGs offer a continuing one-to-one relationship with the same midwife and regular group meetings where the women can form networks with each other as well. Consistent with feminist group processes, MPHCGs have no predetermined syllabus: the content was negotiated beginning with a list of possible topics and then the group designed each weekly session. In Centering Pregnancy, there is a standard curriculum: each session has an overall plan and teaches core content that was predetermined by the Rising et al. [5].
In spite of these differences I believe that there are sufficient similarities between the programs for me to argue that the research finding for the CenteringPregnancy can reasonably be applied to the MPHCGs I was engaged with in Thailand. Indeed it may well be the case that the model of MPHCGs may be superior to CenteringPregnancy if subjected to a randomised controlled trial.

7.6 MPHCGs are Feasible for Thailand

In the sections above, I have argued that MPHCGs are effective and cost effective. There is enough data to move forward to scale up the implementation of these groups, not only in Thailand, but in other countries as well (see Section 7.7.1: How to implement MPHCGs). In this section, the feasibility of establishing MPHCGs to Thailand is considered. For Thai midwives to be able to successfully facilitate similar groups, more information about what they would be required to learn is needed. This includes, Feminist Group Processes, Maslow’s Hierarchy of Needs, Primary Health Care, Philosophy of Midwifery, and Midwifery Partnership (Chapter Two).

I was aware that these Western theoretical foundations were an uneasy fit in midwifery care in Thailand because Thailand is a different culture with a different social, political and economic environment and health care system. In Chapter One, the Thai culture of submission to those in authority was stressed. As a Thai person, I have had to adjust to the Australian tendency to free speech and to question or challenge authority. The value of ‘speaking out’ and ‘speaking up’ seem not to be valued in traditional Thai culture, although the women in the group and I adapted easily and enjoyed the freedom and choice I found in the groups.

My own experience has shown that it is possible for Thai nurse-midwives to learn how to conduct MPHCGs. I used the iterative process of feminist action research that I learned from my practice and I improved on my approach by the use of reflection. For example, to reduce the power differences within the MPHCGs I learned that the midwife should wear normal clothes and to use plain language. Therefore, I learnt how to effectively conduct MPHCGs in Thailand.

I was funded by my university and government to study my PhD full time in Australia. I also had two supervisors who are midwifery leaders and who had both used feminist group processes in antenatal groups. I had time to study, to learn and to reflect. When I think about
the feasibility of introducing MPHCGs more widely in Thailand, I reflect not only on the advantages I have had but also the cultural differences. The lack of knowledge, skills and experience in Thailand, coupled with the real cultural differences make the translation of MPHCGs into the Thai context quite problematic. The solution is to develop midwifery short course training in Thailand and base these workshops on Midwifery Philosophy and contemporary evidence-based practice in maternity care. This strategy would establish nurse-midwives as the ‘index user group’ to implement MPHCGs.

7.7 Recommendations

MPHCGs offer benefits for global health, women, midwives, and maternity units at hospitals as well as health centres and educators. In this section, I present the recommendations for implementing MPHCGs more widely in Thailand and in other countries.

7.7.1 The Up Scaling of Implementing MPHCGs

“Examples abound of innovations that have been shown to be both efficacious and cost-effective and yet are not widely implemented in practice. Why this occurs is the subject of much scholarship and debate, particularly in global health where the need for scale up of effective practices is dire” Bradley, Curry & Pérez-Escamilla et al [379 p.9].

The implementation of MPHCGs would require much coordinated effort and funding. According to Bradley et al. (2011), the successful up scaling of implementing MPHCGs should follow the five steps of AIDED [379 p.37]:

1. Assess: Understand user groups’ receptivity to the innovation and the degree of support for the innovation in the political, regulatory, economic, socio-cultural environments.

2. Innovate: Design and package the innovation to fit with user groups, and to enable index user groups to spread the innovation via social networks.

3. Develop: Build on sources of support and address resistance among stakeholders and opinion leaders that will support take up of innovation.
4. Engage: Use existing roles and resources within user groups to introduce, translate, and integrate the innovation into each user group’s routine practices.

5. Devolve: Feasibility on existing social networks of index user groups to release and spread the innovation to new user groups.

A contribution that I can make to up scaling MPHCGs is to focus on nurse-midwives as the ‘index group’ (i.e. the first set of targeted user groups who put the innovation to use which needs to develop specific knowledge, attitudes and skills). MPHCGs therefore, in engaging women in Thailand and other countries, will be effective at least when they are conducted by the ‘index group’.

For the first step in implementing MPHCGs, my supervisors and I have joined with other researchers to introduce a version of this model to groups of Indigenous and disadvantaged women in Australia where we will follow the steps of the AIDED model as a first step towards wider adoption in low to middle-income countries.

7.7.2 Midwifery and Women

Thai childbearing women need continuity of midwifery care and contemporary midwifery care rather than obstetrical nursing care.

7.7.3 Midwifery Practice

All midwifery practice in Thailand should be based on midwifery philosophy, feminist principles, holistic primary health care and Maslow’s hierarchy of needs.

The department of health in Thailand (or individual hospitals) should offer women the choice of attending MPHCGs antenatally and up to six weeks post partum in order to reduce preterm birth rates and improve birth outcomes.

7.7.4 Midwifery and Antenatal Clinic

The study recommends that a holistic health assessment for midwives at antenatal clinics is needed. Holistic health assessment guidelines that promote dialogue between the pregnant women and their midwives need to be developed for introduction in Thailand. Please see the
table which presents an example of holistic health assessment that has been created based on my actual practice in working with childbearing women and Maslow’s hierarchy of needs (Appendix 7).

### 7.7.5 Midwifery Education

This study provides a blueprint for changing the curriculum from obstetrical nursing to contemporary midwifery care. In summary, the key recommendations are:

1. Refer to midwives as ‘midwives’ and not ‘nurses’
2. Use Australian, New Zealand or UK textbooks (not US textbooks) in all midwifery training
3. Implement a minimum of five midwifery continuity partnerships into undergraduate midwifery education
4. Incorporate reflection in and on practice into the undergraduate curriculum
5. As part of midwifery education incorporate MPHCGs. which use midwifery philosophy, feminist principles, primary health care, Maslow’s hierarchy of needs, health assessment and clinical decision-making
7. Introduce ‘double degree’ nursing and midwifery curricula from Australia as possible models for the midwifery education of nurse-midwives in Thailand
8. Create a Master of Midwifery degree to develop leaders of midwifery in practice, administration, education and research.

### 7.7.6 Midwifery and Research

The MPHCGs could now be tested in a randomised controlled trial if sufficient numbers of Thai midwives could be trained in their conduct. Research in other countries and areas of high preterm birth is also warranted including other parts of Asia, Africa and Australian Indigenous women.
7.8 Research Quality Evaluation

As discussed in Chapter Four, feminist research and action research share values and goals that seek to promote knowledge construction, collaborative learning and transformative action [279]. This section appraises the overall quality of this research project by using the criteria which were developed following a systematic review of 59 healthcare action research papers in the UK [380]. The criteria and my self-evaluation are presented in Table 7.3 [380 pp.48-50].

<table>
<thead>
<tr>
<th>#</th>
<th>Criteria to assess quality/rigor of action research</th>
<th>Y or N</th>
<th>Consistent with Chapter</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Is there a clear statement of the aims and objectives of each stage of the research?</td>
<td>Y</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Was the action research relevant to practitioners and/or users?</td>
<td>Y</td>
<td>1</td>
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<tr>
<td>3</td>
<td>Were the phases of the project clearly outlined?</td>
<td>Y</td>
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<td>4</td>
<td>Were the participants and stakeholders clearly described and justified?</td>
<td>Y</td>
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<td>5</td>
<td>Was consideration given to the local context while implementing change?</td>
<td>Y</td>
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<td>6</td>
<td>Was the relationship between researchers and participants adequately considered?</td>
<td>Y</td>
<td>4</td>
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<tr>
<td>7</td>
<td>Was the project managed appropriately?</td>
<td>Y</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>Were ethical issues encountered and how were they dealt with?</td>
<td>Y</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>Was the study adequately funded/supported?</td>
<td>Y</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>Was the length and timetable of the project realistic?</td>
<td>Y</td>
<td>4</td>
</tr>
<tr>
<td>11</td>
<td>Were data collected in a way that addressed the research issue?</td>
<td>Y</td>
<td>4</td>
</tr>
<tr>
<td>12</td>
<td>Were steps taken to promote the rigour of the findings?</td>
<td>Y</td>
<td>4</td>
</tr>
<tr>
<td>13</td>
<td>Were data analyses sufficiently rigorous?</td>
<td>Y</td>
<td>4, 6</td>
</tr>
<tr>
<td>14</td>
<td>Was the study design flexible and responsive?</td>
<td>Y</td>
<td>4</td>
</tr>
<tr>
<td>15</td>
<td>Are there clear statements of the findings and outcomes for each phase of the study?</td>
<td>Y</td>
<td>6</td>
</tr>
<tr>
<td>16</td>
<td>Do the researchers link the data that are presented to their own commentary and interpretation?</td>
<td>Y</td>
<td>5, 6</td>
</tr>
<tr>
<td>17</td>
<td>Is the connection to an existing body of knowledge made clear?</td>
<td>Y</td>
<td>2, 3, 4</td>
</tr>
<tr>
<td>18</td>
<td>Is the extent to which aims and objectives were achieved at each stage discussed?</td>
<td>Y</td>
<td>4, 6</td>
</tr>
<tr>
<td>19</td>
<td>Are the findings transferable?</td>
<td>Y</td>
<td>7</td>
</tr>
<tr>
<td>20</td>
<td>Have the authors articulated the criteria on which their own work is to be read/ judged?</td>
<td>Y</td>
<td>4, 5, 6</td>
</tr>
</tbody>
</table>

The research design and methods used in this study meet contemporary standards for qualitative rigour. The research responded to the research question and well related research aims guiding the study. All key terms have been defined in Chapter One and Appendix B and consistently used throughout the dissertation. Consistent with the methodological foundations for this study a ‘solutions focused approach’ has been maintained throughout: in this case the aim is to facilitate each woman to optimise holistic health. The study was conducted ethically...
and was approved by the relevant authorities (Appendix A1 and A2). The research setting was appropriately chosen in relation to the research question and aim. The research participants were clearly described and selected using selection criteria that met the requirements of the research question (Appendix A5). The research project was managed appropriately and relevant to me as a practitioner (Chapters One, Four, Five and Six). This research project has transformed both theory and practice in relation to MPHCGs (see Section 6.4-6.6 of Chapter Six, and a new model of MPHCGs). The phases of the project are clearly outlined and follow a logical process that is best conceptualised as a spiral (see Section 4.4.1, 4.5 of Chapter Four, and Figure 4.3).

This Feminist Action Research study was implemented in line with the feminist methodological principles that were discussed in Section 4.2 of Chapter Four. My roles in this study were as a facilitator (see Section 2.5.2 of Chapter Two, and Appendix 2), a midwife (see Section 2.6.2 of Chapter Two, and Section 4.4.1.2 of Chapter Four) and a researcher (see Section 4.2 of Chapter Four). The relationship between participants and me evolved through the modified midwifery partnership, involving individual and group-based discussions (Sections 4.5.1–4.5.2 of Chapter Four). For every step of data collection, I monitored my activities by keeping a diary. I had my reflective journal (see Section 4.5.3 of Chapter Four), in which I faithfully recorded what I had done from the beginning to the end of each one-to-one meeting and group-based discussion. I kept a digital recorder with me and kept voice notes of all ideas of achievement and difficulty. My reflections on myself and my own experiences were made explicit (see Chapters Five and Six).

During data collection and analysis in Chapter Five I used a narrative construction approach. In order to encourage women to give an open and full account of themselves and their health I used semi-structured interviews. The style of interviewing was conversational; open-ended questioning was employed to gather the data [6, 9]. In line with the quality principle of participants checking their own data [286] each woman read and approved her own stories in the Thai language before I translated them to English (see Section 4.6.1 of Chapter Four). Consistent with an action research approach and best practice in qualitative analysis and interpretation [301, 347], data collection and analysis were concurrent and iterative. At the end of each group meeting, the research assistant and I immediately reflected and discussed what had happened during the group from beginning to end. I recorded our discussions on my digital recorder. During data analysis and interpretation for Chapter Six, I consistently and critically examined the way the data could best be interpreted to answer the research question
and achieve the research aims. The progress of data analysis, interpretation and data synthesis including model development were regularly reviewed with my supervisor [288] and a clear audit trail was maintained as required for qualitative rigour [381-383] (Tables 6.5.1–6.5.9 of Appendix 6).

7.9 The Strengths of the Study

The model of MPHCGs had strong theoretical foundations such as feminist group processes, primary health care, midwifery partnership philosophy and Maslow’s hierarchy of needs as a way of conceptualising and assessing holistic health. The FAR process guided me to collect, reflect upon and analyse the data in an in-depth and systematic manner. Data collection and reflection on practice occurred in Thailand by a Thai midwife and thus the recommended ways of conducting the groups and practising midwifery are culturally effective and feasible. Having two groups of women in the study allowed me to learn from the first group and improve practice in the second group. The second group also strengthened the model of MHPCGs. The final meeting for both groups was an ‘evaluation’ meeting which strengthened the rigour of the findings and the model of MPHCGs.

7.10 The Limitations of the Study

The study was restricted to only one antenatal clinic in Bangkok. The study also had small numbers of participants, so its findings cannot be generalised. However the results may be transferable to a different context for women who are socioeconomically disadvantaged. The last limitation was that the study depended on the individual skill of one researcher who had advanced knowledge and good supervision from expert midwives (as discussed above). It would be good to repeat the study in a rural setting in Thailand and in other Asian countries.

7.11 Conclusions

This research project has harmonised theory and practice by focusing on the important issue of the health empowerment of each individual woman, which will help to optimise their health to ensure that each baby is born healthy, and at term. Knowledge from theory and actual practice in the real world has been integrated and developed into a midwifery model that is appropriate for socioeconomically disadvantaged women. The model has been called ‘Midwifery Primary Health Care Groups’ (MPHCGs) which focus on midwifery and holistic
primary health care. I have presented the theoretical foundations, midwifery strategies and aims of the model; these can guide midwives who are interested in promoting holistic health and they will enable these midwives to understand how to effectively implement the model. I hope that the model can be used to help Thai midwifery educators to teach midwifery students women-centred care and continuity of care. The information and findings from this study can assist in providing education aimed not only at minimising preterm births but also at improving collaborative work and the relationship between women and midwives. In conclusion, this feminist action research project was iteratively developed to create a new model (MPHCGs) to provide new hope for childbearing women and midwives. The new model has no harmful side effects for women and their babies; it is also a low cost intervention which is consistent with the ‘Global report on preterm birth and stillbirth: Global Action Agenda’ that was reviewed by Rubens, Gravett, Victora, Nunes and the GAPPS Review Group [384]. I believe that the new midwifery model can be implemented in antenatal clinics in hospitals, and public health centres in Thailand and other countries.
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APPENDICES
APPENDIX A1:

Ethical Approval for the University of Newcastle

HUMAN RESEARCH ETHICS COMMITTEE

Notification of Expedited Approval

To Chief Investigator or Project Supervisor: Professor Kathleen Fahy
Cc Co-investigators / Research Students: Dr Pamela Van Der Riet
Miss Peeranan Wisansakoolwong
Re Protocol: Group-Based Antenatal Care in Thailand: A Feminist Action Research Project
Date: 28-Nov-2008
Reference No: H-2008-0375

Thank you for your Response to Conditional Approval submission to the Human Research Ethics Committee (HREC) seeking approval in relation to the above protocol.

Your submission was considered under Expedited review by the Chair/Deputy Chair.

I am pleased to advise that the decision on your submission is Approved effective 27-Nov-2008

Please provide upon receipt, a copy of your approval letter from the hospital where you will be obtaining medical records.

Please also note that ethics approval is not required for writing a book about preventing premature birth, unless it requires the collection of human data. (such as interviews etc)

The full Committee will be asked to ratify this decision at its next scheduled meeting whereupon a formal Certificate of Approval will be issued. In the interim your approval number is H-2008-0375.

If the research requires the use of an Information Statement, ensure this number is inserted at the relevant point in the Complaints paragraph prior to distribution to potential participants

You may then proceed with the research. Best wishes for a successful project.

Professor Val Robertson
Chair, Human Research Ethics Committee

For communications and enquiries:
Human Research Ethics Administration

Research Services
Research Office
The University of Newcastle
Callaghan NSW 2308
T +61 2 492 18009
F +61 2 492 17164
Human-Ethics@newcastle.edu.au
APPENDIX A2:

Ethical Approval for the Bangkok Metropolitan Administration

Ethics Committee
For
Researches Involving Human Subjects, the Bangkok Metropolitan Administration

Title of Project: Group-Based Antenatal Care in BMA Medical College and Vajira Hospital: An Action Research Project

Registered Number: 005.52

Principal Investigator:
Miss Peeranee Wisansakoolwong
Mr. Pahsvudrak Kongsin
Mrs. Kanya Vallyavuth
Ms. Tisanun Cheungsripisanu
Miss Janyalak Sukjaem
Mrs. Parichart Thano

The aforementioned project has been reviewed and approved by Ethics Committee for Researches Involving Human Subjects, based on the Declaration of Helsinki.

[Signature] Chairman
(Mr. Kraichack Kaewnil)
Deputy Permanent Secretary for BMA

DATE OF APPROVAL: 28 JAN 2009
APPENDIX A3:

Information Statement

Group-Based Antenatal Care in Thailand: An Action Research Project

You are invited to participate in this research project. The research is being conducted by Ms Peeranan Wisansakoolwong, a midwife and PhD student from the school of Nursing and Midwifery, Faculty of Health at the University of Newcastle. Peeranan is being supervised by Dr. Kathleen Fahy, Professor of Midwifery; the second supervisor is Dr. Pamela Van der Riet. Both supervisors are in School of Nursing and Midwifery at the University of Newcastle.

Why is the research being done?

Group based antenatal care in the USA and Britain has been found to reduce premature birth rates. The purpose of the research is to learn how midwives can most effectively conduct group-based antenatal care in ways that are valued by Thai women who are at risk of premature birth. A culturally appropriate model of group based antenatal care will be developed and made available to other Thai hospitals in the future.

Who can participate in the research?

If you have been given this information statement it is because the midwife has identified you as a woman who may be at an increased risk of premature birth and you are generally healthy. Also the midwife has said YES to all five (5) statements about you:

Statement 1: You are less than 24 weeks pregnant?

Statement 2: You are carrying only one baby?

(As we are focussing first on women who have one baby at a time women with multiple pregnancies (twins or more) are not eligible to participate in this research project)

Statement 3: You aged 16 years or older?

Statement 4: You speak Thai easily?

Statement 5: You do not have any intellectual or mental health condition that may prevent you from being part of a group.
Women who participate in this study may not continue their participation if the following occur:

- Multiple pregnancy (twins or more) is diagnosed,
- You develop a severe medical condition that makes participation difficult.

What would you be asked to do?

As described below you will be invited to attend group-based antenatal care and one follow up group discussion after the birth. This is being done within an Action Research framework where all group members are also co-researchers.

If you agree Peeranan would also like to be present when you have your antenatal appointment with the doctor so Peeranan can follow you through your entire experience. I would also like to read your medical file so that I fully understand your medical history and plan of care.

Group-Based Antenatal Care and Action Research Group

Nine group meetings of two hours each are planned to occur fortnightly. The first group meeting will be led by Peeranan and will be about getting to know each other and setting up some group rules. Each group meeting will be focused on creating discussion among the women about health related topics. You will be invited to contribute journal reflection, drawings, photographs or any other form you wish for presenting your experiences. The last group meeting will occur after the last baby of the group has been born and it will focus on evaluation of the whole group-based antenatal care process.

The key principles that will guide the way the group functions are based on the principles used for Group Based Antenatal Care in the USA.

1) Women are responsible for their own health.
2) Facilitation of the group will aim to ensure that every woman feels equal; including the midwife.
3) The plan for the content of each session will be agreed by the group.
4) Each member of the group will be encouraged to participate and listen respectfully.
5) Once the group is formed no new members will be added.
6) Once a woman has started in the group she is invited to continue even if a premature birth has.
7) Each group will end with refreshments being served and socialization being encouraged.

What are the risks and benefits of participating?

There is no promise that you will not experience premature birth but there is some evidence that, for some women, premature birth is less likely when they participate in group-based antenatal care and take more control of their health overall.

You may benefit from the opportunity to share your experiences and develop your networks with other pregnant women.

The findings of this study will enhance midwifery knowledge to promote wellbeing of pregnant women and prevention of premature birth; particularly in Thailand.

The relationship with you and health care providers will not be affected and you will not be disadvantaged in anyway. There are no physical risks to you or your baby by participating in this research. If you have premature labour, I will visit you in hospital to offer my support if you wish. There is possibility that you may experience emotional distress related to discussing your previous and current life experiences. Should you find yourself feeling distressed I will offer you immediate supportive care. I will offer you referral for ongoing counseling if you wish through the social work department or though a women’s health service in the community.
How will your privacy be protected?

Any identifying information, including your name and phone number, will be stored securely and only accessed by Peeranan Wisansakoolwong. The non-identifying research data will use a false name (a pseudonym) and only Peeranan will be able to link the transcribed data to the participants. At the completion of the research all identifying names, telephone numbers, mail address and email addresses will be destroyed and data with pseudonyms will be copied from the computer and stored as electronic data on CD’s. These CDs will be securely stored at the School of Nursing and Midwifery for 5 years.

Your privacy will be protected during and after completion of the project. During the group sessions, it is possible that the groups will explore personal or sensitive details so the group rules which will be set up at the beginning will ask that all participants maintain the confidentiality. The specific content of what is said in the group should not be told to people outside the group.

However, the researcher may be obligated to report specific types of unlawful conduct of the participants if you decide to disclose that. For example the researcher has to report any case of child abuse or neglect to the relevant authorities. This may include domestic violence while you are pregnant or after the birth of the baby. I would be required to report illegal drug use that may affect the baby to the Children’s Right Protecting Centre which is located in this hospital that deals with child welfare in Thailand.

How will the information collected be used?

- Results from this research will be written up in a dissertation of the University of Newcastle.
- Results from this research will be disseminated in conference presentations and journal publications or book chapters.

What choice do you have?

You will be able to review the recording and/or transcriptions to change or erase your contribution if you request this. If you wish to do this I will need to be present to protect the data provided by others.

The research is not about specific individuals; it is group-based. Also the result will be written in English language so Thai women are unlikely to be able to read it. However a Thai language summary of the final results will be sent to you upon request but they will only be available after the study has completed i.e. 2011 Please contact Peeranan via e-mail, phone or mail to request the summary of findings.

Participation in this research is entirely your choice. Whether or not you decide to participate, your decision will not disadvantage you. If you do decide to participate, you may withdraw from the project at any time without giving a reason. If you do withdraw you may also withdraw consent and your contact details if you wish. For the use of any data you provided i.e. I will not quote you.

What do you need to do to participate?

If you would like to participate, please complete and return the attached consent form to Group Based Antenatal Care Research box near the reception counter at Ante Natal Clinic. The consent forms will be collected a number of times per day. Once Peeranan has your signed consent form she will contact you to organize a meeting. If you have consented to be involved you are welcome to ring Peeranan directly (her details are below).

Please ensure that you understand the contents of this Information Statement before you consent to participate. If there is anything you do not understand, or you have questions, contact me by phone (I will insert my Thai telephone number in the Thai version of this form) or email: Peeranan.Wisansakoolwong@studentmail.newcastle.edu.au
Thank you for considering this invitation to participate.

Peeranan Wisansakoolwong
PhD Candidate

Professor Kathleen Fahy
Research supervisor

Complaints about this research

This project has been approved by the University’s Human Research Ethics Committee, Approval No. H-2008-0375

Should you have concerns about your rights as a participant in this research, or you have a complaint about the manner in which the research is conducted, it may be given to the researcher, or, if an independent person is preferred, to the Human Research Ethics Officer, Research Office, The Chancellery, The University of Newcastle, University Drive, Callaghan NSW 2308, Australia, telephone +61 49216333, email Human-Ethics@newcastle.edu.au.
APPENDIX A4:

Consent Forms

Consent Form

Peeranant Wisansakoolwong
Midwife/Researcher and PhD Candidate of The University of Newcastle
Tel: +61 4 051 15966 (Australia)
In Thailand: +68 2 241 6500

Email: Peeranant.Wisansakoolwong@studentmail.newcastle.edu.au

Consent Form for the Research Project:
Group-Based Antenatal Care in Thailand: A Feminist Action Research Project

I agree to participate in the above research project and give my consent freely.
I understand that the project will be conducted as described in the Information Statement, a copy of which I have retained.
I understand I can withdraw from the project at any time and do not have to give any reason for withdrawing.
I consent to

☐ Participating in the group-based discussions and having it audio tape recorded.
☐ The researcher attending my standard antenatal care with obstetrician, and visiting me in hospital.
☐ The researcher accessing my medical history and plan of care to extract information.
☐ De-identified things that I say during the research being included in future publications.

I understand the steps that are being taken to protect my confidentiality.
I have had the opportunity to have questions answered to my satisfaction.

Name: ____________________________________________
Signature: ________________________________________
Date: ____________________________________________
Contact details: Phone __________________________ Email __________________

Complaints about this research

This project has been approved by the University’s Human Research Ethics Committee, Approval No. H-2008-0375

Should you have concerns about your rights as a participant in this research, or you have a complaint about the manner in which the research is conducted, it may be given to the researcher, or, if an independent person is preferred, to the Human Research Ethics Officer, Research Office, The Chancellery, The University of Newcastle, University Drive, Callaghan NSW 2308, Australia, telephone +61 2 49216333, email Human-Ethics@newcastle.edu.au.
Consent Form for Young Participants

Peeranan Wisansakoolwong

Midwife/Researcher and PhD Candidate of
The University of Newcastle
Tel: +61 4 051 16966 (Australia)
In Thailand: +68 2 241 6500

Email: Peeranan.Wisansakoolwong@studentmail.newcastle.edu.au

Consent Form for the Research Project:
Group-Based Antenatal Care in Thailand: A Feminist Action Research Project

I agree to participate in the above research project and give my consent freely.

I understand that the project will be conducted as described in the Information Statement, a copy of which I have retained.

I understand I can withdraw from the project at any time and do not have to give any reason for withdrawing.

I consent to

☐ Participating in the group-based discussions and having it audio tape recorded.
☐ The researcher attending my standard antenatal care with obstetrician, and visiting me in hospital.
☐ The researcher accessing my medical history and plan of care to extract information.
☐ De-identified things that I say during the research being included in future publications.

I understand the steps that are being taken to protect my confidentiality.

I have had the opportunity to have questions answered to my satisfaction.

Name: __________________________________________
Signature: _________________________________________
Date:  ____________________________________________

Contact details: Phone ______________________ Email ______________________

If you are living with your parents we recommend that you should be permitted by your parents.
Parent Consent

I agree to above mentioned young participant taking part in the research. She has had the research explained to her, she understands what participation involves and she freely agreed to take part in the research.

Name: ____________________________ Signature: ____________________________

Relationship with participant: ____________________________ Date: _____________

Complaints about this research

This project has been approved by the University’s Human Research Ethics Committee, Approval No. H-2008-0375

Should you have concerns about your rights as a participant in this research, or you have a complaint about the manner in which the research is conducted, it may be given to the researcher, or, if an independent person is preferred, to the Human Research Ethics Officer, Research Office, The Chancellery, The University of Newcastle, University Drive, Callaghan NSW 2308, Australia, telephone +61 2 49216333, email Human-Ethics@newcastle.edu.au
Consent Form for Publication a Photograph

Peeranan Wisansakoolwong
Midwife/Researcher and PhD Student of
The University of Newcastle Tel: +61 4 051
15956 (Australia) In Thailand: +662 241 6500
Email: Peeranan.Wisansakoolwong@studentmail.newcastle.edu.au

Image Number …………...
This is to state that I give my full permission for the publication a photograph of myself and or may baby (number above) relevant to the research project above and publications (including books, journals, CD-ROMs, online and internet).

I declare, in consequence of granting this permission, that I have no claim on ground of breach of confidence or any other ground in any legal system in respect of publication of the photograph(s)

1. Name:____________________________________________________
   Address____________________________________________________
   Signature:___________________________________________________
   Date:________________________________________________________
   Contact details: Phone _______ Email __________________________

2. Name:______________________________________________________
   Address____________________________________________________
   Signature:___________________________________________________
   Date:________________________________________________________
   Contact details: Phone _______ Email __________________________

3. Name:______________________________________________________
   Address____________________________________________________
   Signature:___________________________________________________
   Date:________________________________________________________
   Contact details: Phone _______ Email __________________________
4. Name:__________________________________________
Address________________________________________
Signature:________________________________________
Date:__________________________________________
Contact details: Phone _______ Email ________________

Complaints about this research
This project has been approved by the University's Human Research Ethics Committee, Approval No. H2008-0375

Should you have concerns about your rights as a participant in this research, or you have a complaint about the manner in which the research is conducted, it may be given to the researcher, or, if an independent person is preferred, to the Human Research Ethics Officer, Research Office, The Chancellery, The University of Newcastle, University Drive, Callaghan NSW 2308, Australia, telephone +61 2 49216333, email Human-Ethics@newcastle.edu.au.
APPENDIX A5:  
Participant Selection Criteria

The research title:  
Group-Based Antenatal Care in Thailand: A Feminist Action Research Project

Instruction for midwives:
Please tick the boxes that are related to the pregnant woman’s history. In order to be eligible to participate women must meet the criteria for increased risk of premature birth at (1) or (2) and all the demographic criteria at (3).

CRITERIA TO IDENTIFY WOMAN WITH INCREASED RISK OF PREMATURE BIRTH

(1) High Risk: Women are eligible to participate if they have one or more of these:
- Cervical incompetence or short cervix
- Two or more miscarriages before 20 weeks
- Threatened premature labour after 20 weeks
- Previous premature birth

(2) Moderate Risk: Women are eligible to participate if they have 3 or more of these:
- Family History of Premature birth
- Chronic hypertension, anemia, hyperthyroidism, or asthma
- Single marital status
- Lack of social support (one or less person/s to rely on for help)
- Body Mass Index <20
- Illicit drug or alcohol use
- Recurrent urinary tract infection
- Current smoker
- Partner who is a smoker
- Periodontal disease

(3) DEMOGRAPHIC CRITERIA

Only woman who meet all these criteria are eligible to participate
- Age >= 16 years old
- Gestational ages < 24 weeks
- Ability to speak Thai language
- Neither intellectually nor mentally impaired in ways that would preclude effective group interaction
- No serious concurrent diseases e.g. heart disease or leukaemia in ways that would preclude effective group interaction

If a woman is eligible to participate please discuss the study with her and give her an information sheet and consent form. Please invite her to contact me, if she wishes.
From the Appendix A5, some risk factors have powerful research evidence that they can be identified as "High Risk" criteria, and women only needed to meet only one of these criteria to be eligible to participate in the study. Those high risk criteria were ‘Cervical incompetence or short cervix’ (Cunningham et al., 2010; Fraser & Cooper, 2009; Pairman et al, 2010), ‘Two or more miscarriages before 20 weeks’ (Cunningham et al., 2010), ‘Threatened preterm labour after 20 weeks and previous preterm birth’ (Beheman and Butler, 2007; Cunningham et al., 2010; Fraser & Cooper (2009; Pairman et al, 2010). It should be noted that these 'high risk' criteria cannot predict the first preterm birth and therefore other factors needed to be considered to try to identify women at risk of having their first preterm birth.

Such other factors have moderate or conflicting research evidence and were classified as 'Moderate Risk Criteria". Those were ‘Family history of preterm birth’ (Basso et al, 1997; Beheman and Butler, 2007; Kallan, 1997), ‘Chronic hypertension, anemia, hyperthyroidism, or asthma’ (Beheman and Butler, 2007; Cunningham et al., 2010; Fraser & Cooper, 2009; Gilbert, 2010), ‘Single marital status, lack of social support’ (Beheman and Butler, 2007; Fraser & Cooper (2009; Gilbert, 2010; Zhong-Cheng, Wilkins and Kramer, 2004), ‘Body Mass Index <20’ (Beheman and Butler, 2007; Cunningham et al., 2010), ‘Illicit drug or alcohol use’ (Beheman and Butler, 2007; Cunningham et al., 2010; Gilbert, 2010; Pairman et al, 2010), ‘Recurrent urinary tract infection’ (Cunningham et al., 2010; Fraser & Cooper (2009; Gilbert, 2010; Goldenberg, 2008b; Pairman et al, 2010), ‘Current smoker, Partner who is a smoker’ (Beheman and Butler, 2007; Cnattingius, 2004; Cunningham et al., 2010; Galan et al, 2005; Gilbert, 2010; Nabet et al, 2007; Pairman et al, 2010; Tikkanen et al., 2006), ‘Periodontal disease’ (Cunningham et al., 2010). Because these criteria were ‘Moderate’ as distinct from ‘High Risk’ a woman had 3 or more of these 'Moderate' factors to be considered eligible for the study. Mostly women who were recruited with only 'moderate' risk factors were women in their first pregnancy living in challenging personal circumstances.
APPENDIX A6:

Letters of Access Medical Records

Letters of Access Medical Records

Peeranan Wisansakoolwong
Midwife/Researcher and PhD Candidate
The University of Newcastle
Tel: +61 4 051 15956 (Australia)
In Thailand: +66 2 241 6500
Email: Peeranan.Wisansakoolwong@studentmail.newcastle.edu.au

November, 2008

Dear Director of BMA Medical College and Vajira Hospital which is under
Bangkok Metropolitan Administration

My name is Miss Peeranan Wisansakoolwong and I am a nursing lecturer in Kuakarun College of Nursing in Bangkok. Currently, I am studying for PhD in Midwifery at the School of Nursing and Midwifery, Faculty of Health, The University of Newcastle, New South Wales, Australia. My Principal supervisor is Kathleen Fahy, Professor of Midwifery, and my second supervisor is Dr. Pamela Van der Riet.

This research involves group-based antenatal care. Group based antenatal care in the USA and Britain has been found to reduce premature birth rates. The purpose of the research is to learn how midwives can most effectively conduct group-based antenatal care in ways that are valued by Thai women who are at risk of premature birth. A culturally appropriate model of group based antenatal care will be developed and made available to other Thai hospitals in the future. My research question is “How can midwives facilitate group based antenatal care in ways that are most valued by Thai women who are at increased risk of premature birth?”

I am writing to ask your permission to access medical records of participants when they come to attend at antenatal clinic in your hospital so that I can be fully aware of the medical care and the care plan. This will promote good communication and collaboration between me and the rest of the health care team.

I will be submitting a research proposal for ethics approval in November, 2008. I hope to commence data collection in January 2009.

With respect I look forward to your reply.

Yours Faithfully

Peeranan Wisansakoolwong
PhD Midwifery Student

Kathleen Fahy,
Professor of Midwifery
Principal Supervisor
APPENDIX A7:

Letter of Invitation

Letters of Invitation to Director re Obstetrician

Peeranan Wisansakoolwong

Midwife/Researcher and PhD Candidate of
The University of Newcastle
Tel: +61 4 051 15968 (Australia)
In Thailand: +66 2 241 6500

Email: Peeranan.Wisansakoolwong@studentmail.newcastle.edu.au

December, 2008

Dear Director of BMA Medical College and Vajira Hospital which is under
Bangkok Metropolitan Administration

My name is Miss Peeranan Wisansakoolwong and I am a nursing lecturer in Kuakarun College of
Nursing in Bangkok. Currently, I am studying for PhD in Midwifery at the School of Nursing and
Midwifery, Faculty of Health, The University of Newcastle, New South Wales, Australia. My Principal
supervisor is Kathleen Fahy, Professor of Midwifery, and my second supervisor is Dr. Pamela Van der
Riet.

This research involves group-based antenatal care. Group based antenatal care in the USA and
Britain has been found to reduce premature birth rates. The purpose of the research is to learn how
midwives can most effectively conduct group-based antenatal care in ways that are valued by Thai
women who are at risk of premature birth. A culturally appropriate model of group based antenatal care
will be developed and made available to other Thai hospitals in the future. My research question is “How can midwives facilitate group based antenatal care in ways that are most valued by Thai
women who are at increased risk of premature birth?”

I am writing to ask your permission to Mr. Pahsuvad Kongsin as my clinical supervisor when I am
conducting research to your hospital (The information statement is attached). I have discussed my
research with Mr. Pahsuvad Kongsin and he has agreed to provide clinical supervisor with your
approval.

I will be submitting a research proposal for ethics approval in November, 2008. I hope to commence
data collection in January 2009

With respect I look forward to your reply.

Yours Faithfully

Peeranan Wisansakoolwong
PhD Midwifery Candidate

Kathleen Fahy,
Professor of Midwifery
Principal Supervisor
APPENDIX A8:

Letter of Invitation

Letters of Invitation to Director re Midwives

Peeranan Wisansakoolwong
Midwife/Researcher and PhD Candidate
The University of Newcastle
Tel: +61 4 051 15556 (Australia)
In Thailand: +68 2 241 6500
Email: Peeranan.Wisansakoolwong@studentmail.newcastle.edu.au

December, 2008

Dear Director of BMA Medical College and Vajira Hospital which is under
Bangkok Metropolitan Administration

My name is Miss Peeranan Wisansakoolwong and I am a nursing lecturer in Kuakarun College of
Nursing in Bangkok. Currently, I am studying for PhD in Midwifery at the School of Nursing and
Midwifery, Faculty of Health, The University of Newcastle, New South Wales, Australia. My Principal
supervisor is Kathleen Fahy, Professor of Midwifery, and my second supervisor is Dr. Pamela Van der
Riet.

This research involves group-based antenatal care. Group based antenatal care in the USA and
Britain has been found to reduce premature birth rates. The purpose of the research is to learn how
midwives can most effectively conduct group-based antenatal care in ways that are valued by Thai
women who are at risk of premature birth. A culturally appropriate model of group based antenatal
care will be developed and made available to other Thai hospitals in the future. My research question
is “How can midwives facilitate group based antenatal care in ways that are most valued by Thai
women who are at increased risk of premature birth?”

I am writing to ask your permission to Mrs. Kanya VaiYavuth and Miss. Tipanun Cheungsrisisanu as
recruiters for my research proposal when I am conducting research to your hospital (The information
statement is attached). I have discussed my research with Mrs. Kanya VaiYavuth and Miss. Tipanun
Cheungsrisisanu. They have agreed to provide support and needed sources with your approval.

I will be submitting a research proposal for ethics approval in November, 2008. I hope to commence
data collection in January 2009.

With respect I look forward to your reply.

Yours Faithfully

Peeranan Wisansakoolwong
PhD Midwifery Candidate

Kathleen Fahy,
Professor of Midwifery
Principal Supervisor
APPENDIX A9:  
Letter of Invitation

Letters of Invitation to Director re Midwifery Lecturer

Peeranan Wisansakoolwong  
Midwife/Researcher and PhD Candidate  
The University of Newcastle  
Tel: +61 4 051 15956 (Australia)  
In Thailand: +66 2 241 6500  
Email: Peeranan.Wisansakoolwong@studentmail.newcastle.edu.au

December, 2008

Dear Director of Kuakarun College of Nursing which is under Bangkok Metropolitan Administration

My name is Miss Peeranan Wisansakoolwong and I am a nursing lecturer in Kuakarun College of Nursing in Bangkok. Currently, I am studying for PhD in Midwifery at the School of Nursing and Midwifery, Faculty of Health, The University of Newcastle, New South Wales, Australia. My Principal supervisor is Kathleen Fahy, Professor of Midwifery, and my second supervisor is Dr. Pamela Van der Riet.

This research involves group-based antenatal care. Group based antenatal care in the USA and Britain has been found to reduce premature birth rates. The purpose of the research is to learn how midwives can most effectively conduct group-based antenatal care in ways that are valued by Thai women who are at risk of premature birth. A culturally appropriate model of group based antenatal care will be developed and made available to other Thai hospitals in the future. My research question is “How can midwives facilitate group based antenatal care in ways that are most valued by Thai women who are at increased risk of premature birth?”

I am writing to ask your permission to Miss Janyalak Sukjaem and Mrs. Parichat Thanu as co-facilitators for group-based antenatal care when I am conducting research to the Medical College and Vajira Hospital (The information statement is attached). I have discussed my research with Miss Janyalak Sukjaem and Mrs. Parichat Thanu. They have agreed to assist and facilitate group discussion in my research with your approval.

I will be submitting a research proposal for ethics approval in November, 2008. I hope to commence data collection in January 2009.

With respect I look forward to your reply.

Yours Faithfully

Peeranan Wisansakoolwong
PhD Midwifery Candidate

Kathleen Fahy,  
Professor of Midwifery  
Principal Supervisor
APPENDIX A10

The Participants and Ethical Implications

1. Consent process

Participants received Thai information statement (see Appendix A3) and consent forms (see Appendix A4) so they must be able to read, write and speak Thai easily. Potential participants were approached by midwives who gave out the information statement and consent forms. Potential participants might read these documents privately during waiting for their appointment. They might ask for more information about the research project from the midwives. Potential participants who were interested in the research might sign the consent form in private. After their visit with obstetricians, they had the choice to return the information statement and consent form in the locked box near the reception counter without midwives being aware.

If a participant chose not to participate or chose to withdraw from the research, there were no any specific consequences. Whether or not participants decided to participate, their decision was not disadvantage them in any way. Also, participants were free to withdraw from project by without reason. If participants withdrew from this project, I would not quote their data.

This research project also involved teenage pregnant women (aged 16-18 years) who were at increased risk of preterm birth. In Thailand, women aged over 15 years old had an identity card. Young women aged 16 and over could make their own decisions when they attended at antenatal clinic. I assumed it was reasonable, therefore to conclude that they could also make an informed choice to participate in the research.

The study therefore was designed to be appropriate for teenage pregnant women. Midwives assessed capacity to give informed consent by considering (1) identity card (2) independent living (3) did not want parents to know because pregnancy hidden (4) social support of the midwives and the group for a model of education to avoid social isolation. If living with parents I encouraged the young women to discuss this research with parents consent. Thus teenage pregnant women and parent/guardian were indicated to sign the consent for the participation (see Appendix A4).
2. Storage of Data during and after Completion of the Project

Data were recorded by audio recorders, field notes and reflective journal. Other documentaries i.e. medical records and photographs were assessed (see Appendix A6). Later, data were transcribed what was said into English text and store it in CD and computer files. In order to protect the identity of participants’ pseudonyms were used in the transcription. All transcription and translation into English were done by the researcher. All identifiable data, including audio-recordings were stored separately and not be directly linked to the transcribed data.

All identifiable data collected from the research had been storing in either a locked filing cabinet in a locked room. Only unidentifiable data had been storing on password protected laptop computer. The researcher could access the identifiable and unidentified data but only supervisors were able to access the unidentified data.

All data had stored in digital form. All paper copies were destroyed once the examination process was completed. Only pseudonyms were used in publications derived from the dissertation. The research materials had been stored in a locked cupboard in a locked room of the School of Nursing and Midwifery, Faculty of Health, the University of Newcastle for a period of five years. No names or identifying information were kept. All information was destroyed at the end of five years by the School Executive Officer.
APPENDIX A11:
National Ethics Application Form

National Ethics Application Form
Version 1.1

PROPOSAL TITLE: Group-Based Antenatal Care in Thailand: A Feminist Action Research Project
FOR SUBMISSION TO: The University of Newcastle Human Research Ethics Committee [EC00144]
PROPOSAL STATUS: Complete
COMPLETION DATE: 2/12/2008

APPLICANT: Prof Kathleen Fahy
INSTITUTION: The University of Newcastle
ADDRESS: The University of Newcastle, University Drive, Callaghan, Newcastle NSW 2308

CONTACT NUMBERS:
Business Hours 02 4921 5966
After Hours -
Mobile 04 0408 7449
Fax 02 4921 6301

PROPOSAL DESCRIPTION:
The aim of this study is to develop a culturally appropriate model of midwife-facilitated group-based antenatal care that is valued by Thai women who are at risk of premature birth.

Premature birth is defined as one that occurs before 37 completed weeks gestation [Tucker & McGuire, 2004; UNICEF & WHO, 2004]. Approximately 75 percent of premature births are unknown causes [Shellhaas & Lam, 2002]. These unknown biological causes may be multiple psycho, social or, spiritual risks involving family, socio-economic, culture, community and environment factors [Behrman & Butler, 2007; Frye, 1998]. Medical treatment involves interventions only once there is a history of premature labour or it is threatened in the current pregnancy [Cunningham, 2005]. By comparison, midwifery research is directed towards primary prevention of premature labour by aiming to antenatally reduce the risk factors for pregnant women who are at higher risk [Rising, 1998]. This qualitative study seeks to enhance the health of participants which may reduce their risks of premature birth.
Participants will be pregnant women who meet the selection criteria and who are higher risk of premature birth. The research design is Feminist Action Research [FAR]. Action Research is a group-based methodology where the research is conducted the real world. Aims of FAR are development and enhancement the consciousness of participants and the researcher. FAR will support practice change in line with current best evidence.

I will conduct group-based antenatal care and action research simultaneously following hospital antenatal booking schedules. I will encourage participants to reflect on their experiences. I aim to facilitate the empowerment of participants. This will hopefully result in them taking greater self-responsibility; develop more self-awareness and increased consciousness.

The data collection involves group-based discussions, participants’ observation and reflective journal. Data collection and analysis will be concurrent because outcomes from early analysis will give input into the subsequent group discussions. Data will be analyzed by [1] Listening to and reading the data, and field notes, including my journal reflections [2] Transcribing [3] Coding and categorizing (looking for similarities and differences, and constant comparison [Holloway & Wheeler, 2002]. Depending upon the type of information that is being generated by the research either recurrent themes for women’s experiences, evaluations and theoretical concepts to develop a theoretical framework for group-based antenatal care in Thailand will be inducted.

**POINTS TO REMEMBER:**

This document has been created using the online National Ethics Application Form [NEAF] - available at [www.neaf.gov.au](http://www.neaf.gov.au). The set of questions that appear in this document have been generated as a result of answers you have provided to specific questions in NEAF. For this reason, the contents of this document are unique to this research ethics proposal and should not be used as the basis for future proposals. New proposals for submission to Human Research Ethics Committees must be generated using NEAF online.

Should you wish to use the contents of this document for other purposes:
- You can copy and paste text out of a PDF document in Adobe Acrobat by using the ‘Tools’ > ‘basic’ > ‘text select’ button.
1. TITLE AND SUMMARY OF PROJECT

1.1. Title

1.1.1 What is the formal title of this research proposal?
Group-Based Antenatal Care in Thailand: A Feminist Action Research Project

1.1.2 What is the short title / acronym of this research proposal (if applicable)?
Group-Based Antenatal Care

1.2. Description of the project in plain language

1.2.1 Give a concise and simple description (not more than 400 words), in plain language, of the aims of this project, the proposal research design and the methods to be used to achieve those aims.

The aim of this study is to develop a culturally appropriate model of midwife-facilitated group-based antenatal care that is valued by Thai women who are at risk of premature birth.

Premature birth is defined as one that occurs before 37 completed weeks of gestation [Tucker & McGuire, 2004; UNICEF & WHO, 2004]. Approximately 75 percent of premature births are unknown causes [Shelhamer & Iams, 2002]. These unknown biological causes may be multiple psycho-social, economic, cultural and environmental factors [Behrman & Butler, 2007; Frye, 1998]. Medical intervention involves intervention only once there is a history of premature labour or at risk is threatened in the current pregnancy [Cunningham, 2005]. By comparison, midwifery research is directed towards primary prevention of premature labour by aiming to antenatally reduce the risk factors for pregnant women who are at higher risk [Rising, 1998]. This qualitative study seeks to enhance the health of participants which may reduce their risks of premature birth.

Participants will be pregnant women who meet the selection criteria and who are higher risk of premature birth. The research design is Feminist Action Research (FAR). Action Research is a group-based methodology where the research is conducted in the real world. The aims of FAR are development and enhancement of consciousness of participants and the researcher. FAR will support practice change in line with current best evidence.

I will conduct group-based antenatal care and action research simultaneously following hospital antenatal booking schedules. I will encourage participants to reflect on their experiences. I aim to facilitate the empowerment of participants. This will hopefully result in them taking greater self-responsibility, develop more self-awareness and increased consciousness.

The data collection involves group-based discussions, participants observation and reflective journal. Data collection and analysis will be concurrent because outcomes from early analysis will give input into the subsequent group discussions. Data will be analyzed by (1) Listening to and reading the data, and field notes, including my journal reflections (2) Transcribing (3) Coding and categorizing (looking for similarities and differences, and constant comparison [Holloway & Wheeler, 2002]). Depending upon the type of information that is being generated by the research either recurrent themes for women’s experiences, evaluations and theoretical concepts to develop a theoretical framework for group-based antenatal care in Thailand will be inducted.

1.3. Type of Research

1.3.1 Tick as many of the following ‘types of research’ as apply to this project. Your answers will assist HRECs in considering your proposal. A tick in some of these boxes will generate additional questions relevant to your proposal (mainly because the National Statement requires additional ethical matters to be considered), which will appear in Section 4 of NEAF.

This project involves:
[X] Qualitative research
[ ] Research on workplace practices or possibly impacting on workplace relationships
[X] Research conducted overseas involving participants NS 1.21
[ ] Research involving deception of participants, concealment or covert observation NS 17
[ ] Epidemiological research NS 14
[ ] Administration of a drug for research but is not clinical research
1.4. Research participants

1.4.1 The National Statement requires additional information to be provided to an HREC where research participants are certain or likely to include any of the categories of people listed in this question. HRECs need to know whether you intend to include or to exclude any of these categories. Answer this question by:
(a) selecting any of those categories that are targeted or likely to be included as participants in this research project.
(b) selecting any other of these categories that will be excluded from participation, and
(c) selecting any other of those categories who may be adversely affected by this research.

Where you select a category for inclusion, you will be required to answer additional questions later in the form.

1.4.1 Where any of the following participant populations may be involved, the National Statement requires additional information to be provided to the HREC. Tick as many of the following 'types of research participants' as apply to this project. If none apply please indicate this below. A tick in some of these boxes will require you to answer additional questions later in the form.

The participants who may be involved in this research are:

<table>
<thead>
<tr>
<th>a) Intended or targeted</th>
<th>b) Probable coincidental recruitment</th>
<th>c) Design specifically excludes</th>
<th>d) Research has potential to adversely affect this population</th>
</tr>
</thead>
<tbody>
<tr>
<td>People whose primary language is other than English (LOTE)</td>
<td>[X]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Children and/or young people (ie. &lt; 18 years)</td>
<td>[ ]</td>
<td>[X]</td>
<td>[ ]</td>
</tr>
<tr>
<td>People with an intellectual or mental impairment</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[X]</td>
</tr>
<tr>
<td>People highly dependent on medical care</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[X]</td>
</tr>
<tr>
<td>People in existing dependent or unequal relationships with any member of the research team, the researcher(s), and/or the person undertaking the recruitment/consent process [eg. student/teacher; employee/employer; warden/prisoner; officer, enlisted soldier, patient/doctor]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[X]</td>
</tr>
<tr>
<td>People who belong to a collectivity</td>
<td>[ ]</td>
<td>[X]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Aboriginal and/or Torres Strait Islander peoples</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[X]</td>
</tr>
</tbody>
</table>

1.5. Research techniques

1.5.1 The research techniques to be used in this project include [You must tick at least one. Tick as many as apply]:
[ ] Observation of non-identified people in public places
[ ] Covert observation of identifiable people in non-public places
[ ] Interviews - telephone
[ ] Interviews - face to face
[ ] Documentary/records analysis
[X] Focus groups
[ ] Data linkage
[ ] Physical activities / exercises / tests
[ ] Taping - audio / video
[ ] Biomedical / clinical interventions, tests, samples
[ ] Use of complementary or alternative medicine, or a natural therapy
[ ] Photos
[ ] Use of gene therapy
[ ] Survey instrument / questionnaire / diary
[ ] Use of a medical device
[ ] Internet / web based research
[ ] Computer based tests
[ ] Other techniques
2. RESEARCHERS

2.0. Applicant

Provide the following information for the person making this application to the HREC.

2.0.1. Name and contact details

2.0.1.1 Title
2.0.1.2 First Name
2.0.1.3 Surname
2.0.1.4 Mailing Address 1
2.0.1.5 Suburb/Town
2.0.1.6 State
2.0.1.7 Postcode
2.0.1.8 Organisation Name
2.0.1.9 Faculty/department/school or centre name as appropriate (optional)
2.0.1.10 Position in organisation
2.0.1.11 Business Hours Phone Number
2.0.1.12 After Hours Phone Number (optional)
2.0.1.13 Mobile Phone Number (optional)
2.0.1.14 Fax Number
2.0.1.15 Email Address

Prof
Kathleen
Fahy
The University of Newcastle, University Drive, Callaghan
Newcastle
NSW
2308
The University of Newcastle
Faculty of Health/School of Nursing and Midwifery
Professor of Midwifery
02 4921 5966
-
04 0408 7449
02 4921 6301
Kathleen.Fahy@newcastle.edu.au

2.1. Principal researcher(s)

2.1.0 How many principal researchers are there?

2.1.1. Principal researcher 1

2.1.1.1 Name and contact details

2.1.1.1.1 Title
2.1.1.1.2 First Name
2.1.1.1.3 Surname
2.1.1.1.4 Mailing Address 1
2.1.1.1.5 Suburb/Town
2.1.1.1.6 State
2.1.1.1.7 Postcode
2.1.1.1.8 Organisation name
2.1.1.1.9 Faculty/department/school or centre name as appropriate (optional)
2.1.1.1.10 Position in organisation
2.1.1.1.11 Business Hours Phone Number
2.1.1.1.12 After Hours Phone Number (optional)
2.1.1.1.13 Mobile Phone Number (optional)
2.1.1.1.14 Pager Number (optional)
2.1.1.1.15 Fax Number
2.1.1.1.16 Email Address

Miss
Peeranen
Wisansakoolwong
32 Cameron Street, Jesmond
Newcastle
NSW
2299
The University of Newcastle
Faculty of Health/School of Nursing and Midwifery
PhD student
04 0511 5956
04 0511 5956
04 0511 5956
-
-
Peeranen.Wisansakoolwong@studentmail.newcastle.edu.au

2.1.2. Describe the qualifications, expertise and experience of the principal
researcher relevant to this project.

2.1.2.1 Qualifications

I graduated Bachelor of Nursing Science from Kuakarun College of Nursing, Bangkok, Thailand in 1993 and graduated Master of Education (health education) from Srinakharinwirot University, Bangkok, Thailand in 2001. Also, I graduated with certificate in midwifery (international short course training for nurses and midwifery educators) from Boromarajonani College of Nursing, Bangkok, Ministry of Public health, Thailand in 2005.

2.1.2.2 Expertise

I have midwifery expertise especially, in high risk pregnancy and delivery.

2.1.2.3 Experience

I have worked as a midwife in high risk pregnancy ward and delivery room for 14 years.

In 1993-2001, I was a registered nurse and midwife in a high risk pregnancy ward and delivery room in Charoenkrung pracharak hospital in Bangkok, Thailand.

In 2001-present, I have been a midwifery lecturer in the Obstetrics and Gynecological department in Kuakarun College of Nursing which is under Bangkok Metropolitan Administration, Thailand. Also, I have attended nursing students who practise midwifery care in antenatal care, high risk pregnancy wards and delivery rooms in the Medical College and Vajira, Klang, Charoenkrung pracharak and Taksin hospitals which are under Bangkok Metropolitan Administration.

2.1.2.4 Name the site(s) for which this principal researcher is responsible.

The research will be conducted at a single site, Ante Natal Clinic, Medical College and Vajira Hospital in Bangkok, Thailand.

2.1.3 Describe the role of the principal researcher in this project.

1. I will submit the research proposal to the human research ethics committee in Medical College and Vajira hospitals in Bangkok, Thailand. After my research is ethically approved, I will conduct the research.

2. Before collection of data, I will collaborate with obstetrician, midwives, midwifery lecturers and social workers at Ante Natal Clinic then orientate them to the research. At this I will organize referral mechanisms.

3. At the first meeting with participants, I will make appointment for group-based discussions follow hospital schedules. Group-based antenatal care will be provided throughout pregnancy.

4. Every session, I will aim to empower participants to take self responsibility, increase awareness and consciousness. Also, I will encourage participants to reflect their life’s experiences, knowledge, ideas, and feelings.

5. If participants have health problems or emotional problems, I will collaborate with obstetricians or social workers.

6. Data collection and analysis will be concurrent because outcome of emerging themes from early discussion will guide the subsequent group discussions.

7. Fortnightly, I will regularly report data collection, analysis and the progression of studying to supervisors via telephone and email.

2.1.4 Is the principal researcher a student? Yes

2.1.4.1.1 What is the educational organisation, faculty and degree course of the student?

2.1.4.1.1.1 Organisation The University of Newcastle
2.1.4.1.2 Faculty
Faculty of Health

2.1.4.1.3 Degree course
PhD in Midwifery

2.1.4.1.4 Is this research project part of the assessment of the student?
Yes

2.1.4.1.5 What training or experience does the student have in the relevant research methodology?
I am studying qualitative methodology in health research (PHUB 6210) in Faculty of Health, the University of Newcastle. Also, I am studying qualitative research methods in health sciences (HLSC 4122) with my supervisor.

2.1.4.1.6 Describe the supervision to be provided to the student.
Before the research will be conducted, I must be confirmed by oral presentation and verbal defense of the research proposal to the confirmation committee in School of Nursing and Midwifery, the University of Newcastle. Supervision whilst in Australia be via emails and face to face meeting every fortnight or more frequently. During data collection in Thailand, Prof. Fahy will visit me on site in the first three months of data collection. My supervisors will email me fortnightly or more often if required. Email examples of data will be beginning analysis. I will be supervised clinically by Dr. Pahsuvadh Kongein, an obstetrician. I will work collaboratively with a midwifery colleague when conducting the groups.

2.1.4.1.7 How many supervisors does the student have?
2

2.1.4.1.7.1 Supervisor 1

2.1.4.1.7.1.1 Title
Prof

2.1.4.1.7.1.2 First Name
Kathleen

2.1.4.1.7.1.3 Surname
Fahy

2.1.4.1.7.1.4 Qualifications
Kathleen is a professor of midwifery at the Newcastle university. She holds bachelor of nursing and masters of education. She has completed successfully two honours graduates, three Masters of Philosophy graduates and one PhD graduate.

2.1.4.1.7.1.5 Expertise
Kathleen is a critical, post-modern, feminist researcher who has broad expertise in qualitative methods and theory generation. She leads a program of research which involves clinician and Research Higher Degree students. The research program is aimed at optimizing normal childbirth. The program is guided by a midwifery theory: Birth Territory and Midwifery Guardianship. Current and recent projects include: critiques of previous research on the safety of birth center birth versus standard medically-led care; the safety of physiological third stage care versus active management using a matched cohort; predicting normal birth loss in third stage labour using logistic regression analysis; inter-professional interactions and their impact on health outcomes using critical interpretive interactionism; optimizing women’s sense of self during the childbirth year using narrative inquiry; group-based antenatal care to promote optimal outcomes for women at increased risk of premature birth using feminism action research and factors effecting midwives clinical decision-making using narrative inquiry and midwifery interventions designed to increase the rates of breastfeeding at 6 months using a quasi-experimental design.
2.1.4.1.7.1. Supervisor 2

2.1.4.1.7.1. Provide the name, qualifications, and expertise, relevant to this research, of the students’ supervisor

<table>
<thead>
<tr>
<th>2.1.4.1.7.1.1 Title</th>
<th>Dr</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1.4.1.7.1.2 First Name</td>
<td>Pamela</td>
</tr>
<tr>
<td>2.1.4.1.7.1.3 Surname</td>
<td>Van de Riet</td>
</tr>
<tr>
<td>2.1.4.1.7.1.4 Qualifications</td>
<td>Pamela holds bachelor of Nursing and master of education (RN ICU &amp; CCU). She has completed Assessment and Workplace Training, PhD.</td>
</tr>
<tr>
<td>2.1.4.1.7.1.5 Expertise</td>
<td>Pamela is Deputy Head of School at the Newcastle University. She has been involved with qualitative studies for many years and has been awarded three external grants. Dr van der Riet has had extensive experience teaching in universities. Pamela has successfully published in the area of complementary therapies, palliative care and cancer nursing. Currently, she leads a team of University and health care professionals investigating end of life care.</td>
</tr>
</tbody>
</table>

2.2. Associate researcher(s)

2.2.1 How many known associate researchers are there? (You will be asked to give contact details for these associate researchers at question 2.2.1.1) 0

2.2.2 Do you intend to employ other associate researchers? No

2.3. Other personnel relevant to the research project

2.3.1 How many known other people will play a specified role in the conduct of this research project? 5

2.3.1.1 Describe the role, and expertise where relevant (e.g. counsellor), of these other personnel.

One obstetrician (Paksuwan Kongsin) in Medical College and Vajira Hospital which is under Bangkok Metropolitan Administration will be a clinical supervisor when pregnant women have health problems [See Appendix I].

Two midwives (Kanya Vaijavuth and Tipanun Cheungsripisanu) in Ante Natal Clinic in Medical College and Vajira Hospital will asked to women to the study and support me with needed resources [See Appendix J]. They will screen pregnant women who are at risk of premature birth by use participants selection criteria [See Appendix C].

Two midwifery lecturers (Janyalak Sukjaem and Parichart Thano) in Kuakarun College of Nursing will be co-facilitators in group discussion. During the study they hope to develop the knowledge and skills to conduct group-based antenatal clinic independently [See Appendix K].

2.3.2 Is it intended that other people, not yet known, will play a specified role in the conduct of this research project? No

2.4. Certification of researchers

2.4.1 Are there any relevant certification, accreditation or credentialing requirements relevant to the conduct of this research? Yes

2.4.1.1.1 Describe the certification, accreditation or credentialing requirements.

I have Bachelor degree of nursing and midwifery, Master degree of Education and Certificate of midwifery. I finished two research subjects.
2.4.1.1.2 Specify and advise whether the principal researcher or any of the associate researchers have been so certified and/or accredited or credentialed.

I have qualitative methodology knowledge before conducting the research project to Thailand.

2.5. Training of researchers

2.5.1 Do the researchers or others involved in any aspect of this research project require any additional training in order to undertake this research?

2.5.1.1 What is this training?

There will be orientation of the roles of obstetrician, midwives and midwifery lecturers in the research project. Introductory information will be produced related to the research design and process, information statement and consent forms.

2.5.1.2 How and by whom will the training be provided?

The researcher will orientate the others who are assisting me to conduct the research before beginning the research project.

2.5.1.3 How will the outcome of the training be evaluated?

The outcome of training will be evaluated by reflecting on how recruitment is progressing or on how my relationships with the obstetrician and/or midwives are evolving.
3. PROJECT

3.1. Duration and location

3.1.1 In how many Australian sites, or site types, will the research be conducted?
3.1.2 In how many overseas sites, or site types, will the research be conducted?

Provide the following information for each site or site type (Australian and overseas, if applicable) at which the research is to be conducted.

3.1.3. Site / Site Type 1

3.1.3.1 Site / Site Type Name
Medical College and Vajira Hospital in Bangkok

3.1.3.2 Site / Site Type Location
Ante Natal Clinic in Medical College and Vajira Hospital, Bangkok, Thailand 10300.
Medical College and Vajira Hospital is a tertiary hospital in Bangkok with an 80 bed maternity unit. It undertakes approximately 4,500 antenatal cases a year. This hospital has been chosen as the setting because it has a high incidence of premature birth [See section 3.2.1] and it is a part of the medical college.

3.1.4. Provide the start and finish dates for the whole of the study including data analysis

3.1.4.1 Anticipated start date
10/01/2009

3.1.4.2 Anticipated finish date
31/05/2011

3.1.5 Are there any time-critical aspects of the research project of which an HREC should be aware?

3.1.5.1.1 Describe the time-critical aspects.

I have received scholarship and time to study my PhD for 4 years from Kuakarun College of Nursing which is under Bangkok Metropolitan Administration. Therefore, I will collect the data in Bangkok beginning in January, 2009 and ending in February, 2010. I will return to Australia to finish analysis and complete the dissertation by May 2011.

3.2. Research plan

3.2.1 Describe the theoretical, empirical and/or conceptual basis, and background evidence, for the research proposal, eg. previous studies, anecdotal evidence, review of literature, prior observation, laboratory or animal studies.

Approximately, 12 percent of all pregnancies end in premature birth [Gilbert, 2007: 491]. Premature birth is the main cause of neonatal morbidity and perinatal deaths [Etuk, Etuk, & Oyo-Ita, 2005]. Approximately 75 percent of premature births involve spontaneous premature birth from unknown biological causes [Shellhaas & Iams, 2002]. These unknown causes include multiple risk factors that are complex interactions involving connection of body, mind, spirit, emotion, family, socio-economic, culture, community and environment [Behrman & Butler, 2007; Frye, 1999]. Premature birth is not only an individual problem, but is also a national problem. About 24 percent of neonatal death is caused from complications of premature birth [WHO, 2001].

Premature birth is the main cause of perinatal death in Thailand. The incidence of low birth weight is currently 11.2 percent (Ministry of Public Health, 2007). The premature birth rate is higher in the Medical College and Vajira Hospital in Bangkok, where this study is to be conducted. In the 2006, it was 15.66 percent reflecting referrals from other hospitals (Medical College and Vajira Hospital, 2007).

THE THEORETICAL AND CONCEPTUAL BASIS

There are four theories that frame my understanding of premature birth. Firstly, Allostasis theory which sees health as the outcome of multiple factors that dynamically interact. The relevant factors in allostasis that affect premature birth are personal genetic risk factors, early life events, working environment, interpersonal relationship, diet, exercise, sleep, lifestyle and health related behaviors, previous and current socioeconomic
stress and environmental experiences [Carlson & Chamberlain, 2005; Lupien et al., 2005; McEwen, 1998, 2000, 2005, Shannon et al., 2007]. According to allostatic theory, if pregnant women have physical-psycho-socio-economic stress, Corticotrophin Releasing Hormone (CRH) will increase and stimulates increasing of Adrenocorticotropic Hormone (ACTH) and Cortisol. Higher levels of CRH for a long period of time may ultimately result in miscarriage and premature birth [Warren, Patrick, & Goland, 1992]. This is because mammals tend to miscarry in situations of stress [Carter, DeVries & Getz, 1996; Carter, 2003; Fourour, 2006].

Secondly, feminist theory is an understanding of gender inequality, emphasizing gender politics, power relations and increasing consciousness. Thirdly, midwifery partnership is a relationship which links pregnant women and midwives. Partnership in midwifery care involves holistic caring; physical, mental, emotional, social and spiritual care. Midwifery partnership encompasses negotiation, equality and reciprocity, trust and time, sharing power and responsibility, empowerment and emancipatory and professional friendship [Freeman, Temperley, & Adair, 2004; Guilliland, 2004; Pairman, Pincombe, Thorogood, & Tracy, 2006, p. 250]. Lastly, the Centering Pregnancy group-based antenatal care emphasizes encouragement and empowerment of pregnant women. Group-based antenatal care aims to support women to take self responsibility and increase self awareness, consciousness and build network among women [Rising, 1998]. These theories are essential in the guidance and support for my planned action research study in Thailand.

EMPIRICAL BACKGROUND

The prevention of premature birth can be conceptualized as primary, secondary and tertiary interventions [Gilbert, 2007; Iams et al., 2008]. The vast majority of medical research concerns secondary and tertiary interventions. These interventions have been focused on treatment once premature labour is threatened or begun. By comparison, midwifery research is directed towards primary prevention of premature labour by aiming to antenatally reduce the risk factors for pregnant women who are at higher risk. The detail of medical and midwifery research is summarized below.

Medical research

Medical interventions are of four main types; [1] cervical cerclage, [2] antibiotic therapy, [3] tocolytic medications and [4] progesterone treatment. Cervical cerclage seems to be effective in preventing premature birth below 34-35 weeks gestation for women who are not laboring and who are at high risk due to previous early loss and/or cervical incompetence. Cerclage has no benefit for women after 35 weeks gestation. Importantly cervical cerclage is not effective once labour has commenced. This intervention is of no benefit to women as a way of preventing the first premature pregnancy loss. The common complications that are associated with cervical cerclage include infection, premature rupture of membrane, increasing use of antibiotic and tocolysis and rehospitalization if used in that context [Hassan et al., 2001; Novy et al., 2001; Rust et al., 2001; Yanamandra & Arulkumaran, 2006].

Secondly, some antibiotics may effective be in reducing premature births. For instance, clindamycin treatment in earlier gestations may prevent ascending infection, but only in the presence of an infection [Lamont, Duncan, Mandal, & Bassett, 2003; Ugwuamadu, Manyonda, Reid, & Hay, 2003]. However, two meta-analyses of antibiotic treatment were undertaken by McDonald, Brocklehurst, & Gordon [2005] and Simcox et al. [2007]. The key findings were treatments did not reduce premature birth before 37 weeks of gestation. There is insufficient evidence for and treatment in all pregnant women for bacterial vaginosis [McDonald, Brocklehurst, & Gordon, 2005; Simcox et al., 2007].

Thirdly, tocolytic medicines do not decrease the premature birth rate, but do extend pregnancy by a few days. Extra days can allow steroids to stimulate lung surfactants of the fetus [Cunningham, 2005]. However, some tocolytics have short and long term impacts and side effects to wellbeing of pregnant women. For instance, the side effects of terbutaline, a common tocolytic, include tachycardia, tremor, palpitations, hypotension, hyperglycemia and hypokalemia [Cunningham, 2005]. There is conflicting data about the effect of tocolytics on perinatal mortality [Crowther, 2003; Mittendorf, 2002].

Lastly, progesterone treatment for prevention of premature birth seems to be effective. The American College of Obstetricians and Gynecologists Committee on Obstetric Practice Number 291 recommended the use of progesterone by intramuscular injection and vaginal suppository to reduce preterm birth. However, ACOG [2003] advises this intervention should be confined to pregnant women with history of previous preterm birth [ACOG, 2003]. Importantly, the use of progesterone has been criticized especially, since long term safety and harm of progesterone on pregnant women or neonate has not been established [Dodd, Flenday, Cincotta,
& Crowther, 2006; Gonzalez, 2006, Mackenzie et al., 2006; Ness, Dias, Damus, Burd, & Bergella, 2006; Thornton, 2007; Wahabi et al., 2007). Furthermore, WHO reproductive recommends that progesterone should be used with caution because it is not known whether prolongation of gestation leads to improved outcomes for mothers and their infants.

Thus, in spite of thirty years or more of medical research, premature birth rates are not decreasing. Indeed they are continuing to increase in western countries (Behrman & Butler, 2007). The treatments that show some effectiveness also have significant side effects. A primary health care approach in preventing premature birth through targeted health promotion is needed.

Midwifery research

Midwifery research primarily focuses on pregnant women who are at risk of premature birth. Midwifery interventions are not invasive and are not discussed in the medical literature. For instance, the Centering Pregnancy group antenatal care is a feminist, midwifery intervention. It takes a holistic approach so that all the health promoting factors can be addressed in a single intervention that is provided prolonged time. Group-based antenatal care has usually been offered to women who are at socio-economic disadvantage and have increased health risks; including the risk of premature birth and small for date's babies (Rising, 1998; Rising, Kennedy, & Klima, 2004). In a Randomized Control Trial 1047 women, the premature birth was reduce from 13.8% in the control group to 9.8% in the antenatal care group (Ickovics et al., 2003). Group-based antenatal care has been effective in reducing premature birth in the USA and Britain (Grady & Bloom, 2004; Ickovics et al., 2003, 2007; Rising, 1998). The way that group-based antenatal care reduces premature birth rates is not known. Group-based antenatal care appears to operate holistically on women as bio-psycho-social-spiritual beings. Sterling's theory of allostatics provides some biological evidence in support.

In Thailand, pregnant women are assessed by both midwives and obstetricians in the antenatal clinic but no midwifery care is directed towards preventing the early onset of labour. The midwife’s role is in major Bangkok maternity units are limited to medically delegated functions. There are currently no Thai examples of midwifery care aimed at preventing premature birth. Instead midwifery care is focused on pregnant women after they are admitted to hospitals for medical treatment.

This project will use feminist action research with a midwifery partnership to introduce a practice change in Thailand. The research question requires me to adopt and modify the United Stated of America version called Centering Pregnancy to my practice as a midwife in Thailand. The main differences between the planned Group-based antenatal care in Thailand and Centering Pregnancy are:

1. The Thai program is specifically for women at high risk of premature birth whereas the Centering Pregnancy program was designed for all women who are culturally, socially or economically disadvantaged.

2. The Thai program will be designed and evaluated by the group; the content will be negotiated. No pre-existing curriculum will be used.

3. In Thailand the group will be a women’s only group. Female support people will be welcome if the women as a group agree. In the Centering pregnancy groups male and female support people are welcome at all times.

4. In Thailand the group members will receive standard medical antenatal care as normal. The group-based antenatal care is additional. In Centering Pregnancy the physical aspects of individual antenatal care are provided by one midwife whilst the other conducts the group. There is no separate antenatal care.

3.2.2 State the aims of the research and the research question and/or hypotheses, where appropriate.

The research question is How can midwives facilitate group based antenatal care in ways that are most valued by Thai women who are at increased risk of premature birth?

The research aim is to develop a culturally appropriate model of midwife facilitated group-based antenatal care that is valued by Thai women who are at risk of premature birth.

3.2.3 Describe how the research design and the methods to be used will enable the research aims to be achieved.
1. RESEARCH METHODOLOGY

The research methodology is Feminist Action Research [FAR]. Contemporary forms of emancipatory feminism and Action Research both have their roots in Critical Social Theory [Reason, 2008]. Critical Social Theory is related to neo-Marxism and the Frankfurt School of philosophy. The goal of Critical research is to develop enhanced consciousness in all the research participants; including the researcher. An outcome of Critical research is to create theory that can be used to build a fairer society [Kincheloe and McLaren, 2005].

Feminist Action Research [FAR] is a group-based methodology where the research is conducted in the real world. Feminist Action Research and feminist research emphasise collaboration, negotiation, participation, emancipatory change and social action [Reid, 2000]. Action research begins with a practice problem, issue or concern. Feminist Action Researchers take a critical perspective and pay particular attention to the socio-political context in which practice occurs. Understanding the context is essential in order to be able to support practice change in line with what women say is most beneficial for them [Kemmis & McTaggart, 2005; Reid, 2000].

Feminism is the theory, research and practice of identifying, understanding and changing intrapersonal and social factors that sustain women’s disempowerment [Harrison & Fahy, 2005]. The principles of feminist research [Brisolara & Seigart, 2007; Clarke, 2007; Hesse-Biber & Brooks, 2007; Lykes & Coquillon, 2007; Reid & Frisby, 2008] as applied to this study are:

1. Women’s concerns are at the center of the research
2. The researcher’s own values are made explicit
3. The researcher’s own experiences will be included
4. Relationships with the research participants will be based on equality
5. The researcher will be explicitly reflexive and is aware of the privilege of being reflexive via the experience of others.
6. The goal is to improve the experiences and lives of women
7. The researcher will explicitly consider the categories of oppression (age, gender, sexuality, race, class, ability)
8. Feminist analysis will include both emic and etic perspectives
9. Feminist researchers pay careful attention to the use of language
10. Feminist analysis considers and explains gaps and silences in the data
11. Feminist analysis explores competing discourses
12. Feminist may extend existing theory by using it to make meaning of data
13. Feminist analysis may result in the generation of new concepts and build them into a theory
14. The research result will provide information for women rather than about women

2. RESEARCH DESIGN

2.1 Feminist Action Research

There are various forms of action research so for this study I have chosen to use the feminist praxis framework developed by Fahy [1996]. In that framework the action research process is conceptualised as an ongoing spiral of Practice, Reflection, Scholarly Inquiry leading to Theorising and Changed Practice. I chose this framework because it is feminist and because it places particular emphasis on both theorising and changing practice.

Practice

Practice, in this research will be practising and researching simultaneously. In my practice as a midwife and the researcher, I will work to develop implement and evaluate a new model of group-based antenatal care [See below].

Reflection

I will be reflecting as a midwife and I will be inviting women to reflect. The model of reflection is based on Boud [1985] and has been used by Fahy [1996]. Reflection means [1] returning to experiences and dwelling on the details [2] attending to feeling of self and other and [3] re-evaluating experiences [Boud, 1986]. Reflection will also involve group reflection where I will invite the group to reflect on their experiences in the group and in their lives. I will particularly encourage them to focus on their experiences that seem to offer the most
potential for learning about health promotion. The outcome of reflection will be: (1) new understanding (2) possible transformation in behaviours and (3) commitment to action (Boud, 1985). In reflection I will record in a journal my own experiences, feelings, beliefs and actions. Each week there will be allocated time for group reflection. At the end of this study the last group will be devoted to reflective evaluations.

Scholarly inquiry

After practice and reflection, I may be confronted with questions, doubts or uncertainties so I will use scholarly inquiry to address uncertainties or doubts. Scholarly inquiry may involve questioning supervisors, counsellors, academic experts. It will involve reading books, journals, and electronic data.

Theorising

Theorising is the outcome of reflection on practice to explain phenomena of interest. The aim of theory that arises from critical research is to reflect or improve our knowledge, whilst aiming to develop practice that succeeds in the real world (Habermas, 1973). The main outcome of this project will be recommendations for practice improvements. I may also develop new concepts or modify concepts from existing theory that have been used to frame this study. I will theorise about the philosophy and format that is most suitable for group-based antenatal care in Thailand. I will use thematic analysis to organise the women’s accounts of their experiences of group-based antenatal care so as to clearly identify what is most and least valued.

2.2 Group Based Antenatal Care

The planned process for conducting group-based antenatal care in Thailand is consistent with the principles of feminist group process (Wheeler & Chinn, 1989) and broadly consistent with feminist research principles as described above. Some of the group processes which are in the Centering Pregnancy Program will be adapted for the Thai group-based antenatal care program (Rising, 1998). The key principles that will guide the way the group functions are based on the principles used for Group Based Antenatal Care in the USA (Massey, Rising, & Ickovics, 2006, p. 299; Rising, 1998; Rising, Kennedy, & Klima, 2004, p. 399).

1. Women are responsible for their own health.
2. Facilitation of the group will aim to ensure that every woman feels equal, including the midwife.
3. The plan for the content of each session will be agreed by the group.
4. Each member of the group will be encouraged to participate and listen respectfully.
5. Once the group is formed no new members are added.
6. Once a woman has started in the group she is invited to continue even if she has a premature birth.
7. Each group will end with refreshments being served and socialization being encouraged.

In addition, I will invite participants to contribute journal reflection, drawings, photographs or any other form participants wish for presenting their experiences. Participants who wish to share photographs will be asked to sign the consent form. The first meeting guidelines will include asking women to use pseudonyms when talking about other people so as not to cause damage to the reputation of others. In my dissertation, I will write de-identified information and only use images for which I have the consent of all people in the image.

Organisation of the Groups

There will be two groups involving 6-8 participants per group. Group one will begin 8 weeks before group two (See Appendix H). I will reflect on my experiences and complete the first level of data analysis with the support of my supervisors. This will allow me to carefully consider improvements in how group-based antenatal care in working before I start the group two.

Nine group sessions will be planned to occur on a fortnightly basis. Each group will last each of 60-90 minutes. I will organize for the participants to then come to group-based antenatal care on the same day as they have their standard antenatal appointment with the obstetrician. I will organize for morning or afternoon tea to be available after each meeting to encourage the women to stay and socialize with each other and me. Participants will be invited to continue in the group until the last baby of the group is born and we have had a final group meeting. Thus, even if women have a premature birth they will be still welcome to continue with the group.

Process for Collecting Data from Action Research Groups
The group-based antenatal care sessions will be conducted as praxis i.e. practising and researching simultaneously. Thus the content of the sessions which will be aimed at understanding and optimising women’s health will also be the data that is generated as part of action research. The second midwife will record detailed notes in point form during each session. These notes will be recorded in time in 15 minute intervals.

The first and last sessions will be facilitated by the researcher. The remaining sessions may be facilitated by participants with the support of the researcher and midwifery colleagues who will take notes (These details are described below). All sessions will be audio recorded. Group norms will be set to encourage only one person to speak at a time which is good group process and good for audio recording.

1. The first session

The first session will be concerned with creating the friendly environment, group norms and midwife/researcher’s roles and ethics. I will facilitate group members to feel free to express their experiences and opinions without concern about agreement and disagreement of other in the group [See Appendix 6: The first session].

2. Session 2-8

The plan of group-based antenatal care session 2-8 will have a similar group agenda [See Appendix 6: Session 2-8 for details and list of possible topics]. Each group meeting will be focused on creating discussion among the women about health related topics. In session 2-8, each participant may facilitate the group discussion.

2.1 Check in: each woman is invited to speak briefly, or pass, about how she is feeling today (about 15 minutes).

2.2 Reflection and evaluation of last session

2.3 Group consideration of possible topics for discussion today; any changes? (About 5-10 minutes).

2.4 Active discussion on the agreed topic [about 45 minutes]. My aim is to invite participants to tell stories of their experiences as they relate to each topic and also to share their journal reflections. Then I would want us as a group to think about the factors that either promote or diminish healthful behaviours with particular emphasis on the social and cultural factors. Finally, I would invite the women to identify action strategies that they would like to use either individually or collective with the aim of promoting health.

2.5 The last 15-20 minutes will be devoted to reflection, evaluation and recommendation on the strengths and weaknesses of the group meeting and planning what needs to happen next time the group meets. I will record audio-tape and/or take field notes immediately after each group discussion.

3. The last session [After birth]

The last session will be concerned with a collective evaluation of the group-based antenatal care and the impacts of this on participants’ health and wellbeing. I will facilitate each member to express their experiences from group-based meeting. If it is possible, I will collaborate with midwives and participants to create networking and relationships for transformation [See Appendix 6: The last session].

These group-based processes will continue until, hopefully, the data is saturated. Data saturation is said to have occurred when; there have been a sufficient number and diversity of research participants to give confidence that the research question has been considered from multiple perspectives. Data saturation requires that the research question has been fully and deeply answered and no more new knowledge is arising from the data (Bifulf, 2006).

Data Analysis

There will be two data sources:

[1] Audio recorded group-based discussions with 12-16 participants throughout research project about 12 months resulting in about 36 hours of recordings.
(2) Field notes will comprise of 1) the detailed notes taken during sessions and 2) the researcher’s reflection after sessions. Field notes will be collected from my experiences, observations, medical records, my reflective journal throughout data collection and analysis (12 months).

Field notes will be transcribed what was said into English text and store it in CD and computer files. Selected parts of what was said will be transcribed. Selection will be based on relevance to the research question. In order to protect the identity data of participants pseudonyms will be used. All transcription and translation into English will be done by the researcher. All participants identified details will be treated separately and not be directly linked to interview data.

Data analysis aims to answer the research question. Thus analysis will be carefully guided by the question. Data collection and analysis will be concurrent. Data will be analysed by [1] Listening to and reading interview data, and field notes, including my reflective journal [2] Transcribing [3] Coding and categorizing (looking for similarities and differences, and constant comparison [Holloway & Wheeler, 2002]. Depending upon the type of information that is being generated by the research either recurrent themes for women’s expression and evaluations or theoretical concepts to develop a theoretical framework for group-based antenatal care in Thailand will be inducted.

3.3. Research significance

3.3.1 What is the value of answering the research question and conducting the project? NS 1.13 NS 1.14

This study is expected to develop and implement a new model of group-based antenatal care for pregnant women who are at risks of premature birth in a major maternity unit in Bangkok. Thus, the value of answering the research question are:

1. That the health and well being of participants may be enhanced. Participants will have more knowledge of what can be done to improve their individual lives and the lives of other women.

2. The research answer will enhance midwifery knowledge to optimize women’s health and prevent premature birth.

3. The successful implementation of group-based antenatal care can be more widely available across hospitals and public health centers in Thailand including other developing countries.

3.4. Peer review

3.4.1 Has the research proposal, including design, methodology and evaluation undergone, or will it undergo, a peer review process?

3.4.1.1 Provide details of the review and the outcome. A copy of the letter / notification, where available, should be attached to this application.

According to the peer review, the study design is appropriate to the situation and appears to have been well thought through (see NEAF Supplement and Peer Review Declaration)

The following questions sets (Q.3.5 - 3.11) relate to the collection, use and disclosure of information for research purposes. In answering these questions please ensure that you address all issues relevant to the type of project and type of participants that will be involved in your research project. Refer for guidance to relevant chapters of the National Statement, NEAF Guidance and other NHMRC guidelines as appropriate.

3.5. Source and description of information about participants

3.5.1 Indicate the source of the information about participants which will be used in this research project.

[X] Information will be collected directly from the participant.

[ ] Information will be collected from another person about the participant.

[X] Information will be collected by accessing a record or an information database held by an organisation other than your organisation.

[ ] Information will be used which you or your organisation collected previously for a purpose other than this research project.

3.5.1.1.0 Information which will be collected for this research project directly from the participant
3.5.1.1.1 Describe the information that will be collected directly from participants. Be specific where appropriate.

Data will be collected by unstructured questions through group-based discussion and the women’s medical records. I will facilitate group discussions (designated topics from participants in the first session). I have created a draft antenatal care program as well (See Appendix G) but what is actually discussed will be up to the group members. The process of each meeting will use Thai language and will record the discussion on audio recorders.

3.5.1.1.2 The information collected by the research team about participants will be in the following form(s). Tick more than one box if applicable.

[X] Identified
[ ] Non-identified

3.5.1.1.2.1 Give reasons why it is necessary to collect information in identified or potentially identifiable (coded) form.

The women’s pseudonyms need to be used in the transcribed data so that the researcher can keep track of each woman’s journey within the action research group process.

3.5.1.1.3 Will consent be sought from participants (or for participants from persons with legal authority) for the collection and use of information about them?

Yes

3.5.1.3.0. Indicate the number of databases, from which you will be collecting information, held by any of these categories of agencies.

3.5.1.3.1. Indicate from which of the following you will be collecting information and indicate how many databases at each source.

3.5.1.3.1.1 A Commonwealth government department or agency 0
3.5.1.3.1.2 A state/territory authority 0
3.5.1.3.1.3 A private sector organisation 0

3.5.6 Use of information about participants

3.6.1 Describe how information collected about participants will be used in this project.

Information collected will be transcribed, sorted and coded with pseudonyms.

3.6.2 Will any of the information used by the research team be in identified or potentially identifiable (coded) form?

Yes

3.6.2.1.1 Give reasons why it is necessary to use information in identified or potentially identifiable (coded) form.

Data will be coded because I will consult my supervisors by use the coded form.

3.6.2.1.2 Indicate whichever of the following applies to this project:

[X] Information collected for, used in, or generated by, this project will/may be used for another purpose by the researcher for which ethical approval will be sought.

3.6.4 List ALL research personnel and others who, for the purposes of this research, will have authority to use or have access to the information and describe the nature of the use or access. Examples of others are: student supervisors, research monitors, pharmaceutical company monitors.

I will use identified data. Supervisors will have access to de-identified data only.

3.7. Storage of information about participants during and after completion of the
3.7.1 In what formats will the information be stored during the research project? (e.g. paper copy, computer file on floppy disk or CD, audio tape, videotape, film)

Data will be recorded by audio recorders, field notes and reflective journal. Later, data will be transcribed what was said into English text and store it in CD and computer files. In order to protect the identity of participants, pseudonyms will be used in the transcription. All transcription and translation into English will be done by the researcher. All identifiable data, including audio-recordings will be stored separately and not be directly linked to the transcribed data.

3.7.2 Specify the measures to be taken to ensure the security of information from misuse, loss, or unauthorised access while stored during the research project? (e.g. will identifiers be removed and at what stage? Will the information be physically stored in a locked cabinet?)

All identifiable data collected from the research will be stored in either a locked filing cabinet in a locked room. Only unidentifiable data will be stored on password protected laptop computer. The researcher will access the identifiable and unidentified data but only supervisors will be able to access the unidentified data.

3.7.3 In what formats will the information be stored after project completion? (e.g. paper copy, computer file on floppy disk or CD, audio tape, videotape, film)

All data will be stored in digital form. All paper copies will be destroyed once the examination process is completed.

3.7.4 Specify the measures to be taken to ensure the security of information from misuse, loss, or unauthorised access while stored after project completion (e.g. will identifiers be removed and at what stage? Will the information be physically stored in a locked cabinet?)

Only pseudonyms will be used in publications derived from the dissertation. The research materials will be stored in a locked cupboard in a locked room of the School of Nursing and Midwifery, Faculty of Health, the University of Newcastle for a period of five years. No names or identifying information will be kept. All information will be destroyed at the end of five years by the School Executive Officer.

3.7.5 The information which will be stored at the completion of this project is of the following types[1]. Tick more than one box if applicable.

[ ] Identified
[ ] Potentially identifiable (coded)
[ ] De-identified

3.7.6 For how long will the information be stored after the completion of the project and why has this period been chosen?

According to the policy of the university, the information will be stored for five years at the University of Newcastle, Faculty of Health

3.7.7 What arrangements are in place with regard to the storage of the information collected for, used in, or generated by this project in the event that the principal researcher ceases to be engaged at the current organisation?

If the principal researcher ceases to be engaged at the current organization, all the information and data will be sent to the University of Newcastle immediately.

3.8. Ownership of the information collected during the research project and resulting from the research project

3.8.1 Who owns the information collected for the research project?

The midwife/researcher who generated it.

3.8.2 Who is understood to own the information resulting from the research, eg. the final report or published form of the results?

The midwife/researcher who generated it.

3.8.3 Does the owner of the information or any other party have any right to impose limitations or conditions on the publication of the results of this project?

No

3.9. Disposal of the information

3.9.1 Will the information collected for, used in, or generated by this project be disposed of at some stage?

Yes
3.9.1.1.1 At what stage will the information be disposed?
After completion of the project the hard copy of documents will be shredded. All data on the computer will be transferred to university on a CD.

3.9.1.1.2 How will information, in all forms, be disposed?
The information will be destroyed by shredding.

3.10. Reporting individual results to participants and others

3.10.1 Is it intended that results of the research that relate to a specific participant be reported to that participant? No
3.10.1.2 Explain/justify why results will not be reported to participants.
Because the research is not about specific individuals, it is group-based. Also, the result will be written in English language so Thai women are unlikely to be able to read it. However, a Thai language summary of the final results will be sent to participants on request.

3.10.2 Is the research likely to produce information of personal significance to individual participants? No

3.10.3 Will individual participant’s results be recorded with their personal records? No

3.10.4 Is it intended that results that relate to a specific participant be reported to anyone other than that participant? No

3.10.5 Is the research likely to reveal a significant risk to the health or well being of persons other than the participant, eg family members, colleagues? No

3.11. Dissemination of Final Results

3.11.1 How is it intended to disseminate the results of the research? eg report, publication, thesis
After the completion of data analysis, the result will be presented at seminar and conference in school of Nursing and Midwifery, the University of Newcastle. The research result will be written up in a dissertation and published in local and international journals.

3.11.2 Will the confidentiality of participants and their data be protected in the dissemination of research results? Yes
3.11.2.1 Explain how confidentiality of participants and their data will be protected in the dissemination of research results
There will be no individually identifiable data in the disseminated results.

3.11.3 Is there a risk that the dissemination of results could cause harm of any kind to individual participants – whether their physical, psychological, spiritual, emotional, social or financial well-being, or to their employability or professional relationships – or to their communities? No

3.12. Benefits/Risks

In answering the following questions (Q 3.12.0 – 3.12.8) please ensure that you address all issues relevant to the type of participants that will be involved in your research project. Refer for guidance to relevant chapters of the National Statement and other NHMRC guidelines as appropriate.

3.12.0 Does the research involve a practice or intervention which is an alternative to a standard practice or intervention? No

3.12.1 What expected benefits (if any) will this research have for other members of the population to which the participants belong?
The results of the study may encourage more widespread introduction of group-based antenatal care and
aims to improve the health of pregnant women who are at risk of premature birth.

3.12.2 What expected benefits (if any) will this research have for the wider community?  
This study may be used by others as a basis for establishing group-based antenatal care for other pregnant women at other hospitals and public health centers in Bangkok and Thailand more generally.

3.12.3 What expected benefits (if any) will this research have for participants?  
Participants will be encouraged to take self-responsibility and to develop enhanced awareness and consciousness of the factors that contribute to their own health. They will experience health discussions and network with other women and some will form friendships that will promote their improved psychological and physical health and well-being. Participants will have more knowledge about the risk factors of premature birth; particularly behaviours like smoking that should be avoided.

3.12.4 Are there any risks to participants as a result of participation in this research project?  
Yes

3.12.4.1.1 What are those risks? eg. potential for harm, distress, loss of employability, loss of reputation/standing, exposure to civil/legal/other proceedings  
This study presents no threat to participants' physical welfare. The participants are at an increased risk of premature birth but this risk will not increased and may be decreased as a result of this study. However, this research involves group-based discussion and participants may experience emotional distress in discussing previous or current painful experience. Some women will probably have a premature birth and this may cause distress.

3.12.4.1.2 Explain how these risks will be negated/minimised/managed.  
I will attempt to minimise the risk of emotional distress by the way I will facilitate group discussion consistent with feminist theory [See research methodology in section 3.2.3]. The first session will be concerned with creating a friendly environment and the setting of group norms aimed at creating emotional safety. If participants experience distress I will respond empathetically and offer to refer the woman for counselling with a psychologist or social worker. My referral networks will be clearly established before I start the groups. If participants have a premature labour I will visit them in the hospital and offer my support. This is culturally appropriate practice in Thailand. Women who have a premature birth will be invited to continue in the group.

3.12.4.1.3 Explain how these risks will be monitored.  
I will maintain close observation of participants emotional state. If I have any concerns about a participant's wellbeing I will speak to her privately to inquire further. If she wishes me to I will make an appropriate referral.

3.12.4.1.4 Explain how these risks, if they result in harm to participants, will be reported.  
I will report any incidents to the supervisors by phone or email as soon as they occur and to the ethics committee, by letter, as soon as practicable.

3.12.5 Explain how the risks/burdens of participation are balanced by the any benefits of the research.  
The participants will receive group-based antenatal care and group discussion. They may benefit from the research and there is no foreseeable harm from participation. I will have referral networks established before the groups commence so if needed I can make appropriate referrals.

3.12.6 Is it possible that the research will involve the disclosure of unlawful conduct, or concealment of a crime, by individuals or definable groups?  
Yes

3.12.6.1.1 Will the researcher have a legal duty to disclose any of that information?  
Yes

3.12.6.1.1.1 How will this duty be managed?  
One or more of the participants may be involved in drug abuse and as this has the potential to harm the child I would tell the women that I would report this via the hospital social work department. One or more may disclose that they are victims of domestic violence (DV). I will offer support by individual discussion and also working collaboratively with the social workers and nursing counsellors to link the woman to support services such as women’s right protecting centre or the support centre for drug users which is located in this hospital.

3.12.6.1.2 What steps, if any, will be taken to protect participants?  
Participation in the study is on a voluntary basis and participants are free to may withdraw their data or withdraw from the study at any time they wish without any threat to their care. At the first meeting I will tell
the women what I will do if they disclose to me of their involvement or knowledge of illegal activity (See the information sheets at appendices E and F). I will say that I have an ethical (not a legal duty in Thailand) to report child abuse or neglect. I will tell them that if they disclose that they are involved in serious crime; e.g. drug dealing, then I will have to report that to the police. If such a serious event occurred, however, I would also have to end the research because reporting drug dealing could place me in danger.

3.12.7 Explain how the dignity and wellbeing of participants takes precedence over the expected benefits to knowledge.

I will invite women at the beginning to feel free to raise any issues or concerns with me privately. In addition I will monitor the emotional wellbeing of each woman in the group and if I have concerns I will invite them to speak to me privately. I will remind the group members that they are free to withdraw from the study any time, however, without threat to their care.

3.12.8 Are there any other risks involved in this research? e.g. to the research team, the organisation, others

3.12.9 Is it anticipated that the research will lead to commercial benefit for the investigator(s) and or the research sponsor(s)?

3.13. Monitoring

3.13.1 What mechanisms do the researchers intend to implement to monitor the conduct and progress of the research project?

I will use unstructured interviews for facilitation because the unstructured interviews help participants to feel free to share their opinions during discussion. Progress of the study will be regularly reviewed during supervision with both research supervisors. Supervision will be via fortnightly telephone calls, emails and monthly face to face meetings. Data collection and analysis of the study will be monitored by the researcher’s regular communication with supervisors.
4. PROJECT SPECIFIC

Your responses to questions at Sections '1.3 - Type of Research' or '1.4 - Research participants' indicate that the HREC will require additional information which is specific to your research project. The following table indicates the question set relating to the project that you will need to complete. If this is not correct please return to sections 1.3 or 1.4 to amend your answer.

4.11
Research conducted overseas

4.11. Research conducted overseas

You have indicated that the project involves research conducted overseas.

4.11.5 Will this research project involve access to, use, collection or acquisition of culturally sensitive artefacts?

No

4.11.6 Are there local factors which make it problematic to comply with ethical standards expressed in the National Statement

No
5. PARTICIPANTS

5.1. Participant description

5.1.1 How many participant groups are involved in this research project?

5.1.2 Expected total number of participants in this project at all sites

12-16

5.1.3. Group 1

5.1.3.1 Group name for participants in this group
The First Group-Based Antenatal Care for Prevention of Premature Birth.

5.1.3.2 Expected number of participants in this group

6-8

5.1.3.3 Age range

> = 16 Years

5.1.3.4 Other relevant characteristics of this participant group

1. Gestational ages < 24 weeks.
2. Ability to speak Thai language.
4. Neither intellectually nor mentally impaired in ways that would preclude effective group interaction.
5. There are no serious concurrent diseases e.g. heart disease or leukemia.

5.1.3.5 Why are these characteristics relevant to the aims of the project?

1. Ability to speak Thai language is very important because they must be competent to understand the research process, information statement and consent form. The group will be conducted in the Thai language. Some with materials are likely to be distributed

2. Gestational age less than 24 weeks is early enough to allow women to be engage in the group.

3. Women who have intellectual, mental impairment would preclude effective group interaction.

4. Multiple pregnancy and serious concurrent diseases may be too unwell to participate fully.

5.1.3. Group 2

5.1.3.1 Group name for participants in this group
The Second Group-Based Antenatal Care for Prevention of Premature Birth.

5.1.3.2 Expected number of participants in this group

6-8

5.1.3.3 Age range

> = 16 Years

5.1.3.4 Other relevant characteristics of this participant group

1. Gestational ages < 24 weeks.
2. Ability to speak Thai language.
4. Neither intellectually nor mentally impaired in ways that would preclude effective group interaction.
5. There are no serious concurrent diseases e.g. heart disease or leukemia.

5.1.3.5 Why are these characteristics relevant to the aims of the project?

1. Ability to speak Thai language is very important because they must be competent to understand the research process, information statement and consent form. The group will be conducted in the Thai language. Some with materials are likely to be distributed

2. Gestational age less than 24 weeks is early enough to allow women to be engage in the group.

3. Women who have intellectual, mental impairment would preclude effective group interaction.
4. Multiple pregnancy and serious concurrent diseases may be too unwell to participate fully.

5.1.4. Your response to questions at Section `1.4 - Research Participants` indicates that the following participant groups are excluded from your research. If this is not correct please return to section 1.4 to amend your answer.

People with an intellectual or mental impairment

People in existing dependent or unequal relationships with any member of the research team, the researcher(s), and/or the person undertaking the recruitment/consent process (e.g., student/teacher, employer/employee, warden/prisoner, officer, enlisted soldier, patient/doctor)

Aboriginal and/or Torres Strait Islander peoples

5.1.4.1 Explain why this group(s) of people is specifically excluded from the research project.

This research and intervention have been designed for competent adults and will be conducted in Thailand. Participants in this study must be competent and able to understand the research intervention.

5.2. Participant experience

5.2.1 Provide a concise detailed description, in not more than 200 words, in terms which are easily understood by the lay reader, of what the participants will experience.

Participants in both groups will be invited in the study by receiving the information statement and consent form. Within group-based discussion, I will use unstructured interview [See appendix G].

5.3. Relationship of researchers to participants

5.3.1 Specify the nature of any relationship, existing or possible, between the research team or an organisation involved in the research and the potential participants.

There will be no pre-existing relationship between the researcher and potential participants. Nonetheless, midwives will screen and provide research information to potential participants. There will be a relationship constructed between the researcher and actual participants in the collection of data.

5.3.2 Describe what steps, if any, will be taken to ensure that the relationship does not impair participants’ free and voluntary consent and participation in the project.

Participants will be able to participate and make their decisions freely because they will return their consent forms after their visit with the obstetricians. They will put their consent forms in a locked box near the reception counter, away from the midwives’ counter.

5.3.3 Describe what steps, if any, will be taken to ensure that decisions about participation in the research do not impair any existing or foreseeable future relationship between participants and researcher or organisations.

Midwives, midwifery lecturers and obstetricians will have no access to participants’ information who consider to participate in this study.

5.4. Recruitment

5.4.1 What processes will be used to identify potential participants?

Midwives at Ante Natal Clinic will identify potential participants by use participant selection criteria [See Appendix C].

5.4.3 Describe how initial contact will be made with potential participants.

Midwives will explain the research process to potential participants. If they are interested in this research, midwives will give them the information statement and consent form.

5.4.2 Is it proposed to ‘screen’ or assess the suitability of the potential participants for the study? Yes

5.4.2.1.1 How will this be done?

Midwives at Ante Natal Clinic will screen potential participants by use participant selection criteria [See Appendix C].

5.4.4 Is an advertisement, e-mail, website, letter or telephone call proposed as the form of initial contact with potential participants? No

5.4.5 If it became known that a person was recruited to, participated in, or was excluded No
from the research, would that knowledge expose the person to any disadvantage or risk?

5.4.6 Will the research involve the intentional recruitment of any groups whose welfare, rights, beliefs, perceptions, customs or cultural heritage requires specific regard? NS 1.2

5.5 Consent process

5.5.1 Will consent for participation in this research be sought from all participants? Yes

5.5.1.2 Will there be participants who have capacity to give consent for themselves? Yes

5.5.1.2.1 What mechanisms/assessments/tools are to be used, if any, to determine each of these participant’s capacity to decide whether or not to participate?
Participants will receive the information statement and consent forms so they must be able to read, write and speak Thai easily.

5.5.1.2.2 Will there be participants who do not have capacity to give consent for themselves? No

The following questions relate to participants who are able to provide consent and also to participants for whom consent may be provided by a person with legal authority to do so.

When answering these questions you need to describe any differences in the processes followed, or the documentation used, for different groups of participants in your proposal, e.g., processes and documentation for users of facilities/services will differ from those for providers of those facilities/services. Where your proposal involves participants with an intellectual or mental impairment, or people in dependent relationships, additional questions about their consent appear at 6.3 and 6.5 respectively.

5.5.1.3 Describe the consent process, ie how participants or those deciding for them will be informed about, and choose whether or not to participate in, the project.
Potential participants will be approached by midwives who will give out the information statement and consent forms. Potential participants may read these documents privately during waiting for their appointment. They may ask for more information about the research project from the midwives. Potential participants who are interested in the research may sign the consent form in private. After their visit with obstetricians, they have the choice to return the information statement and consent form in the locked box near the reception counter without midwives being aware.

5.5.1.4 If a participant or person on behalf of a participant chooses not to participate, are there specific consequences of which they should be made aware, prior to making this decision?
No, whether or not potential participants decide to participate, their decision will not disadvantage them in any way. There is no any specific consequences.

5.5.1.5 If a participant or person on behalf of a participant chooses to withdraw from the research, are there specific consequences of which they should be made aware, prior to giving consent?
No, there is no any specific consequences. Participants are free to withdraw from project by without reason. If participants withdraw from this project, I will not quote their data.

5.5.1.6 Specify the nature and value of any proposed incentive/payment (eg, movie tickets, food vouchers) or reimbursement (eg travel expenses) to participants.
None

5.5.1.7 Explain why this offer will not impair the voluntary nature of the consent, whether by participants’ or persons deciding for their behalf. NS 1.10
Not applicable

5.5.1.8 Provide the name and/or position of the contact person for any concerns in relation to the ethical conduct of the research / complaints process? NS 239 242

Participants could contact Human Research Ethics Officer if they have any concerns or complaints in relation to the ethical conduct of the research.

Human Research Ethics Officer, Research Office, The Chancellery, The University of Newcastle, University Drive, Callaghan NSW 2308, Australia.
Telephone (02) 49216333, email: Human-Ethics@newcastle.edu.au.au.

5.5.1.9 Will a participant or person on their
behalf who withdraws from the research be able to withdraw data about the participant?
6. PARTICIPANTS SPECIFIC

6.1. Research conducted in Australia involving persons whose primary language is other than English (LOTE)

You have indicated that the project involves persons whose primary language is other than English (LOTE).

6.1.1 Describe what steps will be taken to ensure each participant’s free and voluntary consent and participation in the project given that the person’s language is other than English? NS 2.26

All participants must be able to speak, read and write Thai language because information statement and consent form will use Thai language.

6.1.2 In what language(s) will the research be conducted?

[ ] English
[X] Other

6.1.2.2.1 Specify the language(s)

Thai language

6.1.2.2.2 Will an interpreter be present during discussions with the participants about the research project?

No

6.1.2.2.2.1 Why will an interpreter not be present during discussions with participants about the research project?

Because the researcher and participants can speak Thai language.

6.1.3 Will participants be provided with written information in the language in which the research will be conducted?

Yes

6.2. Research involving children and/or young people

You have indicated that the project involves children and/or young people.

6.2.1 Why is participation of children or young people indispensable to this research? NS 4.1 [b]

This research project may have teenage pregnant women (aged 16-18 years) who are at increased risk of premature birth.

6.2.2 Explain why the research is not contrary to the best interests of the children / young people. NS 4.3

This research is not contrary to the interests of teenage pregnant women. In Thailand, women aged over 15 years old have an identity card. Young women aged 16 and over can make their own decisions when they attend an antenatal clinic. We assume it is reasonable, therefore to conclude that they can also make an informed choice to participate in the research. Also, we do not want to arbitrarily exclude young women who may well benefit for the continuity of relationship with the midwife/researcher and the women in the group. I will also attempt to remain the interest of teenage participants and offer my support.

6.2.3 How has this study been designed to be appropriate for children or young people? NS 4.4

This study been designed to be appropriate for young people. Midwives will assess capacity to give informed consent by considering [1] identity card [2] independent living [3] do not want parents to know because pregnancy hidden [4] social support of the midwives and the group for group based antenatal care to avoid social isolation. If living with parents I will encourage the young women to discuss this research with parents consent.

6.2.4. Indicate from whom consent for the participation of these children/young people will be sought. (You may select more than one option.)

6.2.4.1 Child or young person participant

Yes

6.2.4.2 Parent/ guardian

Yes

6.2.4.3 A person or organisation required by law

No

6.7. Research conducted overseas

You have indicated that the project involves research conducted overseas.
6.7.1 In what language(s) will the research be conducted?
   [ ] English
   [X] Other

6.7.1.2.1 Specify the language(s)
   Thai language

6.7.1.2.2 Will an interpreter be present during discussions with the participants about the research project?
   No

6.7.1.2.2.1 Why will an interpreter not be present during discussions with participants about the research project?
   Because the researcher and participants can speak Thai language.

6.7.2 Will participants be provided with written information in the language in which the research will be conducted?
   Yes

6.7.3 Describe the procedures by which overseas participants can obtain further information or complain about the research project?
   Thai information statement and consent forms have the researcher’s address in Thailand. Also, it has Human Research Ethics Officer address.

   1. Peeranan Wisansakoolwong
   Kuakarun college of Nursing, address 131/5 Khao road, Vachira, Dusit, Bangkok, Thailand, 10300
   Telephone number: +62 241 6500 Ext. 8213, 8214, Fax +62 241 6527 or email: Peeranan.Wisansakoolwong@studentmail.newcastle.edu.au.

   2. Participants could contact Human Research Ethics Officer if they have any concerns or complaints in relation to the ethical conduct of the research.
   Human Research Ethics Officer, Research Office, The Chancellery, The University of Newcastle, University Drive, Callaghan NSW 2308, Australia.
   Telephone (02) 4921 6333, email Human-Ethics@Newcastle.edu.au.au.

6.7.4 What cultural sensitivities are relevant to the participants in this research project?
   Thai culture
7. RESOURCES

7.1. Project Funding / Support

7.1.1. Indicate how the project will be funded? Indicate whether funding is confirmed or sought and whether there will be a budget shortfall.

7.1.1.1. External competitive grant
7.1.1.1.1 Confirmed or Sought? Not Sought

7.1.1.2. Internal competitive grant
7.1.1.2.1 Confirmed or Sought? Not Sought

7.1.1.3. Sponsor
7.1.1.3.1 Confirmed or Sought? Not Sought

7.1.1.4. By researcher’s department / organisation
7.1.1.4.1 Confirmed or Sought? Not Sought

7.1.1.5. Other
7.1.1.5.1 Confirmed or Sought? Not Sought

7.1.1.6. Shortfall
7.1.1.6.1 Confirmed or Sought? Not Sought

7.1.2. Will the project be supported in other ways eg. in-kind support/equipment by an external party eg. sponsor

7.1.2. Duality of Interest
7.2.1 Describe any commercialisation or intellectual property implications of the funding/support arrangement.

This research does not have commercialization or intellectual property implications of funding.

7.2.2 Does the funding/support provider(s) have a financial interest in the outcome of the research?  
No

7.2.3 Does any member of the research team have any affiliation with the provider(s) of funding/support, or a financial interest in the outcome of the research?  
No

7.2.4 Does any other individual or organisation have an interest in the outcome of this research?  
No
8. APPROVALS

8.1. Ethical review

Some HRECs may require researchers to provide information additional to that contained in a NEAF proposal. For this reason, it is prudent to check whether the HRECs to whom you propose to submit this proposal require additional information.

8.1.1 To how many Australian HRECs [representing site organisations or the researcher's organisation] is it intended that this research proposal be submitted?

A list of NHMRC registered Human Research Ethics Committees (HRECs), along with their institutional affiliations and contact details is available on the NHMRC website at the following web address: http://www.nhmrc.gov.au/ethics/human/hrecs/information.html#

8.1.1.1. HREC 1

8.1.1.1.1 Name of HREC

The University of Newcastle Human Research Ethics Committee [EC00144]

8.1.1.1.1.1. Provide the start and finish dates for the research for which this HREC is providing ethical review.

8.1.1.1.1.1.1 Anticipated start date or date range 10/01/2009

8.1.1.1.1.1.2 Anticipated finish date or date range 31/05/2011

8.1.1.1.1.2 For how many sites at which the research is to be conducted will this HREC provide ethical review?

8.1.1.1.2.1. Site 1

8.1.1.1.2.1.1 Name of site

Medical College and Vajira Hospital in Bangkok

8.1.1.1.2.1.2 Which of the researchers involved in this project will conduct the research at this site?

Principal Researcher(s)

Associate Researcher(s)

Miss Peeranan Wisansakoolwong

8.1.1.1.2 Have you previously submitted an application, whether in NEAF of otherwise, for ethical review of this research project to any other HRECs?

No

8.2. Research conducted overseas

8.2.1 Are there any local requirements which are necessary for the conduct of this research?

No
9. DECLARATIONS AND SIGNATURES

9.1 Project Title

**Group-Based Antenatal Care in Thailand: A Feminist Action Research Project**

9.2 Human Research Ethics Committee to which this application is made

The University of Newcastle Human Research Ethics Committee [EC00144]

9.3 Signatures and undertakings

**Applicant / Principal Researchers (including students where permitted)**

I/we certify that:
- All information is truthful and as complete as possible.
- I/we have had access to and read the National Statement on Ethical Conduct in Research Involving Humans.
- The research will be conducted in accordance with the National Statement.
- The research will be conducted in accordance with the ethical and research arrangements of the organisations involved.
- I/we have consulted any relevant legislation and regulations, and the research will be conducted in accordance with these.
- I/we will immediately report to the HREC anything which might warrant review of the ethical approval of the proposal [NS 2.37], including:
  - serious or unexpected adverse effects on participants;
  - proposed changes in the protocol; and
  - unforeseen events that might affect continued ethical acceptability of the project.
- I/we will inform the HREC, giving reasons, if the research project is discontinued before the expected date of completion [NS 2.38];
- I/we will not continue the research if ethical approval is withdrawn and will comply with any special conditions required by the HREC [NS 2.43];
- I/we will adhere to the conditions of approval stipulated by the HREC and will cooperate with HREC monitoring requirements. At a minimum annual progress reports and a final report will be provided to the HREC.

**Applicant / Chief Researcher(s) / Principal Researcher(s)**

Prof Kathleen Fahy
The University of Newcastle
Signature __________________________ Date __/__/____

Miss Peerawan Wisansakoolwong
The University of Newcastle
Signature __________________________ Date __/__/____

**Supervisor(s) of student(s)**

I/we certify that:
- I/we will provide appropriate supervision to the student to ensure that the project is undertaken in accordance with the undertakings above;
- I/we will ensure that training is provided necessary to enable the project to be undertaken skilfully and ethically.

Prof Kathleen Fahy
Signature __________________________ Date __/__/____

Dr Pamela Van de Riet
Signature __________________________ Date __/__/____

**Heads of departments/schools/research organisation**
I/we certify that:
- I/we are familiar with this project and endorse its undertaking;
- the resources required to undertake this project are available;
- the researchers have the skill and expertise to undertake this project appropriately or will undergo appropriate training as specified in this application.

<table>
<thead>
<tr>
<th>Title</th>
<th>First name</th>
<th>Surname</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<td>Position</td>
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<td>/ / /</td>
<td>Organisation name</td>
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</tbody>
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Commercial-in-Confidence

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10. ATTACHMENTS

10.1 List of Attachments

<table>
<thead>
<tr>
<th>Core Attachments</th>
<th>Attachments which may be required/appropriate.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recruitment/invitation</td>
<td>Copy of advertisement, letter of invitation etc</td>
</tr>
</tbody>
</table>
| Participant Information | Copy or script for participant  
For parent, legal guardian or person responsible as appropriate |
| Consent Form | Copy for participant  
For parent, legal guardian or person responsible as appropriate  
For, optional components of the project eg. genetic sub study |
| Peer review | Copy of peer review report or grant submission outcome |
| HREC approvals | Copy of outcome of other HREC reviews |

<table>
<thead>
<tr>
<th>Attachments specific to project or participant group</th>
<th>Attachments which may be required/appropriate.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research conducted in the workplace or possibly impacting on workplace relationships</td>
<td>Evidence of support/permission from workplace where research will be conducted</td>
</tr>
</tbody>
</table>
| Research conducted overseas involving participants | English translation of participant information/consent forms  
Evidence of support/permission from overseas organisations involved in the research |
| People whose primary language is other than English [LOTE] | English translation of participant information/consent forms |
| Children and/or young people [i.e. < 18 years] | Information/consent form for parent, legal guardian or person responsible |
| People with an intellectual or mental impairment | Information/consent form for legal guardian or person responsible |
| People highly dependent on medical care | Information/consent form for legal guardian or person responsible |
| People who belong to a collectivity | Evidence of support / permission of leaders of collectivity |
| Aboriginal and/or Torres Strait Islander peoples | Evidence of support / permission of elders and/or other appropriate bodies |
| Focus groups | Copy of script/outline |
### 10.2 Participant information elements

**Core Elements**

Provision of information to participants about the following topics should be considered for all research projects.

<table>
<thead>
<tr>
<th>Core Elements</th>
<th>Issues to consider in participant information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>About the project</strong></td>
<td>Full title and/or short title of the project&lt;br&gt;Plain language description of the project&lt;br&gt;Purpose/aim of the project and research methods as appropriate&lt;br&gt;Demands, risks, inconveniences, discomforts of participation in the project&lt;br&gt;Outcomes and benefits of the project&lt;br&gt;Project start, finish, duration</td>
</tr>
<tr>
<td><strong>About the investigators/organisation</strong></td>
<td>Researchers conducting the project (including whether student researchers are involved)&lt;br&gt;Organisations which are involved/ responsible&lt;br&gt;Organisations which have given approvals&lt;br&gt;Relationship between researchers and participants and organisations</td>
</tr>
<tr>
<td><strong>Participant description</strong></td>
<td>How and why participants are chosen&lt;br&gt;How participants are recruited&lt;br&gt;How many participants are to be recruited</td>
</tr>
<tr>
<td><strong>Participant experience</strong></td>
<td>What will happen to the participant, what will they have to do, what will they experience?&lt;br&gt;Benefits to individual, community, and contribution to knowledge&lt;br&gt;Risks to individual, community&lt;br&gt;Consequences of participation</td>
</tr>
<tr>
<td><strong>Participant options</strong></td>
<td>Alternatives to participation&lt;br&gt;Whether participation may be for part of project or only for whole of project&lt;br&gt;Whether any of the following will be provided: counselling, post research follow-up, or post research access to services, equipment or goods</td>
</tr>
<tr>
<td><strong>Participants rights and responsibilities</strong></td>
<td>That participation is voluntary&lt;br&gt;That participants can withdraw, how to withdraw and what consequences may follow&lt;br&gt;Expectations on participants, consequences of non-compliance with the protocol&lt;br&gt;How to seek more information&lt;br&gt;How to raise a concern or make a complaint</td>
</tr>
<tr>
<td><strong>Handling of information</strong></td>
<td>How information will be accessed, collected, used, stored, and to whom data will be disclosed&lt;br&gt;Can participants withdraw their information, how, when&lt;br&gt;Confidentiality of information&lt;br&gt;Ownership of information&lt;br&gt;Subsequent use of information&lt;br&gt;Storage and disposal of information</td>
</tr>
<tr>
<td><strong>Unlawful conduct</strong></td>
<td>Whether researcher has any obligations to report unlawful conduct of participant</td>
</tr>
<tr>
<td><strong>Financial issues</strong></td>
<td>How the project is funded&lt;br&gt;Declaration of any duality of interests&lt;br&gt;Compensation entitlements&lt;br&gt;Costs to participants&lt;br&gt;Payments, reimbursements to participants&lt;br&gt;Commercial application of results</td>
</tr>
<tr>
<td>Core Elements</td>
<td>Issues to consider in participant information</td>
</tr>
<tr>
<td>------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Results</td>
<td>What will participants be told, when and by whom</td>
</tr>
<tr>
<td></td>
<td>Will individual results be provided</td>
</tr>
<tr>
<td></td>
<td>What are the consequences of being told or not being told the results of research</td>
</tr>
<tr>
<td></td>
<td>How will results be reported / published</td>
</tr>
<tr>
<td></td>
<td>Ownership of intellectual property and commercial benefits</td>
</tr>
<tr>
<td>Cessation</td>
<td>Circumstances under which the participation of an individual might cease</td>
</tr>
<tr>
<td></td>
<td>Circumstances under which the project might be terminated</td>
</tr>
</tbody>
</table>

Research Specific Elements
Provision of information to participants about the following topics should be considered as may be relevant to the research project.

<table>
<thead>
<tr>
<th>Specific to project or participant group</th>
<th>Additional issues to consider in participant information</th>
</tr>
</thead>
<tbody>
<tr>
<td>People who belong to a collectivity</td>
<td>describe consultation process to date and involvement of leaders whether status of being in collectivity will be recorded</td>
</tr>
<tr>
<td>Aboriginal and/or Torres Strait Islander peoples</td>
<td>describe consultation process to date and involvement of leaders whether ATSI status will be recorded</td>
</tr>
</tbody>
</table>
APPENDIX B

GLOSSARY

<table>
<thead>
<tr>
<th>Definitions of key terms</th>
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</thead>
<tbody>
<tr>
<td><strong>Adrenocorticotropic hormone</strong></td>
</tr>
<tr>
<td><strong>Abruption placenta</strong></td>
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<tr>
<td><strong>Beta mimetic</strong></td>
</tr>
<tr>
<td><strong>Cervical cerclage</strong></td>
</tr>
<tr>
<td><strong>Cervical incompetence</strong></td>
</tr>
<tr>
<td><strong>Chronic Maternal Stress</strong></td>
</tr>
<tr>
<td><strong>Concept</strong></td>
</tr>
<tr>
<td><strong>Corticotrophin releasing hormone</strong></td>
</tr>
<tr>
<td><strong>Cortisol</strong></td>
</tr>
<tr>
<td><strong>Emic</strong></td>
</tr>
<tr>
<td><strong>Empowerment</strong></td>
</tr>
<tr>
<td><strong>Epistemology</strong></td>
</tr>
<tr>
<td><strong>Etic</strong></td>
</tr>
<tr>
<td><strong>Feminism</strong></td>
</tr>
</tbody>
</table>
| **Feminist group**                                                                     | Refer to the methods in the group of women to work together to
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>processes</td>
<td>increase self awareness, self consciousness and self responsibility by base on feminism.</td>
</tr>
<tr>
<td>Fetal distress</td>
<td>A compromised condition of the fetus, usually discovered during labour, characterised by a markedly abnormal rate or rhythm of myocardial contraction [64].</td>
</tr>
<tr>
<td>Health empowerment</td>
<td>Health empowerment is an approach to childbirth women so that they learn more consciously and effectively and are motivated to maintain their commitment to healthier living [13].</td>
</tr>
<tr>
<td>Hypothalamic Pituitary Adrenal axis</td>
<td>The combined system of neuroendocrine units that in a negative feedback network regulate the adrenal gland’s hormone activities [64].</td>
</tr>
<tr>
<td>Incompetent cervix</td>
<td>See Cervical incompetence</td>
</tr>
<tr>
<td>Indomethacin (a Cyclo-oxygenase (COX) inhibitor)</td>
<td>A class of compounds designed to inhibit cyclo-oxygenase enzymes, which are responsible for the synthesis of prostaglandins [64].</td>
</tr>
<tr>
<td>Low birth weight</td>
<td>Neonates who are born too small, weight &lt; 2,500 grams [8].</td>
</tr>
<tr>
<td>Magnesium sulfate</td>
<td>A salt of magnesium (MgSO₄). It is prescribed parentally to prevent seizure especially pre eclampsia. The mechanism of action is intracellular calcium antagonist so obstetricians use magnesium sulfate for decreasing intracellular calcium [64].</td>
</tr>
<tr>
<td>Methodology</td>
<td>The study of ontology and epistemology as applied to research. Put simply methodology is concerns with ‘what exists’ (Ontology) and ‘how we can reliably come to know something’ (Epistemology) [71].</td>
</tr>
<tr>
<td>Midwifery Primary Health Care Groups</td>
<td>are series of group meetings of pregnant women with a midwife facilitator. The goal of the group is the health empowerment of each individual woman, which will help to ensure that each baby is born healthy, and at term. The focus of all group discussion is health-related but there is no predetermined syllabus. When conducting MPHCGs the midwife’s practice is guided by (1) Midwifery Philosophy, (2) Maslow’s Hierarchy of Needs, (3) Primary Health Care Principles, and (4) Modified Feminist Group Processes.</td>
</tr>
<tr>
<td>Nifidipine (Calcium Channel Blocker)</td>
<td>A drug that inhibits the flow of calcium ions across the membranes of smooth muscle cells. Calcium channel blockers are used to inhibit uterine contraction [64].</td>
</tr>
<tr>
<td>Ontology</td>
<td>Ontology is department of metaphysics which relates to the being or essence of things [68, 71]. Ontology is concerned with: 1. existence itself ‘it differentiates between real existence and appearance’....... 2. the assumptions about existence underlying any conceptual scheme or any theory or system of ideas. Widely differing assumptions about ‘what exists’ and ‘what doesn’t exist’ are found in different scientific schools or paradigms [71]</td>
</tr>
<tr>
<td>Philosophy</td>
<td>Philosophy has three main branches, logic, metaphysics and ethics; each of these is related to science and therefore research via methodological paradigms. Logic is concerned with the structure of theory or argument. Metaphysics in concerned with being and knowing. Ethics is concerned with moral principles, values and what ought to be done [66].</td>
</tr>
<tr>
<td>Placental abruption</td>
<td>See abruption placenta</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Placenta previa</td>
<td>A complication of childbirth in which the placenta implanted abnormally in the uterus so that it impinges on or covers the internal os of the uterine cervix [64].</td>
</tr>
<tr>
<td>Power</td>
<td>Energy, ability or capability to accomplish something. For Foucault, power is exercised at all levels within institutions at the macro level but also at the level of interpersonal relations [72 p.62]</td>
</tr>
<tr>
<td>Preeclampsia</td>
<td>An abnormal condition of pregnancy characterised by the onset of acute hypertension in the second half of pregnancy the classic triad of preeclampsia is hypertension, proteinuria, and oedema [64].</td>
</tr>
<tr>
<td>Preterm baby</td>
<td>The baby who is born 33-36 weeks or &lt; 2500 grams [7 pp.607-608].</td>
</tr>
<tr>
<td>Preterm birth</td>
<td>A birth occurs after 20 weeks and before 37 completed weeks’ gestation [8, 73, 74].</td>
</tr>
<tr>
<td>Preterm premature rupture of membranes</td>
<td>The spontaneous rupture of the amniotic sac before term pregnancy [64]</td>
</tr>
<tr>
<td>Primary Health Care</td>
<td>A basic level of health care that includes programs directed at the promotion of health, early diagnosis of disease or disability and prevention of disease. Primary Health Care is provided in an ambulatory facility to limited number of people often those living in particular geographical area. It includes continuing health care, as provided by a home care nurse [64].</td>
</tr>
<tr>
<td>Primary prevention</td>
<td>The primary intervention focuses on pregnant women who have increased risk of preterm birth. This intervention begins with risk screening of all pregnant women. The early screening the factors and the signs of premature birth is a very important concept. [75, 76]. These interventions are not invasive and therefore not framed by medical discourses. The primary intervention also involves counseling, health education, psychological and social support.</td>
</tr>
<tr>
<td>Progesterone</td>
<td>A hormone is prescribed in the treatment of various menstrual disorders, repeat spontaneous abortion and previous preterm birth [64].</td>
</tr>
<tr>
<td>Propositions</td>
<td>Propositions are statements of relationship between two or more concepts. Propositional statements provide theory with descriptive, explanatory or predictive powers [77]. For example, a propositional statement in the theory of Birth Territory is the less familiar the environment is to the woman the more likely she is to feel fear and uncertainty [66].</td>
</tr>
<tr>
<td>Secondary prevention for preterm birth</td>
<td>The secondary intervention of preterm birth focuses on prevention for women who are threatened but not yet established [78]. Its aims are inhibition and protection the progression of labour including promotion prolonged pregnancy. It is framed medical discourses of intervention. The secondary intervention is treatment including midwifery care when women are admitted in the hospital [75, 76].</td>
</tr>
<tr>
<td>Small gestational age</td>
<td>An infant whose weight and size at birth fall below that expected for gestational age [64].</td>
</tr>
<tr>
<td>Spontaneous preterm birth</td>
<td>A birth as a result of spontaneous preterm labour (not medically induced) or preterm premature rupture of membranes (PPROM) before full term gestation [64].</td>
</tr>
<tr>
<td>Stress mediators</td>
<td>Corticotrophin releasing hormone (CRH), adrenocorticotrophic hormone (ACTH) and cortisol.</td>
</tr>
<tr>
<td>Tertiary prevention for preterm birth</td>
<td>Tertiary interventions are implemented once preterm labour has begun [75, 76]</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Theory</td>
<td>Theory presents a systematic view of phenomena by specifying the interrelationships between concepts using definitions and propositions with the purpose of description, explanation and prediction about a phenomena in the world. The word ‘theory’ encompasses related terms including ‘philosophy’, ‘model’ and ‘framework’ [77].</td>
</tr>
<tr>
<td>Tocolytic Agents</td>
<td>Any drugs used to stop uterine contraction by relaxing the smooth muscles of the uterus [64]</td>
</tr>
<tr>
<td>Very preterm baby</td>
<td>The baby who is born 28-32 weeks or &lt;1500 grams [7 pp.607-608]</td>
</tr>
</tbody>
</table>
APPENDIX 1

Section 1.1:

1. The Structure of Family in Thailand

- **A Single Family** is composed of a father and mother with children; or, a husband and wife without children. At present, the number of single families composed of only a husband and a wife is increasing, with a corresponding decrease in single families composed of a couple with children.

- **An Expanded Family** is composed of a father, mother, children and their relatives. The number of this type of family is decreasing.

- **A Single Family with Only Father or Mother** is caused by the end of marriage resulting from legal separation, divorce, abandonment, death of either of the couple. This type of family is increasing with a reported 1.3 million of them in Thailand.

- **Homosexual Family** refers to a family where two people who have the same gender spend life together as a couple.

- **A family with Adopted Child** is composed of husband, wife and an adopted child or children. Couples adopt children because they cannot have their own [1, 2].

2. Family Problems/Issues

The problems within Thai families can affect the economy, the society, and the solidarity of the country. Some of the main family problems are as follows [3]:

- Poverty has been significantly worsened by the global financial crisis. In particular a great number of unskilled workers working in industrial factories, who have fixed monthly incomes, have been affected.

- The breakup of families is also a cause of the spread of drugs among teenagers. Children whose parents break up often lack guidance and attention. They tend to turn to their peers for support. They lack self-control and can easily succumb to drug addiction.
• The spread of HIV infection among teenagers and unskilled workers can lead to early death. When a father or mother is infected with HIV and dies, his or her children become orphans.

• Child abuse and domestic violence against women are increasing. This problem is often caused by the irresponsibility of the father or husband as well as the misuse of masculine authority or excessively emotional responses to problems. At other times, they are the result of drug addiction leading to a strong argument and the infliction of mental or physical pain on people in the family.

• The disregard of traditional family roles. In some cases, family members, especially parents, fail to live up to their roles. They instead relegate their responsibilities to outside social institutions like educational institutions and the mass media.

• Elderly people are sometimes left unattended, especially in the provinces. Elderly people are tasked with taking care of their young grandchildren since the parents have to move away from their hometowns to look for jobs in a big city.

• Another problem is a decrease in interactions between families and their community or society, especially in big cities. People in big cities often live in isolation despite the high population densities. Families act too independently and cooperate less with their communities and within society as a whole.

**Section 1.2:**

**The Scope of Practice of Maternal and Newborn Nurses**

Based on the fourth bylaw of the Professional Nurses and Midwives Act of B.E.2528 (1985) as well as the revised version (2nd issue) of B.E.2540 (1997), the term “professional midwives” refers to persons who registered with and were granted licenses of professional midwifery by the Nursing Civil Law of Thailand. The Nursing Civil Law of Thailand provides the following definition of midwifery:

Midwifery means the action about caring and helping the pregnant women, postnatal women and neonates including examination, execute normal delivery, health promotion and prevention the abnormality during ante-
natal, intra-natal and post-natal periods as well as helping the physicians to treat and cure based on science and art of midwifery [4 p.4].

‘Professional midwifery’ refers to midwifery practice for pregnant women, postnatal women, their newborns and family in the following actions:

- providing education, advice, counselling and solving health problems
- providing care to pregnant women, post-natal women and their newborns physically and mentally in order to prevent complications during pregnancy, delivery and post partum
- providing physical examinations, normal delivery and family planning services
- assisting physicians in performing treatments or special investigations.

All midwifery practices including diagnosis, planning, intervention and evaluation must be based on scientific principles and the art of midwifery in performing health assessment [4].

The practice of skills in maternal and newborn nursing and midwifery

The Nursing Civil Law of Thailand prescribes the practice of skills in maternal and newborn nursing and midwifery as follows [4]:

1. Preparedness of women for marriage and pregnancy:
   - women’s health counselling before marriage.
   - getting them ready to become new mothers.
   - family planning services.

2. Nursing care during pregnancy:
   - prenatal care, screening of pregnant women, processing blood and urine tests, abdominal palpation and giving vaccination
   - giving health education and advice about diet, physical exercise, and rest
   - fetal monitoring and assessment
• promoting women’s adjustment during the pregnancy period (developmental task social support)

• assessment of risk status during pregnancy

• encouraging relationship between fathers, mothers and unborn babies

• preparing mothers and fathers to get ready for normal deliveries

• alleviating discomfort during pregnancy

• preparing pregnant women for breast feeding.

3. Nursing care during labour pains and normal delivery:

• attending during labour

• normal delivery

• breech presentation delivery in case of emergency

• cut and repair a part of the perineum to facilitate delivery

• encouraging relationships between fathers, mothers and babies during pregnancy, labour and post-labour

• caring for pregnant women and unborn babies in every stage of labour.

4. Nursing care during the postnatal period and care of neonates:

• caring for neonates

• caring for mothers during the postnatal period

• promoting the adoption of parental roles

• promoting breast feeding

• providing family planning services
• conducting follow-up visits to mothers and babies, and providing advice on health education before discharge from the hospital.

5. **Nursing practice during obstetrical emergencies and complicated situations including:**

• ante-partum and post partum haemorrhage
• prolonged labour and dystocia
• retained placenta
• convulsion from eclampsia
• post-partum infection
• neonatal resuscitation
• pre-eclampsia during pregnancy
• diabetes mellitus during pregnancy
• anaemia.

**Principal Competencies Necessary for Nurses and Midwives**

The Nursing Civil Law of Thailand details the principal competences necessary to nurses and midwives as follows [4]:

**Competency 1:** Practice nursing, morally abiding by the standards and laws related to professional nursing and midwifery

• assess the health situation and need of patients in a holistic manner
• make diagnoses
• set a nursing care plan
• implement the nursing care plan
• monitor and evaluate the nursing practice
• ensure a safe environment.

**Competency 2:** Practice midwifery, morally abiding by the standards and laws related to professional nursing and midwifery.

• assess the problems and needs of patients

• make diagnoses for pregnant women

• set a nursing practice plan for taking care of pregnant women

• take care of pregnant women, screen out abnormal cases, transfer the abnormal cares to an available medical centre, and apply appropriate principles to nurse pregnant women according to their situation and culture

• execute normal birth deliveries

• cut and repair a parts of the perineum to facilitate deliveries

• prepare tools and assist at normal births

• encourage relationships between fathers, mothers and babies during pregnancy, labour and post-labour

• encourage breast feeding

• undertake the care of normal mothers and their babies cares as well as the ones with disorders and emergency cases

• educate and advise families about family planning, getting ready to become new fathers and mothers and educate newly pregnant women about how to take care of themselves in all stages of pregnancy

• monitor and evaluate midwifery practice.

**Competency 3:** Promote Health Care of Individuals, Groups of People and Community in Order to Create a Learning Organisation. Nurses are responsible for encouraging people to learn how to take care of themselves in normal situations, during illness and minimising the risks of getting sick.
• provide knowledge about health to individuals, families, groups and communities

• support and assist individuals, families and groups to engage in activities that promote health

• provide information and assist people to receive the health care they are entitled to

• manage the environment for safety and the promotion of health.

**Competency 4:** Prevent illnesses and encourage immunisation in order to decrease the number of patients suffering some avoidable illness

• collect data and information about the health situation of a community and also the spread of illnesses in the community

• create the ability for people to take care of themselves and their communities in order to prevent illnesses

• be on the alert for, and investigate, illnesses breaking out in a community

• provide vaccinations to encourage immunisation for people in a community.

**Competency 5:** Restore the health of a group of people and their community in both physical and mental aspects so they can live more happily.

• where possible prevent the outbreak disorders resulting from illnesses

• select the most suitable method for health rehabilitation

• give a demonstration on how to use therapeutic instruments and anatomical models

• educate, help and advise patients and their relatives on the resources they are using for continuous rehabilitation

• deal with organisations or institutions regarding cooperation in the restoration of community health.

**Competency 6:** Primary treatment of illness in compliance with the regulations of the Nursing Civil Law of Thailand. Primary treatment includes:
• screen some illnesses
• diagnose some illnesses
• treat some illnesses
• midwifery and family planning services.

**Competency 7:** Educate and give advice to persons, families, groups of people and communities to enhance their good health

• promote, encourage and teach people how to take care of their health themselves
• be a consultant for persons, families, groups of people and communities encountering straightforward physical and mental problems
• recommend and transfer patients encountering complicated health problems.

**Competency 8:** Communicate effectively with persons, families, groups of people and communities

• communicate and build up relationships with people in all groups and at all levels including individuals, families, groups and communities as well as all related organisations
• record data and then make accurate reports
• present ideas and opinions to people
• use the English language for communication
• apply information technologies for communication.

**Competency 9:** Show leadership, apply self-management and conduct duties responsibly

• have a clear vision and be able to make plans, solve problems and make decisions
• conduct duties responsibly
• make plans for time and resource management
● negotiate to protect the wellbeing of patients

● deal with staff and related agencies

● continuously improve working performance

● provide patients with good service

● diligently perform tasks as a team leader or as a staff member.

**Competency 10:** Practice a nursing and midwifery career in accordance with the nursing code of ethics and human rights

● take care of patients to meet their basic needs, abiding by the nursing responsibilities as laid out in the Nursing Civil Law of Thailand in the section, “Patients’ Rights”

● conduct must comply with the nursing and midwifery code of ethics as laid out in the Nursing Civil Law of Thailand

● abide by the standards of the nursing profession as laid out in the Nursing and Midwifery Act

● earn a nursing profession degree that teaches nursing laws, regulations and rules related to nursing careers

● treat all groups of people equally, regardless of their race, religion, culture, social status or health status.

**Competency 11:** Take an interest in and understand the importance of researches on nursing and health enhancement

● know about research methodologies

● apply the results of up-to-date research on nursing practice

● give assistance to research projects

● act in accordance with the code of ethics of researchers and when involved in research respect human rights.
Competency 12: Apply information technology to assist the nursing practice

- search for information on health and related knowledge
- screen and select the appropriate data
- record data on health and nursing practice using information technology.

Competence 13: Improve gradually in line with the values and competence of nursing practice and apply creativity and logical thinking

- practise self-awareness and generosity
- control emotions and handle stress
- continuously search for knowledge and ways to improve in nursing practice
- be concerned about the protection of people’s rights regarding their health.

Competency 14: Help to advance the nursing profession and uphold respect for it

- show optimism towards the nursing and midwifery professions
- understand the importance of being a member of professional organisations
- cooperate with professional peers
- participate in activities of professional organisations
- know the importance of giving support and cooperation in teaching nursing students and new nurses.
APPENDIX 2

The Organisation for the Groups and Planned Stages

1. Organisation of the Groups

I planned the tentative group schedule for ten two-hour meetings throughout pregnancy. I planned in the first meeting to focus on introductions and group interactions aimed at creating a sense of belonging and acceptance. At the first meeting the groups decided on the content and process of the subsequent meetings. The key principles [5, 6] that guided the way the groups functioned were:

- I wore a white uniform when I facilitated the group because it showed the women that I was a qualified nurse-midwife.

- Participants were recruited by using selection criteria that identified women at higher risk of preterm birth (See appendix A5).

- There were two groups with 6–8 participants per group. Once the groups formed no new members were added. This was to promote group cohesion, trust and a friendly atmosphere.

- Group one began eight weeks before group two. I reflected on the experiences in group one and this allowed me to carefully consider improvements for the model before starting group two.

- To minimise travel and time inconvenience I organised for the women to come to the group on the same day that they had their standard antenatal appointment with the obstetrician.

- I facilitated the first and last sessions and participants facilitated the remaining sessions. The women were invited to continue in the group until the last baby of the group was born and there was a final group meeting after that.

- Women who had a preterm births were welcome to continue with the group.

- There were ten meetings on a fortnightly basis and one final postnatal meeting with partners and babies.
• The meetings were normally held fortnightly for 90–120 minutes.

• When participants had health problems or emotional problems, I collaborated with obstetricians or social workers.

These arrangements were consistent with midwifery philosophy and feminist principles. I worked collaboratively with each woman and group to be in control of what information they need by taking conscious practice and awareness about holistic approach and woman’s health needs.

2. Stages of the Feminist Group Processes

The stages in the meetings included group forming, checking in, working, closing and evaluating [5, 6]. These stages are related to the method for data collection.

1. The group forming stage (first meeting):

• This stage was concerned with creating a friendly environment, group norms and explaining the midwife/researcher’s role and ethics.

• I worked to create an atmosphere where everyone felt they were on the same footing during group discussions.

• I introduced myself and my roles as a midwife and researcher. I described my educational background, work experience, my current workplace and educational background.

• I then described the background, objectives, and the details of the research project and discussed teamwork, including the ethical guidelines for recording and photographing.

• The women were encouraged to feel free to express their experiences, values, beliefs and opinions without concern about whether other members of the group agreed or disagreed.

• I worked to empower the women to choose pregnancy health topics for group discussion.
2. The checking-in stage:

A checking-in stage begin with creating a commitment to the power, unity and sharing of the group. The aim of checking in was to help each woman to leave other matters behind and to focus the attention of each member of the group on shared purpose for being together.

- I welcomed the women and thanked them for participating in the meeting. Then I encouraged each woman to focus on herself by telling the group about her pregnancy development and self-care in past two weeks.
- Each woman was invited to talk for about 15 minutes at this stage. It was a chance for each woman to reflect her thoughts, feelings, knowledge and experiences since the last meeting.
- Each woman was encouraged to reflect on whether she could remember what she expected her pregnancy to be like.

3. The working stage:

Active discussion on the agreed topic (about 45–60 minutes), during this stage created commitments to the power of group and promoted group integration, raised individual and group consciousness and created a shared responsibility for the content and process of each meeting.

- Each woman was encouraged to participate and listen respectfully. The women were encouraged to share experiences freely and directly in order to develop trust of the other women and mutual understanding.
- The women were invited to tell stories of their experiences as they related to each topic and also to contribute their journal reflections, drawings, photographs or any other form of contributions they wanted to make and to describe their experiences.
- The women were encouraged to identify action strategies that they wanted to use either individually or collectively with the aim of promoting health.
• Each woman in the group was encouraged by the others to take actions that would promote greater self-responsibility, the development of greater self-awareness and consciousness-raising for her own health.

• The groups were encouraged to think about the factors that either promoted or diminished healthful behaviours with a particular emphasis on social and cultural factors.

4. The closing stage:

The aim of closing stage was to help each woman to reflect on someone or on something that had happened during the group process [5, 6].

• Each woman was invited to express her appreciation of the gathering, or to voice concerns on the processes of the group before moving forward

• Approximately 10–15 minutes was devoted to reflection, evaluation and recommendations regarding the strengths and weaknesses of the group meeting and planning what needed to happen next time the group met.

• Each meeting ended with refreshments being served and socialisation. Women were given time to reflect on their practising, feelings and thinking including an evaluation of group process and content in each session.

5. The evaluation stage (after giving birth):

• The last meeting was organised after all the births had taken place and was concerned with a collective evaluation including an evaluation of the impacts of the group on women’ health and wellbeing.

• Each member was encouraged to express her experiences, and describe the impacts on her health and wellbeing. They were encouraged to mention networking or friends who had assisted or influenced them to have a healthy pregnancy.

• Women were invited to identify action strategies that they would like to use either individually or collectively with the aim of promoting health and creating networks and relationships for transformation.
APPENDIX 3

Section 3.1:

A Summary of Multiple Risk Factors of Preterm Birth

<table>
<thead>
<tr>
<th>Table 3.1.1 Multiple Factors Associated with Preterm Birth Involving Preterm Birth</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Low pre-pregnancy weight or low body mass index [7, 8]</td>
</tr>
<tr>
<td>• Smoking [7-13]</td>
</tr>
<tr>
<td>• Drinking alcohol [7, 8, 11, 13]</td>
</tr>
<tr>
<td>• Drug use [7, 8, 11, 13]</td>
</tr>
<tr>
<td>• Occupational factors e.g. prolonged walking or standing [7, 8, 11, 14-16]</td>
</tr>
<tr>
<td>• Exposure to air pollutants [17-19]</td>
</tr>
<tr>
<td>• Stressful lifestyle [13, 20]</td>
</tr>
<tr>
<td>• Psychological factors e.g. depression, anxiety, chronic stress [7, 8, 11, 21-25]</td>
</tr>
<tr>
<td>• Domestic violence [7, 8, 11, 13, 26]</td>
</tr>
<tr>
<td>• Age under 19 years or over 35 years [7, 8, 11, 13]</td>
</tr>
<tr>
<td>• Single status [7, 11, 20, 27]</td>
</tr>
<tr>
<td>• Non-Caucasian race; with the most socio-economically disadvantaged women and babies being the most at risk of preterm birth [7, 8]</td>
</tr>
</tbody>
</table>
### Section 3.2:

**Literature Review: Medical Interventions**

#### Table 3.2.1 Effectiveness of Anti-infective Medications on Prevention of Preterm Birth

<table>
<thead>
<tr>
<th>Anti-infective</th>
<th>Aim</th>
<th>Authors/ Year/ Journal</th>
<th>Search year</th>
<th>No. trials/ Samples</th>
<th>GA (wks)</th>
<th>Criteria</th>
<th>Key finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Cefetamet (IV) vs placebo</td>
<td>Assess the effect of prophylactic antibiotics on second to third trimester.</td>
<td>Thinkhamrop et al [28]/ The Cochrane Collaboration</td>
<td>1970 - 2004</td>
<td>6RCTs /2184</td>
<td>22-34</td>
<td>2nd and 3rd trimester before labour &amp; delivery. - There were 2 groups; 1) women with unspecified risk or unselected women 2) women with high risk; history of preterm birth, low birth weight, bacterial vaginosis or pre pregnancy weight &lt; 50 kg</td>
<td>- There was a risk reduction in PTB in women with previous PTB related to BV during current pregnancy (OR 0.48; CI 0.28-0.81). - There was no risk reduction in PTB in women with previous PTB without BV during current pregnancy (OR 1.06; CI 0.68-1.64).</td>
</tr>
<tr>
<td>2) Oral of Metronidazole &amp; Erythromycin vs placebo</td>
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<td>3) Oral of Erythromycin vs placebo</td>
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<tr>
<td>4) Clindamycin vaginal cream vs placebo</td>
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</tr>
<tr>
<td>1) Oral metronidazole vs placebo or no treatment</td>
<td>Evaluate effect of antibiotic treatment for BV &amp; TV for prevention of PTB</td>
<td>Okun et al. [29]/ Journal of American college of Obstetricians and gynecologists</td>
<td>1966-2003</td>
<td>14 RCTs /6728; (12 RCTs with BV 2 RCTs with TV)</td>
<td>12-34</td>
<td>Women with BV, TV were screened by gram stain and culture</td>
<td>Antibiotics for BV to prevent PTB: 1) No difference between antibiotic and placebo on PTB&lt;37wks (RR 0.93; CI 0.70-1.22) 2) No effect of antibiotics on PTB&lt;37wks in women who had previous PTB or second trimester miscarriage (RR 0.75; CI 0.45-1.24) 3) No effect of antibiotics on PTB&lt;37wks in women with positive of BV (RR 0.91; CI 0.66-1.26). Antibiotics for TV to prevent PTB - Metronidazole related to increased risk of PTB&lt;37wks (RR 1.78; CI 1.19-2.66, p=0.005) - In women with high risk of PTB, metronidazole related to increased risk of PTB&lt;37wks (RR 1.84; CI 1.07-3.18, p=0.03) Conclusion: both metronidazole and clindamycin can not reduce the risk of PTB&lt;37 wks</td>
</tr>
<tr>
<td>2) Clindamycin vaginal cream vs placebo or no treatment</td>
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<tr>
<td>3) Oral metronidazole &amp; erythromycin vs placebo or no treatment</td>
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QRT, quasi-randomised trial; RCT, randomised controlled trial; PTB, preterm birth; GA, gestational age; BV, bacterial vaginosis; TV, trichomonas vaginalis
Table 3.2.1 Effectiveness of Anti-infective Medications on Prevention of Preterm Birth (Continue)

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<thead>
<tr>
<th>Anti-infective</th>
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<th>Authors/ Year/ Journal</th>
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<th>GA (wks)</th>
<th>Criteria</th>
<th>Key finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Macrolide (Erythromycin) 2) Clindamycin, 3) Metronidazole with placebo, no treatment or vitamin C</td>
<td>- Evaluate effect of 2nd trimester antibiotics; macrolide, clindamycin, metronidazole on risk of PTB</td>
<td>Morency &amp; Bujold [30]/ Journal of Obstetrics &amp; Gynaecology Canada</td>
<td>1965 - 2006</td>
<td>16 RCTs (3 RCTs macrolides 5 RCTs clindamycin 8 RCTs metronidazole)</td>
<td>12-28</td>
<td>1. cervico-vaginal fetal fibronectin positive, 2. urogenital infection, 3. Healthy women with previous PTB or BW&lt;50kg 4. periodontitis 5. Bacteria vagonosis 6. Abnormal flora 7. Asymptomatic BV 8. Asymptomatic Trichomonas</td>
<td>1) There were lower rate of PTB (OR 0.72; CI 0.56, 0.93, p=0.01) in 2 RCTs erythromycin with metronidazole, 1 RCT without metronidazole 2) 5 RCTs clindamycin had lower rate of PTB (OR 0.68; CI .49,0.95,p=0.02) 3) There was higher rate of PTB when 8 RCTs of metronidazole alone were pooled (OR 1.31; CI 1.08, 1.58, p=0.005). Conclusion: macrolide &amp; clindamycin can reduce rate of PTB in high-risk women in 2nd trimester. However, metronidazole alone is related to increased PTB rate.</td>
</tr>
<tr>
<td>1) Amoxicillin 2) Oral &amp; cream clindamycin 3) Oral &amp; cream metronidazole compared with placebo</td>
<td>- Evaluate antibiotic treatment of bacterial vaginosis in pregnancy</td>
<td>McDonald et al. [31]/ The Cochrane Collaboration</td>
<td>1960-2005</td>
<td>15 RCTs/ 5888</td>
<td>10-28</td>
<td>- Women with bacterial vaginosis regardless of method of diagnosis (detected symptoms or asymptoms as part of a screening), co-infection with STD - History of previous preterm birth with weight &lt; 50 kg and BV</td>
<td>- No reduction of PTB before 37 wks (OR 0.91, 95% CI 0.78 to 1.06). - Treatment before 20 wks’ gestation may reduce the risk of PTB &lt; 37 wks (OR 0.63, 95% CI 0.48 to 0.84)</td>
</tr>
</tbody>
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QRT, quasi-randomised trial; RCT, randomised controlled trial; PTB, preterm birth; GA, gestational age; BV, bacterial vaginosis; TV, trichomonas vaginalis
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<th>Key finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Metronidazole</td>
<td>- Evaluate antibiotic treatment to reduce the risk of preterm birth</td>
<td>Simcox et al. [32]/ The Cochrane Collaboration</td>
<td>1966-2005</td>
<td>17 RCTs/ 9584</td>
<td>12-30</td>
<td>- Pregnant women with abnormal flora, previous preterm birth, positive fetal fibronectin, Trichomonas vaginalis, Group B Streptococcus, Ureaplasma urealyticum and Gardnerella vaginalis+/or BV</td>
<td>No significant association of antibiotic treatment to reduce the risk of subsequent PTB (RR 1.03, 95% CI 0.86-1.24)</td>
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<tr>
<td>2) Metronidazole &amp; Erythromycin</td>
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<tr>
<td>3) Clindamycin vs placebo</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1) Oral metronidazole</td>
<td>- Examine harms and benefits of screening and treating women who were asymptomatic for bacterial vaginosis</td>
<td>Nygren et al. [33]/Annals of Internal Medicine</td>
<td>1966-2007</td>
<td>7 new RCTs/ 3860 and 8 report data of meta-analysis</td>
<td>10-26</td>
<td>- Women with asymptomatic for bacterial vaginosis were divided into 3 groups; low, medium and high risks of PTB</td>
<td>- No significant effect on delivery before 37wks of low risk women ( RR -0.019, CI -0.056,0.018) - No significant effect on delivery before 37wks of medium risk women ( RR -0.006, CI -0.009,0.022) - High risk group; 3RCTs found some benefit, 1RCT found harm, 1RCTs found no benefit. - 5RCTs were pooled data, it showed no significant effect on delivery before 34 wks of high risk women ( RR 0.006, CI -0.067,0.079) <strong>Conclusion:</strong> no effect of screening &amp; treating in women who had asymptomatic for BV with low &amp; medium risk PTB.</td>
</tr>
<tr>
<td>2) Oral metronidazole &amp; oral erythromycin</td>
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<tr>
<td>3) Vaginal clindamycin</td>
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</tr>
</tbody>
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QRT, quasi-randomised trial; RCT, randomised controlled trial; PTB, preterm birth; GA, gestational age; BV, bacterial vaginosis; TV, trichomonas vaginalis
<table>
<thead>
<tr>
<th>Tocolytic agents</th>
<th>Authors/ Year/ Journal</th>
<th>Search year</th>
<th>No. trials/ Samples</th>
<th>Adverse effects</th>
<th>Key finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Meta-analysis/ Betamimetics with placebo/no treatment</td>
<td>Anotayanonth et al. [34]/ The Cochrane Collaboration</td>
<td>1960-2004</td>
<td>RCTs 11/1320</td>
<td>(RR 11.38; CI 5.21-24.86) Chest pain, dyspnea, hyperglycemia, hypokalaemia, headaches, nausea, palpitation, tachycardia, tremor</td>
<td>No reduction of perinatal deaths (RR 0.84; CI 0.46-1.55). Cerebral palsy, neonatal and infant death, necrotizing enterocolitis, RDS</td>
</tr>
<tr>
<td>2. Meta-analysis/ Oral Betamimetics with placebo/no treatment or indomethacin or magnesium</td>
<td>Dodd et al. [35]/ The Cochrane Collaboration</td>
<td>1980-2005</td>
<td>RCTs 11/1178</td>
<td>Tachycardia, hypotension, palpitation, tachypnea, nausea, vomiting, headache</td>
<td>Intravascular hemorrhage, necrotizing enterocolitis, neonatal jaundice, RDS</td>
</tr>
<tr>
<td>3. Meta-analysis/ Magnesium Sulfate with no treatment or other tocolytic agents</td>
<td>Crowther et al. [36]/ The Cochrane Collaboration</td>
<td>1980-2000</td>
<td>RCTs, QRTs 23/2000</td>
<td>A woman had respiratory arrest.</td>
<td>There was high risk of fetal and neonatal death (RR 2.82; CI 1.2-6.62)</td>
</tr>
<tr>
<td>4. Cyclo-oxygenase (COX) (Mainly indomethacin) with placebo or other tocolytic agents</td>
<td>King et al. [37]/ The Cochrane Collaboration</td>
<td>1980-2005</td>
<td>RCTs 13/713</td>
<td>Platelet dysfunction or bleeding disorder, hepatic or renal dysfunction, gastrointestinal ulcerative disease</td>
<td>Lungs, kidneys, heart</td>
</tr>
<tr>
<td>5. Calcium channel blockers (CCB) (Nifidipine) with other tocolytic (Ritodrine)</td>
<td>King et al. [38]/ Australian and New Zealand Journal of Obstetrics and Gynecology</td>
<td>1980-2002</td>
<td>RCTs 12/1029</td>
<td>-</td>
<td>Fewer RDS, intravascular hemorrhage, necrotizing enterocolitis, neonatal jaundice</td>
</tr>
</tbody>
</table>

QRT, quasi-randomised trial; RCT, randomised controlled trial; PTB, preterm birth; GA, gestational age
<table>
<thead>
<tr>
<th>Treatments</th>
<th>Aim</th>
<th>Authors/ Year/ Journal</th>
<th>Search year</th>
<th>No. trials/ Samples</th>
<th>GA (wks)</th>
<th>Criteria</th>
<th>Key finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cerclage for Short Cervix on Ultrasonography Meta-Analysis of Trials Using Individual Patient-Level Data</td>
<td>To estimate by meta-analysis of randomised trials whether cerclage prevents preterm birth in women with a short cervical length.</td>
<td>Berghella., et al. [39]/ Journal of American college of Obstetricians and gynecologists</td>
<td>1966-2004</td>
<td>4 RCTs/ 607</td>
<td>14-27</td>
<td>- Asymptomatic pregnant women screened by transvaginal ultrasonography in the second trimester of pregnancy and found to have a short cervical length. - All singletons, twins and triplets - Singletons with suspected cervical incompetence; twins - Singletons with risk factors for preterm birth and twins - Cervical length &lt;15 and 25 mm.</td>
<td>- In total women, there was no significant heterogeneity in the overall analysis ($P = 0.29$), preterm birth at &lt; 35 weeks (RR 0.84, 95% CI 0.67–1.06). - There was a significant reduction in preterm birth at &lt;35 weeks in the cerclage group compared with the no-cerclage groups in singleton gestations (RR 0.74, 95% CI 0.57–0.96), singleton gestations with prior preterm birth (RR 0.61, 95% CI 0.40–0.92), and singleton gestations with prior second-trimester loss (RR 0.57, 95% CI 0.33–0.99). - There was a significant increase in preterm birth at &lt;35 weeks in twin gestations (RR 2.15, 95% CI 1.15–4.01).</td>
</tr>
<tr>
<td>2. Cervical Cerclage for Prevention of Preterm Delivery: Meta-analysis of Randomised Trials</td>
<td>-Examine harms and benefits of screening and treating women who were asymptomatic for bacterial vaginosis</td>
<td>Drakeley, Roberts &amp; Alfreyic [40]/ The Cochrane Collaboration</td>
<td>1966-2007</td>
<td>6 RCTs= 2175</td>
<td>10-26</td>
<td>- Women with pregnancy loss history</td>
<td>- No reduction in preterm delivery or pregnancy loss (RR 0.75,95% CI 0.58-0.98) - Cervical cerclage was associated with mild pyrexia, increased use of tocolytic therapy, and hospital admission but no serious morbidity.</td>
</tr>
</tbody>
</table>

QRT, quasi-randomised trial; RCT, randomised controlled trial; PTB, preterm birth; GA, gestational age
<table>
<thead>
<tr>
<th>Treatments</th>
<th>Aim</th>
<th>Authors/Year/Journal</th>
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<th>GA (wks)</th>
<th>Criteria</th>
<th>Key finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Elective cervical cerclage for prevention of preterm birth: a systematic review</td>
<td>To evaluate effectiveness of cervical cerclage in preventing spontaneous preterm birth before 34 weeks’ gestation</td>
<td>Bachmann et al., [41]/ Acta Obstet Gynecological Scand</td>
<td>1966-2002</td>
<td>7 RCTs/2354</td>
<td>- Different gestation in each trial</td>
<td>- Women were at risk of preterm birth before 34 weeks’ gestation</td>
<td>- Elective cervical cerclage had a significant effect to prevent spontaneous preterm birth before 34 weeks’ gestation (ORs 0.72 (95% CI 0.53-0.97)) - Four studies reported perinatal death, rupture of membrane, chorioamnionitis and puerperal pyrexia (38 centigrade)</td>
</tr>
<tr>
<td>4. Prevention of Preterm Birth by Cervical Cerclage Compared With Expectant Management: A Systematic Review</td>
<td>- Evaluate effectiveness cerclage to prevent premature birth with expectant management</td>
<td>Odibo et al., [42]/ Journal of Obstetrical and Gynecological Survey</td>
<td>1966-2002</td>
<td>- 6 RCTs = 2190</td>
<td>At entry 9-29 weeks</td>
<td>- Women with risk preterm birth: Cervical length &lt;25 mm or Funneling &lt;25% - 2–4 prior preterm delivery &lt;37 weeks or 1 or more 2nd trimester loss/preterm delivery - Twins from ovulation Induction</td>
<td>- 278 of 2190 (12.7%) preterm deliveries. - Cerclage prevent preterm birth&lt;34 weeks (OR 0.77, 95% CI, 0.59, 0.99) (P .049). - Too small sample size - No demonstrable improvement in neonatal mortality (OR of 0.0.86, 95% CI, 0.56, 1.33; P .50). - There was a trend toward cervical cerclage reducing preterm births before 34 weeks. - The use of cerclage is, however, associated with an increased risk of postpartum fever.</td>
</tr>
</tbody>
</table>

QRT, quasi-randomised trial; RCT, randomised controlled trial; PTB, preterm birth; GA, gestational age
Section 3.3:

Literature Review: Midwifery Research

**Table 3.3.1: The Effectiveness of the CenteringPregnancy Model for Preventing Preterm Birth**

<table>
<thead>
<tr>
<th>Author(s)/Year</th>
<th>Research Aims</th>
<th>Subjects</th>
<th>Design &amp; Methods</th>
<th>Interventions</th>
<th>Key Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Rising [43]</td>
<td>- To develop CP program</td>
<td>- 111 women were ethnically diverse with age&lt;19 =25%, 20–29 =64% and &gt; 30 = 11% – 68% Nulliparous women with GA before 20 weeks.</td>
<td>- Descriptive pilot study was conducted during a 15-month period</td>
<td>- Group facilitation, health promotion; assessment, education, support. - 10 sessions each 90 minutes - 8-12 women per group - 13 groups</td>
<td>- Only 6 LBW babies (1500 and 2500 g) (National PTB rate &gt; 10%)</td>
</tr>
<tr>
<td>2. Ickovics et al./ [44]</td>
<td>- To evaluate the effect of CP group vs standard prenatal care on BW and GA.</td>
<td>- 458 women - 80%=black, 15%=Latino, 5%=White - Age 14–19= 39%, 20–25= 45%, 26–30=12% and &gt; 31= 3% - 47% Nulliparous women with GA ≤ 24 weeks - 229 women in CP group; 229 in individual.</td>
<td>- Prospective , matched cohort study - Random selection by computer - Matched by clinic, age, race, parity and infants’ birth weight</td>
<td>- 3 concepts guided the group facilitation: health assessment, education/skill-building and support - 10 sessions each 90 minutes - 12 participants per group at the similar GA.</td>
<td>- BW babies in CP were greater than those in standard care (F = 7.68, p&lt;0.01). - LBW in CP =19, individual =29</td>
</tr>
</tbody>
</table>

BW: Birth Weight; CP: CenteringPregnancy; GA: Gestational Age; LBW: Low Birth Weight; NR: Not Reported; OR: Odd Ratio; PTB: Preterm Birth; RCT: Randomised Control Trial; NR: No report
<table>
<thead>
<tr>
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<th>Interventions</th>
<th>Key Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Grady &amp; Bloom[45]</td>
<td>- Evaluate CP model on satisfaction with prenatal care, PTB, LBW and mean BW</td>
<td>- 124 adolescents - Black 94% White 6% - GA 12-18 weeks.</td>
<td>- Non-equivalent control - Data collection women who gave birth in 2001-2003 - Evaluate 2 times; at 7th prenatal and 10th or post partum - 2 comparisons data; 1st CP 2003 with 2001, 2nd CP 2003 with 1998</td>
<td>- Themes of care: education &amp; support - 12 sessions - 8-12 women per group in Teen Pregnancy Center at Barnes Jewish hospital St. Louis, Missouri.</td>
<td>- LBW CP group = 8.8% compare to 2001(22.9%) and 1998 (18.3%); ( p&lt;.02 ) - CP group had lower rate of PTB=10.5% (2001=25.7, 1998=23.2%), ( p&lt;.02 )</td>
</tr>
<tr>
<td>4. Ickovics et al.[46]</td>
<td>- Evaluate group prenatal care improve pregnancy outcomes, psychosocial function and satisfaction</td>
<td>- 1047 women - Black=79%, Latino= 13%, White= 8% - Age 14-25 - 62% Nulliparous women with GA18 weeks plus - RCT group had the same expected delivery month (Matched for age, income, education)</td>
<td>- Multisite RCT - Compare CP with standard prenatal care - Structured interviews at entering, during 3rd trimester and postpartum - Intention to treat analyses</td>
<td>- No difference in BW</td>
<td>- CP had significantly less PTB (9.8%) than standard care (13.8%) This is equivalent to a risk reduction of 33% (OR 0.67, 95% CI 0.44–0.99, ( p=.045 ))</td>
</tr>
</tbody>
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BW: Birth Weight; CP: CenteringPregnancy; GA: Gestational Age; LBW: Low Birth Weight; NR: Not Reported; OR: Odd Ratio; PTB: Preterm Birth; RCT: Randomised Control Trial; NR: No report
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</tr>
</thead>
<tbody>
<tr>
<td>5. Robertson, Aycock and Darnell [47]</td>
<td>- To compare the effectiveness of CP and traditional care on maternal outcome</td>
<td>- 100% Hispanic, 49 women; 24 women in CP with similar due dates and 25 in traditional care</td>
<td>- Quasi-experimental design</td>
<td>- CP model</td>
<td>- No significant differences for mean birth weight</td>
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<td></td>
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<td>- Questionnaires:</td>
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<td>(1) At initial visit for demography, history, Rosenberg self-esteem scale.</td>
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<td>(2) At 34–36 weeks for prenatal and postnatal care knowledge and health behaviours.</td>
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<td>(3) At postpartum for evaluation infant outcomes, scale of breastfeeding, Rosenberg self-esteem scale, depression scale and satisfaction.</td>
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<td></td>
<td></td>
<td>- CP questionnaire was given only CP group at the postpartum visit.</td>
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</thead>
<tbody>
<tr>
<td>6. Klima et al. [48]</td>
<td>- To compare the effects of CP model and individual care</td>
<td>- 110 women in CP and 207 women in individual care</td>
<td>- A Pilot study at urban public health clinic on CP model</td>
<td>- CP model with 22 groups completed the program</td>
<td>- No differences BW at birth in both groups</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- 100% African American, low risk women</td>
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<td>- Postcards were sent to remind before meeting</td>
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<tr>
<td></td>
<td></td>
<td>- GA &lt; 18 weeks</td>
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<td>- Program staffs rang women before meeting</td>
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<td></td>
<td></td>
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<td></td>
<td>- CP was assessed in 3 ways: Focus group, questionnaires and medical record on</td>
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BW: Birth Weight; CP: CenteringPregnancy; GA: Gestational Age; LBW: Low Birth Weight; NR: Not Reported; OR: Odd Ratio; PTB: Preterm Birth; RCT: Randomised Control Trial; NR: No report
Section 3.4:

Medical Interventions Aimed at Prevention of Preterm Birth

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APPENDIX 5

Section 5.1:

Stories of Women Who Gave Birth at Term

1. Kai

Kai, aged 28, was 19 weeks pregnant with her third pregnancy when I first met her. Kai and her husband Chai had one child aged five years who was born by caesarean section due to a prolonged second stage of labour and maternal exhaustion. She had miscarried in between these two pregnancies. Even though the current pregnancy was unplanned, Kai and her husband wholeheartedly welcomed it.

Kai was born in Bangkok. She is the first of two siblings by the same parents. At birth, she weighed only 1,200 grams. As a newborn, Kai was nursed in the neonatal intensive care unit for three months before her mother took her to the grandparents. As a child, Kai grew up with her peasant grandparents, who always found it hard to make ends meet. By age 12, Kai had left school. She moved to Bangkok and was re-united with her mother. She married Chai when she was 21. Kai became pregnant with their first child two years after marriage.

In this pregnancy, Kai had 13 antenatal visits to the hospital and regularly attended the group, completing her program just before she gave birth. Her weight gain (17 kilograms) was considered appropriate. Her iron status improved during her pregnancy. At 24 weeks gestation, Kai had a periodontal checkup and dental fillings. Because of her previous caesarean section, Kai had an elective caesarean section with tubal ligation at 39 weeks. A healthy boy weighing 3,400 grams was born. Kai breastfed and intended to breastfeed for as long as she could. Kai and her baby were well and discharged from hospital on their third postnatal day.

Reflections

Kai said that prior to joining the group, she was uninformed about what she should do or how she should care for herself during pregnancy. Eating, drinking or sleeping was just the usual daily routine for her whether or not one was pregnant. Kai confessed that she was ignorant about nutrition and the benefits of drinking enough water. At the time, Kai was not getting
enough sleep; her normal bedtime was from 2 a.m. to 7 a.m. Kai said that because of her learning through the group, she changed her lifestyle and how she took care of her health during this pregnancy. She reorganised her life, paying greater attention to her daily routine. Kai made sure that she had three full meals each day and carefully selected healthy foods for herself and her unborn baby. Kai said that she learned the importance of an appropriate intake of water from the group and when she increased her intake, her urine became less concentrated, and this helped her recover from a urinary tract infection.

Kai found that group discussions were instrumental in helping her understand and become more mindful of her health and state of pregnancy. She explained that her experiences at the group discussion often became material for family conversation. Kai’s sharing of her experiences with the group with her husband led to the development of a closer relationship with him, and Kai said he became more aware of his role and the need to take his responsibility for his wife and baby more seriously. When the other women shared their hardships and their coping strategies, Kai said how helpful that was in learning how to manage difficult situations herself.

Kai said her feelings about this third pregnancy were very different from how she felt the first time she was pregnant. Her husband had ignored the pregnancy and her needs the first time, and she felt alone and irritated with him. This time, it was different because of the way she learned to share with him what happened at the group. She emphasised that her husband looked after her very well this time. Kai was very happy and surprised to see how her husband was truly sensitive to her needs and consistently made an effort to look after her while she enjoyed home rest.

Kai said that she felt proud and self-assured in this pregnancy after participation in the group. After giving birth, Kai’s joy and happiness knew “no bounds” as she went about the business of bringing up this son, “feeding and constantly looking after him in every which way” she could. This experience was very different to that with their first son. Kai said sharing experiences with the women in the group definitely helped expand her own horizon and equipped her with sharper self-awareness. The positive companionship gave her “great moral support” and “reassured her of her own worth” as a group member.
2. Mary

Mary, aged 34, was 22 weeks pregnant with her fourth pregnancy when I first met her. It was an unplanned pregnancy but Mary and her husband, Robert, wholeheartedly welcomed it. Mary is the first to the two siblings by the same parents. She was born a preterm baby in Bangkok. Weighing only 1,000 grams at birth, she was therefore nursed in neonatal intensive care unit for three months, and she grew up as a sickly child. She has a congenitally crippled right arm. As a newborn, she was breastfed for one year. Mary’s parents were very poor, and they always found it hard to make ends meet.

Mary’s first child is 12 and was born a preterm baby with a birth weight of 2,100 grams. Her second child is nine, and he was born a full-term baby. Both Mary and her husband’s educational level is year six. She is a housemaid for a company and has social security. Robert is a temporary employee whose income is irregular. Mary, her husband and their children live with her parents under the same roof.

Mary’s mother and brother are public health volunteers; they have a medicine chest and nursing kit. Thus, sick people who lived nearby always came to see them (I used to talk with Mary’s mother and brother. They were knowledgeable about health in pregnancy). Mary’s family is Muslim but they are not strict about their beliefs, culture and rituals. For example, Mary did not keep the placenta for return to her home. She also had tubal ligation. Mary said that her family did not have daily reverence and respect paid to God (these are Muslim rituals). Mary said that her family respected God, but she had to organise her daily lifestyle to manage the current situation.

Mary received approximately five antenatal care sessions and regularly attended the group discussion until quite close to the date of delivery. She showed appropriate weight gains during pregnancy (63.4 to 75.4 kilograms) and her iron status also improved. Mary confided that after she knew that she had a high-risk pregnancy she felt worried about her unborn baby. She said that she did not want to have a small baby. She said that it was good to know about her pregnancy because it had encouraged self-awareness.

At 37 weeks, Mary gave birth to a healthy baby girl weighing 3,150 grams. Following the birth she received a tubal ligation. Mary and her baby remained in the hospital for only three days. Mary, her husband and parents felt proud of the baby. Mary planned to breastfeed for
only three months because she had to return to her job. Mary’s parents look after her baby following her return to work.

Reflections

Mary said that she was not fortunate enough to enjoy food in sufficient degrees prior to her association with the group. Mary developed some healthy eating and drinking habits from her previous pregnancy and group discussion. She carefully selected healthy foods for her unborn baby. Mary expressed that she always ate vegetables and tropical fruits such as ripe papayas and bananas. She also was aware of her water intake and discussed the benefits of drinking a sufficient amount of water with friends in the group. She said that it was very good for pregnancy because it could prevent yellow baby (hyperbilirubinemia) (Mary and other women believe that an inadequate water intake leads to hyperbilirubinemia). She confided that she drank three to four litres of water per day. Mary also shared her eating experiences and encouraged women to eat an egg every day. She discussed the positive value of an egg diet and made it a point to add an egg or two into her daily food intake. Eggs do help to keep expectant mothers in good health as well as encourage baby growth (eggs are relatively affordable, easily available and highly nutritious for Thai people).

(Mary seems to be easygoing and comfortable with people). After each session, she always talked to friends about what happened in the group meeting especially about building bonds with the baby (friends in the group admired Mary because she shared lots of her knowledge and experiences. Thus, everyone expected her to be a leader in the group. Mary shared her pregnancy experiences; she advised friends to talk with their unborn babies). She said that she always talked with her baby and turned on soft music for it (Mary did not know that her talking with her unborn baby was bonding. Thus, it became a main topic for discussion in this group every week. I knew that most Thai women in the group felt somewhat odd and awkward talking to their unborn babies. They were reluctant to do it at first).

(Mary was attentive, open and willing to share her experiences with the group). She confided that she really liked group discussion because she gained a lot of knowledge and health know-how on pregnancy and preterm birth. She learned how to look after herself and her unborn baby. Her first child was born a preterm baby because she did not know how to look after herself. Mary said as a result of her engagement with group activities, she shared her knowledge and experiences that affected her and her unborn baby. She felt it was
unbelievable that she could be a full term pregnancy. She felt proud and self-assured in giving birth. Mary said there were plenty of benefits in group-based antenatal education because friends in the group could share their experiences. Having learned, for instance, about what had happened to some of her friends, she came to understand the kinds of hardships they had gone through and how they successfully coped with them. Group-based antenatal education was like the same language for pregnant women so sharing knowledge and experiences was easier to understand.

3. Kelly

Kelly, aged 27, was 18 weeks pregnant with her fourth pregnancy when I first met her. It was an unplanned pregnancy but she and her husband, Won felt comfortable with it. Kelly is the fourth of six siblings by different fathers (Kelly’s mother remarried four times). By age 10, Kelly’s father had died. Her mother had an alcohol addiction and indulged in gambling. At that time, her twin sisters were only six months old, and they had to drink condensed milk. Kelly became inactive because she had inadequate sleep, a nutrient deficiency and was abused by her mother. Kelly skipped her classes frequently because she had to look after her twin sisters all day and all night when her mother did not. However, by age 13, she completed the compulsory grades. Kelly began to work as a caddy. She acted as a father, and she was responsible for all her sisters. After she repaid the loan to her mother and then had her own savings, she continued her study in non-formal education until she graduated from year nine.

By age 16, Kelly had a sexual relationship with the man who later became her husband. Kelly first began to menstruate at 17 years old (It was delayed because she was unhealthy from inadequate sleep and nutrient deficiency. She was also very thin when she was young). Unaware of getting pregnant, she quickly became pregnant three times in succession. The first two pregnancies were terminated. Her third pregnancy produced a small baby (2,500 grams) (It might be because she was under nutrition). She said that she received vitamin supplements, but she stopped using them because each time she took them, she felt dizzy. The doctor had never told her what supplements were. She confessed to me that she breast fed her baby only two months because she had to return to work. By age 21, Kelly had two induced abortions.

For her latest pregnancy, Kelly received approximately 12 antenatal care sessions and regularly attended the group discussion until quite close to the date of delivery. She showed appropriate weight gains during pregnancy (53 to 66.6 kilograms) and her iron status also
improved. At 24 weeks, Kelly had a motorcycle accident and had been bleeding from the vagina. At 30 weeks, Kelly had spontaneous bleeding; the ultrasound examination showed placenta previa, and the doctor mentioned a caesarean section. She was very worried because she had a bad impression of caesarean sections from her neighbours. In addition, she wanted to have a normal birth. She expressed to me that giving normal birth took only two to three days to recover; she wanted to be a healthy mother. Fortunately, Kelly had no further bleeding per vagina. At 36 weeks, the ultrasound result showed no placenta previa; Kelly was very happy.

At 39 weeks of pregnancy, unfortunately Kelly had a caesarean section due to foetal distress. A healthy baby boy weighing 3,100 grams was born. The first day, Kelly suffered quite a lot from pain. However, Kelly and her baby remained healthy and had been only five-days of hospitalisation. She commenced breastfeeding and planned to continue for three months or as much as she could. She said she would feed the baby by herself. She wanted to keep a close relationship with her second child.

**Reflections**

On Kelly’s reflection, Kelly said that prior to joining the group, she was rather uninformed about what she should do or how she should care for herself during pregnancy. Kelly said she used to eat only two meals a day, and she was ignorant about good nutrition. She felt any kind of food would be good for her; mostly, her meals consisted of high carbohydrates and sugars. She did not take any vitamin supplements because the supplements caused constipation, even if she drank a lot of water (It might be because she had inadequate fibre). She said that she did not care about water intake, and she always retained urine. (Her usual water intake might be insufficient with a result that she suffered a urinary tract infection).

Kelly said that as a result of her engagement with the antenatal group activities, she changed her daily lifestyle, and she took care of her health during this pregnancy because she was afraid that her baby would be born preterm or underweight. She reorganised her life, paying greater attention to her daily routine such as eating, drinking, sleeping, talking to the baby and even dealing with her stress and emotion. She always took vitamins supplements. Kelly emphasised that she wanted to have a normal birth. Sharing experiences in the group encouraged Kelly to be more conscious of her health and her unborn baby. Won took her to the group and waited outside every time (Kelly was attentive, open and willing to share her
experience with the group). She confided to me that she felt awkward talking to her unborn baby. She was shy to talk in front of other people; this was true for most women in the group as well.

Kelly expressed that she felt proud and self-assured in her pregnancy after participation in the group. She was proud that she delivered a full term healthy baby; she never imagined her baby would be so big. Kelly confided to me that group discussions were instrumental in helping her understand and become more mindful of her health and state of pregnancy. Having learned, for instance, about what had happened to some of her friends, she came to understand the kind of hardships they had gone through and how they successfully coped with these hardships. Kelly’s positive experience and ability to deal with stress and emotion together with her fairly easygoing attitude seemed to be a strong influence and had a beneficial effect on her health and pregnancy.

4. Pauline

Pauline, aged 16 who was 20 weeks pregnant with her first pregnancy, insisted that she had been having normal menstruation, and she became pregnant unknowingly. Pauline’s mother (Lucy) noticed her abdomen was big so Lucy punished Pauline for lying. She confessed that she had sexual relationship with her boyfriend. Pauline came to the antenatal clinic for the first time accompanied by her mother and found that Pauline was pregnant but suffered from large genital warts. Pauline’s parents wanted to terminate the baby; they were worried about congenital abnormality (Abortion is illegal in Thailand. I also advised them that genital warts are not transmitted to the foetus in mother's womb but can be transmitted during birth).

Pauline was born in Bangkok and was a healthy baby who was breast-fed for two years. She is the first to the two siblings by the same parents. Pauline’s parents moved from Northeastern Thailand 15 years before. They completed the compulsory grades from primary school. They worked as road sweepers in Bangkok province. Pauline’s boyfriend (Mark) was 21 years old and finished year nine. He has an uncertain income. Mark lives with his father; they always quarrel. Pauline met Mark accidentally when she traveled. A month later, they had a sexual relationship. Mark prevented pregnancy by external ejaculation during intercourse so Pauline was not aware of pregnancy. They contacted each other for six months. Pauline did not know that Mark had condylomata acuminata until attending antenatal care. Pauline’s parents
separated Mark from Pauline because they wanted Mark’s parents to make a marriage proposal first. Thus Mark just visited Pauline once a fortnight, but they did not stay together.

Prior to joining the group-based antenatal care, Pauline was concerned about (1) The spread of genital warts (2) Preterm birth (3) Her study; fortunately, she can continue her study after giving birth. Pauline confessed to me that many schoolmates at the same age were pregnant, but the school allowed them to suspend their study. Pauline expressed that the major concern was genital warts during pregnancy. Pauline said infected women with chronic warts could possibly develop cervical cancer. It is extremely difficult to treat for some women.

Pauline received approximately seven antenatal care sessions and regularly attended the group discussion until quite close to the date of delivery (Nobody in the group knew that Pauline had genital warts). She showed appropriate weight gains during pregnancy (55 to 67.5 kilograms) and her iron status also improved. Since the first antenatal session, Pauline was treated weekly with nine treatments of Trichloro-acetic acid (TCA). However, the genital warts got larger and spread further. With the impending birth therefore, the treatment was replaced by electrocautery. Following the electrocautery, Pauline had an episode of uterine contractions and was admitted to the labour ward for two days by taking a rest without medical treatment for threatened preterm labour. Then the uterine contraction resolved spontaneously. Finally treating the warts by electrocautery was successful.

At 39 weeks, Pauline had a normal birth. A healthy baby boy weighing 3,200 grams was born. Pauline and her baby remained healthy and had been only three-day of hospitalisation. She commenced breastfeeding planned to continue for at least one year, or as long as she could (Pauline’s parents encourage breast feeding).

Reflections

Pauline confided to me that prior to joining the group, she was rather uninformed about what she should do or how she should care for herself during pregnancy. Her lifestyle was just daily routine for her whether or not she was pregnant. Pauline said she used to eat only 1-2 meals a day, and she was ignorant about the nutrition and thought any kind of food would be good for her. Pauline was particularly fond of snacks. She also said that she did not care about water intake and did not engage any physical exercise (Her usual water intake might be insufficient with a result that she suffered from severe constipation). Thus, she often had to take laxatives.
As a result of her engagement with antenatal group activities she changed her daily lifestyle, and Pauline began to take care of her health. She reorganised her lifestyle by paying greater attention to her daily routine and chatting to the baby and even dealing with her stress and emotion. Regarding nutrition, Pauline’s mother cooked for Pauline, and she knew what foods benefited pregnancy. Pauline had inadequate sleep; she did change her normal bed time from midnight to 10 p.m. - 7am.

On Pauline’s reflection, the relationship between Pauline and her mother was really bad at first and Pauline’s father was very sad. Prior to an association with group, each time Pauline came to the antenatal clinic she was accompanied by her mother. Pauline expressed to me that joining the group built a good relationship between Pauline and her parents. (Pauline’s parents believed in a group based antenatal education). After joining the group, their relationships were much better. Pauline’s mother was much more confident in her and did not accompany her each time Pauline confided that she told her mother what happened in the group each time. Her parents began to accept her and planned for her life. They encouraged Pauline to continue her study. Her parents helped her in raising her child when Pauline studied in the evening.

Pauline said that she learnt the possibility of preterm birth. She was afraid and did not want to give birth prematurely. She had to become self-aware and consider what foods are beneficial for the baby. Pauline expressed that she felt proud and self-assured in her pregnancy after participation. She was proud that she gave a full term healthy baby. She never thought her baby would be healthy. Pauline said attending the group was beneficial for her first pregnancy. Sharing experiences from the others empowered her to take care of herself to prevent adverse situations. Pauline also shared her knowledge and experiences to her neighbors who were also teenage pregnant women.

5. Tammy

Tammy was aged 16 and was 22 weeks pregnant with her first pregnancy when I first met her. It was an unplanned pregnancy but her mother and her partner, David felt comfortable with it. Tammy was born in Yasothon province, northeastern region and is the first to two siblings by the same parents. Tammy was born a full-term baby with a weight of 3,300 grams. She was breast fed for two years. As a child, she was healthy and lived with her grandparents. Tammy confided to me that as she grew up her parents always quarreled because her mother addicted to alcohol. By age 12, her parents had divorced. Tammy and her sister continued to
live with their grandparents. Tammy has a good relationship with her grandmother; she always consults to her grandmother. After she completed year nine, she lived with her mother in Bangkok.

Tammy met her partner David (aged 19) because he works at the same place as her mother. David is Laotian and an illegal immigrant. Tammy became pregnant a year after meeting David. Tammy’s grandparents and mother advised her to conceal her relationship because David did not have a passport or identity card to give to the hospital. Thus her marital status in the obstetric record was single.

Tammy told me that she felt concerned about her unborn baby when she first met midwives. She was afraid that her baby would be born preterm or underweight because she knew from the midwife that teenage pregnancy was a risk of preterm birth. Tammy received approximately seven antenatal care sessions and regularly attended the group discussion until quite close to the date of delivery. She showed appropriate weight gains during pregnancy (48 to 60.5 kilograms) and her iron status also improved. At 24 weeks of pregnancy, Tammy had a periodontal treatment (dental filling).

At 39 weeks of pregnancy, Tammy had a normal birth. A healthy baby girl weighing 2,800 grams was born. Tammy and her baby remained healthy and had been only three-days of hospitalisation. She commenced breastfeeding and planned to continue as long as she could. She had enough milk flow for full breastfeeding and Tammy’s mother, and grandmother also encouraged her. Now Tammy and her baby live with her grandparents in her home town while David works and lives in Bangkok.

**Reflections**

Tammy confessed that prior joining the group, she was rather uninformed about what she should do or how she should care for herself during pregnancy. The significant concern for Tammy was eating and drinking (less than four glasses of water a day). Tammy told me that she was totally ignorant of healthy eating and drinking because she did not have a big appetite, so she did not eat much. Tammy always bought breakfast, lunch, snacks and desserts from road side stalls. All these practices were just the usual daily routine for her whether or not she was pregnant. She ate alone in the morning and midday. She told me that she used to eat only two meals a day and was ignorant about good nutrition because she did
not know how to select beneficial foods and thus thought any kind of food would be good for her. She did not care about her water intake.

Tammy said that a result of her engagement with the group activities, she definitely changed her daily lifestyle and how she took care of her health during this pregnancy. She changed her lifestyle, paying greater care to her daily routine and chatting to the baby. Tammy changed her drinking and eating habits after the second session. She always ate three meals and carefully selected healthy foods for her unborn baby (Tammy is an obedient girl and does not speak much. In a group session, she was attentive and appeared rather reticent preferring to listen to others).

Tammy said that the discussions held at each session encouraged her to think and be aware her health and pregnancy. She expressed that she exercised daily following the exercise for easy delivery brochure. Tammy said that having learned, for instance, about what had happened to some of her friends, she came to understand the kind of hardships they had gone through and how they successfully coped with them. She also expressed that when she returned home, her experience at the group discussion often became topics for her mother's conversation, for example, how talking with the unborn baby could create even more intimate bonding. Tammy made it daily routine to talk to her unborn baby, and she even made a point of involving her baby in daily decisions. For example, shall we eat lunch? Shall we take a shower? David also liked to talk with the baby and to turn on soothing music for the baby every evening.

Tammy expressed, she felt proud and self-assured in her pregnancy after attending the group. She said that many people told her to be aware risks but with care she could succeed in term pregnancy. Tammy described that she gained more understanding from friends. Group discussions helped her understand and become more mindful of her health and state of pregnancy. She said that prior to the group, she was afraid of the pregnancy and giving normal birth but group participation changed her views. She understood her pregnancy and believed in her ability. She felt responsible for her unborn baby every day.

6. Vicky

Vicky (aged 16) was 17 weeks pregnant with her first baby when the researcher first met her. It was an unintended and unwanted pregnancy, but her boyfriend (Mike) felt comfortable with it. At first, she wanted to terminate the baby, but she had no money for the expense.
Vicky was born a healthy 3,300 grams baby in Bangkok and did not breastfeed. She is the youngest of three siblings by the same parents. Vicky graduated year nine at school. She seemed to be addicted to cigarettes and misuses alcohol. Vicky’s mother was a mistress of her father. Her mother earns a living by washing clothes whereas her father quitted his job because he is sick from prostate cancer.

Vicky became pregnant after six months of sexual contact with Mike. She said she often had sex without prevention but never realised she could become pregnant. Mike is nineteen years old and is studying in his third year of vocational school. He is addicted to alcohol and enjoys spending more time with friends than Vicky. Mike is the third child of the three siblings by the same parents. Vicky said she was not sure whether Mike was the baby’s father because she also had a sexual relationship with another man.

Vicky had 14 antenatal care visits and regularly attended the group discussion up until the birth of her baby. While she was staying with her mother, Vicky was able to choose and eat more food because most of her food was provided from her uncle who is a temple boy\footnote{A temple boy helps the monk and carries the alms bowl of the monk during the morning alms collection, and then prepares the monk’s food before eating the left-over. A temple boy gets free food from monks.} at a nearby Buddhist temple. Vicky’s weight gain (11 kilograms) was appropriate and her iron status also improved. Vicky was successfully treated for a urinary tract infection and vaginal discharge at 28 weeks. She was given two courses of three doses of antibiotics (Cef-3) and anti-fungal medication (Clotrimazole) Vicky was hospitalised three times with threatened premature labour at 32, 34 and 35 weeks gestation, respectively. She was treated with Magnesium sulphate injection and rest.

At 38 weeks, Vicky gave birth naturally to a healthy baby girl weighing 2,700 grams. She commenced breastfeeding and planned to continue for three months. Vicky told me that she wanted to breastfeed but has flattened nipples and was forced to supplement with a bottle. Vicky’s changing health status is summarised in the table below.

**Reflections**

The significant concerns when she first joined the group were food intake, water intake, exercise, sleep, alcohol consumption and smoking. Prior to joining the group, ate only one to two meals a day. Vicky did not eat vegetables at all, since she was young. She drank very little water or not at all, so she had chronic constipation (Her lips and skin were very dry). She
was fond of snacks and was addicted to alcohol and smoking. Vicky’s normal bed time was about 2-3 a.m. or at dawn, and she woke up about 6-7 a.m. Some days she did not sleep because she went to the nightclub; she slept again in the morning of the next day. Vicky said she mostly slept in the daytime. Vicky said that she was rather uninformed about what she should do or how she should care for herself during pregnancy. Her lifestyle was just the usual daily routine for her whether or not she was pregnant. Prior to attending the group, Vicky’s relationship with Mike was inconsistent. The main cause was that Mike is addicted to alcohol, friends, and other women. If Mike did not return home or quarrel with her, Vicky would smoke heavily. She sometimes went to the nightclub and drank alcohol. At 20 weeks, Vicky was drinking and smoking heavily (six cigarettes a day).

As a result of her engagement with the group activities, Vicky gradually changed her daily lifestyle and how she took care of her health during the pregnancy. She attempted to reorganise her life, paying greater attention to her daily routine. Vicky said her eating style was changed; she chose to eat beneficial foods. She tried to consider whether she had all five categories of nutrition or not, and she tried to eat vegetables more often. Vicky said that she did not really like to eat eggs, but she ate an egg daily because it was cheap, easy to find and easy to cook. Vicky drank more water; 500 mL to 1500 mL. She also drank 500-750 mL of milk. She continually took vitamin supplements. While she was staying with her mother, most of her foods were from her uncle who is a temple boy at nearby temple. Vicky chose to eat healthy foods that were beneficial for her baby. Vicky expressed that sometimes she did not have an appetite but when she thought about her unborn baby and the encouragements from friends in the group, she changed her mind. She also changed her bedtime from 3 a.m. - 11 p.m. She also slept three to four hours in the daytime; Vicky said she could not sleep at night.

After attending the group discussion twice, Vicky stopped going to the nightclub and drinking. She smoked only one or two cigarettes per day; some days she did not smoke at all. After the first hospitalisation due to concerns for preterm birth, Vicky did not smoke or drink alcohol at all (this was after the researcher took Vicky and Mike to see preterm babies in the Neonatal Intensive Care Unit). Vicky began to accept Mike’s behaviour because she was encouraged by the researcher and her friends in the group. Vicky had become more empowered and conscious of how to take care of herself. She expressed that her life did not depend upon Mike. She confided that the Healthy Behavioural Cards (HBCs) were very good. They reminded her to consciously take care of herself. The positive companionship gave her
great moral support and reassured her of her own worthy role as a group member. She tried to be patient because she would give birth soon.

Vicky expressed that she felt proud and self-assured in the pregnancy after participation in the group. Vicky said she was amazed and very proud that she could carry the pregnancy to a full term. She never thought the day would come. She expressed that she was encouraged by the researcher and her friends in the group. Vicky said if she had not joined the group, she would have given birth at 24 weeks. She accepted that listening to her friends in the group made her understand how to behave in order to be a healthy mother. Vicky’s mother was very happy that Vicky had attended this project. Her mother also gained more knowledge.

I argue that medical treatments may be effective for inhibiting premature uterine contractions but not preventing them. If medical treatment was effective to prevent preterm birth, Vicky would not have had three occasions of hospitalisation for threatened preterm labour. Hence, without women’s health empowerment, awareness and consciousness, giving birth prematurely is still highly likely for those women at risk. This conclusion is consistent with the literature review in Chapter Three.

7. Linda

Linda (aged 24) was 18 weeks pregnant with her fourth pregnancy when I first met her. She was known to have Thalassemia and her general appearance had the facial features, pale skin and thin shape consistent with that condition. Her first baby was born prematurely. The current pregnancy was unplanned but she and her husband (Tiger) felt happy and welcomed it.

Linda was born in Bangkok. At birth, she weighed only 2,100 grams. She is the first for two siblings by the same parents. She was breast-fed for more than one year. Her parents graduated from primary school, and Linda graduated year nine. When Linda was 17 years old, she terminated two pregnancies. She became pregnant again when she was 20 years old. Her ex-partner (Alex) was a heavy driner, and he was hot-tempered. Linda said that she was a victim of domestic violence on several occasions. She split from Alex, she was 16 weeks pregnant. Linda was very stressed and was afraid that people would gossip about her. She returned home to live with her parents. Her first child was born prematurely at 34 weeks. At birth the baby weighed only 2300 grams. The baby was breast-fed for more than two years. Two years later, Linda married her husband (Tiger) and once pregnant she ceased working at her job, which had included selling beer and being a security guard.
Linda went to approximately 11 antenatal care sessions and regularly attended the group discussion until quite close to the date of delivery. She showed appropriate weight gains during pregnancy (41.5 to 51.5 kilograms), and her iron status did not improve. At 24-week gestation, she had a dental filling and periodontal checkup. At 32-week gestation, she had preterm labour pain and was required to rest at home.

At 39 weeks, Linda had a normal birth; a healthy baby boy weighing 3,100 grams was born. Linda and her baby remained healthy with only three days in the hospital. She commenced breastfeeding and planned to continue as long as she could.

**Reflections**

Linda said that prior to joining the group and learning about pregnancy self-care needs, she was rather uninformed about how she should care of herself during pregnancy. Linda confided to me that she was fond of soft drink. She confessed that she used to eat only two meals a day erratically because she only woke up at about 10 a.m. She was also ignorant about good nutrition. She did not care about the benefits of drinking a sufficient amount of water. Linda’s normal bedtime was around midnight to 1-9 a.m.

Linda expressed that as a result of her engagement with the group activities, she definitely changed her daily lifestyle and how she took care of her health during her pregnancy. She changed her life, paying greater attention to her daily eating and sleeping patterns. Linda said her eating habits had changed; she always makes sure that she eats three nutritious meals. She considered the healthiness of each meal and ate many kinds of fruit. She said that this pregnancy was very different from her last pregnancy. She did not suffer from any stomach ache symptoms. For this pregnancy, she more consciously looked after of her health and the health of her baby. She has learnt more about eating, sleeping, and coping with stress. Linda confided to me that group discussions were instrumental in helping her understand and become more mindful of her health and state of pregnancy. Having learned, for instance, about what had happened to some of her friends, she came to understand the kind of hardships they had gone through and how they successfully coped with them. Linda said her feelings about the second pregnancy were very different from the first one. She said chatting with her unborn baby was strange. She felt somewhat odd and awkward talking to the baby, and she was ashamed to do it at first. However, when she tried it, she felt very comfortable with
it. Furthermore, Linda said that when she returned home, her experience with the group often became a topic for family conversation.

Linda felt very proud and self-assured in this pregnancy after participation in the group. She expressed that talking with the unborn baby could create even more intimate bonding and family conversation. She said that it was unbelievable that she could succeed in getting the pregnancy to a full term. After participation in the group, she learnt many experiences she never knew before. She listened to the other’s stories and compared them with herself. Linda said that listening to stories from her friends did not make her upset, but she did take them into consideration. Linda said she was proud of herself. She had fewer problems than her friends did; each of the members had serious problems. Linda said she just had a premature labour. It was not serious but the others’ problems were severe. She had breast fed her firstborn baby for more than two years, so she planned to breastfeed the second baby for as long as she could. After giving birth, Linda’s happiness knew no bounds as she went about the business of bringing up her son, feeding and constantly looking after him in every which way she could.

Linda said she learnt about pregnancy and premature delivery. She came up with the idea of what kinds of foods were beneficial and what could help the baby to grow. Linda said the group should continue because there are so many pregnant teenagers. She thought the group to be especially good for teenage pregnant women because they do not know anything about pregnancy. Usually, they have become pregnant unintentionally. Linda said she had experience with teenage pregnancy, and she did not think it over or be serious. She said, “Whatever will be, it will be.” Linda felt that it was pointless to be stressed. She confessed that before attending the group, she thought she would register her pregnancy as a special case. She had to pay 170 AUD for special pregnancy attention. However, she changed her mind after she had attended the group because she was confident in taking care of herself and in how to be healthy mother. She gained more experiences from the group, and felt like she had grouped counseling and a private consultant already.

8. Nancy

Nancy (aged 30) was 20 weeks pregnant with her third pregnancy when I first met her. The first pregnancy was miscarriage. Her second pregnancy was born prematurely. The current pregnancy was unplanned. Nancy was born a healthy baby in Sri Saket province, in the
northern region of Thailand. She is the fourth of five siblings by the same parents. Nancy has been in Bangkok for ten years. Nancy’s first child (Tee) is three years old; he was born prematurely with a birth weight of only 2,150 grams. As he was sickly due to asthma, fevers and allergies, Tee required special attention and care so Nancy hired a baby-sitter for him. She said that her last pregnancy was just general self-care by watching a video. It did not mention anything about preterm delivery. She does not talk to friends in the group nor ask any questions if she does not understand something.

The current pregnancy was unplanned but Nancy and her husband (Cavin) felt comfortable with it, but Nancy was not overly excited about it. She said that this might be because she is busy looking after of her first child. Nancy went to approximately fourteen antenatal care sessions and regularly attended the group discussion until quite close to the date of delivery. She showed appropriate weight gains during pregnancy (54 to 71 kilograms) and her iron status also improved.

At 40 weeks, Nancy had a normal birth and underwent a tubal ligation procedure. A healthy baby girl weighing 3,900 grams was born. Nancy and her baby were healthy and had only three days in the hospital. Nancy felt proud of her success in reaching full term in the pregnancy. However, she was disappointed and unsatisfied with birthing difficulties, which resulted in her perineum having a third degree tear. She commenced breastfeeding but only planned to continue for one month because she had to return to her job. Her sister in-law will look after the baby while she is at work.

**Reflections**

Nancy said that prior joining the group, she ate less food and drank less water because she did not understand her pregnancy needs. She said that she did not eat anything because she felt unsure, so she just drank milk and ate three meals. She ate a little because she was not appetite, and she did not want to eat. Nancy said that she was unaware about how she should look after herself during pregnancy. Eating, drinking or sleeping was just her usual daily routine for her whether or not she was pregnant.

Nancy expressed that as a result of her engagement with the group activities, she completely changed her daily lifestyle and how she took care of her health during this pregnancy. She paid greater attention to her daily routine and food and water intake. Nancy ate more and focused on more protein. She selected beneficial foods that contained the five categories of
nutrition for all three meals. She felt she had the more appetite than during her last pregnancy. She also drank more water. Nancy said she was more sensible in selecting foods. She always considered whether it was beneficial or not. Sometimes, she ate non-beneficial foods, but she stopped eating them when she was reminded about the group discussions. Moreover, she shared her knowledge with Cavin, so he knew how to choose good food for Nancy. She said that she now always makes sure that she has three wholesome meals and carefully selects healthy foods for herself and her unborn baby. When she had learned from the group about the positive value of egg in her diet, she made a point of adding an egg or two into her daily food intake. She said that during the last pregnancy when she was admitted in the hospital, she had to eat an egg at every meal.

Nancy expressed that when she returned home from the group, she and her husband talk about what she had discussed with the group. For example, they talked about how chatting with the unborn baby could create even more intimate bonding. She confided to me that she felt somewhat odd and awkward talking to the unborn baby, so she was reluctant to do it at first. Although she was not keen about the unborn baby, she felt as if she still could communicate with it. She said that when she went to bed, her baby did not move too much but the baby moved a lot at 5 a.m. to remind her to get up.

Nancy said that herself care during the current pregnancy were very different from her first pregnancy. She said that during the previous pregnancy, she usually stayed alone. Her routine activities were to eat and sleep in her rented room. She had to buy and cook food by herself. At that time Cavin was a heavy drinker and addicted to his friends, football, and partying. She was stressed, but she did not realise it. Currently, Nancy’s relationship with Cavin is different. He takes better care of her. Cavin drinks one bottle of beer but does not get drunk. He does not smoke, and as given up his addiction to friends, football and gambling. Therefore, Nancy’s stress levels in this pregnancy are reduced. This may also be because: (1) Group discussions have been instrumental in helping her, and Cavin understand and become more mindful of her health and state of pregnancy (2) Cavin did not want her to give birth prematurely for a second time.

Nancy said she felt proud and self-assured in this pregnancy after joining the group. She said she was astonished by getting her pregnancy to term. She said that it was because she gained more skills in taking care of herself. Attending the group changed Nancy’s understanding, especially her eating habits. She was more confident in what she should eat and know how to
rest and how to take care of her mind. Nancy expressed that the word cards (HBCs) from the group discussion reminded and encouraged her, particularly when she felt stressed or uncomfortable. She said that group discussion empowered her to feel confident in her pregnancy and to be able to take care of herself and her baby. Most pregnant women do not know how to take care of themselves. She said that importantly, attending the group allowed her to make new friends and shares experiences. Sharing experiences in the group was the way to remember and understand pregnancy needs easier because it was the ‘pregnancy language’.

After participation in the group, Nancy stated that she understood the causes of her previous preterm birth: (1) Inadequate food and water intake because people told her not to eat many things, and she was unsure about nutrition needs. She ate only a little because she did not have an appetite and thus her weight gain during the last pregnancy was only 10 kilograms (2) She walked too much because she was staying in a rented room on the fourth floor (3) Chronic psychological stress from her job. Her workplace was very far away (4) Cavin was addicted to his friends, football and alcohol. He returned home late. She had to stay in the rented room alone from the morning to the evening (5) Nancy had to cook food on her own and eat alone.

9. Doran

Doran (aged 28) joined the study when she was 22 weeks pregnant with her fourth pregnancy. Doran was born in the north-eastern region of Thailand, the youngest of six children from same parents. When she graduated from year twelve, she moved to Bangkok for work. Doran had two miscarriages during an unhappy relationship with an unfaithful boyfriend. A year after that relationship ended, she married Tom, the eldest of three children, and became pregnant with her third pregnancy. Tom finished school in year nine and worked as a builder with his father. That pregnancy ended with a term stillbirth of unknown causes. Understandably, Doran and Tom were very worried about the current pregnancy. Tom was ordained as a monk to dedicate one’s acquired merits to the benefit of the dead following the birth of their stillborn baby. Two months after ordination as a monk, Tom and Doran felt confident in their lives and were not always so fearful. Tom left the monastery after Doran gave birth to their healthy baby.
Doran expressed that she was deeply distressed in her last pregnancy because of the verbal violence of her parents-in-law. Her father-in-law was addicted to alcohol, and he had a violent temper, so they quarreled frequently. Doran heard their fracas all the time. Sometimes they fought at midnight then her mother-in-law cried with her until 1-2 a.m. so Doran only got to sleep at 2-3 a.m. Doran cried with each fight because she knew what it was like to have deep hurt, so she felt sympathy. (Doran is faced with psycho-physiologically chronic stress unknown to herself).

Doran expressed (after learning from group discussion) that the last unborn baby was affected by the household controversy. It caused the baby extreme emotional and psychological distress. Doran also shared this knowledge to her parents-in-law. They agreed with her and were afraid that the current unborn baby would be stressed. They intended to change their behaviour and they finally succeed in changing to increase their chances of having a healthy full term grandchild.

Doran received breakfast and lunch from the monks because Tom was a temple boy and followed monks to collect alms every morning. At 32 weeks, Doran decided to attend antenatal care in her hometown because it was without cost. She was also keen to move away from the home of her parents-in-law, whose home was a camp which was built in the temple’s area. She felt fear of funerals at temple so she took action by moving to live with her sisters. She established a better social environment for herself; she took herself away from a negative environment. During moving, she was always supported by her sisters and her husband.

At the last group meeting, Doran attended, she was reflective about her knowledge and experiences gained through group discussion. She reviewed information about her pregnancy records, so she would know how to interpret what was being said about her health and her unborn baby’s health. Before moving, Doran received approximately seven antenatal care sessions from hospitals in Bangkok. Doran also regularly attended five of the group discussions. She showed appropriate weight gains during pregnancy (54 to 66 kilograms) and her iron status also improved. At the last meeting she attended, Doran was reflective of her knowledge and experiences as a result of the group discussion as well as reviewing about how to understand her pregnancy records thoroughly so that she would understand status of her health and her baby’s health.
On 18 August 2009, at 40-week gestation, Doran had a caesarean section due to oligohydramnios (Doran told the doctor that she had a history of stillbirth). A healthy baby boy weighing 3,700 grams was born. Doran and her baby remained healthy staying in the hospital for only three days. She commenced breastfeeding and planned to continue for two years, or as long as she could.

**Reflections**

Doran said that prior to joining the group, she was ignorant of what she should do or how she should care for herself during pregnancy. Her lifestyle did not change with the pregnancy. Doran said that previously, she did not know how to be healthy mother and what was beneficial for the unborn baby. She never knew that her unborn baby could feel everything from her behaviours. In addition, she was not aware of the nutrition requirements in her previous pregnancy; she thought any kind of food would be good for her. Doran was fond of papaya salad with fermented fish. She also ate vegetables and chilli sauce without meat. She confessed that she used to eat only two meals a day she did not care about drinking a sufficient amount of water. She drank only milk.

After joining the group, she became aware of what was a beneficial diet for her baby. Doran shared her knowledge and experiences from the group to her parent-in-law. Doran received breakfast and lunch from the monks because Tom followed monks to collect alms every morning. Doran always thought about what to select or what to cook in order to complete the five categories of nutrition. Doran expressed, as a result of her engagement with the group activities, she certainly changed her daily lifestyle and how she took care of her health during this pregnancy. She reorganised her lifestyle, including food, water and sleep. Doran said that she now always makes sure that she has three meals a day and carefully selects healthy foods for herself and her unborn baby. The baby seemed to know when to eat. If she did not eat on time, her baby would move often. Doran’s normal bed time was changed from midnight to 10 p.m. so she was getting enough sleep.

Doran expressed that she had a good relationship with her husband and parents-in-law. Tom’s parents did not allow Doran to watch stressful movies. They were afraid that the baby would be stressed. Doran confided to me that she felt somewhat odd and awkward talking to the unborn baby. She was reluctant to do it at first. However, Doran wanted to do whatever was good for her baby because her baby feels what she did. Doran said when she laughed, her
baby also moved. Doran talked with and read tales to her baby. She turned on Thai country music for her baby. Doran said that she felt she did not pay enough attention to herself and her baby during the last pregnancy. She thought she could give better care to the baby if she had more knowledge and experience. Doran said that she greatly enjoyed the group sessions. There were many fruitful and lively exchanges throughout the discussion, and the overall atmosphere was most conducive to learning. She described that she gained more experiences from friends. Group discussions were instrumental in helping her, and her family understand and become more mindful of her health and state of pregnancy. Group participation changed her views. Having learned, for instance, about what had happened to some of her friends, she came to understand the kind of hardships they had gone through and how they successfully coped with them.

Doran expressed that she felt proud and self-assured in her pregnancy. She expressed that she felt confident to discuss her problems with the obstetrician. After attending the group, she realised that the impacts on her previous pregnancy were (1) nutrition (2) emotional and psychological stresses (3) relationship (4) quantity and quality of rest (Doran looked back to her last pregnancy and then reflected her knowledge and experiences). Sharing experiences with friends definitely helped expand her own knowledge and equipped her with sharper self-awareness. Doran expressed if she did not attend the group, her situation would be the same, and nothing would have changed. She would have inadequate sleep, eat inappropriately and be stressed.

10. Orlene

Orlene (aged 30) was 12 weeks pregnant she was 12 weeks pregnant with her fourth pregnancy when I first met her. Her first baby was born normally. The current pregnancy was unplanned but she and her husband (Peter) welcomed it. Orlene was born in Bangkok. She is the second of three siblings by the same parents. Orlene’s father is a shoemaker and he has alcoholism. Her parents are divorced and her mother has worked in Germany since Orlene was twelve years old and her younger sister was one year old. Orlene had to take care of her sister (Jay). She raised her as best as a teenager could. Jay became pregnant when she was fourteen years old, thus she did not graduate year nine. Orlene’s mother provides money for everybody on a monthly basis. Orlene said she would suffer without her mother’s money.
Orlene had her first pregnancy when she was fifteen years old, but she miscarried because she suffered stressed because of her ex-boyfriend. She dropped her classes for a few years then she came back to continue her studies until she graduated with a bachelor degree. She had her second pregnancy when she was twenty-two years old. It was an unintended pregnancy. Her husband, Peter (aged 27) graduated to bachelor degree level. Peter smokes regularly and he sometimes drinks alcohol. Peter does not speak much. He wanted her to terminate the pregnancy because he was studying, and his family was very poor. However, they changed their decision. Her first child was born with weighing 2,750 grams. Orlene intended to breast-feed her baby for six months but the baby was breast-fed for only four months, and then it went to live with her parents-in-law because Orlene had to return to work. She said she pumped her milk into plastic bags and took it to her parents-in-law, but they did not feed it to the baby.

With Orlene’s third pregnancy, she suffered from hydatidiform moles. She said she had severe vaginal bleeding, very high levels of human chorionic gonadotropin (hCG) and very high blood pressure along with a protein level of 4+ in the urine. Following uterine suction and curettage, she was cautioned about getting pregnant again and given oral contraceptives which she took as prescribed. Orlene said that she felt unhealthy after the treatment from the hydatidiform mole and she was easily exhausted which she attributed to the amount of vaginal bleeding she had through that experience. After nine months only she felt pregnant unintentionally. Even though the current pregnancy was unplanned, Orlene and her husband wholeheartedly welcomed it. Her husband always supported her after knowing the current pregnancy. Orlene still had laundry work and her husband worked with her at home.

Orlene went to approximately twelve antenatal care sessions and regularly attended the group discussion until quite close to the date of delivery. She showed appropriate weight gains during pregnancy (52 to 67.5 kilograms) and her iron status also improved. At 20 weeks, she had a filling and periodontal check up. At 40 weeks, Orlene gave birth normally to a healthy baby girl weighing 2,550 grams. The baby was of small gestational age (SGA). Orlene and her baby remained healthy and had been only three-day hospitalisation. She commenced breastfeeding and planned to continue as long as she could because she worked from home.
Reflections

The significant concerns when she first joined the group were food and water intake. Orlene said that prior to joining the group, she was not aware, of how she should care for herself during pregnancy. Eating, drinking and sleeping were everyday activities and no different when pregnant. Orlene did not like to eat vegetables, but she always ate fruit. She took an hour to eat lunch because she ate while doing laundry work. Orlene did not engage any physical exercise, although she was aware of the benefits. She said that laundry work was her exercise, and she got tired easily.

Orlene said as a result of her engagement with the group activities, she definitely changed her daily lifestyle and how she took care of her health during this pregnancy. She reorganised her life, paying greater attention to her daily routine, including her food and water intake. She said that she always made sure that she had three meals and carefully selected healthy foods for herself and her unborn baby. Her older sister (cousin) cooked foods that Orlene chose. The kinds of food were changed after she had joined the group. She focused more on protein, such as, egg, liver, fish, shrimp and pork. Orlene began to eat more vegetables when she became pregnant. She wanted to eat vegetables for her baby. Orlene confessed that she did not want her baby to be big because she was scared of having difficulty during delivery. She drank a lot of water already because she was afraid her baby would have been hyper-bilirebinemia. Orlene said that when she returned home her experiences at the group discussion often became topics for her husband conversation. Orlene told her husband the details of everything after participation in the group. She encouraged her first child to feel the baby’s movements. Orlene taught him to hug, kiss and talk with his younger brother every day. He is only three years old. She said she did not want him to envy his sibling. Orlene was always concerned about her friends in the group.

During discussion, she suggested good solutions for friends. She confided to me that group discussions were instrumental in helping her understand and become more mindful of her health and state of pregnancy. Having learned, about her friends’ hardships she came to understand she was not alone and could overcome her own problems.

Orlene expressed that she felt satisfied and self-assured in this pregnancy after participation in the group. Orlene’s positive experience and skillful dealing with stress and emotion together with her fairly easygoing attitude seemed to be a strong influence and to have had a beneficial
effect on her health and pregnancy. Orlene said she would take care of this pregnancy more. Attending the group made her to realise, observe, and pay attention to herself. Orlene felt more confident. She learned something she had never known before. She becomes more knowledgeable and observant. The group reminded her that she had a high-risk pregnancy. Therefore, she had to change her nutrition and behaviour in order not to give birth prematurely. Previously, she did not pay attention to premature delivery, but she began following news about premature delivery among Thai women, particularly amongst teenage girls. She understood that they do not take good care of themselves. Premature delivery is unpredictable. Orlene said it was good to communicate and exchange. She wanted to learn new things.

Before attending the group, Orlene thought she would register her pregnancy as a special case. However, she changed her mind after she had attended the group because she became confident in taking care of herself and preparing to be a healthy mother. She gained more experiences from the group, and felt like she had a group counseling service and a private consultant already.

11. Yari

Yari (30) was 22 weeks pregnant with her third pregnancy when I first met her. Yari said that she was born a low birth weight baby in her hometown, the eldest of two children in the Southern region. When she finished year 12, her parents divorced, her father moved to live in Bangkok and her mother stayed behind. She married with her first husband when she was 18 and she had her first pregnancy. Yari and her ex-husband had one eight years old child who was born at term. Yari then divorced. After one year, Yari married Ronald, her second husband when she was 26 years old. Yari had a second pregnancy but it was Hydropfetallis which implies that she was Rh Negative and her first husband was Rh positive but that this was undiagnosed and untreated (Cunningham, 2010). After one year, Yari had her current pregnancy again. It was unplanned but Yari, and Ronald felt comfortable with it. She and Ronald travel between her home town and Bangkok when she had antenatal visits.

Yari and Ronald worked for a landowner for low wages in their home town. Yari and Ronald travelled between Bangkok and her home town regularly: it was a three hours drive. When she was in her hometown, she lived with her husband, her mother and her child. When she
was in Bangkok, she stayed with her father and his new family. Yari and Ronald travelled to Bangkok for each antenatal visit.

Yari received approximately 12 antenatal care episodes and regularly attended the group discussion until quite close to the date of delivery. She showed appropriate weight gains 17 kilograms and her iron status also improved. At 39 weeks, Yari gave normal birth. A healthy baby girl weighing 3,200 grams was born. Yari and her baby remained healthy with only three-day hospitalisation. Yari felt proud of her success in term pregnancy. She commenced breastfeeding as much as she could.

Reflections

On Yari’s reflection, Yari said that she did not eat all five categories of foods or three meals; she also drank water less because she worked as a peasant, so she sometimes focused on her job. However, Yari drank milk and bread because they were simple meals for her. Yari said that prior joining the group, she was rather uninformed about what she should do for herself during pregnancy. Yari said that whether or not was pregnant, eating, drinking or sleeping was just usual daily routine for her.

Yari stated, because of her engagement with the group, she changed her daily lifestyle during this pregnancy. She updated her life by paying more attention to her daily routine. Yari selected beneficial foods that contain five categories of nutrition and emphasised on protein. She also was aware of her water intake and the benefits of drinking a sufficient amount of water with friends in the group. Yari said she always considered of whether it was beneficial or not. Issue from the group discussion also reminded her when she ate non-beneficial foods, she then stopped eating immediately. Additionally, Yari shared her knowledge with Ronald, so he knew how to choose the food for Yari. Ronald said he would like to join the group discussion.

Yari stated, each meeting, when she had finished the group discussion, she shared her experiences to Ronald and her mother. Therefore, group discussion often became matters for family conversation. Conversation with the unborn baby, for example, could build more intimate bonding, she felt as if she could communicate with the baby because the baby moved hardly at 5 a.m. to remind her getting up. Yari said she felt awkward talking to the unborn baby, so she was reluctant to do it at first. Ronald and her daughter were interested in talking
with the unborn baby. Yari said her taking care about the current pregnancy were very different from the first one.

Joining the group has changed Yari’s thought, especially eating and drinking habits. She was more self-assured in what she should eat and how to take care of herself. Attending from the group encouraged her to be aware and be conscious on herself. Group discussion empowered Yari felt confident in her pregnancy and taking care of herself and preparation to become a mother. Yari voiced that the word cards (HBCs) that group discussion reminded and refreshed her, particularly when she is stressed and feels uncomfortable. Most women did not know how to take care of themselves. She said that notably, joining the group allows her to make new friends and shares experiences. Sharing experiences in the group was the pregnant language which was the method that to remember and understand easier.

**Section 5.2:**

**Stories of Women Who Gave Birth Prematurely**

1. **Terri**

Terri, aged 31 is a refugee from Myanmar. She came from a poor refugee family and married a Thai man. She has only a biography register and has no nationality, birth certificate or census. Terri was 16 weeks pregnant with her first baby when I first met her. It was an unintended pregnancy that she planned to terminate. However, her husband (Tony) felt comfortable with it and wholeheartedly welcomed the pregnancy.

Terri is the youngest of the five siblings by the same parents. She was born a healthy baby in a minority close to the Myanmar frontier. As her family were poverty-stricken and were socially disadvantaged, Terri’s siblings had to disperse to live with their relatives. Poverty affected Terri’s lifestyle and eating behaviour; she had to often eat beans and sesame instead of meat. She was then moved to Mae Sai, Chiang Rai Province, Thailand. Her birth certificate was registered in Thailand, and her nationality is ‘registered refugee’. Terri confided to me that she was Thai Yai minority; she came from Chiang Dung, Chan's state, which is the part of Myanmar. She always thought of herself as Thai and denied that she was Burmese, however, she had no official nationality, no original birth certificate and she was not counted in the Thai census.
During pregnancy, in order to meet government requirements to renew her refugee permit, Terri travelled to Mae Sai in the northernmost district of Chiang Rai (800 kilometres or 14 hours bus travel from Bangkok). Terri confided that she lost her appetite during travel because she was tired from inadequate sleep. Furthermore, food at Mae Sai was not easily affordable. (Terri showed the low weight gains during pregnancy (44 to 53 kilograms), and her iron status did not improve).

At 20 weeks, Terri experienced bleeding per vagina; she thought it was because straining to pass faeces when she was constipated. As a result of this realisation and learning from group, Terri changed her eating and drinking habits. At 28 weeks, Terri was concerned about her pregnancy, so she decided to attend antenatal care at her home town (Mae Sai). Before moving, Terri received approximately five antenatal care sessions from the hospital in Bangkok. She also regularly attended five group discussions. At the last meeting, Terri reflected her knowledge and experiences from group discussion and learnt about how to understand the pregnancy records thoroughly so that she would understand status of her health and her baby’s health. At the first antenatal visit at Mae Sai, Terri said the antenatal clinic opened only one day a week and had only one doctor. She said that she was 28 weeks pregnant but could not get another antenatal appointment for four weeks.

At 35 weeks, Terri had a preterm premature rupture of her membranes. She gave birth to a healthy baby boy weighing 2,050 grams who was small for gestational age. The baby was healthy and was nursed in the nursery for five days of antibiotic therapy as infection prophylaxis as Terri’s membranes had ruptured prematurely. Terri was healthy and stayed in hospital for two days. She planned to breastfeed her baby as long as she could. Overall, my impression was that Terri did not want to have this baby and was generally unhappy with her life.

Reflections

Terri confessed that prior joining the group, she had only two meals a day, and she was ignorant about the components of good nutrition. She did not have a good water intake, and as such she had constipation. Terri confided to me that knowledge and experiences from group members encouraged her to consciously change her lifestyle and eating habits. She ate three meals daily, and her meals contained five categories of foods. Terri improved her lifestyle and eating habits becoming more selective about what to eat and drink and carefully considering
whether it would be good and beneficial for her baby. Regarding sleep and exercise, Terri’s sleeping hours were 10 p.m. – 6 a.m. She expressed that she needed adequate sleeping, otherwise she would not be able to eat. She also engaged in physical exercise by walking about 10 minutes from the bus stop to her workplace.

Terri has a good relationship with her husband, step son, family members and friends in the group (Nobody in the group knew that Terri is a refugee. Terri exchanged her experiences quite well because she is curious. Terri was cooperative, so she and others had different topics to share). Her husband also helped her by searching for knowledge about pregnancy from the internet.

Terri confided that after joining the group discussions she was relieved of her worries as the group was like having a private counselor. The group helped in the following ways: (1) she knew whether she had the same symptoms as them (Terri felt confident). It was more effective than the normal antenatal care. In the group antenatal education, women created and discussed the topics that related to their situations. Terri emphasised that participation in the group was necessary for her and similarly poor groups of people (It benefits for socially economic disadvantage group) (2) Group discussion was about pregnant women’s language (Women talking with women help the women to understand easier) (3) Terri said sharing experiences with friends definitely helped to expand her own horizons and equipped her with sharper self-awareness. The positive companionship gave her great moral support and reassured her of her own worthy role as a group member (Increased consciousness and responsibility) (4) Terri expressed that she greatly enjoyed the group discussions. There were many fruitful and lively exchanges throughout the discussion, and the overall atmosphere was most conducive to learning. Terri confided to me that group discussions were instrumental in helping her understand and become more mindful of her health and state of pregnancy (Pregnancy is a normal life event).

Terri was faced with social inequality, economic disadvantage and negative experiences; she has chronic psychophysiological stress. This seems to be a strong barrier to her and affects her health and eventual preterm birth.

2. Tukta

When she joined the study, Tukta was 39 years old and 22 weeks pregnant with her second pregnancy. Tukta is the fourth of six children with the same parents. A sickly child due to
asthma and chronic common cold, Tukta required special attention and care during childhood. As a teenager, she had to live with her aunt whose close friend was a doctor. Poor health prevented Tukta from physical exercises, sport activities and social activities.

Tukta became pregnant in year 11 and dropped out of school. Tukta said she felt victimised by her boyfriend who took advantage of her love and trust. She described him as an unscrupulous and irresponsible playboy, who ruined her life and made her very unhappy. Tukta continued to live with her boyfriend for the next three years. At the end of that relationship, Tukta moved to Bangkok, leaving her baby with her ex-boyfriend’s family. Tukta’s first child, Jessica is now 21 and lives with her paternal grandparents.

For the next 17 years, Tukta lived and worked as a sales assistant in Bangkok. During this time she never visited her daughter nor did she have any romantic relationships. She moved in with a new partner, Mac, who was 34 years old when she was 38 years old. Within that first year of living together, Tukta became pregnant. She had told the midwives it was her first so she was recorded as being a primigravida in her obstetrical records. At first meeting with Tukta, I also knew that she was a primigravida. However, after four weeks of knowing each other, Tukta confided to me that it was her second pregnancy.

At the first group meeting, Tukta said that she wanted to withdraw from the project because she hated to get up a little earlier than usual. Besides, she thought that her health was fairly stable because her screening score indicated that her risks of preterm birth were less than those of the others. Later she had second thoughts and decided to come because she believed that her age might affect her pregnancy.

Between 8 and 12 weeks gestation Tukta had vaginal bleeding. Tukta had three antenatal visits and attended three group discussions only. Her iron status was stable. Tukta was extremely irritable with the baby’s kicking; she over slept – her desire to sleep all the time was not only a problem in this pregnancy and she complained of extreme tiredness. At 32 weeks, she had preterm premature rupture of membranes. At 35 weeks, Tukta had a caesarean section due to oligohydramios and a healthy baby boy weighing 2100 grams was born, small for gestational age (Cunningham, 2010). The baby was nursed in the nursery for one day but then the baby had hyperbilirubinemia so he was treated by phototherapy for another two days. Tukta was hospitalised for five days and her health was relatively good. Tukta told me that she wanted to breastfeed but she said that she simply did not have enough milk flow.
to do full breastfeeding and she was therefore forced to supplement with a bottle. The baby lives with Mac’s parents because Tukta returned to work. Overall, my impression was that Tukta did not want to have this baby and was unhappy throughout her pregnancy.

**Reflections**

The significant concerns prior joining with the group are eating, drinking, eliminating and exercising and physical activities. Tukta said that as a child, she did not like to eat vegetable (she developed some unhealthy eating habits during childhood, which have persisted into adulthood). Tukta suffered chronic constipation. She confided that she experienced hair loss a few months before she became pregnant; it might be because she had nutritional deficiency. However, the hair loss stopped during pregnancy, and she wondered. It stopped because of the vitamin supplements she was taking. Before joining the group, she ate two meals per day with a few of vegetables, which were mixed with rice (fried rice) or noodle. However, she ate a lot of fruits such as durian, rambutan, mango and mangosteen (These fruits contain of lots of carbohydrate and sugar). Her usual water intake is only four glasses a day.

Tukta did not engage any exercise, although she was aware of the benefits. She got tired easily when she exercised so she spent most of her free-time sleeping. She hardly went out at all, so she did not get much walking. Her normal bed time was 10-10 a.m and she usually found time for more sleep during the day. If not for this morning ritual, she said, she would not even get out of bed because she felt sleepy. She also confided that she was so annoyed with too much baby kicking, particularly at bedtime. Sometimes she simply swallowed up vitamins taking hours to consume just a few tablets. (I wonder if Tukta had antenatal depression. I realise I need to know more about depression during pregnancy).

Tukta did not like to socialise with people. (Tukta seems to be obsessed by fear and mistrust). At home, she hardly talked to neighbors preferring to spend time with herself. She hated gossip, so she did not like to socialise with people. After the second session, Tukta confided that she began to think about the group meeting and think of friends. She did not know why she felt that way.

During the third meeting, she explained how easily she became fatigued. Other women said that this could result from too much indulgence in sleep and the lack of physical activities and exercises. She agreed with them and promised to change her lifestyle (Tukta appeared even more friendly and began to share her pregnancy complications). Unfortunately, shortly after
the meeting, she had preterm premature rupture of membrane. She confessed to me that ‘If she could go back on time, she would have changed her lifestyle. If she had looked after herself, she wouldn’t have water from the vagina. She felt that she was not careful with her health, so she ended up in the hospital. Actually, she intended to change her lifestyle’. The negative experiences seem to be strong barriers to her and affects to her health and eventual preterm birth. Many factors related to Tukta’s health and behavior. She was sent away from home as a child. She was pregnant while still a teenager; her history includes her negative experiences with her poor health and her ex-boyfriend, all of which had deeply affected her health and behavior. Tukta’s unhealthy behaviors can be likened to the visible and submerged parts of an iceberg because many memories, beliefs, cultural values and notions are hidden below the surface.

3. Jinny

Jinny (aged 32) was 16 weeks pregnant with her fourth pregnancy when I first met her. Her current pregnancy was unplanned but Jinny and her husband (John) felt comfortable with it. Jinny was born at home in the north-eastern region of Thailand. She was breast-fed for three years. Jinny is youngest of the two siblings by the same parents. Her parents were farmers. Jinny graduated with a bachelor degree and works as a police officer stationed in Bangkok. Jinny married John when she was 20 years old. Her first two pregnancies were spontaneously aborted. Her third pregnancy was successful, and she gave birth to a 2,400 grams baby. She was not sure whether it was born maturely because her menstruation was irregular. Jinny had been taking the birth-control pill for nine years. She stopped taking it because it caused blemishes on her face. Jinny’s husband works as an art teacher in a private school. He is a very patient person. He drinks and smokes. Jinny said that she is a leader in the family. She has to plan and take decisions on everything. If she does not decide, John is not confident in decision-making. Thus Jinny has to take more responsibility than John. Jinny said that she has a serious character. She needs to plan for the future and think in advance (This might be psychological chronically stress that was the cause of insomnia).

Jinny received approximately nine antenatal care sessions and regularly attended the group discussion until quite close to the date of delivery. She showed appropriate weight gains during pregnancy (47 to 57 kilograms), but her iron status was not improved.
At 36 weeks, Jinny had a normal birth and additionally underwent tubal ligation. A healthy baby girl weighing 2,100 grams was born. Jinny remained healthy with only three-days in the hospital. Her baby was observed for respiratory distress for three days in the incubator. Jinny commenced breastfeeding and planned to continue for three months only because she had to return to work so she would move the baby to live with her parents.

**Reflections**

The significant concerns when she first joined the group were appropriate food intake, water intake, exercise and adequate sleep. She confessed that she used to eat only two meals a day, and she was ignorant about proper nutrition. She did not eat much (It might be because of the retainer and braces to straighten her teeth that affected her eating). She did not care about drinking water. She normally only drank a glass of water after each meal; this was evident because her skin was dry. On reflection, Jinny said that prior to her association the group, she was rather uninformed about taking care for herself during pregnancy. Eating, drinking and sleeping patterns were just standard daily routines for her whether or not she was pregnant.

Jinny expressed that although her normal sleep period was from 10 p.m. to 5.30 a.m. she was not actually getting adequate sleep because she usually only got to sleep at 2 a.m. She also noted that she always dreamed; sometimes she was exhausted from dreaming. Jinny said that she adjusted herself by following the groups’ suggestions, but she still had insomnia. She said she has had insomnia for a long time, and she cannot solve it. Jinny confided that there are many trivial things affecting her, such as her work, family and money, and additionally, her mother, who is sick with diabetes. (It may be because she always thinks over issues, but she is not aware of herself). She expressed her feeling about her work to her husband because she cannot talk to her colleagues (She may not trust her colleagues). Jinny did not engage in any exercise. She said that housework was her exercise. She did not just sit or lie down after eating but cleaned the floor or washed the dishes. Sometimes her daughter wanted to help her, but she was not confident, so she did everything by herself (She may not trust others).

Jinny said as a result of her engagement with the group activities, she gradually changed her daily lifestyle and how she took care of her health during the pregnancy. She reorganised her life, paying greater attention to her daily routine, including food and water intake and sleep. Jinny said that group meetings affected her thoughts; she realised that she should drink more water, and thus she changed her behaviour. Although she was not thirsty, she tried to drink at
least eight glasses of water. Jinny cooked every meal by herself. Most meals were northern Thai foods. She ate more vegetables during her pregnancy. She also added more protein to each meal such as egg, pork, chicken and meat. She made sure she ate three meals a day, but she did not like to eat in between meals. Additionally, she drank 500 mL of milk, although she never drank it before.

With her first child, she did not know anything about pregnancy needs, and nobody gave her any suggestions. She never talked to her unborn baby before attending the group because she did not know it could hear her. She felt shameful when talking with her unborn baby It was as if she was talking to herself. She tried not to let anybody hear. Her husband and first child also talked to the unborn baby. She confessed that when she returned home, her experience at the group discussion often became the topic for their family conversation.

Jinny said that she was not confident in herself when her colleagues criticised her. This was one reason why she was not able to sleep. Jinny confided to me that group discussions were instrumental in helping her understand and become more mindful of her health and state of pregnancy. Having learned, for instance, about what had happened to some of her friends, she came to understand the kind of hardships they had gone through and how they successfully coped with them. Jinny said that she gained a lot of knowledge and experiences. She consciously adjusted her lifestyle, eating and drinking habits. She expressed that only behaviour she could not solve was her insomnia.

Jinny was not confident in herself. She thought things over and was unable to sleep when someone criticised her. She is faced with psycho-physiological chronic stress from sleep deprivation and inadequate nutrition. This seems to be a strong barrier to her and affects to her health and eventual preterm birth.

4. Cherene

Cherene (aged 23) was 14 weeks pregnant with her first baby when I first met her. It was a planned pregnancy; Cherene and her husband (Son) wholeheartedly welcomed it. Cherene is the first child of two siblings by the same parents. Cherene said she had a birth weight of 2,400 grams, but she did not know whether she was born at full term or not. She also did not know how long she was breast-fed. Cherene’s family lives in Bangkok. Her father works for a beer company while her mother is a housewife. Her family’s income is quite good. Cherene’s mother does not speak much, but her father is very fierce. Her father always scolds her.
Cherene now lives in her husband’s family home, and she is less scolded. Cherene graduated year twelve. She first became pregnant when she was fourteen years old. She terminated six pregnancies between 2000 and 2004. The seventh pregnancy was ectopic and as a result her right fallopian tube was removed. Cherene said that she did not want to explain the details of her abortions. She said that she had to do it. If she did not abort, she would have many children and partners (Her medical records showed four curettages. She experienced several types of induced abortion).

Cherene’s husband (Son) (aged 23) graduated year twelve. They have been married for about two years. He did not know about Cherene’s history of abortions. Son does not drink alcohol or smoke. He is a humorous man and has a good temper.

Cherene complained that the ultra-sound showed that her baby was too small (This might be a reason that Cherene was afraid she would lose the baby). Cherene said that sometimes she had stomachache, but she could not tell where the pain came from. It hurt all the time after her fallopian tube was removed. Cherene said she wanted the baby so much but expressed that her greatest concern was that the umbilical cord might get caught around the baby’s neck. She said that she had heard that babies could be dead in the womb, but the mothers did not realise. She was worried about her baby’s health thus she always took notice of her baby’s movement. If he or she did not move, she would bend her body to make her baby move; she felt relieved if the baby moved. She said that she did this regularly. When Cherene was in the group, she participated well and discussed the subject in detail (she looked serious). Cherene confessed to me that her husband would divorce her if she miscarried again.

Cherene attended four antenatal care sessions and joined four group discussions. At 26 weeks gestation, Cherene’s baby had decreased foetal movements and the ultrasound scan result showed oligohydramios, Amniotic Fluid Index was decreased which implies fetal growth restriction (Cunningham, 2010). Cherene’s baby boy was stillborn. Data from obstetrical records indicated that the baby weighed 860 grams. She told me that the baby’s cord was tightly spiralled around the neck and legs, which was the probable cause of death. Cherene believed that this baby died because the other previous babies who were terminated did not want him to be born. This could be her guilty. Before the baby died, Cherene dreamt that ‘she saw a baby sleeping in a box (Her past induced abortions are in her sub-conscious). Cherene’s changing health status is summarised in the table below.
Reflections

The significant concerns when she first joined the group were food intake, water intake, exercise and adequate sleep. Prior to joining the group, Cherene was fond of snacks and soft drink. She did not consider good nutrition and only ate what she wanted. She drank very little water. Cherene said she could not sleep. She had several nightmares about her baby showing that she was worrying. Sometimes she took sleeping pills. Cherene slept about three to four hours a day. She was addicted to playing games and reading books until about 1-2 a.m. Also, Cherene did not engage in any physical exercise. On reflection, Cherene said that prior to joining the group, she was rather uninformed about what she should do or how she should care for herself during pregnancy. She did not change her usual daily routine when she was pregnant. She was not fortunate enough to understand her pregnancy needs prior to her association with the group.

Cherene expressed that, as a result of her engagement with the group activities, she definitely changed her daily lifestyle and took better care of her health during the pregnancy. She reorganised her life, paying greater attention to her daily routine, such as eating, drinking water and sleeping. After attending the group, she always made sure that she had three full meals and carefully selected healthy foods for herself and her unborn baby. She ate and drank more, but she was still confronted with insomnia.

Every time after returning from the group meeting, her experiences often became the topic of conversations, especially about talking with the unborn baby. She never thought she had to talk to the unborn child, but she had learnt more from the group. Her husband also talked to the baby every day. When she received the Healthy Behavioural Cards (HBCs), she posted them on the wall at home so she, and her husband could read them every day. She expressed that she felt lucky in joining this project. She confided to me that group discussions were instrumental in helping her understand and become more mindful of her health and state of pregnancy. Having learned, for instance, about what had happened to some of her friends, she came to understand the kind of hardships they had gone through and how they successfully coped with them.

Cherene said she gained a lot of knowledge and experiences from the group. She never knew it before even though it was her own body. Group members shared with her about how to count the foetal movement and how to choose healthy foods. It was good that she learned
from the group, so she could observe herself and her baby. Following the stillbirth, Cherene expressed that despite her grief, she and her husband did not blame the researcher. Cherene was thankful that the researcher suggested she joined the group. She said that she knew from the researcher that she had a high-risk pregnancy, so she would be more aware of a subsequent pregnancy. Although she lost the baby, she gained knowledge and experiences from group discussion. Her partner also said he was very upset, but she would carefully look after the subsequent pregnancy. Cherene was faced with her health conditions, including unhealthy eating and drinking habits and insomnia, so she had psycho-physiological chronic stress. This seems to be a strong barrier for her and affects her health resulting in the eventual death of the baby in the uterus.
### Section 5.3:

#### Table 5.3.1: Detailed Summary of the Risk Factors, Health Status and Birth Outcomes of All Participants

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<th>Kai</th>
<th>Mary</th>
<th>Kelly</th>
<th>Pauline</th>
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* Risk at first meeting; x Risk after joining in group; HR: High Risk; MR: Moderate Risk; T: term; P: Poor=Poorly Met; M: Moderate=Partially met; G: Good=Reasonably Met
Section 6.1:

Group One: Concerns/Problems/Questions That Arose in My Practice

KEY TO INTERPRETATION:

Times New Roman = description and participants’ words

*Times New Roman, Bold, Italics = my reflections and interpretations*

Q. 1 Should a Midwife Wear a Uniform to Facilitate Group-Based Antenatal Education?
Reflections on the practice of facilitating group-based antenatal education: Should a midwife wear a uniform in the hospital setting?

Peernan Wisanskoonwong RM MEd
Midwifery Candidate, School of Health and Human Science, Southern Cross University, Lismore, New South Wales, Australia

Kathleen Fahy RM PhD
Professor of Midwifery, School of Health and Human Science, Southern Cross University, Lismore, New South Wales, Australia

Carolyn Hastie RM MPhil
Adjunct Lecturer, Southern Cross University, Lismore, New South Wales, Australia

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Reflections on the practice of facilitating group-based antenatal education: Should a midwife wear a uniform in the hospital setting?

Should a midwife wear a white uniform
Should a midwife wear a white uniform
Q. 2 How should a midwife encourage equality of power among women?

Preamble to the Reflection

At the first group meeting, the women and I met at the meeting room in the obstetrics–gynaecology building. The meeting room and antenatal clinic are located in the same building. The meeting room size is approximately 40 square meters. The room has two air conditioners, one white board, one table, 10–12 chairs and curtains. There were eight women who sat in the circle (see Figure 6.1). The assisting midwife who was a note-taker sat outside the circle.

Figure 6.1: The Women Sat in a Circle

1. Identifying a Situation in Practice

At the first meeting, I used the English language, technical terminology and questions that were too complex. I forgot to take into account the education level of the group members.

2. Reflecting: Focus on Feeling and Behaviour

This meeting started with simple questions to create familiarity and subsequently questions were asked to ‘break the ice’. I then briefly outlined my role, my personal life, workplace and education, including my responsibility for the research project. This approach was appropriate in Thai culture and was valued for building trust. I then explained the background, objectives, and the details of the research project as well as the responsibility of the secretary and research team. I ended my introduction with an outline of the ethical issues related to sound recording and taking photos.
I offered details about myself to give the women a sense of who I am as a midwife, a woman and a researcher. I tried to create a friendly atmosphere, improve relationships, and create connections between pregnant women in the group and me. However, I did not realise that I used English language and technical terminology such as “high risk”, ‘preterm birth”, “ANC (antenatal clinic”), “project” and ‘review”. This was not consistent with feminist group processes (see Chapter Two: Section 2.5.2). The women in the group finished their school education between years six and twelve, so they might not have understood what I was talking about.

I then continued and encouraged the women, “Could you please tell me and your friends your name, surname, nickname, gestational ages, pregnancy experiences, house, occupation and expectations for the research project.” After I asked the question, nobody answered and all the women were silent.

At the time, I was very worried about why the women did not respond to my questions. I then immediately asked myself this and I thought that the women might be confused by my question. Also, this was the first meeting so the women might feel embarrassed to talk.

I smiled and immediately apologised to the women and said, “I am so sorry. I speak too fast and asked you a sentence that was too long.” All the women smiled and laughed at me.

At the time, I was feeling better. The women looked friendly after my sincere apology. It might have helped the women know me as a normal woman who wanted to work with them.

3. Understanding: Feelings are Motivators of Behaviour

Then I smiled and encouraged the women again, “You might like to tell the group your name, nickname, and expectations of the project.” After finishing the sentence, all the women smiled, and then I gave the recorder to the first woman (Terri: Burmese).

I did not realise that I used power over Terri by giving her a recorder without first asking for volunteers. At the time, I just thought that she was a friendly woman because she talked to other women when she first came to the group. Thus, I judged that she might be a good choice to start the group discussion.

Terri smiled and shared about herself, “My name is Terri, my nickname is Tang, and I am 12 weeks pregnant. My expectation from this project is to make my baby healthy.”
I saw Terri and the other women look at each other and smile. I thought this was a good start. I then encouraged Terri.

Terri said, “I am attending the project because my older sister was born prematurely. My body weight is low and has not increased. I do not know how to do it”. Terri continued, “I am also pale.” Terri thought and then she said, “I am also worried about myself because the doctor said that my blood cells were abnormal. I work as a car insurance agent sitting in an office.”

During the time while Terri was talking, all the women paid attention to her, and then the other women followed Terri.

I reflected that to sincerely open with my personal details enhanced the group process and gained the women’s trust. When the women felt trusting towards me and were comfortable talking in the group, they began to reveal details about their lives. Therefore, many issues from the women’s experiences gradually appeared in the group.

4. Identifying Learning Needs: Consider Knowledge, Attitudes and Skills

During the women’s introduction, I told them that, “Do not forget that our aim is a full-term baby so women shouldn’t have uterine contractions, bleeding from the vagina or water leakage.” I also repeated these sentences many times.

I had not realised that the way I talked to the women was asserting my power over them. After finishing the group discussion, I listened to the recorded session. I then reflected on my role immediately by talking and recording my reflections with the digital recorder. When I transcribed the data, I knew that I had made a mistake because I did not follow the plan that I set in Australia. I did not play the role of a woman, midwife or facilitator. I knew that I over-emphasised some sentences and words many times. These sentences seemed to be orders by using words such as, “do not...” or “…should not ...” Because of the use of technical terminology, English language and exercising power over the women, I saw that this weakened the group process. I reflected on the research aim, which is to develop a culturally appropriate model of midwife-facilitated group-based antenatal education that is valued by Thai women who are at risk of preterm birth. I thought that plain language should be used because it is non-oppressive.
5. Taking Action to Meet Own Learning Needs

As a facilitator of group-based antenatal education, I will be striving to use plain language, simple questions and non-demanding phrases whilst working with the women.

6. Developing a Plan to Change Action

For the next group meeting, as a Thai midwife, woman and researcher, I will:

- selectively and sparingly share relevant personal details so as to enhance communication and build trust
- equalise power relationships and encourage the women to feel confident to share experiences in groups
- be aware by not ordering, “do not…” or “should not…” but use positive encouraging language instead
- be aware of the sensitive use of verbal and non-verbal language in ways that were not intimidating to Thai women
- use plain language that was educationally appropriate and could be understood by someone with a grad six level of education (no technical terminology or ambiguous language).

Q. 3 What is the role of the midwife if it is not to be the ‘expert’?

1. Identifying a Situation in Practice

After the women knew each other from the first meeting, I encouraged all of them to set the topics they would like to discuss at future meetings. The only caveat I wanted was that discussion topics should be related to women’s health in pregnancy and preterm birth. By doing this, I was aiming to facilitate the empowerment of the women.

2. Reflecting: Focus on Feeling and Behaviour

I told the women, “We should have topics for discussion at the meeting every two weeks. The topics are of interest and relevance to you. What would you like to talk about?” The women were silent.
I was not surprised that the women were silent. It is normal for Thai women to be submissive with doctors and nurses. The women expected me to take the lead, to tell them what they needed to know. Thai women do not dare to ask questions or share their experiences or even see them as valuable in the presence of a health professional. This is because doctors and nurses normally, and usually unconsciously, use power over women so that women feel that they have to believe in them and do as they are told. In addition, most women (six out of eight) finished school after year 6. I assumed that they had little self-confidence to contribute to the discussion topic in the context of group-based antenatal education. I was confident, however, that my role was to encourage and support the women to feel valued and to build their self-confidence.

In the group, I emphasised that I was concerned for each woman’s health; not just for herself but also because mother’s health was essential to the baby’s health. I told the women that what women did, what they ate, how they felt and what they thought all affected their own health and the health of the baby in the womb. I encouraged the women to realise that if they took care of their own health then the pregnancy would be less problematic, and the baby would be healthy. Again, I encouraged them and asked them, “What topics should we discuss to achieve our aims?” Three women then spoke and said, “Diet.” I asked other women to give their opinions. They said, “Diet is a very important topic because we do not know what we should eat or choose for being healthy mothers.” Every woman agreed so diet was the first topic I wrote on the white board.

Whilst facilitating the group, I did not wear the nurse’s white uniform. I thought that not wearing it made me more approachable, on a more equal footing with the women and less intimidating than Thai nurses in uniform usually were. I judged that when I kindly encouraged and empowered the women as I did, they began to feel confident to speak and to trust me not to embarrass them.

Then I asked the women, “What other topics should we discuss?” Terri spoke next, “Miscarriage is interesting. I see many women faced with it”. Other women agreed with Terri. I still encouraged women to offer the discussion topics. Women said, “Sleep and rest, exercise, preparation for delivery”
3. Understanding: Feelings are Motivators of Behaviour

*I interpreted that the women now felt confident in themselves because the discussion topics gradually flowed easily from the women. I was pleased to see the women took responsibility for the topics that would be discussed.*

Although there were two women who had experienced a preterm birth, neither offered to talk about it. I asked them if they knew about preterm birth. Renee (who had a history of preterm birth) said, ‘I remember that at birth, my baby weighed 2300 grams.’ Mary (the other woman who had a preterm birth) commented, “My baby’s weight at birth was 2100 grams.” Renee continued and said, ‘I gave birth normally at about nine months. The nurse told me that the birth was normal.’ (Renee did not realise that she had a preterm birth.). Mary said, “My first child was 2100 grams. The doctor told me that it was a normal delivery, but the baby was very small. Its body and eyes were yellow. The baby was nursed in the incubator for a week.” [Preterm babies are particularly prone to hyperbilirubinaemia and presumably this occurred in the neonatal nursery.]

*I thought that I was facing a communication problem because the women misunderstood preterm birth. Both women said that they had had a normal birth with a small baby because nurses told them that it was normal. The women did not realise that it is quite possible to have a normal delivery of a preterm baby. They heard the word ‘normal’, and that is all they comprehended. In other words, they did not have a good understanding of their own health situation.*

I tried to encourage the women to suggest more topics so as to make sure that they would want to discuss them. So I asked them again if there were any other topics, we should add to our list. Terri said, “Miscarriage and preterm birth are the same.” Renee said, “No, it’s different because I experienced both miscarriage and preterm birth”. Terri said, “Can we talk about both?” Other women agreed with her.

*I reflected that it was good that I had encouraged the women so many times because some women did not offer any topics without the extra encouragement. I was patient. I allowed for silence, thus giving the women time to think and to get the courage to speak. I was pleased when I saw the women beginning to share what they wanted to discuss.*
A woman said, “Safe sexual relationships during pregnancy. I do not know which is suitable and safe.” At the time, the other women did not say anything.

Oh dear, I was anxious about this topic being discussed in the group because it is a topic that is usually taboo in public discussion. I knew this topic is sensitive for Thai women: I had not thought about it before.

I then asked the women, “What do you think about this topic?” All the Thai women nodded enthusiastically and said, “It is interesting.” One participant was Muslim and she did not respond.

4. Identifying Learning Needs: Consider Knowledge, Attitudes and Skills

When I asked the women in the group again I was surprised that the women wanted to talk about sex. At the time, I really hoped that the majority of women would not agree to talk about this topic. At the time, I worried and was not confident in this topic. I am a single woman, and I did not feel comfortable myself. I thought, however, that as my research was a woman-centred, I should follow the women’s decision. (I thought I had time to prepare myself as a facilitator.)

When I discussed the topic of sexual relationships with my supervisor (on Video Skype) she laughed at me. She told me that I was a mature woman, and I was a midwife. In fact, at that time I felt that she did not understand me as a single woman. I felt embarrassed, and I was not confident to facilitate this topic effectively. I worried that if women asked me more details, I would not know how to answer their questions.

Reflecting now, a year after this experience, I realise I am still not comfortable talking about sex with women. I recognise that it is better for the women if the midwife can take a non-judgmental, comfortable approach when the women want to speak about their sexual lives. I’m still working on this and hope that I will develop more confidence in being able to be comfortable when women talk about sex. I think I would be much more comfortable talking one-on-one about sex rather than talking to the whole group.

5. Taking Action to Meet Own Learning Needs

I can focus on facilitating women to talk to each other: I do not have to be the expert on everything.
6. Developing a Plan to Change Action

The key findings about the role of the midwife, if it is not to be the expert, were that the midwife:

- should focus on women’s needs and wants related to their health.
- should encourage each woman to feel like the expert on her own life.
- should be genuine and accepting so as to develop trust with the women.
- should be patient to allow women time to think. This is important for getting the group interaction going.
- are expert in normal pregnancy and birth but does not have to be the expert on everything.

Q. 4 Can the groups have two topics scheduled for the same session?

1. Identifying a Situation in Practice

This concern occurred at the first meeting. I asked the women to design what topic they wanted to discuss for each meeting.

2. Reflecting: Focus on Feelings and Behaviour

Some women said, “Diet is important for us; we are not sure how to eat or choose food for our pregnancy”. Some women said, “Miscarriage and preterm birth are also interesting because we have never known about them”

At that time, I was not sure how to decide. However, I knew I had to facilitate the group based on equality following feminist group processes (see Chapter Two: Section 2.5.2). Thus, I sought a consensus agreement.

“What do you think about setting the topic for the second meeting?” The women said, “Let’s talk about both diet and preterm birth”. All the women agreed with this idea. Then I asked what the next topic should be for the third meeting. Two women who suggested the topic of sexual relationships said “safe sexual relationships”. Another woman said, “Yes, I did not have sex throughout previous pregnancy. I did not want it but my husband wanted it”.

Another woman said, “I am six months pregnant so preparation for birth is also good; I think we should talk about it too”. I asked women again “what do you think?” All women said, “Let’s talk about both”.

I followed the women’s decision by including two health topics in one meeting i.e. diet and preterm birth (2nd meeting); sexual relationships and preparation of childbirth (3rd meeting). However, I did not realise that it would be difficult to discuss the topics in this way in the group.

3. Understanding: Feelings are Motivators of Behaviour

After finishing the 2nd meeting, I reflected on it, and I found that two topics on the same day were not suitable with duration of time (90 minutes). I began to see the problems because both topics had so many details for discussion. The women could finish one topic, but could not finish talking about preterm birth on time. Thus, the women had to add discussion of preterm birth to the next meeting (3rd meeting).

The riot

However, there was a problem with organising the third meeting. Due to a riot in Bangkok and the closure of many roads, the third meeting could not go ahead, and had to be postponed. I rang the women to arrange a new time. However, the political protests continued and the meeting had to be postponed again to four weeks away.

Mary said, ‘I had pain when the protestors closed the road because my house was located only 100 metres away from that protest area’. ‘I felt as if I was going to have my baby. My parents told me not to deliver otherwise it would be a big problem. When the riot became intense, my baby moved harder’. All women exclaimed together, ‘Really, Mary?’ Mary said, ‘Yes, I was scared, and I did not know what to do, I was afraid I would deliver. When there was rioting, I was frightened and afraid because there would be no bus. Thus, I did not know what to do if something happened’.

The problem of political unrest affected the research plan, and had an effect on the women because the principle of this research focused on stimulation, support and raising awareness of the women on a fortnightly basis. It also affected to safety and security of women.
4. Identifying Learning Needs: Consider Knowledge, Attitudes and Skills

At the third meeting, I asked what preterm delivery was. Everyone kept quiet. Finally, Mary replied, “Preterm birth is when the baby weighs less than 2.5 kilograms”.

The women might not be able to remember because the last meeting was so long ago. I then summarised preterm birth again and encouraged the women to be aware of their pregnancy by knowing how many weeks were left before their due date. Thus, the women could improve their eating, drinking and sleeping behaviour in order to maximise their chances of producing a full term healthy baby.

5. Taking Action to Meet Own Learning Needs

- If there is disruption to future groups so that meetings cannot occur on a fortnightly basis I will phone the women to offer my support and to emphasise that looking after her own health and wellbeing is the first priority of a pregnant woman. Only if the woman is holistically healthy can her baby can be healthy.

- We (the women and me as the researcher) have become like friends and are walking together in the journey. This is important to how the women feel and to their holistic health.

- I emphasised to the women that although they are at risk, this did not mean they will give birth prematurely. Some women get very stressed so they have to take care of their body, mind and emotions. The women have to be conscious and responsible for eating well and sleeping every day. Good health of the mother is good health for the baby.

6. Developing a Plan to Change Action

I therefore planned to change my practice as I found the key finding from this question were that the midwife should:

- provide a list of possible topics but allow women to set the health-related agenda.

- facilitate only one planned topic for the a session.
Q. 5 How can positive mother-baby connections be facilitated?

1. Identifying a Situation in Practice

This scenario happened during every meeting and in the daily life of the women. At the first meeting, it happened because some women in the group complained about the baby kicking too much; they did not know how to cope with this feeling. When another woman in the group tried to help them, the women in the group gradually admitted that they had experienced this feeling e.g. turning on music and talking with the unborn baby. Thus, the women did these things as a result of advice they got from the other woman. I reflected that these actions allowed the women to bond with their babies. I believe that women’s experiences of bonding are the source of responsibility, love and compassion to the baby. When women bond with their baby, they become empowered and this increases the amount of responsibility they take and their self-awareness.

2. Reflecting: Focus on Feelings and Behaviour

Tukta said, “I cannot sleep because the baby kicks harder and it hurts so much when the baby moves. I felt that it was annoying and disturbed my sleep.” She continued with an unhappy face. “Sometimes I scolded the baby when I felt irritated and then the baby would stop moving.” Another woman said with an unhappy face, “Yes, sometimes I complained to the baby that I felt bothered because I could hardly work when the baby moved too much.”

I reflected that although it was the first meeting for the women, these women expressed their feelings directly to the baby. They might be unhappy and would like to know how to deal with this feeling. This was a good sign for the first group meeting. I also interpreted from women’s faces that they might feel guilty when they scolded or felt bothered with their baby. This sharing experience was quite challenging for the women in the group. I knew that each woman should aim to be self-aware and aware of the other women in the group. This is consistent with feminist group processes (see Chapter Two: Section 2.5.2). I then encouraged the other women to share their experiences to help their friends in the group.

Mary said, “You may use a small pillow to support your belly while you are sleeping on one side”. Mary shared her experience, “I touched my belly and softly talked to my baby saying please sleep, please sleep.” Tukta said, “I told the baby that I would go to hospital, then the baby stopped moving so I had a good sleep.” Mary continued, “You could turn on soft music
for the baby. I did that and I told the baby to listen to the songs and then the baby slowly moved then it slept.” Tukta agreed she would try this. During the discussion all the women looked at Mary and me.

*I reflected that all the women in the group might not have faith in Mary’s suggestions. They then looked at me and waited for me to confirm these suggestions. I reflected on Mary’s suggestions that she learned from her own pregnancy. This was an amazing experience which was shared by a woman whose education finished in year six. I was very pleased with this because nobody was interested in talking with their unborn baby. Also nurses at antenatal clinics never mention this. I realised that talking with an unborn baby was usually done by women who had a higher education and were in middle and high classes. I thought this was a good opportunity for the women in the group to bond with their babies. I then added information about fetal development, chatting, and the benefit of chatting with an unborn baby and how chatting with the unborn baby could create even more intimate bonding.*

3. Understanding: Feelings are Motivators of Behaviour

Kai said, “I do not talk to the baby or turn on music because I thought my unborn baby could not hear.” The other women said, “We have not talked to the baby; how can the baby hear our voice?” Mary said, “I do not know either but I love to play music and talk to the baby. When I talked to the baby or turned on the music, the baby moved slowly and calmed down.”

*I reflected that the women in the group began to think about chatting with their unborn baby.*

Next meeting

Kai said, “I had to talk with the baby and ask it to sleep and then the baby moved more softly. I encouraged my first child to talk to the unborn baby before bedtime. He loves his younger brother.” Terri smiled and continued, “I touch my belly and talk to it; I always do this every day. My husband also talks to it.” Mary said, “My baby moves very vigorously. I still talk and play music to the baby.” Tammy said, “My baby moves well and I chat with it every day. I talk to my baby about having a meal, and washing clothes. I always say goodnight to the baby.” Tukta said, “The baby moves well, and my husband talks to the baby every day. He persuaded the baby to sleep and pray.” *(Intimacy is growing)* “I sometimes talk to the baby
when it moves too much.” Kelly said, “The baby moved well and I talk with the baby when there is nobody with me,” then she laughed (Kelly is reluctant to chat with her unborn baby). Kelly confides, “I felt somewhat odd and awkward talking to the unborn baby. I was shy to talk in front of other people.” The other women said, “Yes, This is true we were reluctant to do it at first because it’s like talking with ourselves”.

4. Identifying Learning Needs: Consider Knowledge, Attitudes and Skills

At each meeting, I encouraged all the women in the group to talk with their unborn baby every day. This is the way to bond, communicate and to build a relationship with the unborn baby. A woman can more easily bond with the baby once the baby is moving. Bonding builds love and a sense of protectiveness that increases over time. It is an intimate connection based on safety, trust, love and consistency (Barrack, 2007). Both the woman and her partner can bond with the baby by talking, singing, reading and touching the belly. I always asked each woman to look upon herself and to reflect her thoughts and feelings about the development of her pregnancy in the previous two weeks.

5. Taking Action to Meet Own Learning Needs

Each woman has a different personality, experiences and feelings. As a midwife, I work with women on the basis of a midwifery partnership because it is essential in the guidance and support of women to take self-responsibility and to increase self-awareness and consciousness and to build networks among women. I should encourage the women to consciously bond with their babies. Parents’ experiences of prenatal bonding are the source of responsibility, love and compassion to the baby.

6. Developing a Plan to Change Action

Therefore, for the next group, I planned to strongly encourage the women to talk with their unborn babies. I know that bonding naturally occurs in every woman and it can begin in early pregnancy. As the midwife I cannot make the bonding occur but, the mother can bond with the baby through her actions. My role is to encourage the women to have more consistency of consciousness, awareness and responsibility for their health.
Q. 6 How should a midwife facilitate the sharing of vulnerabilities?

Preamble to the Reflection

I began the first group meeting by introducing myself and inviting the others to introduce themselves. I suggested that each woman might like to share their name, their nickname and something she would like the other women to know about them.

1. Identifying a Situation in Practice

I encouraged the women to share their risk factors for preterm birth.

2. Reflecting: Focus on Feeling and Behaviour

Tammy was the fifth among the six women to introduce herself. She said, “My name is Tammy. My nickname is Lek. This is my first baby, I am six and a half months pregnant.” She continued, “I have anemia and a periodontal disease.” Then she became quiet and smiled.

I interpreted that Tammy was comfortable and happy. I think that Tammy was trying to help me by talking about risk factors and now I was trying to make her feel equal in the group by encouraging other women to share risk factors. I reflected later that the risk factors for preterm birth are very sensitive topics. Also, some women in the group had experienced previous preterm births and the associated suffering and grief.

So I enquired about Tammy’s pregnancy on behalf of the other women. She said, “I can feel my baby kicking,” and remained quiet again with a smile on her face. I asked about her diet. She said, “I can eat but not much, I buy food from roadside stalls.” I tried to encourage her to talk but she just smiled. I changed the topic to ask about her occupation and her home. “I do not work, I am at home. My house is at Krungthep-Non.” Mary asked, “Where is it? Is it near Big-C (a shopping centre)?” Tammy smiled and replied, “Yes.” I encouraged other participants to talk to Tammy but they just smiled.

I thought that the women did not talk much because it was the first meeting and they did not know each other and were shy. I felt insecure and unsure about how to continue.
3. Understanding: Feelings are Motivators of Behaviour

I then began to talk about the words, “HIGH RISK PREGNANCY” that were stamped in red on the top of each woman’s antenatal record (just near their name). Next, I asked the women to tell their ages.

*I did this because I wanted the participants to understand why they had this stamp on their records. I was trying to focus attention again on risk factors for preterm birth. I now realise that I was unsure about what to do and went straight back into ‘nurse’ mode. The way that I maintained focus on risk factors reflected my clinical approach, which was consistent with my training and the standard nursing approach in Thailand. The way I asked these questions was like a nurse or doctor in a private consultation. I had not made any adjustment for the impact of having a group of women all listening to each answer.*

4. Identifying Learning Needs: Consider Knowledge, Attitudes and Skills

*Reflecting in 2010 (one year later), I realised that I did not follow the feminist group process rules that I had set up before I left Australia. I should not have asked the women to share their risk factors. I should have allowed the women to maintain their privacy. Also, identifying the reasons why the women had joined a feminist group should be a crucial first step (see Chapter Two: Section 2.5.2).*

5. Taking Action to Meet Own Learning Needs

- I have learned that it is better to allow women to volunteer information so they can decide whether or not to share their experiences of or risk factors for preterm birth.

- Use open-ended questions so as to avoid making individual women feel vulnerable.

6. Developing a Plan to Change Action

- I ensured that each woman’s health information was kept private and shared only with her consent

- I will in future invite women to say why they joined the group and what they hoped to get out of the group.
All of their answers, including my own, could be written on a white board and discussed until consensus about the group purpose is reached.

Q. 7 Should I act as a Thai nurse or as a contemporary midwife?

I met Tammy at the very beginning of my data collection time in Thailand (early February, 2009).

1. Identifying a Situation in Practice

When I met Tammy she was attending her initial booking-in visit, at which time she was twenty weeks pregnant. I was wearing the standard hospital nurse’s uniform and cap. Like the other participants, Tammy was referred to me after she had been recruited by the antenatal clinic nurses and consent for her participation obtained from them (in line with ethical approval: see Chapter Four: Section 4.4.1.6).

2. Reflecting: Focus on Feeling and Behaviour

I conducted the planned brief interview in the open waiting room area of the antenatal clinic. During the initial 15 minutes of interview, I learned that Tammy was 16 years old, single and living at home with her mother. Her risk factors for preterm birth, in addition to her young age, were anaemia and periodontal disease. Tammy looked unhappy and avoided eye contact. I thought she might not trust me so I persuaded her to make another appointment the next time she was available. She said, “Yes, I can meet you again on the thirteenth February at 1.00 p.m.” I thanked her and asked about the meeting venue. She thought for a moment and said, “I think I will come to meet you at the hospital”

3. Understanding: Feelings are Motivators of Behaviour

When I reflected on the first meeting with Tammy (and with the other women in the first group) I thought that 15 minutes was not enough time to establish mutual understanding and trust and for the women to feel able to talk about their risks factors and health. That was why I invited Tammy to another appointment with me, which I had not originally planned to do. During the first interviews with all the first group participants, I began to realise that providing group-based antenatal education only was not going to be enough for the women. I sensed that they needed my attention, care and concern as a midwife and a woman. When I invited Tammy to make another appointment with me, I stepped outside
what was normal nursing practice in Thailand and crossed a boundary. I did this knowing that in contemporary models of midwifery partnership (Gilliland & Pairman, 1995) what I was doing was good midwifery practice. I also realised that my Thai colleagues would not approve of me being ‘too close to the patient’ but for me, what I did in reaching out to Tammy was right for me as a midwife and as a woman.

4. Identifying Learning Needs: Consider Knowledge, Attitudes and Skills

At the next meeting both Tammy and I felt more relaxed. We ate lunch together in a park in the hospital grounds. I did not even think about wearing my uniform; I wore a shirt and pants. I began a discussion with Tammy about her health behaviours. For example, I asked her about eating habits, physical activity, education and family. She said, “I normally buy breakfast and lunch from roadside stalls” I enquired about people who ate with her. She said, “I eat alone in the morning and at noon because my mother works every day, but we eat dinner together.” She told me her normal daily staple consisted of rice, noodles, vegetables, meat and so on. “I also drink milk every day,” she said. I further asked her about her physical activities. She said, “In the morning, I wash my clothes by hand and clean the room. Then I have breakfast and watch television.” I asked about her friends. She said, “I do not have any friends in this apartment, I normally talk to mum’s friends but I have my own friends in my hometown.” I asked about her hometown. She said, “I was born in Yasothon province. I went to school up to grade nine. My parents divorced, I lived with my grandparents.”

I felt she had begun to trust me because she smiled, laughed and talked more freely. She was letting me know her. The way we were relating confirmed for me that inviting Tammy to meet me again, in an informal setting, was the right thing to do.

I asked about her pregnancy. She said, “One year ago, I met my boyfriend at my hometown. He was seventeen years old and good looking.” She smiled and laughed. I hoped she would continue to elaborate about her boyfriend but she tried to avoid talking about him in detail. So I asked her about her pregnancy. She said, “In January, I found out I was pregnant so I moved to live with my mother in Bangkok.” She talked on every topic except her partner. When I asked about her partner, she kept quiet.

At the time I was not sure why she was silent. I guessed that she felt ashamed about being young and single. In Thai culture being a single teenage mother is very much looked down upon. There are no social security payments for single mothers like there are in Australia.
5. Taking Action to Meet Own Learning Needs

Women need my personal attention, care and concern as a midwife and a woman. The group alone is not enough.

6. Developing a Plan to Change Action

• act as a contemporary midwife which is an appropriate role to work with each woman in response to her health needs

• be aware that women need to be treated as individuals and require one-on-one meetings with a midwife in addition to group-based antenatal education.

Q. 8 How should a midwife use her power when facilitating antenatal groups for vulnerable women?

1. Identifying a Situation in Practice

This question is a direct follow-on from questions 6 and 7, all of which were discussed in the first meeting. Immediately before this question I had been talking to the group about the known risk factors for preterm birth, including being young and being older so that the women could think about whether age was a risk factor for them.

2. Reflecting: Focus on Feelings and Behaviour

This scenario begins with my telling the women my age – 39 years. Then I said, “Please say your age so that you can think about whether age is a risk factor for you.”

I knew the ages of the women from the initial interviews. I also knew that except for Tammy, they were all married. The other women were aged between 28 and 39 years old. Tammy was faced with a direct request to tell her age. As soon as I asked the question, I immediately felt regretful that I raised the topic of ‘age’. I thought that Tammy might be embarrassed about having to tell her age. She also wondered where the other teenage women in the group were because I had told her that there were going to be three teenage women in the group including her. Neither of the other two young women turned up to the first meeting.
When it was her turn to speak, Tammy said, “I am 16 years old, I am single and I live with my mother.” After the other women told their ages, Tammy appeared rather withdrawn. Nobody responded to her, no one offered any words of support.

*I wondered if the other women were looking down on Tammy for being a single teenage mother. In this situation, an appropriate hint of a sympathetic verbal and non-verbal overtone from me could have greatly encouraged her to feel valued by me. I thought my question might have added to her shame and distress.*

3. Understanding: Feelings are Motivators of Behaviour

The next day, I rang Tammy and told her that I was worried that she might have been unhappy because she appeared rather reticent. “How did you feel about the group meeting?” I enquired. She said, “It was good. I also told my mum about what happened in the group meeting.” I told her, “I am sorry if you felt unhappy.” She replied, “No, I am fine” and then was silent.

*Although she told me that she was fine, I still worried about her. This was because talking via telephone made it difficult to understand her feelings. I was not sure of the meaning of her silence in the group. However, I tried to think positively because Tammy and I had had a good relationship at the beginning of our meeting. I also hoped that my willingness to help her would be a bridge that helped me to rectify this mistake.*

I continued to regret the situation, so I rang Tammy again. She was not at home so I talked to Tammy’s mother.

*Before talking to Tammy’s mother, I carefully thought and asked myself whether I should or should not talk to Tammy’s mother because I worried about the relationship between Tammy and her mother. Then I made a decision to talk to Tammy’s mother about general topics first.*

Tammy’s mother said, “Tammy is not a talkative person, and she does not speak much. This is her character. Please do not worry. Tammy told me about you, as well as what happened in the group meeting. I think it is good for her to meet you and to have the group meeting.”
While talking with Tammy’s mother, I felt that Tammy and her mother had a good relationship because Tammy and her mother told me the same thing. They knew about what happened in the group meeting.

4. Identifying Learning Needs: Consider Knowledge, Attitudes and Skills

On reflection, and in discussion with my supervisors, I realised that age was a sensitive topic. I now saw that I misused my authority as a health professional. I was more focused on risk and ‘teaching’ than I was on facilitating the group process and individual empowerment. Consistent with midwifery philosophy, I should have allowed each woman to be in control of what information she chose to share or keep private. On reviewing feminist group processes, I had noted that this issue was not explicitly addressed.

On reflection, I wanted Tammy to see herself as valuable and to stop actively participating in her own disempowerment by feeling bad about being pregnant, young and single. Now that her periodontal disease had been treated, I should have been helping her and the others to look at their strengths: she was young, strong and healthy. She did not smoke or drink. She had the love of her mother. So, rather than take a risk-based approach, I should try to see things from a positive perspective and help the women to do the same. Thus, I as a researcher and midwife should collaborate with women in the real world, not just for writing research papers. I had learnt from this situation and it was the beginning of good practice in my research project. It was a valuable lesson if it was applied in the real working situation in the group discussion.

5. Taking Action to Meet Own Learning Needs

- I now see that my focus on risk was what initiated the negative interaction based on age.

- This reflection reminded me to work thoughtfully and sensitively when collaborating with women; most especially disadvantaged women.

6. Developing a Plan to Change Action

From this scenario I want to make two adjustments to feminist group process for antenatal education. As a facilitator of group-based antenatal education I now:
• explicitly value the right of each woman to be in control of what information she chooses to share or keep private

• work thoughtfully and sensitively when collaborating with women; most especially disadvantaged women

• avoid stimulating any reactions within the group that could disadvantage any woman on the basis of age, marital status, race or social class etc.

Q. 9 What should a midwife do when information is required in a facilitated group discussion on nutrition in pregnancy?

1. Identifying a Situation in Practice

The following reflection is about how I should best facilitate the group discussion on nutrition in pregnancy. This question happened in the second meeting. I began the session by putting examples of healthy and unhealthy food models on the table. I then encouraged the women to:

• Start discussing which food groups pregnant women need to eat from every day to stay healthy.

• Consider the food models on the table and give a reason why that choice of food was either healthy or unhealthy.

• Write down what they ate for each meal on the white board: I wrote up an example of my daily diet too.

• Consider their own meals, whether they were sufficiently healthy or not.

• Consider the weight gain during pregnancy and the importance of weight gain for a healthy pregnancy.

2. Reflecting: Focus on Feelings and Behaviour

I encouraged all the women to look at food models and discuss the values in each choice of food (This was consistent with the international definition of a midwife in Chapter Two: Section 2.6.1).
Terri said, “There are five main food groups; protein, vitamins, minerals, iron, and carbohydrate.” (Although this was not correct I did not correct Terri at this point.) The other women said that protein included meat, such as fish, shrimp, chicken, pork, milk, egg, and soymilk. A woman said, “I know the positive value of an egg diet. People told me to add an egg or two into the daily food intake.” (Egg diets are relatively affordable, easily available and highly nutritious.) I then asked about protein from other sources. Every woman thought about this, but they could not answer so I summarised for them.

The women then said, “Carbohydrates include flour, rice, sugar, sticky rice, noodles.” Terri looked at me and asked whether rice, bread, and noodles were the same. I did not answer but I asked the women what they should eat. Everybody kept quiet, so I then explained more. I asked about minerals and vitamins. The women said, “Minerals are in vegetables and fruits and vitamins are in vegetables and fruits.” The women said, “We are very fond of eating durian, rambutan, mangosteen and mango because they are very cheap and delicious,” then they laughed.

I was not surprised that the women could not answer because most women (6/8) finished school after year 6. I assumed that low education and having little knowledge meant that the women had little self-confidence when speaking about what constitutes healthy eating. I also reflected that the women only knew that those kinds of fruits contain vitamins but they did not know that they contained high levels of sugar. I explained that if the women were very fond of eating them, that they might have high blood sugar, which could lead to complications in both the woman and the baby.

I provided healthy refreshments for the pregnant women that day, including oranges, soymilk mixed with black sesame, and water. I asked whether they knew what these foods contain. The women said, “We know that oranges contain vitamin C but we have no idea about soybean mixed with black sesame.”

I reflected that all the women had a very superficial overview of nutritional issues. Thus, I carefully thought about my role as a midwife and a researcher and how I should facilitate and develop a culturally appropriate model that would be most valued by Thai women. I realised that an appropriate approach was to provide a summary of a model including all of the information that was raised during the discussions and then to include more information from me. (This was consistent with feminist methodological framework in
Chapter Four: Section 4.2) This allowed the women to feel confident and enhanced health empowerment.

Each woman then asked about their vitamin supplements. I asked of their knowledge of vitamins they had been given. All the women looked suspicious, they looked at each other and then replied, “The medicines were vitamins that the doctor prescribed but we did not know what the medicines were for.” Kelly then said, “I did not take any vitamins when I had my previous pregnancy because I did not know what they were for and I had constipation after I took them. Therefore, I do not take any vitamins in the current pregnancy.”

I reflected that the women did not know the benefits of vitamins so they ignored them. Some women just took them because of the doctor’s orders. I reflected that all the women wanted to know what the medicines were for, but they did not dare to ask the doctor or the nurse. I knew that this was normal for Thai patients who were always submissive. Thus, I encouraged all the women to protect their rights and to take responsibility for their health by asking health care providers about their doubts. I also confirmed that the health care providers must answer all their questions. I finally summarised the benefits of each vitamin.

I then encouraged each woman to consider the foods that she had written on the board as to whether they were suitable for pregnancy. Almost all of the women confessed “We have to work, so we normally eat only two meals a day (lunch and dinner) and we are ignorant about nutrition because we do not know how to choose food every day to stay healthy. Eating or drinking is just a usual daily routine for us. Whether or not one is pregnant makes no difference.”

3. Understanding: Feelings are Motivators of Behaviour

After each woman talked about her meals, I found that all of them were suffering from anemia but they did not choose foods that contained iron. Moreover, each of them ate very little and thus, they were low on overall energy intake and their food choices did not cover the five nutritional food groups. Inadequate nutrition during pregnancy affects the subsequent health of the baby and is related to increased risk of preterm birth (This is consistent with the Barker Hypothesis) (de Boo & Harding, 2006). Mostly, the women focused on eating high carbohydrate foods and they lacked sufficient vegetables. Nobody particularly talked about drinking water. Thus, I explained more about how to choose the best foods for their own
health and that of their babies and focus on drinking plenty of water each day. I made reference to the Asian Food Pyramid [49](see Figure 6.2).

**Figure 6.2: Asian Food Pyramid**

I then encouraged the women to participate in a discussion about weight gain during pregnancy. What was an appropriate weight? None of the women could answer but Kai asked, whether the mother’s weight was used to calculate the baby’s weight. Kai had an anxious face and said, “My weight has increased one kilogram per month.”

*I interpreted that Kai’s weight gain was too low (BMI = 19). This might have been because she mostly ate papaya salad. It did not contain enough nutrients, especially protein. I then explained appropriate weight gain. I asked the women to check their weight and note if it increased normally and how much weight they had put on so far. If their weight increased too little, women had to consider how to improve their diet and health. I encouraged the women not to worry if they had not previously chosen foods appropriately or if their weight was too low. The most important thing was to make changes now and improve eating habits from now on in order to ensure their babies became healthy.*

4. Identifying Learning Needs: Consider Knowledge, Attitudes and Skills
Sharing knowledge and experiences in the group on this topic seemed to be ineffective because the women were of a low educational level. Thus, I carefully reflected on the research aim, which was to develop a culturally appropriate model of midwife-facilitated group-based antenatal education that was valued by Thai women who are at risk of preterm birth. I realised that if I just wanted the women to share their experiences, they might not understand how to change their eating styles. According to feminist methodological framework in Chapter Four: Section 4.2, sharing my own experiences (of both theory and practice) was an appropriate way to support the women to feel confident and to increase their health empowerment.

5. Taking Action to Meet Own Learning Needs

- My research is feminist action research so I thought about what would be best for the women and for myself. I decided to support all the women by giving more information.

- As a researcher in feminist action research, I knew that my main role should be as facilitator in the research project. However, in this situation involving socioeconomically disadvantaged Thai women, I needed to carefully support them otherwise they would not gain any knowledge and experience to reflect on and use to change their lives.

- To succeed in this meeting, to be only facilitator was not the appropriate role to enhance women’s health and wellbeing. Thus, I decided to add the roles of teacher, listener and observer at different stages of the process.

- I realised that the most appropriate method was to summarise the issues discussed and then to add more information.

- I decided that in future I would be better prepared with written nutritional information in simple language with good diagrams of the different foods to eat and to avoid. I thought that giving direct information using multiple methods was a more appropriate way to support Thai women to feel confident and enhance health empowerment.

6. Developing a Plan to Change Action
I realised that I was on the right track taking a woman-centred approach. My role here was to find out how best to work with women to optimise their holistic health and extend their pregnancy to term. As a midwife and a facilitator of a feminist action research study, in the next group I decided I should:

- act as a health counsellor to fulfil women’s health needs in this topic
- add more information after the women’s discussion to inform them about appropriate ways to support socioeconomically disadvantaged Thai women.
- use simple language with good diagrams of the different foods to eat and to avoid
- encourage the women to share and to analyse their eating habits with each other which helps the women to be aware of their own nutritional status.

Q.10 How should a midwife facilitate women to share their thoughts and feelings about a sensitive topic?

1. Identifying a Situation in Practice

The following reflection is about how a midwife should facilitate women to share their thoughts and feelings about a sensitive topic. This question arose in the second meeting. I began this section of the meeting by asking the women in the group to talk about preterm birth but nobody offered to speak. I then encouraged two women whom I knew had experienced preterm births, Renee and Mary, to reflect their experiences and share their thoughts and feelings with the group.

2. Reflecting: Focus on Feeling and Behaviour

Renee and Mary smiled but hesitated to tell their experiences. The other women smiled and waited for them. Renee smiled but did not say anything. Then Mary asked, “Does the preterm birth make the baby’s body yellow?”

I thought Renee and Mary hesitated to share their experiences because they might fear embarrassment if they said something wrong and that they were not yet sure of me or the other women as this was only the second meeting. Thus, consistent with feminist group processes in Chapter Four: Section 4.2 I aimed at this stage to build mutual trust and empathy first because these are important values that need the commitment of each woman.
I thought that the smiles from Renee, Mary and the others were a good sign that trust was building.

I smiled at Renee and Mary and said to everyone, “Today we are honoured to have two teachers here; two women who have directly experienced preterm birth.” I continued, “We should be grateful to Renee and Mary. Both of them want to help us in the group to learn about preterm birth.” All the women smiled and applauded for Renee and Mary.

According to the feminist group processes in Chapter Four: Section 4.2 it was important to note that all the women in the group had different backgrounds, beliefs and personalities but these differences were valued resources to strengthen the group. Thus I tried to build the unity in the group and this helped the women feel that they had the same purpose.

Renee smiled and asked, “What am I supposed to tell? I am not sure because I did not know before that I gave birth prematurely. Nurses told me that I had a normal birth.” Renee said, “I remember that at birth my baby weighed 2300 grams.” Mary also commented, “My baby’s weight at birth was 2100 grams.”

I guessed that Renee and Mary hesitated to share their experiences because they did not know about preterm birth and they thought that they had had normal births. They seemed not to understand that they could have a normal vaginal birth of a preterm baby. Drawing on my own experiences as a midwife and a facilitator, I realised that the women needed some basic information before proceeding with the discussion.

However, before I could speak Renee said, “I gave birth normally at about nine months but the baby was small. The nurse told me about this.” Mary then said, “My first child was 2100 grams. The doctor told me that it was a normal delivery but the baby was very small. Its body and eyes were yellow. The baby was nursed in the incubator for a week.”

I focused on my aim, which was to help the women to improve their lives so I briefly explained what preterm birth was and some of the risk factors that predispose particular women to preterm births. This helped the women to understand their health and what preterm birth was.

Renee smiled and said, “OK, I understand. At that time, I was working at a textile factory. I worked 12 hours a day and I carried tons of heavy iron. I worked both day and night shifts on the same day. I stood around and walked all day controlling 15 machines, I did not feel tired.”
Renee then laughed. During the discussion, the other women kept quiet and paid attention to Renee’s story.

_I realised that Renee understood her previous pregnancy was a preterm birth and then she reflected on her experience and thought that working hard might have been a cause of giving birth prematurely. The other women valued Renee’s sharing of her story._

3. Understanding: Feelings are Motivators of Behaviour

Renee continued, “At that time my belly was small and my weight had increased only a little. However, I did not realise because when I met the doctor, they said that I was healthy.” Kelly asked, “Did the nurses discuss your weight with you?” Renee said, “Yes, they said that it was normal but I did not know what normal was.” Renee paused and then said, “Two week before delivery, a doctor told me to eat more. I tried to eat but my weight did not increase. Finally, I gave birth and the baby was only 2.3 kilograms.” Every woman said, “The doctor should have told you earlier.”

_I reflected that the other women began to think about the importance of weight gain. They also began to think about their rights as patients. This meant that women were starting to project what they were learning in the group onto themselves in the real world. According to a feminist methodological framework in Chapter Four: Section 4.2, ‘Experiences of the women and my experience including theory and practice are related to each other’. I then summarised the known causes of preterm birth for Renee and added more information about screening risk scores of this project because nobody knew much about preterm birth._

Kelly asked, “What might tell me if I am having a preterm birth? Is it a stomachache?” Pauline said, “I thought it could be the breaking of water and bleeding.” Renee said, “I had a stomachache (_Uterine contraction_) and then my water broke and I had bleeding.” Mary also said, “I had a stomachache too and then after many hours I gave birth.”

_I reflected that the women began to learn more about themselves so they wanted to have more knowledge. I gave them an opportunity to share their experiences and to have a discussion between themselves; I did not need to talk or direct the conversation. I was pleased that the women were feeling confident and taking more control._

Kai shared her experience, “I saw a preterm baby; it was in an incubator. The baby’s body was very small and wrinkled. The parents could only look at it from the outside. The baby
could breathe by itself. He had to be nursed in the incubator for months. Since then he has not grown well. He was three years old but he was smaller than my kid who was the same age.”

Terri also said her neighbour may have had a preterm baby. She said, “The baby had to stay in an incubator for many weeks. The baby was difficult to feed because he stayed in the incubator all the time. Now the baby is nine months old but his limbs are very small and do not grow normally.”

4. Identifying Learning Needs: Consider Knowledge, Attitudes and Skills

I noticed that nobody shared about how to look after themselves so as to be healthy and have a full term, healthy baby. I concluded the discussion about preterm birth by talking about the women’s experiences and this included a PowerPoint presentation. The women who had experienced preterm birth said that it was the same as what they had seen. I emphasised to the women that our aim was to reach full term in the pregnancy and give birth to a healthy baby. However, if women had preterm labour signs before their due date, they should be aware of their health and seek medical attention. At least, women should get treated for inhibition of uterine contractions and receive a lung stimulant for the baby.

5. Taking Action to Meet Own Learning Needs

I carefully thought about what would be best for working with women who are at an increased risk of a poor pregnancy outcome. I planned to maintain a strengths-based approach. In future, it would be better to encourage the women by focusing on positive thinking, attitudes and behaviours. These characteristics assisted and enabled women to take more responsibility for their own health and increase the consistency of their self-consciousness and self-awareness.

6. Developing a Plan to Change Action

For the next group in the research project, the midwife should:

- maintain a strengths-based approach by focusing on positive thinking, attitudes and behaviours
- add information after the women’s discussion
- be aware that women were experts in their own health and that if they were in good health their babies would also be in good health
be aware that trust and unity were required for women to share on sensitive topics because experiencing previous preterm births was associated suffering and grief.

Q.11 How should a midwife “break the ice” when talking about taboo subjects?

1. Identifying a Situation in Practice

The following reflection was about how the midwife could facilitate the women to talk about sex during pregnancy which was taboo topic for Thai women. This question arose at the third meeting as I was worried and lacked the confidence to facilitate and encourage the group effectively on this topic.

2. Reflecting: Focus on Feeling and Behaviour

Two weeks before the meeting, I discussed my discomfort with my colleague (Tak). She told me that women might just want to know whether sexual relationships during pregnancy were safe or not. Tak said that women mostly stopped having sexual relationships in pregnancy. She suggested that a midwife who was unmarried and who had never given birth could talk to the women about sex and effectively support a woman giving birth.

At that time, I reflected on Tak’s suggestion. I realised that the women knew that they were at a higher risk of pregnancy so they might want to know whether or not they could have sexual relationships during pregnancy. At the time, I agreed with Tak. Although I had not had the experience of giving birth, I could successfully build the confidence of the women in the group.

I also discussed this topic with other colleagues who worked with nursing students at antenatal clinics. I knew that they had never directly discussed sexual relationships during pregnancy with the pregnant women. They just gave brochures about pregnancy and advised the women about safe sex practices during pregnancy. At that time the midwives I consulted with all agreed that if a woman was at increased risk of preterm birth then she should not have sex during pregnancy. I knew that the nurses and obstetricians at antenatal clinics never asked about sexual relationships during pregnancy. I also knew that four of the eight participants had experienced bleeding in their current pregnancies. I knew then that women were generally advised against sex in pregnancy.
On reflection, I think as a Thai woman and a Thai nurse, talking about sex is a taboo and this is different from Western culture. This is consistent with Thai culture and a belief that sex should only be discussed in private. I then thought about how I could facilitate the group discussion in ways that were culturally appropriate for Thai women.

I decided that at the end of the session I would use a short PowerPoint presentation to summarise this topic after the women had had the opportunity to discuss sex in pregnancy. My PowerPoint presentation had three line drawings from a textbook showing different positions for sexual intercourse. I also had a slide presenting other ways for couples to have sexual pleasure (e.g. masturbation).

At the meeting after the checking-in stage, I began to talk about this topic using my PowerPoint slide. I then wanted to guide the women to the working stage of the group by asking whether sex was important during pregnancy or not. There was no response to this enquiry.

The women might be reluctant due to the taboo nature of the topic. They were not likely to speak even if they had had experiences. Pregnant women might not know much about sex and pregnancy.

Terri was the first woman to share on this topic, saying, “I had not had sexual relations since I was three months pregnant because I did not need it. My husband does not say anything. It is as if I have to take care of my baby and myself.” Terri said, “I used to talk to my husband and said that I did not feel any need and I did not feel anything even if he tried to stimulate me. My husband also understood this.” The other women focused on the information that Terri was sharing.

Nobody spoke much or asked Terri any questions. Terri is Burmese and she finished studying at year 12. She is a curious and friendly woman. In the group, Terri always discussed and shared experiences quite well. I thought that Terri’s sharing on this topic might encourage other women to reflect on their feelings and experiences. Also, I thought that listening to Terri might give the other women more options that they had not considered before. Terri’s power and negotiation about sex in her marriage might be admired by the other women and may influence them in their own negotiations about sex.
3. Understanding: Feelings are Motivators of Behaviour

I smiled and looked around at the women, they smiled but nobody said anything. I then smiled and encouraged the women to again share their experiences of the topic being discussed. I said, “We can share about this in the group because now we have only women in this room!” Everyone laughed.

Consistent with feminist group rules (Chapter Two: Section 2.5.2), I knew that the women were united in the same purpose. Thus my question here was: how best could I support and encourage the women to trust in the group and feel safe? Once they felt safe, they would open up about their lives. By having a woman-only group, I was saying it was culturally OK to talk about sex.

Mary then said, “I think it is not important and I rarely have sex.”

Normally, Mary was an active participant and she was a good role model for the other women in the group. However, for this topic, Mary might have felt less comfortable talking about this topic so she shared only a little bit. It might be because she was Muslim so she felt that it was inappropriate to share her experiences. I then reflected that I should be aware of the sensitivity of Muslim women to such a topic and needed to respect different religions. Then I observed that other women in the group had begun to be confident in themselves.

Kai then said, “I think that sexual relationships are not important for pregnant women but it might be important for the husband. He might need it but I did not have any needs. Sometimes we argued about this because I felt that sex during pregnancy was different. It was difficult to discuss. Sometimes I am angry and I curse him.” The women in the group laughed.

Kai was the woman who suggested this topic on the first day of the group meeting. I thought she might have had some questions about sex during pregnancy. I guessed that the women laughed because other women might have the same experiences. Tukta smiled and said, “Yes, I did not want to have sex either because it was different and so difficult. I do not know how to do it.” While Tukta was speaking about herself, she smiled and laughed. Other women also laughed.
The atmosphere during the discussion seemed to be light-hearted; all the women laughed. I felt uncertain so I was trying to understand the laughing. Maybe the women were concealing their embarrassment by laughing; on the other hand, it might be because the women had the same feelings and experiences. Maybe the women felt pressured to say that they were not having sex and/or did not want to have sex because of what the first three women said. Also, I am now aware that although I had not said that I thought sex in pregnancy may cause a preterm birth, this is what I thought based on my training as a Thai midwife.

Whatever the reason for the laughing, it was clear that now the women were feeling comfortable. I noticed that the women seemed to relax and they were in control of the group discussion. I think I had helped this happen because I had told them we were all women.

The sense of shared fun and talking about a taboo topic in a women-only group seemed to have ‘broken the ice’ which was very encouraging for me as the group facilitator.

Kelly then laughed and said, “Having sex during pregnancy was like adding limbs and sharing nutrients from the husband to the baby because men want their baby’s face to be like him.” Other women smiled and said, “Really?” However, I said immediately, “It’s not true and I disagree with you.”

Kelly was one of the women who suggested this topic. I guessed that Kelly’s opinion was based on a belief in some Thai families; this belief was not true. On reflection, however, I should not have disagreed with Kelly immediately. One of the feminist meeting principles is that ‘relationships with the women are based on equality’ but I unconsciously misused my authority as a nurse. I was more focused on the ‘risk to women’ than I was on facilitating the group process. At the time, I disagreed with Kelly’s opinion because all of the women in the group were at risk of preterm birth so I worried that if the women believed Kelly, they would have sex.

4. Identifying Learning Needs: Consider Knowledge, Attitudes and Skills
I now think that voicing my disagreement was not in alignment with the feminist ways of relating to women which are based on openness, power sharing of each woman respectfully and sensitively (Chapter Four: Section 4.2). I should have encouraged the other women to discuss Kelly’s comments first because women in the group had different backgrounds, beliefs, and personalities. These differences are valued resources that strengthen women (Chapter Four: Section 4.2).

I also reflected on sex in pregnancy even if there are some risks of preterm birth. Since my return to Australia I have checked the current recommendations about sex in pregnancy. They are that penetrative sex and female orgasm are safe if there has been no vaginal bleeding or ruptured membranes in the current pregnancy [8]. Also, for women with a prior preterm births, sexual intercourse during early pregnancy does not lead to an increased risk of recurrent preterm birth [8].

I then asked the women, “What do you think about this?” The women said, “We do not know.” Kelly continued, “I do not know either but this is my husband’s thought: if he did not have sex with me, it was as if he did not add anything to the baby. Therefore, having sex during pregnancy was helping the baby’s face to become like the husband’s face.” Again the women laughed and said “Really?”

I concluded that this is not a Thai cultural belief; it was a belief of Kelly’s husband. Kelly’s input into the discussion might be a way of justifying her engagement in sexual relationships during pregnancy, due to the fact that the other women who have spoken said that they had no need or interest.

Then I encouraged the other women to share their experiences again. Tammy who was a teenage woman did not share any information. She just listened to the other women’s comments and then smiled and laughed. Pauline who was another teenage woman said, “My neighbour had sex during pregnancy and the baby was healthy. There is no abnormality.” The other women smiled and laughed.

I encouraged other women again because the women in the group are valued and equal. Tammy and Pauline are teenage women and single. However, Tammy grew up in the countryside while Pauline grew up in Bangkok so they had different backgrounds. Consistent with feminist group processes, I was aware of different backgrounds and personalities when I organised the next meeting and the second group. I thought that
Pauline’s opinion might stimulate the women to think that sexual relationships during pregnancy were normal.

Kai said, “I used to have sex during my first pregnancy, but it hurt every time. It was different from when I was not pregnant. Thus, I was afraid to have sex again.” Other women said, “Yes, we were afraid that having sex was not safe for the baby.”

It seemed to me that Kai and the other women felt safe to contribute to the group discussion. They shared their feelings about being worried for their unborn babies. However, not all the women shared their experiences. Maybe this was because I lacked the confidence to facilitate more comfortably myself. On reflection, after discussing the matter with my supervisors face-to-face, I realised that Kai seemed to be having unwanted sexual relationships with her partner. I should have encouraged the women to negotiate sex with their husbands. Thus I missed an opportunity to support the women to have healthy sexual relationships.

I encouraged the other women to share their thoughts and experiences but they kept quiet.

I then asked why the women thought sex in pregnancy was not safe. The women said, “We were worried about the baby, miscarriage, preterm birth and water leakage.”

I inferred that the women felt worried about their pregnancy and unborn babies. This might be the reason why the women did not want to have sex. Therefore, I explained about the physiology of pregnant women, the uterus and the amnion. I hoped that this might help the women to understand their pregnancy.

Kelly said, “I had sex before delivery. After having sex, my uterus contracted frequently. I had mucus and bleeding.” Kelly smiled and continued, “At that time, I was pregnant for nine months; my baby weighed 2500 grams when born. Last pregnancy, I had an anaemia problem.” All women looked at me. At the time, I felt uncertain that this was because of sexual intercourse and I wondered how I could explain.

On reflection, the women were waiting for my explanation about Kelly’s experiences. Also, Kelly’s experiences might resonate with the other women’s reasons why they did not want to have sex. I was focused on the women’s risk of preterm birth so I did not want the women to have sexual relationships if they had experienced vaginal bleeding in the first and second trimesters (only four women.) This opinion was not consistent with the
philosophy of midwifery, which is that midwifery recognises every woman’s right to self-determination in their choices (see Chapter Two: Section 2.6.1). However, I thought Kelly’s experience might have encouraged the women to rethink and to make their decisions. On reflection, after face-to-face discussion with my supervisors, I realised that I could have provided the women with the current guidelines for sex during pregnancy and supported them to make their own decisions.

Now I know that when a woman has sex and orgasms this does not cause preterm birth because uterine contractions only cause labour once the myometrial gap junctions have formed [50 p.361]. I also reviewed an article by Sayle et al. [51] and found that sexual intercourse in late pregnancy is related to a decreased risk of preterm birth.

Terri continued to share her experiences: “I wanted to talk about sex to him directly at the time he needed it. I told my husband that we should not have sex in the first three months but my husband did not believe me. However, I had bleeding from the vagina at that time. He searched on the Internet and then he understood. However, my husband told me that some people have sex as usual until they give birth and they are fine. He said to me that I worried too much.”

I considered that Terri talking about this negotiation with her husband showed the other women a way to negotiate for themselves. Women do have choices in their lives and they should be able to say ‘no’ when they are not ready to have sex. I reflected that other women might gain some insight from Terri’s conversation.

Terri then said, “I told my husband that women were different; the others might not have complications.” All women agreed with this.

I reflected that this was consistent with the belief of Thai women because it is suggested from health providers that they should not have sex if they were higher risk i.e. had experienced vaginal bleeding.

In this group, Tammy and Pauline are single. Mary’s husband works in another province. Thus they are not worried about sexual relationships. Then I provided further information with a PowerPoint presentation about sexual relations and safe positions for sex during pregnancy.
To conclude this session, I summarised what the women had shared in the group. After finishing the group, I reflected by myself about how I had used sexual information academically based on textbooks. I did not explain in detail each of the positions for sexual intercourse. I wondered how I could do better next time.

5. Taking Action to Meet Own Learning Needs

After face-to-face discussion with my supervisors, I began to realise that as a midwife, I needed to learn to be more comfortable talking about sex with women. My supervisor asked me two questions that encouraged me to think about my roles. These were (1) Should a midwife, in my view, be able to discuss sex with women? (2) Should a midwife be able to help women feel confident and comfortable to ask them questions about sex? The answers for these questions were “Yes,” as I believe I should be able to carry out these roles. Now I realise that I lack confidence in these areas because I focus too much on myself rather than on the needs of the women and my role as a midwife.

6. Developing a Plan to Change Action

I am still coming to terms with the idea that I do not have to be the expert on all topics, even though I am a qualified nurse. On this topic, I realise that the women are more expert than me. This is why the women may want to talk about sex. I re-evaluated my role and values in this research project. I now know that having a baby is a very private and intimate thing and it’s all part of sexual reproductive functioning. I realise that sex is normal human behaviour. I am striving to not be socially anxious when talking about sex. As a facilitator of group-based antenatal education, in the next group I will be aware that:

- Creating a sense of shared fun is important for group development.
- Talking about a taboo topic in a woman-only group allows for the creation of a shared bond of trust and increases the chances that women will form friendships within the group.
- Asking open-ended questions early in the meeting and then being patient to allow women time to think and to answer was important for getting the group interaction going.
• Although sex is taboo in public discussion in Thai culture, my role is to facilitate the empowerment of women and allow them to be confident in their sexual lives. I will also share my experiences about this so as to encourage my colleagues and nursing students to support the women to be able to talk about sex comfortably with their nurse/midwife if they wish.

• I do not have to answer every question and I do not have to be the expert on everything. When I can access accurate information I will share it with the group.

• I will support each woman to make well-informed decisions about their health and wellbeing.

• The religion, culture and beliefs of each woman are important issues so I will facilitate and encourage respectfully and sensitively.

• Women gained power and knowledge on how to negotiate after the discussions. I should have been empowering women to look at their strengths rather than just focusing on risks.

• Teenage women have different backgrounds and personalities. I should carefully facilitate this group of women especially around sensitive issues. Maybe a group based on teenagers only would be better for them.

• When the women share stories of unhappy sexual relationships, I will encourage the other women to respond and/or share their experiences.

Q.12 How can a midwife facilitate empowerment in women?

1. Identifying a Situation in Practice

The following reflection is about how a midwife should facilitate women to become more empowered in their lives. This question arose at the second meeting and the key findings of this question were applied to facilitate every subsequent group meeting. I would like to support the women to improve their lifestyles by taking greater self-responsibility, developing more self-awareness and consciousness-raising. Therefore, the concepts at the beginning of each meeting involved “reviewing, reflecting and emphasising”.

2. Reflecting: Focus on Feelings and Behaviour
At the second meeting

1. At each meeting, I encouraged the women to ‘review’ their knowledge and their experiences in the previous two weeks (What did we learn together from last meeting?).

2. Then I encouraged the women to ‘reflect’ the thoughts and feelings (How did you feel about the development of your pregnancy and self-care in the previous two weeks?).

3. I then encouraged the women to ‘emphasise’ health behaviors (What should you be aware of or improve or change in your lifestyle?). The conversations below are excerpts of the meetings.

Kai said with unhappy face, “I did not have time to talk with my baby because I was very busy. I was sorry because I retained urine from 5 p.m. to midnight”. The other women asked why. Kai replied, “Because the toilet is far from my shop and there were many customers; I could not go off. I urinated only once after working. Thus, now, I have pain while urinating; the urine was so yellowish”. (I encouraged the women to help Kai) Terri said, “How did you deal with this? It is not good; you should be aware about urinary tract infection”. Kai said, “Now, I know talking with the baby is good but I do not have time. I also know I should not retain urine so I will change myself”.

Kai looked unhappy because she has already learned the meaning of talking with her unborn baby and the possible adverse outcomes of retaining urine. Therefore, when Kai did not do these actions, she felt guilty. However, because of learning from the group, Kai realised the benefits of paying attention to health issues. I reflected that this was a good sign because Kai began to be aware of her issues and intended to take self responsibility. I thought that Kai believed in the group so she told the truth by opening her mind and her feelings.

When the women reflected on their feelings and actions, they began to notice something in their practices. They would think about what they wanted to do or why they wanted to make changes.

3. Understanding: Feelings are Motivators of Behaviour

Kelly said, “I talked with the baby when I was alone because I felt somewhat odd and awkward talking to the unborn baby. I was shy to talk in front of other people”. The other
women said “Yes, This is true we were reluctant to do it at first because it’s like talking to ourselves”. Kelly continued, “Now I do not retain urine anymore; I go to the toilet frequently” (Last meeting, Kelly said that she retained urine). The other women approved of this and smiled at Kelly. At this, Kelly smiled in appreciation of the support from the other women. She continued, “I used to experience severe pain when I retained urine. I took sick leave from work often”.

I inferred that although the women had attended the group only once, they began to learn and to be aware about their pregnancies. Kelly changed her habits and that meant that her self-awareness and consciousness had increased and she intended to take responsibility for her health. I reflected that Kelly’s conversation might influence Kai and the other women. Regarding talking with the unborn baby, I understood the women’s feeling because they had never thought of it before so they felt reluctant to do it. However, I thought the women knew the benefits and they felt better.

Terri smiled and said, “Last week I had bleeding from my vagina”. With this every woman was interested in Terri and asked why. Terri replied, “It may be because I had constipation and pushed too hard trying to pass faeces. Now, I try to drink more water and chew food thoroughly to stop this” (Terri learns to be aware of herself). Terri continued, “I asked the doctor why I had pain in the left and right wing of my uterus. The doctor said it might be because my uterus grew bigger”.

At the first meeting, women complained that they did not dare to ask any questions of doctors or nurses. I encouraged the women to take self-responsibility by asking about their health. This was the women’s right; the women should know how their health was going. Now Terri had learned to take more responsibility for her health; she had asked the doctor and could describe more details of the changes due to her pregnancy.

Tukta said, “I have not talked to the baby yet but my husband does it. I had constipation; it might be because I drank too little water and I did not eat vegetables. I have decided now that I will begin to change my eating and drinking habits; it should get better” (It might be because Tukta listened to group discussion). Mary said of her water intake, “I drink about four to three liters per day”. Mary and Renee shared their experiences about of the benefits of drinking water, “Drinking a lot of water is good for mother and baby. The baby’s body will not be yellow and the mother will not have constipation”. Renee said, “In fact, people should
drink a lot of water whether they feel thirsty or not. If your lips are dry, it means you should drink water”.

_I reflected that learning from women’s experiences helped Tukta and the other women to feel confident; they could see the benefits of improving or changing their lifestyles. I was quite confident that the other women would also change._

4. Identifying Learning Needs: Consider Knowledge, Attitudes and Skills

Because of some women’s experiences of changing lifestyle, the other women saw the benefits. All the women were motivated by the other women’s experiences. When the women reflected on their feelings, the life experiences of the other women became the motivator that encouraged them to think and change their own behaviors. This was the women’s power. I thought that all the women had the same aim. Being pregnant was a common factor which greatly facilitated the sharing of personal experiences among group members because they all used the same language – that is to say, the language of pregnant women. Thus, the women might feel keenly interested in changing their lives.

5. Taking Action to Meet Own Learning Needs

My research project concerned midwifery primary health care based on feminist theory, and midwifery partnerships. I carefully thought about the best way to work with the women in relation to feminist concepts such as increasing awareness, consciousness and taking responsibility. I carefully thought about what would be best for me and the group participants. Therefore, I decided to use the concept of Reviewing, Reflecting and Emphasising to encourage the women at the beginning of every meeting. I think group sessions therefore acted as a catalyst for the women’s bonding and teamwork. This in turn had a positive effect on the women’s attitudes toward their pregnancies.

6. Developing a Plan to Change Action

The key findings were that the midwife needs to:

- be aware that women’s power comes from sharing their everyday life experiences
- provide information about health topics in ways that are non-didactic and non-judgemental
• encourage the women to reflect on their own experiences in order to develop more self-awareness and self-acceptance

• encourage the women to share their experiences with each other and offer each other non-judgemental support

• provide support when each woman has an increased level of self-acceptance and a sense of being accepted by the group. When this happens each woman will become empowered and will take more responsibility for their holistic health

• use active experiential learning to stimulate women’s reflection.

Section 6.2:

Group Two: Concerns/Problems/Questions That Arose in My Practice

Q. 1 How should a midwife deal with unplanned topics?

1. Identifying a Situation in Practice

The following reflection is about how a midwife deals with unplanned topics. This question arose in the first group meeting. I encouraged the women to think and talk by using open-ended discussion. I used this as a facilitating strategy because I believed it might help the other women who did not talk much to share their concerns and to ask questions.

2. Reflecting: Focus on Feeling and Behaviour

Jane raised her hand immediately and asked, “I wonder about vitamin supplements. I would like to ask if I can take folic acid together with black vitamin (Ferrous sulphate). The doctor told me that I must take only folic acid first and then take the black vitamin. I did not understand so I only take folic acid and do not take the vitamin.” Orlene said, “For me, the doctor did not allow me to take the black vitamin. He prescribed only folic acid and said taking the black vitamin as well would be too much for me” Nobody could answer Jane’s question so it was my role to explain the situation to clear their doubts. Jenny then asked, “I have retainer and braces to straighten my teeth. Do they affect the unborn baby?” Cherene said, “I would like to go to amusement park. I wonder if I could go on the rides.”
In relation to the key findings from group one, as a midwife and a researcher, my important tasks were health counselling, educating and facilitating. I reflected that some women might have doubts about their pregnancy but they might be unsure how to ask about them. Thus, giving the women an opportunity to share their needs at the end of each meeting might allow them to find answers to their questions. I reflected that, when I encouraged the women to think and to reflect on their needs and their doubts, they participated quickly so unplanned topics that the women wished to address gradually emerged in the group discussion. This was consistent with the philosophy of midwifery and feminist group processes.

3. Understanding: Feelings are Motivators of Behaviour

Jane said, “I want to ask more questions”. I encouraged her to question because they might be beneficial questions for other members. Jane asked, “Can I have hair highlights or hair waved?” Orlene then asked, “It might be the smell that worries women”. Jane said, “Someone told me, I should not have my hair coloured”. I encouraged other members to share their opinions on the topic. Yari said, “I read from a magazine about a mother who dyes her hair and she was concerned that the chemicals might stimulate the uterus, but she did not actually know if this was true”. Jane said, “The chemicals might be absorbed to the brain or it might be just the smell”. Orlene commented, “It might be because of its strong smell. The chemical smell might make a woman feel pain in her nose”. Yari suggested, “We can be beautiful in other ways”.

I remembered that the women in the group had different background and beliefs but these differences were valued resources that helped to strengthen the unity and harmony of the group. They all had an equal opportunity to share their experiences and feelings. Although the women had conflicts, these conflicts were part of human relationships. These were consistent with feminist group processes. Using open-ended discussion motivated the women to reflect on their feelings and their behaviours. Thus, the women would understand their needs to a greater degree.

4. Identifying Learning Needs: Consider Knowledge, Attitudes and Skills

I judged that when the women discussed their doubts, their knowledge, attitudes and experiences were also shared with each other. The atmosphere of the meeting was light-hearted and the women laughed together and were friendly. This was appropriate for
learning and sharing experiences. Thus, the women felt that their concerns were addressed, and that their health needs were met. I realised that the open-ended discussions at the end of each meeting were an appropriate technique for facilitating the group of women. The women felt free to share and to question because this practice was an approach that recognised each woman’s social, emotional, physical and cultural needs and acknowledged their expectations.

5. Taking Action to Meet Own Learning Needs

- After this situation, I knew that using open-ended discussion helps me to effectively and collaboratively work with the women to satisfy their health needs.

- Encouraging open-ended discussion exposes the women’s doubts.

- Open-ended discussion helped the women to gain more knowledge and experience, which sometimes alleviated their concerns.

6. Developing a Plan to Change Action

For the next group meeting, in order to improve the women’s confidence and to diminish their anxiety, the midwife should:

- use open-ended discussion to effectively and collaboratively work with the women to address their concerns

- give the women an opportunity to ask questions and support them to answer them for each other.

Q. 2 How should a midwife work with a pregnant teenager who drinks and smokes?

Preamble to the Reflection

The following reflection was initiated by my practice towards the end of the first group meeting about how I effectively worked with a teenager who drank and smoked. Vicky, aged 16 was 17 weeks pregnant with her first baby. It was an unintended and unwanted pregnancy. Vicky seemed to be addicted to smoking (six cigarettes a day) and she was also a regular alcohol drinker. She had an unhappy relationship with her boyfriend (Mike). He was addicted
to alcohol and spent lots of his time with his friends, and other women. If Mike did not return home or quarrelled with Vicky, she would smoke and drink heavily.

1. Identifying a Situation in Practice

The question is about how to work with a teenager who drinks and smokes while she is pregnant.

2. Reflecting: Focus on Feelings and Behaviour

In relation to the experiences of group one, I understood that the women needed my individual attention, care and concern as a midwife and a woman. The group meeting by itself was not enough for them. Thus, individual meetings and group-based antenatal education was used to support Vicky to become empowered in her health.

Reflection on the group meeting

At the first meeting, Vicky hesitated to tell about her risks factors for a preterm birth. She said, “I did not know about my risks.” Vicky paused, then smiled and said, “I smoked and drank alcohol because I was stressed”.

The women had shared the fact that they had a risk of preterm birth in group one. I respected the right of each woman to be in control of what information she chose to share or keep private. I reflected that Vicky chose to tell about her risks; this might be because she knew that she had unhealthy behaviours. She intended to join an antenatal education group because she wanted to be a healthy pregnant woman. Then she dared to talk about her risks. I appreciated Vicky’s sharing and her courage, I was very proud of Vicky. I also reflected that this was a good starting point for Vicky and the other women in the group.

Vicky said, “My boyfriend does not care about me and is not concerned about my feelings. He is an alcoholic hanging out with other women and friends. When he did not return home, I was stressed and then I would smoke and drink heavily.” Doran, who was sitting next to Vicky, asked with a soft voice if Vicky continued to drink during pregnancy. Vicky smiled and said, “I will stop drinking now.” I encouraged the other women to support and help Vicky to achieve good health and wellbeing.
I tried to keep away from provoking any reactions within the group that could be inconvenient for any of the women. I planned to protect Vicky and the other women if judgmental responses occurred in the group during discussion. The atmosphere in the group was relaxed and friendly which was conducive to information sharing. I inferred that Vicky felt comfortable to discuss issues with the other women in the group because she smiled and wanted to stop drinking. I believed in Vicky’s promise because Vicky and I had individual meetings, and we had a good relationship. Vicky listened to my suggestions and endeavoured to apply these to her own life.

Reflection on the one-on-one meeting

I had several individual meetings and telephone conversations to support Vicky. This was consistent with the philosophy of midwifery (ACM) (see Chapter Two: Section 2.6.1). I took Vicky to see preterm and full term babies. I tried to gauge the level of Vicky’s consciousness by asking how many months she had left of her pregnancy and what she wanted for her baby. This was consistent to feminist methodology framework in Chapter Four: Section 4.2.

Vicky said, “I have five months left. I do not want my baby to be in the incubator, I want to have a full term baby. Do I have enough time for having a full term baby?”

I reflected that in fact, Vicky was very worried about her baby so she hoped that the months left could help her baby to become healthy.

Vicky said, “I will stop drinking and smoking. I do not want my baby like those babies in the incubators.”

I think that Vicky began to realise that drinking and smoking affected her unborn baby. Vicky realised that she had time left, so if she could stop those addictions, she could have a full term baby.

Two weeks later, Vicky said, “I do not drink at all but I still smoke – only 1–2 cigarettes a day. Some days I do not smoke at all.”

I reflected that Vicky’s consciousness and awareness were gradually increasing. She began to take self-responsibility by steadily changing herself and her unhealthy behaviours.
3. Understanding: Feelings are Motivators of Behaviour

In regards to the discussion with Vicky, I recognised that increasing Vicky’s responsibility for her own health and empowerment was dependent on Mike’s support. I expected that Mike could support Vicky to have good health and wellbeing. Thus, I took Mike to visit the neonatal intensive care unit. This was consistent with philosophy of midwifery (ACM) (see Chapter Two: Section 2.6.1).

Mike said, “The babies in the incubators were tiny. How they can survive? I do not want my baby to be like those babies. What should I do because Vicky still smokes? I tried to stop her smoking. When I am with her, she does not dare to smoke and drink. However, I can’t be with her all the time.”

I saw that Mike realised that Vicky’s unhealthy behaviours affected the unborn baby. He began to be worried about the baby. I also deduced that Mike was the key support person for Vicky throughout her pregnancy. Both Vicky and Mike were teenagers so their loving relationship was inconsistent. I planned to continually work with them. However, I reflected that Vicky’s good health and wellbeing as well as her pregnancy were in her control. Her life could not only depend on Mike because her life was her own responsibility. Thus I thought the group meetings could support and empower Vicky to be a strong woman. This was consistent with philosophy of midwifery (ACM) (see Chapter Two: Section 2.6.1).

At the first group meeting, Yari smiled and told Vicky, “Please wait for five months and then you can drink after delivery. Orlene asked with a soft voice, “After giving birth, a woman has to breast-feed her baby, so how can she drink?” Yari smiled and said, “Vicky may stop drinking after giving birth and may realise that it is good to stop drinking.”

I thought that Yari shared this idea as she knew that bonding between Vicky and her baby would gradually occur. I reflected that although the meeting was the first one, the women shared their experiences and the group discussion was an amicable one.

Linda smiled and then she said, “I experienced preterm birth because of stress. At that time, I did not realise that I was stressed but I finally gave birth prematurely. I thought about my boyfriend because we had split up when I was four months pregnant. I was very worried at first. However, after that I decided that I had to survive so I just thought about my baby.”
I reflected that Linda would like to support Vicky by focusing on the unborn baby only. This technique might help Vicky to be strong.

4. Identifying Learning Needs: Consider Knowledge, Attitudes and Skills

After taking Vicky to see preterm babies, I focused on Vicky’s feelings by encouraging her to share with the group. Vicky said, “Preterm babies were very small and scary. Some of them were only hand-size. (Other women were frightened). Vicky continued, ‘They were much smaller than normal babies. The head was so small and there were a bunch of wires in the incubator. However, term babies were big in size and healthy. They were much bigger. My goal is to have a full term, healthy child.”

At each meeting, I encouraged each woman to reflect on her pregnancy development and self-health care in the past two weeks. I thought that reflection would help the women to realise their health responsibilities and the effect of their health on their baby. I stressed that the person who took care of the babies at all times was the woman herself.

From individual meetings and the group discussion, I reflected that, as teenagers, Vicky and her boyfriend still had an unhappy relationship. I wanted Vicky to be strong so I encouraged the other women to share their life experiences to support Vicky.

Linda confessed that, “I was very concerned about my previous pregnancy, I was very stressed. I thought it over and I was afraid that my baby would not have its father. I was afraid of being without him. My parents understood and encouraged me; they told me that I could live without my boyfriend. Then I told myself I could survive and raise my child without him. I did not beg for money from him, it was my breast milk that the baby needed. My life is about my choice.’” The other women and I praised Linda for taking care of herself and her baby.

I reflected that Linda would not like to see Vicky stressed; she wanted to support Vicky and show her that her life was in her control. Without a boyfriend, Vicky still had her own life, her own baby and her parents.

After seeing the preterm babies, Vicky said, “I stopped going to nightclubs and drinking and I smoked only 1–2 cigarettes per day; some days I did not smoke.” After the first hospitalisation due to preterm labour pain, Vicky said, “I did not smoke or drink alcohol at all. I have gradually changed my daily lifestyle and how I take care of my pregnancy. I have
reorganised my life, paying greater attention to my daily routine. For instance, most of the foods come from the temple. I choose healthy foods that are beneficial for my baby. Sometimes I do not have an appetite but when I thought about my unborn baby and encouragements from friends, I changed my mind. I focus on my unborn baby by not paying as much attention to Mike. Although Mike is not a good man he is better than others. I have been encouraged by you and friends in the group, my life do not depend upon him.” Vicky smiled.

*I inferred that Vicky has more awareness, consciousness and power to take care of herself. After this situation, I realised that low socioeconomic, disadvantaged women need both individual meetings and group-based antenatal education. To enhance their self-awareness, consciousness and responsibility the women also need their family's support and continuity of care.*

5. Taking Action to Meet Own Learning Needs

- Women need their partner’s/family’s support and continuity of care and concern from me as a midwife and a woman. These factors influence the women’s empowerment; working individually with the woman might not be enough.

- Working and encouraging the women and their partners to gain knowledge and experience in the real world becomes a tool for increasing empowerment to strive for a healthy life.

6. Developing a Plan to Change Action

- Working with teenagers who drink and smoke requires support from their partner/family

- women need continuity of care and concern from a midwife.

- reflection upon experiences from real situations can help women to become empowered to strive for a healthy life.

- both individual and group meetings are important for working with teenagers who drink and smoke while they are pregnant
• friendly relationships between women and midwives, including other women in the group, are needed for teenage women.

• midwifery partnership and continuity of care help to guide the midwife in working with teenage women.

• the midwife should aim to prevent judgmental comments occurring in the group to protect teenage women.

Q. 3 How should a midwife support women to apply theory to real life situations?

1. Identifying a Situation in Practice

The following reflection is about how I supported the women to apply theory in their own lives. This question arose at the second meeting, which was about working with the women in a practical way to enhance aspects of their self-awareness (see Figure 6.3). The session looked at how women were conscious of nutrition and what they intended to do about their eating and drinking to ensure a healthy pregnancy and to safeguard the health of their baby. I facilitated the group based on my experiences and on the recommendations for practice identified from group one. The beneficial and non-beneficial food models were mixed and put on the table. Then the women were encouraged to select food models and were asked what they wanted to cook and why.
2. Reflecting: Focus on Feelings and Behaviour

Orlene showed her selection and said, “I would like to cook mackerel almost every day because it contains minerals and calcium and it is not expensive’. Doran said, “Yes we can eat every part of fried mackerel if we fry it to be crispy”. Orlene said, “Yes, I eat all of it, including the head, tail and bones. They contain lots of calcium”. Orlene added, “I will cook spaghetti with eggs, meat, onions, vegetables and tomato sauce”. Orlene said, “It is enough and contains five categories of foods”. Doran then showed the selected food models and said, “I would like to cook sour soup with agasta flower and shrimp. It contains protein and minerals”. Doran said, “I will cook it by myself because I will add more omelette and use only a little oil. If I bought the prepared food, it might not contain enough protein because they just add a little protein”.

I judged that this facilitating method was appropriate for the women as it was a practical way in the real world. The technique could enhance the women’s awareness and consciousness because it encouraged the women to reflect on and share details about their everyday lives. This was consistent with feminist group processes (see Chapter Two: Section 2.5.2). The women all had the same aim; this technique was conducive to openness and power sharing among the women.
Thus I knew about each woman’s eating style and the other women could use these styles to model their own. I felt that the women were enthusiastic about this technique because the atmosphere was joyful and friendly while choosing the food models. All the women smiled and laughed. I reflected that I saw the women also discussing what they would cook with their friends.

3. Understanding: Feelings are Motivators of Behaviour

The method seemed to be a good way to motivate the women to express their feelings and to discuss their eating habits. This helped me to understand the eating behaviour of each woman and it also helped the women to understand each other. In addition, the women could help and share their experiences with the other women who had unhealthy eating behaviours. For instance, Doran and Orlene’s eating styles could be a model for the others.

Vicky said, “I usually do not have breakfast so I have only two meals”. Vicky smiled and then showed the selected food models and said, “Today I will cook omelette and tinned fish mixed with chilli and lemon. These are my main dishes when I have no money”. Vicky laughed in embarrassment. Vicky said, “I also drink soymilk and milk”.

I thought that Vicky felt embarrassed when she stated that she would cook tinned fish because eating tinned fish is a symbol of poverty in Thailand.

Doran said, “Tinned fish is beneficial because the whole fish can be eaten and the bones can be digested, it contains high calcium”. The other women agreed with Doran.

I inferred that Doran and the others understood Vicky’s feelings and did not want Vicky to feel embarrassed.

I asked if it is enough; does it contain five categories of foods? Orlene asked, “Do you eat fruits”. Vicky said, “I eat fruits occasionally. I buy fruits if I see the fruit pushcart.” Vicky quickly said, “I eat vegetables because the noodles contain many kinds of vegetables, such as bean sprouts and morning glory”. Vicky and the others were laughing.

Orlene and the other women seemed to be worried about Vicky’s eating habits because they knew that they were all at an increased risk of preterm birth. They also knew that Vicky was a teenager who drank and smoked while she was pregnant. Vicky also knew that she had unhealthy eating behaviours that affected her nutrition. Thus, she quickly said that she ate
bean sprouts and morning glory with noodles. These kinds of vegetables were not enough for her body and her baby.

4. Identifying Learning Needs: Consider Knowledge, Attitudes and Skills

All of the women chose the beneficial food models even though I had mixed all models together to tempt them. Every woman chose wisely. Thus, I realised that I was on the right track in applying this method. This method resulted in an effective group process as it facilitated decision-making for all women. It valued the diversity of the women’s opinions, in the real world. This was consistent with group processes (see Chapter Two: Section 2.5.2).

5. Taking Action to Meet Own Learning Needs

Women needed the technique. The technique was a suitable technique to enhance women’s awareness as it was applied for use in the real situation. The technique encouraged the women to think before they made a decision.

6. Developing a Plan to Change Action

The key findings were that the midwife should:

- enhance women’s awareness and consciousness by supporting women to practise by applying theoretical knowledge to their daily lives.

- promote active learning to promote knowledge transfer to change daily life practices

- support experiential learning to allow women to think and understand before acting.

Q. 4 How should a midwife help each woman to find the strength and commitment to make lifestyle choices that promote full-term birth?

Preamble to the Reflection

The following reflection is about how I supported the women to find and bring strength into their lives. This question was discussed at the third group meeting which was about influencing health empowerment by the use of Healthy Behavioural Cards (HBCs) (see Figure 6.4) which were a strengths-based approach to increase the consciousness and awareness of women. The details of Healthy Behavioural Cards were created from the
women’s discussion and their concerns. In the description below I have used ‘Arial’ style font to present the content of each card during discussion.

**Figure 6.4: Healthy Behavioural Cards: Commitment to Lifestyle Choices**

1. **Identifying a Situation in Practice**

I put the 20 HBCs on the table, and then wrote on the white board, ‘Mum, I want to be a full term, healthy baby’. I then asked the women, ‘how would you take care of yourself to maximise your chances of reaching full term in this pregnancy? Then the women were encouraged to select the HBCs and to share their reasons for choosing each card.

2. **Reflecting: Focus on Feelings and Behaviour**

While the women were choosing the cards, they consciously considered and decided on their favourite cards. Each woman chose 5–15 cards; however, I saw that Vicky chose only two cards. I then encouraged her again by emphasising the goal of ensuring that the baby would be a full term, healthy baby.

*I felt that this strategy could encourage and empower each woman to reflect on her feelings, her thoughts and her behaviours in the real world. I also saw the significant*
differences between the teenage and adult women. The different views guided me to know how to support the teenage woman.

Jane smiled and laughed, “The first card I chose was, ‘Mum, just let it go, do not be stressed. Please focus on looking after me’. I chose this one because I always worry over small things so I try to stop thinking too much. The second card I chose was, ‘It would be better for us to go to sleep at 10 p.m. and wake up around 6–7 a.m’. I chose this card because I always go to sleep late and wake up easily. I usually wake up at 1–2 a.m. I have had difficulty sleeping for a long time. It was like this in my first pregnancy but I did not see the doctor because I would receive medicine. The third card was, ‘Mum, drink milk, soymilk, juice, and water for me’. I do not usually drink milk or other liquids; I am going to do these.”

Vicky smiled and said, “The first card I chose was, ‘Mum, whatever makes you stressed, just let it go. You need to stay with me’. I chose this card because I have felt stressed since I conceived. I am sleepless and have had headaches for a long time. This card will remind me to relax. The second card I selected was, ‘Mum, it would be better for us to go to sleep at 10 p.m. and wake up around 6–7 a.m.’ I chose this card because I always go to sleep late. I used to go nightclubs frequently. Sometimes I did not sleep at all and I returned home in the morning. Sometimes, even if I did not go to the nightclub I was stressed and I could not sleep. If it is possible, I would like to try not going to bed late but it will be difficult. I have difficulty sleeping and I have to get up early. This card will remind me and I will try to do that. Sometimes I have a headache too and I cannot sleep.”

I reflected that these cards encouraged the women to have more self-awareness, consciousness and responsibility. The women began to realise that if they wanted to have a healthy baby, they would need to be more aware of their habits. They seemed to accept that some of their behaviours affected their health and wellbeing and the health of their unborn babies. These cards encouraged the women to share about their daily lifestyle and some unhappy issues. Thus, I also learnt more about the women; this technique helped me to appropriately work with the women to care and be more concerned about their health needs.

3. Understanding: Feelings are Motivators of Behaviour

The fourth card that Jane chose was, ‘Mum, eat three meals daily.’ Jane said, “I do not usually have breakfast. I only eat two meals a day but I will begin to eat all three meals.”
“The third card that Vicky chose was, ‘Mum, drink milk, soymilk, juice and water for me’. Vicky said, “I think I will drink more water because my urine is deep yellow. This card will remind me to change my drinking habits. I should drink plenty of water, I am going to try to do these.”

The first card Linda chose was, ‘Mum, do not be stressed because I will not be healthy’. Linda said, “I chose this card because it reminds me not to be stressed otherwise I may give birth prematurely. I was afraid in my last pregnancy. That was because I was so stressed, I finally gave birth prematurely.”

I saw that the women began to reflect on themselves and their daily lifestyles. They seemed to understand their feelings and had a commitment to changing unhealthy habits. The individual and collective actions of the women can produce changes to their health and wellbeing, including the health of their unborn babies.

I reflected that HBCs could be a tool to encourage the women to focus on positive thinking, attitudes and behaviours. The selected cards of each woman would remind them to strive to enhance consciousness, awareness and health responsibility during the week. Also these selected cards would be a commitment from each woman to her unborn baby. I supported the women to accept responsibility for her own health and recognise that her good health was also the baby’s good health.

4. Identifying Learning Needs: Consider Knowledge, Attitudes and Skills

I could see that HBCs were an excellent tool as the cards reminded the women about healthy choices. I gave the HBCs to the women to take back to their homes to remind themselves about what they needed to do. A meeting every two weeks may not be a frequent enough reminder for some women. Some women might forget or become careless in their self-care. Some might be stressed or have many problems. The HBCs would remind them to be aware and responsible for themselves and their babies. It would also encourage the women when they were discouraged.

Compared with the first group, the new strategy was more successful. In relation to the evaluation, all the women said that they would paste the cards on their walls to remind themselves. They said that these cards were like making a commitment to the babies. The women said that they wanted to change unhealthy behaviours.
5. Taking Action to Meet Own Learning Needs

- I wanted the women to take an active role in their life so using HBCs supported the women to reflect on their knowledge, experiences, feelings, attitudes and practices. These reflections helped them to have more self-consciousness and responsibility.

- From this situation, I have learned that using HBCs guides me to learn more about each woman and helps me to collaboratively work with a group of women and helps them to meet their health needs.

6. Developing a Plan to Change Action

- if the women make a commitment to their babies it can increase their consciousness, awareness and health responsibility

- a strengths-based approach by using HBCs can help women address their concerns.

- positive thoughts encouraged by HBCs can encourage women to reflect on their experiences, feelings, attitudes and practices.

- collaborative learning by use of HBCs can help the midwife learn more about each woman.

Q. 5 Should a midwife encourage a woman with a high risk of preterm birth to bond with her unborn baby?

Preamble to the Reflection

The following reflection about whether I should encourage a woman with a high risk of preterm birth to bond with her unborn baby or not. This question arose after a woman had a miscarriage. Cherene was a twenty-three-year-old woman who has experienced six induced abortions and one ectopic pregnancy with a fallopian tube removed. When I first met Cherene she was already 16 weeks pregnant. There had been some bleeding at 12 weeks in this pregnancy. She finally miscarried when she was 26 weeks pregnant.
1. Identifying a Situation in Practice

I felt regretful that I had encouraged Cherene to bond with the unborn baby because she finally miscarried. I then lost of self-confidence to facilitate the group.

2. Reflecting: Focus on Feeling and Behaviour

At the first meeting, Cherene said, “I want to participate in the group because I do not know how to look after the baby, I used to have abortions. Last pregnancy, I really wanted the baby but it was ectopic. I was worried then. Now, I really want this baby”. I saw that Cherene strongly wanted to be successful in this pregnancy. When Cherene was in the group, she participated well and discussed things in detail, but she looked serious. She said, “My husband will divorce me if I have a miscarriage again. Many times I have nightmares about my baby”. I interpreted that Cherene was stressed by her husband and her own experiences e.g. fears and self-criticisms. Her nightmares indicated her subconscious communicating her deep-seated fears about this baby.

At the first group meeting, I used the key learning need from group one (actively focus on enhancing the bond between the woman and her unborn baby) to encourage the women to build bonds with their babies by talking and singing to and then by touching them through their abdomen. This was because I saw the huge benefits of building bonds from group one. I also suggested that the women should encourage their husbands to bond with their babies and that it should increase their love and sense of responsibility.

At the next meeting, I again focused on strengthening bonding by inviting women to select HBCs which I created based on promoting positive thinking. The key concepts of this strategy were: a mother’s love is of great value, positive thinking is more likely to lead to positive physiology and positive health outcomes, and empowerment through providing knowledge. I used two key learning needs from my reflection on practices from group one. These were to: maintain a strengths-based approach (particularly when working with women who are at increased risk of a poor outcome) and to keep the focus on positive thinking and behaviours.

Cherene selected seven of the HBCs, ‘Arial’ style font is used below to present the content of each card:

1. ‘Mum, your health is my health. What you eat, what you think, what you do, I am as well.’
2. ‘Mum, you are a good Mum, excellent Mum, and wonderful Mum. Thank you that you’ve looked after me very well.’

3. ‘Mum, my handsome dad talks to me every day.’

4. ‘Mum, I’ll be a full term healthy baby because of you.’

5. ‘Mum, five more months and we will see each other, I’m excited.’

6. ‘Mum, please select for me five varieties of food every day.’

7. ‘Mum, my brain and ears are developing; I want to listen to mellow music.’

Cherene said, “After each session, I normally shared with my husband what happened in the group meeting. Last time, you suggested about talking to the baby so I told him. He liked to talk and read fables to the baby. So these cards will remind me and my husband every day. I’ll paste them on the wall in my room.” I interpreted that Cherene had high hopes for this pregnancy, so she focused on her needs by consciously doing things following the group discussion. Cherene said, “My husband and I really like your cards. They remind us every day”. When Cherene was twenty-six weeks pregnant, she miscarried.

Cherene said, “This baby died because the other babies who were terminated before did not want him to be born”. I saw that the five induced abortions were still in her consciousness. “Before the baby died, I dreamt that I saw a baby sleeping in a box”. I interpreted that her dream where she ‘saw’ a baby in a box signified her subconscious communicating her deep fears about the baby. This was a sign that her subconscious ‘knew’ the baby would die and was preparing her for that eventuality. Thus she was deeply afraid or believed it would happen.

3. Understanding: Feelings are Motivators of Behaviour

When I reflected on this situation, I felt regretful that I had encouraged Cherene to bond with the baby by using HBCs. I focused on the woman’s needs and her expectations but I forgot to consider the loss and grief that could occur in her pregnancy as she had a history of six abortions. I felt I had made a mistake for the reason that the style of midwifery I used in this research project is different from the way I normally practice. I got involved in her
journey. Thus, when Cherene and her husband suffered more, so did I. I blamed myself because I had dwelt on the essence of bonding by using HBCs.

My supervisors supported me and increased my consciousness by discussion. Their suggestions reminded me of what had happened to this participant. Every woman knows that miscarriage and preterm birth are possible. Cherene and her husband had positive expectations but their baby was an intrauterine death (FDIU). I found it painful to be with Cherene and her husband as they grieved for their dead son. Despite their grief, they did not blame me. Cherene said, “Thank you very much for your suggestion to me in the group. Now, I know from you that I have a high risk pregnancy. I will be aware for the next pregnancy. Although I’ve lost the baby, I have gained knowledge and experiences from group discussion”. Her husband also said, “I am very upset but I want Cherene to be in the group again if she gets pregnant because we get lots of knowledge and experience from you”.

I had more consciousness to reflect and re-evaluate my roles in this research project. As a midwife and research student, I aim to support the women to take self-responsibility, promote self-awareness and consciousness, and to build bonds with their babies. This encouragement had helped Cherene to identify how much she loved her baby.

4. Identifying Learning Needs: Consider Knowledge, Attitudes and Skills

I discussed this situation with my supervisors (KF and CH.) They suggested that I think about my role again. I carefully thought about it and reviewed optimising psychophysiology, prenatal bonding, and midwifery partnerships. These concepts have reminded me that I am right on track. This experience is very normal. I understand the essences of true midwifery are vulnerability, strength, compassion and kindness.

1. Cherene has emotional and psychological stress in relation to termination of previous babies. Optimising psychophysiology guides me to understand why Cherene has oligohydramios and fetus death in the uterus. This concept sees health as the outcome of multiple factors that dynamically interact. The relevant factors that affect fetal development, preterm birth and miscarriage are personal genetic risk factors which are: early life events, working environment, interpersonal relationships, diet, exercise, sleep, lifestyle and health related behaviors, previous and current socioeconomic stress and environmental experiences[53-58].
According to optimising psychophysiology, when a woman has physical, emotional and psychosocial stresses, these stresses do cross the placenta. Corticotrophin Releasing Hormone (CRH) will increase and stimulate the increase of Adrenocorticotropic Hormone (ACTH) and cortisol. Cortisol is released into the amniotic fluid affecting the fetus. Chronic stress can result in higher levels of CRH for a long period of time and may ultimately result in poor placental function, lower the immune response and affect the baby’s development. Chronic stress is associated with miscarriage, intrauterine growth restriction and preterm birth [59].

Also, induced abortion is often a septic abortion that may affect a woman’s uterus. Cherene’s pregnancy may have appeared to be a healthy pregnancy but the chances of a positive outcome can deteriorate rapidly into a poor outcome without timely assessments and intervention by midwives and obstetricians [60]. In Cherene’s case the physical cause seems to have been umbilical cord compression leading to lack of blood flow to the fetus which caused both small for dates baby and oligohydramnios.

2. Bonding is a communication or relationship between the woman and her unborn baby. A woman can more easily feel the bonding once the baby is moving. Bonding builds love and a sense of protectiveness that increases over time. It is an intimate connection based on safety, trust, love and consistency [61]. Both a woman and her husband can bond with the baby by talking, singing, reading and touching on the belly.

I now understand that bonding naturally occurs in every woman and it can begin in early pregnancy. As the midwife I do not build bonds; the mother can bond with the baby by building a heart to heart connection. My strategies encourage women to have more consistency of consciousness, awareness and health responsibility. I understand loss and grief can occur in every woman and family. Cherene has never had baby because of her abortions. Then a baby that she had started to love died. Some may say that the cord compression was just ‘bad luck’ but others might think that years of negative thinking somehow contributed to the death of the baby. This situation has allowed Cherene to grieve fully and deeply. Hopefully she can now let go of her guilt about the abortions. Her experience of this pregnancy hopefully tells her clearly that although she’s lost her baby, she can look forward to the next pregnancy with some optimism for a better outcome.

3. Midwifery partnerships are a relationship that links pregnant women and midwives. Partnerships in midwifery care involve holistic caring; physical, mental, emotional, social and
spiritual care [62, 63 p.250]. I work with women on the basis of midwifery partnership because it is through building a trusting relationship that I can guide and support a woman to increase her awareness, take responsibility for herself and her choices and build networks among women. I have found that vulnerability, strength and compassion are the essence of true midwifery.

5. Taking Action to Meet Own Learning Needs

After reflection and scholarly inquiry on the theoretical conceptual basis of the research project, including reading the journals and talking with my supervisors, I understand that:

- my strategy of using HBCs and encouraging self-empowerment through positive thinking, the adoption of positive attitudes and healthy behaviours, is a good concept.

- as a researcher and midwife I am right on the track of developing a holistic midwifery practice and am more aware of the theoretical conceptual basis of the importance of collaboration with pregnant women.

- I have learned from this situation and have strived for improved practice in group-based antenatal education. It is important that midwives encourage women to consciously bond with their prenatal babies. Parents’ experiences of prenatal bonding are the source of responsibility, love and compassion for the baby.

- each woman has a different personality, and different experiences and feelings; each is an individual.

- although I have a compassionate heart, I now seek to consciously separate myself from the person I am working with. I will now apply this new knowledge and understanding to the group situation.

6. Developing a Plan to Change Action

- encouraging women to consciously bond with their babies is still important

- parents’ experiences of prenatal bonding are the source of responsibility, love and compassion for the baby.
• the use of HBCs and encouraging self-empowerment through positive thinking, the adoption of positive attitudes and healthy behaviours, is a good approach.

• as a researcher and midwife I am right on the track of developing a holistic midwifery practice and am more aware on theoretical conceptual basis of the importance of collaboration with pregnant women.

• midwives encourage women to consciously bond with their prenatal babies. Parents’ experiences of prenatal bonding are the source of responsibility, love and compassion to the baby.

• although I have a compassionate heart, I now seek to consciously separate myself from the person I am working with. I will now apply this new knowledge and understanding to the group situation.

Section 6.3:

Evaluation

This section presents an evaluation of group one and group two. It examines how the sessions were planned and conducted. The evaluation was scheduled to take place four weeks after the last woman from each group gave birth. I facilitated one last group where the women came back together, but this time they brought the babies, their partners and/or their relatives who were also invited to join in the group. This final session had two main aims: firstly to encourage friendships and mutual support and secondly to invite the women to evaluate their experiences within the group and make recommendations for changes to future groups. Of the 14 women who joined the group, only the ten could join the evaluation session. The other four women could not join the group because they were in their hometown; however, these women filled out the evaluation questionnaires and forwarded them via post.

The two-hour evaluation session was conducted at the Kuakarun College of Nursing. After finishing the evaluation session, the women, their partners and/or their relatives and I had lunch together. This section is divided into two parts. The first part presents a brief summary of the women’s qualitative evaluation. The second part is about the evaluation questionnaire responses.
6.3.1 Summary of the women’s qualitative evaluation

This section presents a summary of the qualitative evaluation. The aim of the qualitative evaluation session was to assess the benefits and areas for improvement of the antenatal education groups. The women sat in the circle with their babies, their partners and and/or their relatives. I used open-ended questions to provide each woman with an opportunity to speak about her experiences and thoughts about the group.

1. What have been your thoughts about the benefits of working together in antenatal groups?

The summaries of evaluations are provided in Section 6.6 in Chapter Six. In general, the ten women noted the benefits of working in the groups as follows.

Mary said,

“It was an excellent project, suggesting that this type of project should continue. Although I joined only three meetings, I gained a lot of knowledge and health about pregnancy and preterm birth. My first child was born a preterm baby; it might be because I did not know how to look after myself”.

Tukta said,

“I really liked this project because I met new friends despite the fact that I did not like to socialise. However, friends in the group changed my view and gave me greater confidence and encouraged me to communicate with midwives. Group discussion was like private counselling for me. In fact, before the first meeting, I became hesitant and even considered withdrawing from the project because I believed that I was a healthy pregnant woman. But how glad I am that I did not withdraw – if I had done that, it would have been a great loss”.

Kelly said,
“I definitely changed my daily lifestyle and how I took care of my health during this pregnancy. I paid greater attention to my daily routines, such as, eating, drinking, sleeping, talking to the baby and even dealing with stress. In fact, I felt somewhat odd and awkward talking to the unborn baby so I was reluctant to do it at first. I liked the topic of nutrition and physical activity. Group discussions were instrumental in helping me understand and become more mindful of my health and the state of pregnancy. However, I wanted to see some graphic presentations such as photographs or models related to the subjects under discussion. They would enable participants to gain a better understanding”.

Pauline enthused that,

“I greatly enjoyed the group sessions. There were many lively exchanges throughout the course of discussion and the overall atmosphere was most conducive to learning. When I learned, I improved my eating habits becoming more selective about what to eat and drink and carefully considering whether it would be good and beneficial for my baby. I shared with my parents what I had learned from the group. I also shared them with my pregnant teenage neighbours. For me, group members were like close companions treading the same road”.

Kai said,

“Sharing experiences with friends definitely helped expand my own horizon and equipped me with sharper self-awareness. I no longer felt lonely because of the group support. I could even enjoy the company of my friends from the group while waiting for the obstetrician. The group helped me to have more friends; I felt warm and confident with my pregnancy. Group discussion provided me with necessary counselling. I shared what I had experienced in the group with my partner and family. I wanted to see about photos and models when the researcher summarised each topic”.

Nancy said,
“For me, I learned a lot from the group about how to eat and look after myself and my unborn baby. I remembered when I was first pregnant, my first child was born a preterm baby because I did not know how to eat and look after myself. I did not dare to eat anything because I thought I should not eat some kinds of foods. Doctors and midwives had never told me anything and I did not dare to ask them. If I had not joined the project, I absolutely would not know all this”.

Orlene said,

“It was a very good project because it influenced on thoughts. I felt confident to look after my health and the health of my baby. Sharing knowledge and experiences made me to more consciously look after myself. I really appreciated this project because friends in the group changed my view and encouraged me to dare to communicate with midwives and doctors. I liked the group discussions because it was like private counseling for me”.

Linda said,

“I remembered when I was first pregnant, my first child was born a preterm baby because I did not know how to eat and look after myself. However, for this pregnancy, this project helped me and other women who are at risk of preterm birth to have full term pregnancies. The group-based education was like private counselling for me. I felt that I got the continuity of care from you and group. In fact, before joining the group, I thought I would like to have a private doctor by paying [AU$150]. Luckily, after joining the group, I changed my mind because as a result of my engagement with the group, I gained a lot of knowledge and experience so I definitely learned how to take care of my health during this pregnancy”.

Vicky said,

“For me, friends in the group and you were like close companions treading the same road. I understood my life, paying greater attention to my daily routine. Especially, the group and you supported me to stop drinking alcohol
and smoking. I focused on my baby and I dealt with my stress and emotions. I greatly enjoyed the group sessions. There were many lively exchanges throughout the course of discussion and the overall atmosphere was most conducive to learning. When I learned, for instance, from the group about eating, drinking and sleeping, I improved my habits and became more careful about what to eat and drink and carefully considered whether it would be good and beneficial for my baby. I shared my experiences with my pregnant teenage neighbours”.

Doran said,

“I gained more experience from friends. I liked the topics of nutrition, sleep and stress management. Group discussions were instrumental in helping me understand and become more mindful of my health and the state of pregnancy. After each session I shared what I had experienced in the group with my partner and family. Group participation changed my views about managing my lifestyle and my eating habits. I became more selective about what to eat and drink and carefully considered whether it would be good and beneficial for my baby. Group discussion provided me with necessary counseling”.

2. Have you made any changes to your way of living with an aim to improve your health and/or the baby’s health?

All the women had consciously modified their ways of life to bring about improvements to their health. This included eating and drinking habits, emotion and stress management physical activities, and having sufficient sleep, as well as chatting with the unborn baby. In short, all the women became more careful with regard to day-to-day activities both for themselves and the babies.

One woman used to feel irritated with too much or too frequent baby kicking but this changed after joining the group. She vowed to change her lifestyle and habits. Although she ended up in hospital with a premature rupture of membrane, she was aware and responsive about health and pregnancy. She said she would like to turn the time back because she would have changed her lifestyle earlier and she wouldn’t have suffered a preterm delivery.
3. How has this group influenced you to have a more healthy pregnancy?

Different experiences encouraged women to think and plan how looks after themselves. The group influenced women to more consciously observe themselves. The group also helped them to have the self confidence to take responsibility for their health when they had health problems. Group members influenced women to change unhealthy behaviours to healthy ones because group discussion was took place in the language of pregnant women so sharing knowledge and experiences was easier to understand. In short, all the women concurred that they had a more healthy pregnancy because the group meetings gave them a much-needed boost in self confidence. Group sessions therefore acted as a catalyst for family bonding and teamwork responsibility.

4. What activities did you find really helpful and why?

The really helpful activities from group-based discussion included:

- Nutrition (eating, drinking, eliminating)
- Preterm birth
- Communicating with the unborn baby
- Spirit of teamwork
- Drinking alcohol and smoking
- Healthy Behavioural Cards
- Exercise and physical activity
- Moral support of the researcher and group members.

The women thought that these activities were helpful because they learned about the real lives and experiences of the other women. The questions of the researcher helped the women to review and to reflect on themselves. These made them to be aware of their lives and their pregnancies.
5. What activities did you find least helpful?

Most women found the ten topics beneficial but found the discussion on sexual relationships during pregnancy the least helpful. Perhaps that session needs to be facilitated differently as described in the reflection above on question 11 in Appendix 6: Section 6.1.

6. What specific advice would you give me about improving groups like this in future?

- All women agreed that the venue and duration for group-based discussion were suitable.

- All women expressed that they wanted obstetricians to tell them about their health and pregnancy when they visited them. If women were told they were unhealthy, they could take steps to look after their health as soon as possible.

- All the women also suggested that so that obstetricians could understand women’s needs and the development of their pregnancies, obstetricians should have opportunities to participate in the group meeting.

- One woman agreed that the group should separate teenagers from the adult women.

- One woman said that the group meeting should be organised more frequently, for example, once a week and husband should be allowed to join and that the group meeting should be held outside the hospital occasionally.
6.3.2 Summary of the women’s evaluation questionnaires

The evaluation questionnaires were created by using rating scales. Each woman completed the questionnaires that were distributed and collected by the research assistant. In general, from the questionnaires, I interpreted from working in the groups that:
<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly</th>
<th>Moderately</th>
<th>Not Really</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I gained knowledge and experience from group discussion</td>
<td>13</td>
<td>1</td>
<td></td>
<td></td>
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<tr>
<td>2. The group discussion made no difference to my lifestyle or health</td>
<td></td>
<td></td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>3. In pregnancy I felt more bonded with my baby because of the group discussion</td>
<td>14</td>
<td></td>
<td></td>
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<tr>
<td>4. After participation, I more carefully selected healthy food for me and the baby</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. After each session, I had more knowledge about how to be a healthy woman and mother</td>
<td>13</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I learned nothing about how to cope if I was to have a preterm birth</td>
<td></td>
<td></td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>7. I made friends in the group who helped me when I had worries</td>
<td>10</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. After each session I shared what I had experienced in the group with my partner and family.</td>
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<td>12</td>
<td>2</td>
</tr>
<tr>
<td>9. I am confident in looking after my baby because of the group discussion</td>
<td>13</td>
<td>1</td>
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<tr>
<td>10. I am lonely because I have no friends who understand me as a new mother</td>
<td></td>
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<td>2</td>
<td>12</td>
</tr>
<tr>
<td>11. I am proud of myself and take some credit for the health of my baby because of the group discussion</td>
<td>14</td>
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</tr>
<tr>
<td>12. Each group discussion increased my personal stress</td>
<td></td>
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<td>4</td>
<td>10</td>
</tr>
<tr>
<td>13. Group discussions helped me to understand that the baby’s movements in pregnancy is a sign of health</td>
<td>14</td>
<td></td>
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</tr>
<tr>
<td>14. Because of the group I more carefully looked after myself as a new mother than I probably would have if I was not so aware of the importance of me being healthy and happy.</td>
<td>14</td>
<td></td>
<td></td>
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<tr>
<td>15. Group discussions did not help me to be aware of the importance of me being healthy and happy.</td>
<td></td>
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<td>4</td>
<td>10</td>
</tr>
<tr>
<td>16. Group discussions encouraged me and my husband to know that we could talk with unborn baby.</td>
<td></td>
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<td></td>
<td>14</td>
</tr>
<tr>
<td>17. Group discussions helped me to know that I could look after my unborn baby all the time.</td>
<td></td>
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<td>14</td>
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</tr>
<tr>
<td>18. My health and pregnancy only depended on obstetricians and midwives’ caring</td>
<td></td>
<td></td>
<td>4</td>
<td>10</td>
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<tr>
<td>19. Group discussion took place in the language of pregnant women so sharing knowledge and experiences was easier to understand</td>
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<td></td>
<td>14</td>
</tr>
<tr>
<td>20. Group discussions did not help me when I had questions or doubts.</td>
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<td>3</td>
</tr>
</tbody>
</table>

- All the women gained knowledge and experience from the group discussions. Group antenatal education was instrumental in helping the women understand and become more mindful of their health and state of pregnancy.
• All the women understood their health and the health of their baby; they felt confident and proud of themselves. They understood that their health in pregnancy did not depend on obstetricians and midwives.

• All the women felt more bonded with their babies and understood that their babies’ movements in pregnancy are a sign of health.

• All the women now more carefully select healthy food for themselves.

• Group antenatal education exposed the women to discourse about health and pregnancy. This new discourse then supplied material to talk about with friends, partners and families.

In summary

Conducting the group-based antenatal education and action research simultaneously based on individual and collective action, participation, empowerment and collaboration are central to building knowledge that can produce changes in women. It results in women taking greater self-responsibility, developing more self-awareness and increasing their consciousness.

Section 6.4:

Healthy Behavioral Cards

1. “Mom shall we go to bed early about 10 p.m. and wake up at 6-7 o’clock”.

2. “Mom, four more months we will see each other, I’m excited”

3. “Dad, Mom! My ears now can listen to you voices, please talk to me”.

4. “Mom, my brain and ears are developing; I want to listen the soft songs, please”

5. “Mom, your health is my health. What you eat, what you think and what you do, I am as well.”

6. “Mom, I really love your uterus, I do not like incubator, Mom”.

7. “Mom, only you now stay with me 24 hours, only you can look after me 24 hours.”
8. “You are a good mom, excellent mom, wonderful mom. Thank you that you’ve look after me very well.”

9. “You’re not rich Mom but you can look after me to be a full term healthy baby.”

10. “Mom shall we sleep at least 8 hours at night and 1 hour in the day time?”

11. “Mom, after we finish breakfast, lunch and dinner, shall we have activities?”

12. “Handsome Dad talks to me every day, Mom.”

13. “Mom, please select and eat five daily food choices for me every day.”

14. “Mom, I want you to eat three meals per day every day.”

15. “Mom, I will be a full term healthy baby because of you.”

16. “Mom, drink milk, soy milk, fruit juice and plenty of water for me.”

17. “Mom, please drinks lots of water, I do not want to have high bilirubinemia”.

18. “Mom, whatever makes you’re stressed, please let it go, and focus on me. Whatever happens, happens.”

19. “Mom, doesn’t be stressed. It makes me an unhealthy baby.”

20. “Mom, shall we laugh and smile at least ten times per day.”
Figure 6.6: Healthy Behavioural Cards
Section 6.5:
Audit Trails

Table 6.5.1: Data Reduction and Linking of Similar Learnings

<table>
<thead>
<tr>
<th>Key Findings from Reflecting on Practice</th>
<th>Midwife’s Strategy</th>
<th>Midwife’s Aim</th>
<th>Where the Learning Arose</th>
</tr>
</thead>
<tbody>
<tr>
<td>The midwife ...</td>
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<td></td>
</tr>
<tr>
<td>1. should wear normal clothes</td>
<td>• Wear normal clothes</td>
<td>• Equalise Power (EP)</td>
<td>Q1 (Uniform wearing) &amp;Q3 (Roles of midwife)</td>
</tr>
<tr>
<td>2. should selectively share personal details to enhance communication and build trust.</td>
<td>• Selectively share personal details</td>
<td>• EP</td>
<td>Q2 (Encourage equality of power)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Build trust (BT)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Promote Interaction (PI)</td>
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</tr>
<tr>
<td>3. should equalise power relationships and encourage the women to feel confident to share experiences in groups.</td>
<td>• Use simple language</td>
<td>• PI</td>
<td>Q2 (Encourage equality of power) &amp;Q9(Nutrition during pregnancy)</td>
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<tr>
<td></td>
<td></td>
<td>• EP</td>
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<td></td>
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<td>• Encourage self-confidence (ESC)</td>
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<tr>
<td>4. should be careful not to use “do not…” or “…should not” etc.</td>
<td>• Use positive encouraging language*</td>
<td>• PI</td>
<td>Q2 (Encourage equality of power), Q3 (Roles of midwife), Q8(Midwife work with vulnerable women) &amp; Q10 (Sharing PTB)</td>
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<tr>
<td></td>
<td></td>
<td>• EP</td>
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<td></td>
<td></td>
<td>• ESC</td>
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<tr>
<td>5. should be aware of the sensitive use of verbal and non-verbal language so that they are not intimidating to Thai woman.</td>
<td>• Be conscious of the sensitive use of verbal and non-verbal language (self and other)</td>
<td>• EP</td>
<td>Q2 (Encourage equality of power),Q8 (Midwife work with vulnerable women) &amp;Q11 (Taboo topics)</td>
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<tr>
<td></td>
<td></td>
<td>• BT</td>
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<td></td>
<td></td>
<td>• PI</td>
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<tr>
<td>6. should use plain language that could be understood by someone with a grade six level of education (no technical terminology or ambiguous language)</td>
<td>• Use simple language</td>
<td>• EP</td>
<td>Q2 (Encourage equality of power)&amp;Q9(Nutrition during pregnancy)</td>
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<td></td>
<td></td>
<td>• BT</td>
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<td>• PI</td>
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<td></td>
<td>• ESC</td>
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<tr>
<td>7. should focus on a woman’s needs and wants related to their health</td>
<td>Focus on women’s expressed needs and wants related to their holistic health</td>
<td>Promote holistic health (PHH)</td>
<td>Q3 (Role of midwife)&amp;Q11 (Taboo topic)</td>
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<td>8. should encourage each woman to feel like the expert on her own life</td>
<td>To encourage the women to focus on and believe in strength in self and their authority</td>
<td>EP</td>
<td>Q3 (Roles of midwife),Q10 (Sharing PTB)&amp;Q11(Taboo topic)</td>
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<td>BT</td>
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<td>PI</td>
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<td></td>
<td></td>
<td>ESC</td>
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<tr>
<td>9. should be genuine and accepting so as to develop trust with the women.</td>
<td>Be real and accepting</td>
<td>EP</td>
<td>Q3 (Roles of midwife),Q10 (Sharing PTB)&amp;Q11(Taboo topic) &amp;12 (Women’s empowerment)</td>
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<tr>
<td></td>
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<td>BT</td>
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<td>ESC</td>
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<tr>
<td>10. should be patient and allow women time to think. This is important for getting the group interaction going.</td>
<td>To allow women time to reflect on their life experience</td>
<td>EP</td>
<td>Q3 (Roles of midwife), Q9 (Nutrition during pregnancy),Q10 (Sharing PTB)&amp;Q12(Women’s empowerment)</td>
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<tr>
<td></td>
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<td>BT</td>
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<td>PI</td>
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<td></td>
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<td>ESC</td>
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<td>Enhance Self Awareness (ESA)</td>
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<tr>
<td>11. does not have to be the expert on everything.</td>
<td>To act as a plain woman by wearing plain clothes</td>
<td>EP</td>
<td>Q1 (Uniform wearing)&amp;Q3 (Roles of midwife)</td>
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<td></td>
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<td></td>
<td></td>
<td>ESC</td>
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<tr>
<td>12. should provide a list of possible topics but allow women to set the health-related agenda</td>
<td>Women set the group health related agenda</td>
<td>EP</td>
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<td></td>
<td></td>
<td>PI</td>
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<td></td>
<td></td>
<td>ESC</td>
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<td></td>
<td></td>
<td>Focus on Health Promotion (FHP)</td>
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<tr>
<td>13. should facilitate only one topic for the a session</td>
<td>One topic per session</td>
<td>PI</td>
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<td></td>
<td></td>
<td>ESC</td>
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<td></td>
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<td>PHH</td>
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</tbody>
</table>
| 14. should support women to bond with their unborn babies from the beginning of pregnancy by encouraging them to communicate by touch and talk with their unborn babies. | **•** Encourage the women to talk and touch with their unborn babies | **•** Promote Maternal-infant love (PMIL)  
**•** FHP |
| 15. should support women to talk about their unborn babies. | **•** Encourage the women to share their bonding experience | **•** PMIL  
**•** FHP  
**•** BT  
**•** PI |
| 16. should educate women about unborn baby needs as people cannot do what they do not know. This can increase women’s awareness and confidence to be able to keep her baby healthy. | **•** Use video about fetal development to present unborn baby health needs | **•** PMIL  
**•** FHP  
**•** BT  
**•** PI  
**•** ESA  
**•** ESC |
| 17. should use volunteer mode so women can elect to share or not to share their experiences or risk factors for preterm birth. | **•** Allow each woman to speak or not on a particular topic | **•** EP  
**•** BT  
**•** PI | Q6 (sharing of vulnerabilities) & Q8 (Midwife work with vulnerable women) & Q11 (Taboo topics) |
| 18. should ensure that each woman’s information is in her control | **•** Respect the privacy of each woman | **•** BT | Q6 (sharing of vulnerabilities)&Q11 (Taboo topic) |
| 19. should use open-ended questions to avoid the possibility of individual women feeling vulnerable. | **•** Use open-ended questions | **•** BT  
**•** PI  
**•** Promote active learning (PAL) | Q6 (sharing of vulnerabilities?)&Q11 (Taboo topic) &Q12 (Women’s empowerment) |
| 20. should act as a contemporary midwife. This is the appropriate role that can respond women’s health needs. | **•** Be a midwife to each woman | **•** 121 Midwifery relationship (121MR)  
**•** FHP  
**•** BT  
**•** PI  
**•** ESA , ESC | Q7 (Be nurse or midwife),Q9 (Nutrition during pregnancy)&Q11(Taboo topic) |
21. should be aware that women need to be treated as individuals and require one-on-one meetings with a midwife in addition to group-based antenatal education.

- To work with women as individuals and group meeting
- 121 MR
- FHP
- BT
- PI
- ESA
- ESC
- Continuity of care (CC)

22. should explicitly value the right of each woman to be in control of what information she chooses to share or keep private.

- Allow each woman to answer or not
- BT
- PI
- EP
- ESC

Q6 (sharing of vulnerabilities) & Q8 (Midwife work with vulnerable women) & Q11 (Taboo topics)

23. should work thoughtfully and sensitively when collaborating with women, most especially disadvantaged women.

- To work thoughtfully, sensitively and collaboratively with disadvantaged women
- BT
- PHH
- Ensure cultural safety (CS)

Q2 (Encourage equality of power), Q8 (Midwife work with vulnerable women) & Q11 (Taboo topics)

24. should avoid provoking any reactions within the group that could disadvantage any woman on the basis of age, marital status, race or social class etc.

- Avoid stimulating any negative reactions within the group
- BT
- PHH
- Respect for each woman (REW)
- CS
- BT
- PI
- EP
- Enhance women’s health empowerment (EHE)

Q2 (Encourage equality of power), Q3 (Roles of midwife), Q8 (Midwife work with vulnerable women) & Q10 (Sharing PTB)

25. should act as a health counsellor to fulfil women’s health needs in this topic

- Be a health educator plus contemporary midwife
- 121 MR
- CC
- PHH
- Fulfilment women’s health needs (FHN)

Q7 (Be nurse or midwife), Q9 (Nutrition during pregnancy) & Q11 (Taboo topic)

26. should add more information after the women’s discussions in ways that are appropriate to support socio-economically disadvantaged Thai women.

- To include additional information after the women’s discussion
- FHN
- PHH
- ESC

Q9 (Nutrition during pregnancy) & Q10 (Sharing PTB)
| 27. should use simple language with good diagrams of the different foods to eat and to avoid. | • Using simple language  
• Using resources that are suitable to the topics i.e. food model | • FHN  
• PHH  
• ESC  
• PI | Q9 (Nutrition during pregnancy)&Q2 (Encourage equality of power) |
| 28. should encourage the women to share and analyse their eating habits to benefit each and increase self-awareness of their own nutritional status. | • To encourage the women to reflect on self and others  
• Reflection on experiences | • PAL  
• EP  
• Enhance Self-awareness and self-responsibility (ESA&R) | Q3 (Role of midwife), Q9 (Nutrition during pregnancy)&Q10 (Sharing PTB), Q11 (Taboo topics)&Q12 (Women’s empowerment) |
| 29. should maintain a strengths-based approach by focusing on positive thinking, attitudes and behaviours where needed. | • To encourage the women to focus on and believe in strength in self  
• To encourage the women to stick with what they love  
• To support the women to stay in positive thinking, attitude and behaviours | • EHE | Q3 (Role of midwife)&Q10 (Sharing PTB) |
| 30. should add information after the women’s discussion where appropriate and in appropriate ways. | • To include additional information after the women’s discussion | • FHN  
• PHH  
• ESC | Q9 (Nutrition during pregnancy)&Q10 (Sharing PTB) |
| 31. should be aware that women are experts in their own health and that their good health is also their babies’ good health. | • To encourage the women to take active role  
• To encourage the women to reflect on real life, pregnancy and others  
• To encourage the women to focus on and believe in strength in self  
• To encourage the women to stick with what they love | • EHE  
• ESC | Q10 (Sharing PTB),Q11 (Taboo topics)&Q12 (Women’s empowerment) |
| 32. should be aware that trust and unity were required for women to share on sensitive topics because previous preterm births were associated with suffering and grief. | • Be real and accepting  
• BT  
• Enhance unity (EU) | • To build unity of the women by asking women’s consensus | Q3 (Role of midwife) & Q10 (Sharing PTB)  
Q11 (Taboo topics) & Q12 (women’s empowerment)  
Q10 (Sharing PTB) & Q11 (Taboo topics) |
|---|---|---|---|
| 33. needs to learn to be more comfortable to talk about sex with women. | • Be a midwife to each woman  
• PHH  
• FHN | • To focus on Maslow’s hierarchy of human needs | Q7 (Be nurse or midwife), Q9 (Nutrition during pregnancy) & Q11 (Taboo topics)  
Q3 (Role of midwife) & Q11 (Taboo topics) |
| 34. should be able to help women feel confident and comfortable to ask about sex | • Be real and accepting  
• PHH  
• FHN | • Allow each woman to speak or not  
• To focus that sex is normal Moving away from my own vested interests | Q3 (Role of midwife) & Q10 (Sharing PTB)  
Q11 (Taboo topics) & Q12 (women’s empowerment)  
Q6 (sharing of vulnerabilities) & Q8 (Midwife work with vulnerable women) & Q11 (Taboo topics)  
Q3 (Role of midwife) & Q10 (Sharing PTB)  
Q11 (Taboo topics) & Q12 (women’s empowerment) |
| 35. needs to create a sense of shared fun that is important for group development. | • To build unity of the women by creating a sense of fun  
• EHE  
• Create support networks (CSN)  
• EU | | Q10 (Sharing PTB) & Q11 (Taboo topics) |
| 36. needs to use open-ended questions early in the meeting and then needs to be patient to allow women time to think and to answer – important for getting the group interaction going. | • Use open-ended questions  
• PI  
• PAL  
• PHH | | Q6 (sharing of vulnerabilities?) & Q11 (Taboo topic) & Q12 (Women’s empowerment) |
| 37. does not have to answer every question and does not have to be the expert on everything. | • To focus on women’s experiences  
• PI  
• PAL | • To encourage the women to take active role in their decision making | Q3 (Role of midwife), Q9 (Nutrition during pregnancy) & Q10 (Sharing PTB), Q11 (Taboo topics) & Q12 (Women’s empowerment)  
Q10 (Sharing PTB) & Q11 (Taboo topics) & Q12 (women’s empowerment) |
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Strategies</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>38.</td>
<td>should facilitate and encourage respectfully and sensitively by considering religion, culture and beliefs of each woman.</td>
<td>- To work and respond respectfully and sensitively in cultural beliefs</td>
<td>Q6 (Sharing of vulnerabilities) &amp; Q11 (Taboo topics)</td>
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<tr>
<td></td>
<td></td>
<td>- BT</td>
<td>Q2 (Encourage equality of power), Q8 (Midwife work with vulnerable women) &amp; Q11 (Taboo topics)</td>
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<td>- PHH</td>
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<td>- PI</td>
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<tr>
<td>39.</td>
<td>should be empowering of women by encouraging them to look at their strengths rather than just focusing on risks.</td>
<td>- To encourage the women to focus on and believe in strength in self</td>
<td>Q3 (Role of midwife) &amp; Q10 (Sharing PTB) Q11 (Taboo topics)</td>
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<td></td>
<td></td>
<td>- EHE</td>
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<tr>
<td>40.</td>
<td>should encourage the other women to respond and/or share their experiences, when the women share stories of happy and unhappy sexual relationships.</td>
<td>- To encourage the women to focus on women’s expressed needs and wants related to their holistic health</td>
<td>Q3 (Role of midwife) &amp; Q11 (Taboo topics)</td>
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<td>- PHH</td>
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<td>- FHN</td>
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<td></td>
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<td>- Be real and accepting</td>
<td>Q3 (Role of midwife), Q10 (Sharing PTB) Q11 (Taboo topics) &amp; Q12 (women’s empowerment)</td>
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<tr>
<td>41.</td>
<td>should be aware that women’s power comes from sharing everyday life experiences with each other</td>
<td>- To encourage the women to reflect everyday life experiences</td>
<td>Q3 (Role of midwife), Q9 (Nutrition during pregnancy) &amp; Q10 (Sharing PTB), Q11 (Taboo topics) &amp; Q12 (Women’s empowerment)</td>
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<td></td>
<td>- Women’s power (WP)</td>
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<td>- Experiential learning (EL)</td>
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<td>- EHE</td>
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<tr>
<td>42.</td>
<td>should provide information about health topics in ways that are non-didactic and non-judgemental</td>
<td>- To encourage the women to be active in learning each other</td>
<td>Q10 (Sharing PTB) Q11 (Taboo topics) &amp; Q12 (women’s empowerment)</td>
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<td>- PHH</td>
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<td>- ESC</td>
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<tr>
<td>43.</td>
<td>should encourage the women to reflect on their own experiences in order to develop more self-awareness and self-acceptance</td>
<td>- Encourage the women to reflect on their own experiences</td>
<td>Q3 (Role of midwife), Q9 (Nutrition during pregnancy) &amp; Q10 (Sharing PTB), Q11 (Taboo topics) &amp; Q12 (Women’s empowerment)</td>
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<td>- EHE</td>
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<td>- EL</td>
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<td>- Reflection on experiences (RE)</td>
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<td>- ESA</td>
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<tr>
<td>44.</td>
<td>should encourage the women to share their experiences with each other</td>
<td>- Use non-didactic and non-judgemental</td>
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<td>Other and to offer each other non-judgemental support</td>
<td>To encourage the women to be active in learning each other</td>
<td>EHE</td>
<td>PHH</td>
</tr>
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<tr>
<td>45. should provide support when each woman has an increased level of self-acceptance and a sense of being accepted by the group then each woman will become empowered and will take more responsibility for their holistic health</td>
<td>Use open-ended discussion</td>
<td>EHE</td>
<td>EL</td>
</tr>
<tr>
<td>45. should provide support when each woman has an increased level of self-acceptance and a sense of being accepted by the group then each woman will become empowered and will take more responsibility for their holistic health</td>
<td>to support the women to take active role in their decision making</td>
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<td>45. should provide support when each woman has an increased level of self-acceptance and a sense of being accepted by the group then each woman will become empowered and will take more responsibility for their holistic health</td>
<td>Be real and accepting</td>
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<tr>
<td>46. should use active experiential learning to stimulate women’s reflection</td>
<td>To encourage the women to reflect everyday life experiences</td>
<td>PHH</td>
<td>EHE</td>
</tr>
<tr>
<td>46. should use active experiential learning to stimulate women’s reflection</td>
<td>To encourage the women to focus on actively experiential learning</td>
<td></td>
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</tr>
<tr>
<td>Key learnings from Group Two are numbered 47-65</td>
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</tr>
<tr>
<td>47. need to use open-ended discussion – helps me to effectively and collaboratively work with the women to satisfy their health needs.</td>
<td>Use open-ended questions</td>
<td>BT</td>
<td>PI</td>
</tr>
<tr>
<td>48. should give an opportunity and support the women to answer their questions.</td>
<td>Giving time the women to discuss</td>
<td>PI</td>
<td>Promote active learning (PAL)</td>
</tr>
<tr>
<td>49. need to be aware that working with teenagers who drink and smoke need supports from their partner/family</td>
<td>Work collaboratively with the woman’s partner/family (with consent)</td>
<td></td>
<td>Promote Social Support (PSS)</td>
</tr>
</tbody>
</table>
| 50. should be aware that women need continuity of care and concern from a midwife. | • Be a health counsellor plus contemporary midwife | • 121MR  
• CC  
• PHH  
• Fulfilment women’s health needs (FHN) |
|---|---|---|
| 51. should be aware that experiences from real situations can help women to become empowered to strive for a healthy life. | • To encourage the women to reflect everyday life experiences | • Women’s power (WP)  
• Experiential learning (EL)  
• EHE  
Q2 (G2) (Work with a pregnant teenager who drinks and smokes), Q3 (G2) (Apply theory to real-life practice), Q4 (G2) (Strength and commitment to lifestyle choices) & Q5 (G2) (High risk PTB and bonding) |
| 52. should be aware that both individual and group meetings are important for working with teenagers who drink and smoke while pregnant. | • Working with women as individuals and group meeting | • 121 MR  
• FHP  
• BT  
• PI  
• ESA  
• ESC  
• Continuity of care (CC) |
| 53. should be aware that friendly relationships between women and midwives including other women in the group are needed for teenage women | • Be a midwife to each woman | • 121MR  
• CC  
• PHH  
• Fulfilment women’s health needs (FHN) |
| 54. should be aware that midwifery partnerships and continuity of care are suitable philosophies to guide work with teenage women. | • Be a health counsellor plus contemporary midwife | • 121MR  
• CC  
• PHH  
• Fulfilment women’s health needs (FHN) |
| 55. should be aware that protection from being judgment occurring in the group is required for | • Addressing conflict openly, sensitively and consciously | • EP  
• BT  
• PI  
• ESC |
<table>
<thead>
<tr>
<th>56. should enhance women’s awareness and consciousness by supporting women to apply knowledge to real-life situations</th>
<th>To encourage the women to reflect on self and others</th>
<th>PAL, EP, Enhance Self-awareness and self-responsibility (ESA&amp;R)</th>
<th>Q2 (G2) (Work with a pregnant teenager who drinks and smokes), Q3 (G2), Q4 (G2) (Strength and commitment to lifestyle choices) &amp; Q5 (G2) (High risk PTB and bonding)</th>
</tr>
</thead>
<tbody>
<tr>
<td>57. should promote active learning to stimulate the real experience.</td>
<td>Use active experiential learning by encouraging the women to reflect everyday life experiences</td>
<td>To encourage the women to reflect everyday life experiences; To encourage the women to focus on actively experiential learning</td>
<td>Q2 (G2) (Work with a pregnant teenager who drinks and smokes), Q3 (G2) (Apply theory to real-life practice), Q4 (G2) (Strength and commitment to lifestyle choices) &amp; Q5 (G2) (High risk PTB and bonding)</td>
</tr>
<tr>
<td>58. should offer experiential learning to allow women to think and understand before acting</td>
<td>To encourage the women to reflect everyday life experiences</td>
<td>PHH, EHE, EL, RE</td>
<td>Q2 (G2) (Work with a pregnant teenager who drinks and smokes), Q3 (G2) (Apply theory to real-life practice), Q4 (G2) (Strength and commitment to lifestyle choices) &amp; Q5 (G2) (High risk PTB and bonding)</td>
</tr>
<tr>
<td>59. should be aware that women making a commitment to their babies can increase consciousness, awareness and health responsibility.</td>
<td>Encourage the women to talk and touch with their unborn babies</td>
<td>Promote Maternal-infant love (PMIL), FHP</td>
<td>Q4 (G2) (Strength and commitment to lifestyle choices) &amp; Q5(G2) (High risk PTB and bonding)</td>
</tr>
<tr>
<td>60. should be aware that a strengths-based approach can exert some control over.</td>
<td>Encourage the women to focus on what they want as an outcome of the pregnancy; healthy happy baby and mother.</td>
<td>EHE</td>
<td>Q4 (G2) (Strength and commitment to lifestyle choices) &amp; Q5(G2) (High risk PTB and bonding)</td>
</tr>
<tr>
<td>61. should be aware that positive thought from HBCs can encourage the</td>
<td>To focus on positive thinking, attitude and behaviours</td>
<td>EHE, ESC</td>
<td>Q2 (G2) (Work with a pregnant teenager who drinks and smokes), Q4 (G2) (Strength and commitment to lifestyle choices) &amp; Q5 (G2)</td>
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</table>
women to reflect on their experiences, feelings, attitude and practices.

<p>| 62. should be aware that collaborative learning by using HBCs can help midwife to learn more about each woman. | To work thoughtfully and collaboratively | BT, PAL | Q2 (G2) (Work with a pregnant teenager who drinks and smokes) &amp; Q4 (G2) (Strength and commitment to lifestyle choices) |
| 63. should be aware that encouraging women to consciously bond with their babies is important | Encourage the women to share their bonding experience | PMIL, FHP, BT, PI | Q4 (G2) &amp; Q5 (G2) (High risk PTB and bonding) |
| 64. should be aware that parents’ experiences of prenatal bonding are the source of responsibility, love and compassion to the baby. | Encourage the women to share their bonding experience | PMIL, FHP, BT, PI | Q4 (G2) &amp; Q5 (G2) (High risk PTB and bonding) |
| 65. needs to be aware that use of HBCs and encouraging self-empowerment through positive thinking, the adoption of positive attitudes and healthy behaviours, is a good concept. | To encourage the women to reflect everyday life experiences | FHN, PHH, ESC, PI, EHE | Q2 (G2) (Work with a pregnant teenager who drinks and smokes), Q3 (G2) (Apply theory to real-life practice), Q4 (G2) &amp; Q5 (G2) (High risk PTB and bonding) |</p>
<table>
<thead>
<tr>
<th>Midwife’s Strategy</th>
<th>Midwife’s Aim</th>
<th>Where the Learning Arose</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Wear normal clothes</td>
<td>• equalise power&lt;br&gt;• build trust&lt;br&gt;• promote group interaction&lt;br&gt;• enhance self-confidence</td>
<td>Q1 (Uniform wearing) &amp; Q3 (Roles of midwife)</td>
</tr>
<tr>
<td>2. Share relevant personal details (sparingly)</td>
<td>• equalise power&lt;br&gt;• build trust&lt;br&gt;• promote interaction (promote group interaction)</td>
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</tr>
<tr>
<td>3. Use simple language</td>
<td>• promote group interaction&lt;br&gt;• equalise power&lt;br&gt;• enhance self-confidence&lt;br&gt;• Fulfilment women’s health needs&lt;br&gt;• promote holistic health</td>
<td>Q2 (Encourage equality of power) &amp; Q9 (Nutrition during pregnancy)</td>
</tr>
<tr>
<td>4. Use learning resources models, diagrams or videos</td>
<td>• promote group interaction&lt;br&gt;• equalise power&lt;br&gt;• enhance self-confidence&lt;br&gt;• Fulfilment women’s health needs&lt;br&gt;• promote holistic health</td>
<td>Q2 (Encourage equality of power) &amp; Q9 (Nutrition during pregnancy)</td>
</tr>
<tr>
<td>5. Be positive &amp; encouraging</td>
<td>• promote inclusivity and unity&lt;br&gt;• promote group interaction&lt;br&gt;• equalise power&lt;br&gt;• enhance self-confidence&lt;br&gt;• cultural safety&lt;br&gt;• build trust&lt;br&gt;• enhance health empowerment</td>
<td>Q2 (Encourage equality of power), Q3 (Roles of midwife), Q8 (Midwife work with vulnerable women) &amp; Q10 (Sharing PTB)</td>
</tr>
<tr>
<td>6. Be culturally sensitive</td>
<td>• equalise power&lt;br&gt;• build trust&lt;br&gt;• promote holistic health&lt;br&gt;• promote group interaction</td>
<td>Q2 (Encourage equality of power), Q8 (Midwife work with vulnerable women) &amp; Q11 (Taboo topics)</td>
</tr>
<tr>
<td>7. Focus on women’s expressed health needs</td>
<td>• promote holistic health&lt;br&gt;• build trust</td>
<td>Q3 (Role of midwife) &amp; Q11 (Taboo topic)</td>
</tr>
</tbody>
</table>
| 8. Encourage the women to focus on their inner strength | • promote group interaction  
• fulfilment women’s health needs  
• enhance self-confidence | Q3 (Roles of midwife),Q10 (Sharing PTB)&Q11(Taboo topic)  
Q3 (Roles of midwife),Q10 (Sharing PTB)&Q11(Taboo topic) &Q12(Women’s empowerment) |
|---|---|---|
| 9. Encourage women to touch and talk to their unborn babies | • equalise power  
• build trust  
• promote group interaction  
• enhance self-confidence  
• enhance health empowerment  
• women’s power | Q3 (Roles of midwife),Q10 (Sharing PTB) |
| 10. Be real and accepting with self and others | • promote mother-infant love11  
• focus on health promotion12  
• promote group interaction  
• enhance self-awareness13  
• enhance self-confidence | Q3 (Roles of midwife),Q10 (Sharing PTB)&Q11(Taboo topic) &Q12(Women’s empowerment) |
| 11. Talk comfortably and non-judgementally about taboo topics if women want to | • build trust  
• promote group interaction  
• enhance self-confidence  
• enhance health empowerment | Q3 (Roles of midwife),Q10 (Sharing PTB)&Q11(Taboo topic) &Q12(Women’s empowerment) |
| 12. Encourage the women to reflect on everyday life experiences relevant to pregnancy and/or holistic health | • promote active learning  
• enhance self-awareness and self-responsibility  
• enhance self-confidence  
• enhance self awareness  
• women’s power  
• experiential learning  
• enhance health empowerment  
• reflection experiences | Q3 (Roles of midwife),Q9 (Nutrition during pregnancy),Q10 (Sharing PTB) Q11 (Taboo topics) &Q12(Women’s empowerment) |
| 13. Ask the women set the group health related agenda | • equalise power  
• promote group interaction |  |
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</table>
| **14. Limit the topics to one per session** | • enhance self-confidence  
• focus on health promotion |
| **15. Allow each woman to speak or not as they choose on a particular topic** | • equalise power  
• respect the privacy of each woman  
• build trust  
• promote holistic health  
• promote group interaction  

Q6 (sharing of vulnerabilities) & Q8 (Midwife work with vulnerable women) & Q11 (Taboo topics) |
| **16. Use open-ended questions** | • build trust  
• promote group interaction  
• promote active learning (pal)  
• promote holistic health  

Q6 (sharing of vulnerabilities?) & Q11 (Taboo topic) & Q12 (Women’s empowerment) |
| **17. Be a health educator/promoter** | • 121 midwifery relationship  
• focus health promotion  
• build trust  
• promote group interaction  
• enhance self-awareness  
• enhance self-confidence  
• continuity of care  

Q7 (Be nurse or midwife),Q9 (Nutrition during pregnancy)&Q11(Taboo topic) |
| **18. Be a contemporary midwife by working with women as individuals as well as in a group** | • 121 midwifery relationship (121mr)  
• focus health promotion  
• build trust  
• promote group interaction  
• enhance self awareness  
• continuity of care  
• promote holistic health  
• enhance self-confidence  

Q7 (Be nurse or midwife),Q9 (Nutrition during pregnancy)&Q11(Taboo topic) |
<table>
<thead>
<tr>
<th></th>
<th>Encourage the women to take an active role in learning</th>
<th>enhance health empowerment promote group interaction promote active learning enhance self-confidence</th>
<th>Q10 (Sharing PTB), Q11 (Taboo topics) &amp; Q12 (Women’s empowerment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.</td>
<td>Create activities which involve having fun</td>
<td>build trust enhance health empowerment create support networks enhance unity</td>
<td>Q10 (Sharing PTB) &amp; Q11 (Taboo topics)</td>
</tr>
<tr>
<td>21.</td>
<td>Allow the women to speak first and only add additional information at the end as needed</td>
<td>experiential learning enhance self-confidence enhance health empowerment promote holistic health promote active learning fulfilment women’s health needs</td>
<td>Q9 (Nutrition during pregnancy) &amp; Q10 (Sharing PTB)</td>
</tr>
<tr>
<td>22.</td>
<td>Encourage women to make decisions by consensus</td>
<td>build trust enhance health empowerment create support networks enhance unity</td>
<td>Q10 (Sharing PTB) &amp; Q11 (Taboo topics)</td>
</tr>
<tr>
<td>23.</td>
<td>Work collaboratively with the woman’s partner/family (with consent)</td>
<td>promote social support promote holistic health</td>
<td>Q2 (G2) (Work with a pregnant teenager who drinks and smokes) &amp; Q4 (G2) (Strength and commitment to lifestyle choices)</td>
</tr>
<tr>
<td>24.</td>
<td>Encourage the women to focus on what they want as an outcome of the pregnancy: a healthy happy baby and mother.</td>
<td>promote mother-infant love promote holistic health enhance self-confidence</td>
<td>Q4 (G2) (Strength and commitment to lifestyle choices) Q5 (G2) (High risk PTB and bonding)</td>
</tr>
<tr>
<td>Midwife’s Strategy</td>
<td>Actualise Midwifery Philosophy</td>
<td>Promote Holistic Health</td>
<td>Promote Maternal-Infant Love</td>
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<tr>
<td>1. Wear normal clothes</td>
<td>equalise power</td>
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<td>2. Share relevant personal details (sparingly)</td>
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<td>equalise power</td>
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<td>3. Use simple language</td>
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<td>-</td>
<td>promote mother-infant love enhance self-awareness</td>
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<td>4. Use learning resources models, diagrams or videos</td>
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<tr>
<td>5. Be positive &amp; encouraging</td>
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<td>6. Be culturally sensitive</td>
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<tr>
<td>7. Focus on women’s expressed health needs</td>
<td>fulfil women’s health needs</td>
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<td>enhance self-confidence enhance health empowerment</td>
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<tr>
<td>8. Encourage the women to focus on their inner strength</td>
<td>enhance self-confidence enhance health empowerment</td>
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<tr>
<td>9. Encourage women to touch</td>
<td>promote mother-</td>
<td>promote</td>
<td>promote</td>
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</table>
and talk to their unborn babies

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<tr>
<th></th>
<th>infant love enhance self-awareness</th>
<th>mother-infant love enhance self-awareness</th>
<th>mother-infant love enhance self-awareness</th>
<th>mother-infant love enhance self-awareness</th>
<th>confidence enhance health empowerment</th>
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<tbody>
<tr>
<td>10. Be real and accepting with self and others</td>
<td>build trust promote group interaction</td>
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<td>11. Talk comfortably and non-judgementally about taboo topics if women want to</td>
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<td>promote group interaction</td>
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<tr>
<td>12. Encourage the women to reflect on everyday life experiences relevant to pregnancy and/or holistic health</td>
<td>promote active learning enhance self-awareness and self-responsibility enhance health empowerment</td>
<td>-</td>
<td>promote mother-infant love enhance self-awareness</td>
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<tr>
<td>13. Ask the women set the group health related agenda</td>
<td>-</td>
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<td>promote group interaction</td>
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<td>16. Use open-ended questions</td>
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<td>promote active learning</td>
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<td>enhance self-awareness promote continuity of care</td>
<td>promote mother-infant love enhance self-awareness</td>
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<td>enhance self-confidence enhance health empowerment</td>
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</table>
Table 6.5.4 Grouping Supra-concepts

<table>
<thead>
<tr>
<th>Ultimate Goal</th>
<th>Midwifery Primary Health Care Groups (MPHCGs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhance Individual Health Empowerment</td>
<td>Promote Health</td>
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<tr>
<td>Actualise Midwifery Philosophy</td>
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<tr>
<td>39. Allow each woman to speak or not on a particular topic</td>
<td>enhance self-confidence enhance health empowerment</td>
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<td>40. Use open-ended questions</td>
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<td>41. Be a Health Educator/Promoter</td>
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<tr>
<td>42. Be a contemporary midwife by working with women as</td>
<td>-enhance self-confidence</td>
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<tr>
<td>individuals as well as in a group</td>
<td>enhance health empowerment</td>
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<tr>
<td>43. Encourage the women to take active role in learning</td>
<td>enhance self-confidence</td>
</tr>
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<td>44. Create activities which involve having fun</td>
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<td>45. Allow the women to speak first and only add additional information at the end as needed</td>
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<td>46. Encourage women to make decisions by consensus</td>
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<td>47. Work collaboratively with the woman’s partner/family (with consent)</td>
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<td>48. Encourage the women to focus on what they want as an outcome of the pregnancy; healthy happy baby and mother.</td>
<td>enhance self-confidence enhance health empowerment</td>
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<tr>
<td>Actualise Midwife’s Strategy</td>
<td>Ultimate Goal</td>
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<td>1. Wear normal clothes</td>
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<td>2. Share relevant personal details (sparingly)</td>
<td>- build trust</td>
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<td>3. Use simple language</td>
<td>- build trust</td>
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<td>4. Use learning resources models, diagrams or videos</td>
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<td>5. Be positive &amp; encouraging</td>
<td>enhance self-confidence</td>
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<td>enhance health empowerment</td>
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<td>enhance health empowerment</td>
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<td>6. Be culturally sensitive</td>
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<td>7. Focus on women’s expressed health needs</td>
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<td>8. Encourage the women to focus on their inner strength</td>
<td>enhance self-confidence</td>
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<td>enhance health empowerment</td>
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<td>enhance health empowerment</td>
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<td>enhance health empowerment</td>
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</table>

Table 6.5.5: Comparing and Modifying
Green highlighted numbers were what I would add or modify into the new model.
<p>| | | | | | | | | | | | | |</p>
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<thead>
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</thead>
<tbody>
<tr>
<td>9.</td>
<td>Encourage women to touch and talk to their unborn babies</td>
<td>enhance self-confidence</td>
<td>enhance health empowerment</td>
<td>promote mother-infant love</td>
<td>enhance self-awareness</td>
<td>promote mother-infant love</td>
<td>enhance self-awareness</td>
<td>promote mother-infant love</td>
<td>enhance self-awareness</td>
<td>promote mother-infant love</td>
<td>enhance self-awareness</td>
<td>-</td>
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<tr>
<td>10.</td>
<td>Be real and accepting with self and others</td>
<td>-</td>
<td>build trust promote group interaction</td>
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<td>-</td>
<td>build trust</td>
<td>promote group interaction</td>
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<td>11.</td>
<td>Talk comfortably and non-judgementally about taboo topics if women want to</td>
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<td>build trust promote group interaction</td>
<td>build trust promote group interaction</td>
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<td>-</td>
<td>promote group interaction</td>
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<tr>
<td>12.</td>
<td>Encourage the women to reflect on everyday life experiences relevant to pregnancy and/or holistic health</td>
<td>enhance self-confidence</td>
<td>enhance health empowerment</td>
<td>promote active learning enhance self-awareness and self-responsibility enhance health empowerment</td>
<td>-</td>
<td>promote mother-infant love</td>
<td>enhance self-awareness</td>
<td>promote active learning enhance self-awareness and self-responsibility enhance health empowerment</td>
<td>enhance health empowerment</td>
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<td>13.</td>
<td>Ask the women set the group health related agenda</td>
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<td>-</td>
<td>promote group interaction</td>
<td>enhance self-confidence</td>
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<td>14.</td>
<td>Limit the topics to one per session</td>
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<td>promote group interaction</td>
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<tr>
<td>15.</td>
<td>Allow each woman to speak or not on a particular topic</td>
<td>enhance self-confidence</td>
<td>enhance health empowerment</td>
<td>-</td>
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<td>promote group interaction</td>
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<td>16.</td>
<td>Use open-ended questions</td>
<td>-</td>
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<td>-</td>
<td>-</td>
<td>promote active learning</td>
<td>promote group interaction</td>
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<tr>
<td>17.</td>
<td>Be a health educator/promoter</td>
<td>-</td>
<td>promote group interaction</td>
<td>enhance self-awareness promote continuity of care</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>promote group interaction</td>
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</tbody>
</table>
18. Be a contemporary midwife by working with women as individuals as well as in a group. Enhance self-confidence, enhance health empowerment, promote continuity of care, promote holistic health, enhance health, enhance self-confidence, promote mother-infant love, enhance self-awareness, promote continuity of care.


20. Create activities which involve having fun. Create support networks, enhance unity, promote active learning, promote group interaction, promote unity.

21. Allow the women to speak first and only add additional information at the end as needed. Enhance health empowerment, enhance self-confidence, promote health empowerment, enhance self-confidence, promote mother-infant love, enhance self-awareness, promote active learning, promote group interaction.

22. Encourage women to make decisions by consensus. Create support networks, enhance unity, promote group interaction, promote unity.

23. Work collaboratively with the woman’s partner/family (with consent). Promote holistic health, promote health, promote continuity of care, promote mother-infant love, enhance self-awareness, promote health empowerment, enhance self-confidence.

24. Encourage the women to focus on what they want as an outcome of the pregnancy; healthy happy baby and mother. Enhance self-confidence, enhance health empowerment, enhance health empowerment, enhance self-confidence, promote mother-infant love, enhance self-awareness.
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Table 6.5.6: Embedding Theoretical Foundations
Green highlighted numbers were what I would add or modify into the new model

Theoretical Foundations
2. Maslow‟s
Hierarchy of
Needs

1. Primary Health Care

3. Philosophy of
Midwifery

4. Midwifery
Partnership

5. Feminist Group Rules

6. Stages of Group
Process

Supra-concepts of Midwifery Primary Health Care Groups
I. Actualise Midwife‟s
Strategy

Yellow highlighted supra-concepts were grouped and embedded to Philosophy of Midwifery
Blue highlighted supra-concept was grouped and embedded to Stage of Group Process

II. Ultimate
Goal
Individual
Health
Empowerment

Actualise
Midwifery
Philosophy

Promote Holistic Health

Promote
Health

Promote Group
Processes

Promote
Networking
Among Women

1. Wear normal clothes

-

equalise power

-

Promote Mother
-Infant Love
-

Promote Active
Learning
equalise power

equalise power

equalise power

2. Share relevant personal details
(sparingly)
3. Use simple language

- build trust

-

-

-

build trust

build trust

- build trust

build trust
equalise power
equalise power

-

promote group
interaction

promote group
interaction

-

4. Use learning resources models,
diagrams or videos

-

-

-

promote group
interaction

promote group
interaction

-

5. Be positive & encouraging

enhance selfconfidence
enhance health
empowerment
build trust

enhance selfconfidence
enhance health
empowerment
build trust

-

-

6. Be culturally sensitive

enhance selfconfidence
enhance health
empowerment
-

-

-

Fulfill

Fulfill

promote group
interaction
promote group

enhance selfconfidence
enhance health
empowerment
-

7. Focus on women‟s expressed

promote
mother-infant
love
enhance selfawareness
promote
mother-infant
love
enhance selfawareness
enhance selfconfidence
enhance health
empowerment
enhance selfconfidence
enhance self-

-

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<table>
<thead>
<tr>
<th></th>
<th>8. Encourage the women to focus on their inner strength</th>
<th>9. Encourage women to touch and talk to their unborn babies</th>
<th>10. Be real and accepting with self and others</th>
<th>11. Talk comfortably and non-judgementally about taboo topics if women want to</th>
<th>12. Encourage the women to reflect on everyday life experiences relevant to pregnancy and/or holistic health</th>
<th>13. Ask the women set the group health related agenda</th>
<th>14. Limit the topics to one per session</th>
<th>15. Allow each woman to speak or not on a particular topic</th>
<th>16. Use open-ended questions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>enhance self-confidence enhance health empowerment</td>
<td>enhance self-confidence enhance health empowerment</td>
<td>enhance self-confidence enhance health empowerment</td>
<td>build trust</td>
<td>enhance self-confidence enhance health empowerment</td>
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<tr>
<td></td>
<td>enhance self-confidence enhance health empowerment</td>
<td>promote mother-infant love enhance self-awareness</td>
<td>promote mother-infant love enhance self-awareness</td>
<td>build trust</td>
<td>promote mother-infant love enhance self-awareness</td>
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<td></td>
<td>enhance self-confidence enhance health empowerment</td>
<td>promote active learning enhance self-awareness and self-responsibility enhance health empowerment</td>
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<td>build trust</td>
<td>promote active learning enhance self-awareness and self-responsibility enhance health empowerment</td>
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<td>enhance self-confidence enhance health empowerment</td>
<td>promote health needs</td>
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<td>promote group interaction</td>
<td>promote group interaction</td>
<td>promote group interaction</td>
<td>promote group interaction</td>
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</table>
17. **Be a health educator/promoter**

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<tr>
<th></th>
<th></th>
<th>promote group interaction</th>
<th>enhance self-awareness</th>
<th>promote continuity of care</th>
<th>-</th>
<th>-</th>
<th>promote group interaction</th>
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</thead>
</table>

18. **Be a contemporary midwife by working with women as individuals as well as in a group**

<table>
<thead>
<tr>
<th></th>
<th>enhance self-confidence</th>
<th>enhance health empowerment</th>
<th>promote group interaction</th>
<th>promote holistic health</th>
<th>-</th>
<th>promote mother-infant love enhance self-awareness</th>
<th>-</th>
<th>Promote continuity of care</th>
</tr>
</thead>
</table>

19. **Encourage the women to take active role in learning**

<table>
<thead>
<tr>
<th>enhance self-confidence</th>
<th>enhance health empowerment</th>
<th>promote group interaction</th>
<th>promote mother-infant love enhance self-awareness</th>
<th>promote active learning</th>
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</table>

20. **Create activities which involve having fun**

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<tr>
<th>-</th>
<th>-</th>
<th>promote active learning</th>
<th>promote group interaction</th>
<th>Promote unity</th>
<th>-</th>
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</thead>
</table>

21. **Allow the women to speak first and only add additional information at the end as needed**

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<tr>
<th>-</th>
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<th>promote active learning</th>
<th>promote group interaction</th>
<th>-</th>
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</thead>
</table>

22. **Encourage women to make decisions by consensus**

<table>
<thead>
<tr>
<th>-</th>
<th>create support networks enhance unity</th>
<th>create support networks enhance unity</th>
<th>promote group interaction</th>
<th>Promote unity</th>
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</thead>
</table>

23. **Work collaboratively with the woman’s partner/family (with consent)**

<table>
<thead>
<tr>
<th>-</th>
<th>promote holistic health</th>
<th>promote continuity of care</th>
<th>promote mother-infant love enhance self-awareness</th>
<th>-</th>
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</tr>
</thead>
</table>

24. **Encourage the women to focus on what they want as an outcome of the pregnancy; healthy happy baby and mother.**

<table>
<thead>
<tr>
<th>enhance self-confidence</th>
<th>enhance health empowerment</th>
<th>promote group interaction</th>
<th>promote mother-infant love enhance self-awareness</th>
<th>-</th>
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</thead>
</table>
Table 6.5.7: Embedding Theoretical Foundations
Green highlighted numbers were what I would add or modify into the new model

<table>
<thead>
<tr>
<th>Theoretical Foundations</th>
<th>Supra-concepts of Midwifery Primary Health Care Groups</th>
<th>I. Actualise Midwifery Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>II. Individual Health Empowerment</td>
<td></td>
<td></td>
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<tr>
<td>- Build trust</td>
<td>1. Wear normal clothes</td>
<td></td>
</tr>
<tr>
<td>- Equalise power</td>
<td>2. Share relevant personal details (sparingly)</td>
<td></td>
</tr>
<tr>
<td>- Promote mother-infant love</td>
<td>3. Use simple language</td>
<td></td>
</tr>
<tr>
<td>- Enhance self-awareness</td>
<td>4. Use learning resources models, diagrams or videos</td>
<td></td>
</tr>
<tr>
<td>- Promote group interaction</td>
<td>5. Be positive &amp; encouraging</td>
<td></td>
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<tr>
<td>- Enhance self-confidence</td>
<td>6. Be culturally sensitive</td>
<td></td>
</tr>
<tr>
<td>- Enhance health knowledge</td>
<td>7. Focus on women’s expressed health needs</td>
<td></td>
</tr>
<tr>
<td>- Fulfill women’s health needs</td>
<td>8. Encourage the women to focus on their inner strength</td>
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</tr>
<tr>
<td>- Enhance self-awareness and self-responsibility</td>
<td>9. Encourage women to touch and talk to their unborn babies</td>
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<tr>
<td>- Promote continuity of care</td>
<td>10. Be real and accepting with self and others</td>
<td></td>
</tr>
<tr>
<td>- Promote holistic health</td>
<td>11. Talk comfortably and non-judgementally about taboo topics if women want to</td>
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<tr>
<td>- Promote networking among women</td>
<td>12. Encourage the women to reflect on everyday life experiences relevant to pregnancy and/or holistic health</td>
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<tr>
<td>- Promote unity</td>
<td>13. Ask the women set the group health related agenda</td>
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<td></td>
<td>14. Limit the topics to one per session</td>
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<td>19. Encourage the women to take active role in learning</td>
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<td>22. Encourage women to make decisions by consensus</td>
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<td>23. Work collaboratively with the woman’s partner/family (with consent)</td>
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<td></td>
<td>24. Encourage the women to focus on what they want as an outcome of the pregnancy; healthy happy baby and mother.</td>
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</tbody>
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Table 6.5.8: Embedding Theoretical Foundations
Green highlighted numbers were what I would add or modify into the new model

<table>
<thead>
<tr>
<th>1. Primary Health Care</th>
<th>2. Maslow’s Hierarchy of Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supra-concepts of Midwifery Primary Health Care Groups</strong></td>
<td><strong>3. Philosophy of Midwifery</strong></td>
</tr>
<tr>
<td>- Build trust</td>
<td>- The environment</td>
</tr>
<tr>
<td>- Equalise power</td>
<td>1. A private, comfortable and welcoming space is important for women to feel safe to engage with the group.</td>
</tr>
<tr>
<td>- Promote mother-infant love</td>
<td>2. The chairs were placed for sitting in a circle so that everyone has eye contact with one another.</td>
</tr>
<tr>
<td>- Enhance self-awareness</td>
<td>3. The group size was thought to be good at 8 members.</td>
</tr>
<tr>
<td>- Promote group interaction</td>
<td><strong>The facilitator/midwife</strong></td>
</tr>
<tr>
<td>- Enhance self-confidence</td>
<td>1. The midwife/facilitator had certain formal roles.</td>
</tr>
<tr>
<td>- Enhance health knowledge</td>
<td>2. Language and non-verbal communications should aim to reduce the power imbalances between women and facilitators.</td>
</tr>
<tr>
<td>- Fulfil women’s health needs</td>
<td>3. Women should feel enabled to question (or challenge) the midwife each other about group participation issues.</td>
</tr>
<tr>
<td>- Enhance self-awareness and self-responsibility</td>
<td>4. A midwife-facilitator facilitates every group meeting.</td>
</tr>
<tr>
<td>- Promote continuity of care</td>
<td>5. Work collaboratively with obstetricians or social workers</td>
</tr>
<tr>
<td>- Promote holistic health</td>
<td>6. Wear normal clothes*</td>
</tr>
<tr>
<td>- Promote networking among women</td>
<td>7. Share relevant personal details (sparingly)*</td>
</tr>
<tr>
<td>- Promote unity</td>
<td>8. Use simple language*</td>
</tr>
<tr>
<td><strong>The environment</strong></td>
<td>9. Use learning resources models, diagrams or videos*</td>
</tr>
<tr>
<td>- 1. Wear normal clothes</td>
<td>10. Be positive &amp; encouraging*</td>
</tr>
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<td>19.</td>
<td>Encourage the women to take active role in learning</td>
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<tr>
<td>20.</td>
<td>Create activities which involve having fun</td>
</tr>
<tr>
<td>21.</td>
<td>Allow the women to speak first and only add additional information at the end as needed</td>
</tr>
<tr>
<td>22.</td>
<td>Encourage women to make decisions by consensus</td>
</tr>
<tr>
<td>23.</td>
<td>Work collaboratively with the woman’s partner/family (with consent)</td>
</tr>
<tr>
<td>24.</td>
<td>Encourage the women to focus on what they want as an outcome of the pregnancy; healthy happy baby and mother.</td>
</tr>
</tbody>
</table>

| 11. | Focus on women’s expressed health needs* |
| 12. | Encourage women to touch and talk to their unborn babies* |
| 13. | Encourage the women to reflect on everyday life experiences relevant to pregnancy and/or holistic health* |
| 14. | Ask the women set the group health related agenda* |
| 15. | Use open-ended questions* |
| 16. | Be a Health Educator/Promoter* |
| 17. | Be a contemporary midwife by working with women as individuals as well as in a group* |
| 18. | Create activities which involve having fun* |
| 19. | Allow the women to speak first and only add additional information at the end as needed* |
| 20. | Work collaboratively with the woman’s partner/family (with consent)* |
| 21. | Encourage the women to focus on what they want as an outcome of the pregnancy; healthy happy baby and mother* |

**Promoting effective group processes**

1. The group on the same day.
2. A fortnightly basis and one final postnatal meeting with partners and babies.
3. The group meeting 90-120 minutes.
4. A known shared purpose was Optimising Health to Prevent Preterm Birth.
5. The group norms had the aim of creating mutual trust, respect, empathy, caring and responsibility.
6. Only one person should speak at a time.
7. The agreed way of indicating a desire to speak was by raising hands.

**3. The working stage**

This stage creates commitments to power of group and aims to promote group integration, raised individual and group consciousness and shared responsibility for the content and process of each meeting.

A midwife-facilitator:
- Facilitates active discussion on the agreed topic (about 45-60 minutes).
- Encourages each woman to participate and listen respectfully.
- Encourages women to share experiences freely and directly that lead women trust other women and to be better understood.
- Invites the women to tell stories of their experiences as they relate to each topic and also to contribute their journal reflections.
- Encourages the women to identify action strategies that they would like to use either individually or collective with the aim of promoting health.
- Encourages each woman to take action and take greater self-responsibility; to develop more self-awareness and consciousness-raising for her own health.
- Encourages the women to think about the factors that either promote or diminish healthful behaviours with particular emphasis on the social and cultural factors.

4. The closing stage

The aim of closing stage is to help each
8. When one woman was speaking others should interrupt.
9. Each woman should be careful not talk too much or too often.
10. Differences are valued resources to strengthen the integrity of the group.

woman to reflect on someone or something that has happened during the process (Wheeler & Chinn, 1989).

A midwife-facilitator:
- Invites each woman to express their concerns and doubts
- Spends 10 minutes to devote to reflection, evaluation and recommendation of the group and planning what need to happen next time the group meets.
- Ends the each meeting with refreshments being served and socialisation being encouraged.

5. **The evaluating stage (After giving birth)**
The last meeting is organised after birth concerned with a collective evaluation including the impacts of this on women’s health and wellbeing.

A midwife-facilitator:
- Facilitates each member to express her experiences, the impacts and feelings from meeting on their health and wellbeing including networking or friends who had assisted or influenced you can to have a healthy pregnancy.
- Invites women to identify action strategies that they would like to use either individually or collective with the aim of promoting health as well as creation of networking and relationships for transformation.
Table 6.5.9: Tentative Model Building

| Feminist Group Processes, Maslow’s Hierarchy of Needs (holistic health), Primary Health Care, Philosophy of Midwifery, Midwifery Partnership |
|---|---|---|---|
| Feminist Group Agreements That Were Used in Thailand |
| The environment |
| ✷ A private, comfortable and welcoming space is important for women to feel safe to engage with the group. |
| ✷ The chairs were placed for sitting in a circle so that everyone has eye contact with one another. |
| ✷ The group size was thought to be good at 8 members. |
| The facilitator/midwife |
| ✷ The midwife/facilitator had certain formal roles. |
| ✷ Language and non-verbal communications should aim to reduce the power imbalances between women and facilitators. |
| ✷ Women should feel enabled to question (or challenge) the midwife each other about group participation issues. |
| ✷ A midwife-facilitator facilitates every group meeting. |
| ✷ Work collaboratively with obstetricians or social workers. |
| Promoting effective group processes |
| ✷ The group on the same day of the week. |
| ✷ A fortnightly basis and one final postnatal meeting with partners and babies. |
| ✷ The group meeting 90-120 minutes. |
| ✷ A known shared purpose was Optimising Health to Prevent Preterm Birth. |
| ✷ The group norms had the aim of creating mutual trust, respect, empathy, caring and responsibility. |
| ✷ Only one person should speak at a time. |
| ✷ The agreed way of indicating a desire to speak was by raising hands. |
| ✷ When one woman was speaking others should interrupt. |
| ✷ Each woman should be careful not talk too much or too often. |
| ✷ Differences are valued resources to strengthen the integrity of the group. |
| Stages of Group Process That Were Used in Thailand |
| 1. The group forming stage (first meeting) |
| ✷ Creating an equal and friendly environment, group norms |
| ✷ Creating an equal footing during group discussion |
| ✷ Sharing the self and the roles as a midwife |
| ✷ Informing the background, objectives of group |
| ✷ Helping women to feel free to express their experiences, values, beliefs and opinions |
| 2. The checking-in stage |
| ✷ Encourage each woman to look on her pregnancy development and self-care in past 2 weeks. |
| ✷ Invite each woman to talk briefly for about 15 minutes |
| 3. The working stage |
| ✷ Facilitate active discussion on the agreed topic (about 45-60 minutes) |
| ✷ Encourage women to share experiences freely and directly that lead women trust other women and to be better understood. |
| ✷ Invite the women to tell stories of their experiences as they relate to each topic |
| ✷ Encourage women to identify action strategies that they would like to use either individually or collectively with the aim of promoting health. |
| ✷ Encourage the women to think about the factors that either promote or diminish healthful behaviours with particular emphasis on the social and cultural factors. |
| 4. The closing stage |
| ✷ Spends 10 minutes to reflection, evaluation and recommendations of the group and planning what needs to happen next time the group meets. |
| ✷ Ends the each meeting with refreshments being served and socialisation being encouraged. |
| 5. The evaluating of the whole process (After giving birth) |
| ✷ Facilitates each member to express her experiences, the impacts and feelings from meeting on their health and wellbeing including networking or friends. |
| ✷ Invite women to identify action strategies that they would like to use either individually or collectively with the aim of promoting health as well as the creation of networking and relationships for transformation. |
| Midwifery Strategies Learned from Experience in Thailand |
| ✷ Be: |
| ✷ A Health Educator/Promoter |
| ✷ A contemporary midwife by working with women as individuals as well as in a group |
| ✷ Positive & encouraging |
| ✷ Use simple language |
| ✷ Use open-ended questions |
| ✷ Limit planned topics to one per session |
| ✷ Focus on women’s expressed health needs |
| ✷ Use learning resources models, diagrams or videos |
| ✷ Create activities which involve having fun |
| ✷ Share relevant personal details (sparingly) |
| ✷ Work collaboratively with the woman’s partner/family |
| ✷ Encourage women to: |
| ✷ Speak first (and midwife only add additional information as needed) |
| ✷ Focus on the health outcome they want |
| ✷ Reflect on relevant everyday life experiences |
| ✷ Touch and talk to their unborn babies |
| ✷ Set the group’s health-related agenda |
| ✷ Wear normal clothes |
| Midwifery Aims Learned from Experience in Thailand |
| ✷ Build trust |
| ✷ Equalise power |
| ✷ Encourage: |
| ✷ Group interaction |
| ✷ Networking among women |
| ✷ Unity |
| ✷ Mother-infant love |
| ✷ Holistic health |
| ✷ Enhance women’s: |
| ✷ Self-awareness |
| ✷ Self-confidence |
| ✷ Self-responsibility |
| ✷ Health knowledge |
## APPENDIX 7

**Holistic Health Assessment Framework (First draft)**

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
</table>
| **1. Physiology assessment of:** | (1) Nutrition and hydration  
(2) Elimination  
(3) Physical exercise and relaxation  
(4) Sleeping and rest  
(5) Functional ability  
(6) Physical health history  
(7) Exposure to damaging substances  
(8) Reproductive health  
(9) Early life experiences relevant to physiological health and illness |
| **2. Safety and security assessment of:** | (1) Social and political context  
(2) Adequacy and security of housing  
(3) Quality of available water, air and food  
(4) Baby’s environmental context  
(5) Adequacy and security of income  
(6) Early life experiences relevant to safety and security needs |
| **3. Love and belonging assessment of:** | (1) Interpersonal relationships within extended family  
(2) Emotional and sexual intimacy with partner.  
(2) Inner personal relationship (with unborn baby)  
(3) Relationship with the midwife  
(4) Relationship with other health care providers  
(5) Early life experiences relevant to love and belonging |
| **4. Self esteem assessment of:** | (1) Perception of pregnancy (physio psychological change and fetal development)  
(2) Adaptation during pregnancy  
(3) Self-confident, worth and strength  
(4) Early life experiences relevant to self esteem |
| **5. Self actualisation assessment of:** | (1) Meaning in work  
(2) Creativity  
(3) Being spontaneous  
(4) Personal growth  
(5) Spiritual experiences (value and belief)  
(6) Being useful to mankind  
(7) Early life experiences relevant to self actualisation |
**Holistic Health Assessment Framework (Second draft)**

1. **Physiology assessment of:**
   1. Nutrition and hydration
   2. Elimination
   3. Physical exercise and relaxation
   4. Sleeping and rest
   5. Functional ability
   6. Physical health history
   7. Exposure to damaging substances
   8. Reproductive health (sexual expression as appropriate)
   9. Early life experiences relevant to physiological health and illness

2. **Safety and security assessment of:**
   1. Social and political context
   2. Adequacy and security of housing
   3. Quality of available water, air and food
   4. Baby’s environmental context
   5. Adequacy and security of income
   6. Physically safe at home
   7. Early life experiences relevant to safety and security needs

3. **Love and belonging assessment of:**
   1. Love and belonging needs met within family
   2. Love needs met by partner and/or friends
   3. Express an inner personal relationship with unborn baby
   4. Feels known and cared about by the midwife
   5. Feels respected and cared about by other health care providers
   6. Self-evaluation of early life experiences relevant to love and belonging

4. **Self esteem assessment of:**
   1. Perception of self as a woman
   2. Perception of self as a pregnant woman
   3. Self-confident, strong
   4. Sense of self-worth
   4. Early life experiences relevant to self esteem

5. **Self actualisation assessment of:**
   1. Finds life meaningful
   2. Expresses creativity
   3. Behaves spontaneously
   4. Values personal growth
   5. Expresses spirituality (in own way)
   6. Early life experiences relevant to self actualisation
## Holistic Health Assessment Framework (Third draft as criteria for Assessing woman’s health)

<table>
<thead>
<tr>
<th>Name:</th>
<th>Meetings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors to be Assessed on Basic Needs</td>
<td>1st</td>
</tr>
</tbody>
</table>

### 1. Bio-physiological:
- Nutrition and hydration
- Elimination
- Physical exercise and relaxation
- Sleeping and rest
- Exposure to damaging substances
- Reproductive health (sexual expression as appropriate)

### 2. Safety and security:
- Adequacy and security of housing
- Quality of available water, air and food
- Baby’s environmental context
- Adequacy and security of income
- Physically safe at home

### 3. Love and belonging:
- Love and belonging needs met within family
- Love needs met by partner and/or friends
- Express an inner personal relationship with unborn baby
- Feels known and cared about by the midwife

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### Table 5.1 Criteria for Assessing Woman’s Health (continue)

<table>
<thead>
<tr>
<th>Name:</th>
<th>Meetings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors to be Assessed on Basic Needs</td>
<td>1st</td>
</tr>
</tbody>
</table>

- Feels respected and cared about by other health care providers

### 4. Self esteem:
- Perception of self as a woman
- Adaptation during pregnancy
- Self-confident and strong
- Sense of self-worth

I compiled the above table based on my experiences from data collection. Each category it lists is a factor for the midwife to consider when making assessments and providing care for childbearing women. Some of these factors are quite sensitive and would probably not be discussed in a first meeting. Indeed, some factors (e.g. sexual and interpersonal relationships) may not ever be the subject of direct questions. These topics may come up or be inferred from conversation during the midwife–woman partnership that extends over the whole childbearing experience. When and if the timing and trust is right, then the midwife might initiate a specific conversation about a sensitive matter. Even if all the factors are not specifically discussed, this table of holistic factors should remind midwives that all of these factors are important all of the time.
Maslow’s theory of human needs can be a framework for midwives to follow to assess the health of the women and their babies and subsequently to provide them with care. Maslow’s theory is hierarchically categorised with the most basic needs for survival at the lowest level. This reminds midwives to ensure that the basic needs for food and safety are met, at least to some extent, before trying to influence higher-order needs. Therefore, the midwifery health assessments based on Maslow’s theory can help women to see all the factors that influence their health and the health of their babies. Midwives can then educate and encourage women to meet their needs and avoid risks to their health. In a move away from reductionist nursing and obstetric forms of antenatal assessment, we have modified Maslow’s hierarchy of human needs to create an open-ended set of questions that has been used by the midwife to engage in a dialogue where the woman and the midwife jointly assess the woman’s holistic health in pregnancy.
References for Appendices


76. Iams JD, Romero R, Culhane JF, Goldenberg RL. Primary, secondary, and tertiary interventions to reduce the morbidity and mortality of preterm birth. Lancet 2008; 371 (9607): 164-75.