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FACULTY OF HEALTH SCIENCES

Thai Women's Breastfeeding Experiences and Support Needs

by

Pornpimol Apartsakun

Thesis for the degree of Doctor of Philosophy

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UNIVERSITY OF SOUTHAMPTON

ABSTRACT

FACULTY OF HEALTH SCIENCES

Midwifery

Thesis for the degree of Doctor of Philosophy

THAI WOMEN'S BREASTFEEDING EXPERIENCES AND SUPPORT NEEDS

Pornpimol Apartsakun

Breast milk is acknowledged and recommended as the best food for babies by the World Health Organization. However, globally the proportion of mothers who breastfeed is still low and this is particularly the case in Thailand. The aim of this study is to improve women's ability to breastfeed. A two phase study was designed. Phase I was to better understand women's experiences and breastfeeding support needs, which formed the development of the 'Breastfeeding Support Package'. The package, which consisted of the tool and leaflets, was to be administered by the nurses with the postpartum women. Phase II aimed to explore mothers' and nurses' experiences following the use of the package.

A pragmatic qualitative approach was used throughout. A government hospital in Bangkok, Thailand, was the setting for this research. Purposive sampling was used to recruit the participants for both phases of the study. In Phase I, semi-structured interviews of 17 mothers who visited the Family Planning Clinic, post-delivery, were undertaken. Thematic analysis was used to examine the data. For phase II, three groups of participants were involved: five participants from phase I, five postpartum women and five nurses working on the postpartum ward. Telephone interviews were used to assess face validity of the tool while semi-structured interviews were used to investigate mothers' and nurses' experiences regarding the use of the package. Inductive qualitative analysis was then used.

Three themes that contribute to women's experience of breastfeeding were 'knowledge and attitude toward breastfeeding', 'practicality' and 'support'. Three themes that contribute to 'women's needs of breastfeeding support' were 'knowledge', 'attitude', and 'practice'. The use of the package could open a 'platform to communication' regarding women's needs and act as a 'platform to support' for nurses. The postpartum women were able to better communicate their needs regarding breastfeeding support with the nurses, as well as receiving the support they required. The package worked well with present conditions and environment at the postpartum ward of the hospital.

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DECLARATION OF AUTHORSHIP

I, Pornpimol Apartsakun

declare that this thesis, and the work presented in it, is my own and has been generated by me as the result of my own original research.

An Exploration of Thai Women's Breastfeeding Experiences and Support Needs'

I confirm that:

1. This work was done wholly or mainly while in candidature for a research degree at this university;
2. Where any part of this thesis has previously been submitted for a degree or any other qualification at this university or any other institution, this has been clearly stated;
3. Where I have consulted the published work of others, this is always clearly attributed;
4. Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;
5. I have acknowledged all main sources of help;
6. Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;
7. None of this work has been published before submission

Signed: Pornpimol Apartsakun

Date: 22 July 2015

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Definitions and Abbreviations

WHO: World Health Organization

UNICEF: United Nations International Children's Emergency Fund

BFHI: Baby Friendly Hospital Initiative

WHA: World Health Assembly

IYCF: Infant and Young Child Feeding

BWTi: World Breastfeeding Trend Initiative

US: The United States

ANC: Ante Natal Care

DR: Delivery Room

OR: Operating Room

PP: Postpartum Ward

NR: Newborn Room

FPC: Family Planning Clinic

N/L: Normal Labour

F/E: Forceps Extraction

V/E: Vacuum Extraction

C/S: Caesarean Section

Gravida (G) is the total number of times a woman has been pregnant

Parity (P) includes four numbers which are the number of times of having full term pregnancy, preterm pregnancy, abortion, and having living children, e.g. $G_2P_{1-0-1-1}$ means that it is a second pregnancy with having one full term, no preterm, one abortion and having a child at the present.

Chapter 1: Introduction

1.1 Introduction

In Thailand, political and social influences have led to an increase in the focus on breastfeeding. As a nurse/midwife who has a key role in educating nursing students in Bangkok, Thailand, and as an advocate of breastfeeding, the author was successfully sought to conduct research in this field of practice. While respecting women's rights and having an understanding that women should be encouraged to make their own choices regarding feeding their babies, this project predominantly follows the 'breastfeeding is the best' perspective and hence was conducted with the women who intended to breastfeed. This chapter provides the overview of the study which includes the introduction and justification for conducting the study as well as the situation of breastfeeding in Thailand, particularly in the capital city, Bangkok. The structure of the whole thesis is presented at the end of the chapter.

1.2 Background and significance of the study

Breast milk is acknowledged as the best food for babies (World Health Organization/United Nations Children's Fund 1989; World Health Organization 2014a). The World Health Organization (WHO) has strongly recommended that mothers exclusively breastfeed their children for at least six months and continue breastfeeding along with providing additional nutritional supplements for two years or beyond (World Health Organization 2010b). Considering different regions of the world, the United Nations Children's Fund (UNICEF) reported that South Asia has the highest rate of six months exclusive breastfeeding, at 45 per cent; followed by East/South Africa at 42 per cent; developing countries at 37 per cent; East Asia/Pacific at 32 per cent; Middle East/North Africa at 29 per cent; Central Europe at 27 per cent and the lowest rate is West/Central Africa at 22 per cent (World Health Organization n.d.). In Thailand, a country in Southeast Asia, the national rate of breastfeeding in 2006 was only at 5.4 per cent (World Health Organization n.d.).

WHO and UNICEF are key organizations that set global policies to support breastfeeding. The Baby Friendly Hospital Initiative (BFHI) was launched by WHO/UNICEF in 1991 to promote breastfeeding worldwide, through the 'Ten Steps to Successful Breastfeeding' strategy (see Appendix A) (World Health Organization/United Nations Children's Fund 1989; World Health Organization 2006). There is evidence of the importance of support in the achievement of successful breastfeeding (see Chapter 2 Section 2.4.3 Breastfeeding interventions). The 'Ten Steps to Successful Breastfeeding' and BFHI programme are being globally recognized as best practices in the provision of support for breastfeeding (Kramer et al. 2001; World Health Organization 2014c). At present, 16,000 hospitals in 171 countries have adopted the 'Ten Steps to Successful Breastfeeding' to facilitate their health care professionals to support mothers with breastfeeding (World Health Organization 2014c). Hospitals in around 134 countries have been awarded BFHI status (World Health Organization 2013b). Having a large number of countries adopting BFHI is an indication that breastfeeding has major individual and public health benefits to babies and women, and hence to society as a whole, as indicated in Chapter 2: Literature Review).

The WHO's global breastfeeding goal is to increase the rate for exclusive breastfeeding at six months to 50 per cent by 2025, while the ultimate goal is set to be at 60 per cent by 2030 (World Health Organization 2010b; World Health Organization 2012; Bill & Melinda Gates Foundation 2014). At present, 26 countries have achieved the target of 50 per cent of women achieving six months exclusive breastfeeding (World Health Organization 2012). However, the global rate of mothers who exclusively breastfeed their children for six months still does not meet the target set by the WHO (World Health Organization 2010b). Only 35 per cent of mothers worldwide breastfed their children for six months exclusively in 2010, while this rate had increased to 37 per cent in 2013 (World Health Organization 2010b; World Health Organization 2014b). The steadily increasing rate during the last few years implies that many countries still need to put more effort into breastfeeding support practices in order to meet the target of the global goal.

1.2.1 Breastfeeding related aspects in Thailand

Historically, individuals who provide care for pregnant women in the rural areas of Thailand are known as 'Moh Tam Yae'. Before the advancement of formal health systems and services in the rural areas of Thailand they were traditional midwives who would be called to homes to help women with delivery. After World War II in 1945 Thailand had an increased level of cooperation with the international community and obtained more knowledge in various medical fields. After 1957 the law stipulated that all 'Moh Tam Yae' had to take courses to continue their practice and had to be registered with the Ministry of Public Health (Ministry of Public Health 2010). This requirement affected their practice. While many of them ended their profession during the following years, some reversed their practice to that of post birth masseuses. Traditional Thais believe that massages can help with recovery after giving birth (Ministry of Public Health 2010). Increases in the development and use of medical technology helped reduce the rate of maternal deaths. Maternal death rate at 36 per 100,000 live births in 1993 has reduced to 24 in 2002 (The Royal Thai College of Obstetricians and Gynaecologists 2010). This rate has continued to decrease to 11.7 in 2006 and 10.2 in 2010 (Statistical Forecasting Bureau 2012). The statistics could represent safer care and indicate progress in treatment in the obstetric field. The perception of hospital safety continues to gain acceptance among the population. More and more mothers are deciding not to deliver at home. From the statistics in 2006, it could be clearly seen that only 1.3 per cent of women had a home birth, whereas around 98.7 per cent delivered at hospitals, mainly at government facilities (Ministry of Public Health and Ministry of Social Development and Human Security Thailand 2008). This suggests that the services for pregnant women have been shifting from home based to hospital based settings for over half a decade, and today nearly all births take place in hospitals.

Thailand was reported to rank third amongst the countries with the lowest rate of six month exclusive breastfeeding at 5.4 per cent in 2006 (World Health Organization n.d.). Recently, Thailand was also reported by the International Baby Food Action Network (IBFAN) Asia, as one of the countries in Southeast Asia where the promotion of breastfeeding throughout the country was considered to be challenging (Gupta et al. 2012; Internatonal Baby Food Action Network Asia 2014). However, for mothers living in Bangkok the rate was 14.5

per cent in 2005 (Bureau of Health Promotion 2006) but had decreased to 11 per cent in 2007 (Laisiriruangrai et al. 2008). The statistics indicate that an average of only 10 per cent of Thai mothers living in Bangkok exclusively breastfed their children for six months during the past nine years. This statistic is consistent with the recent database from WHO which indicated that the rate of Thai mothers who achieved breastfeeding exclusively for six months was at 15 per cent in 2012 (OECD/World Health Organization 2012). According to Thailand's national policy, in particular the Eleventh National Economic and Social Development Plan (2012–2016), the goal of exclusive breastfeeding at six months has been set at 50 per cent (Ministry of Public Health 2014). The current rate of 15 per cent falls short of the goals set by both the WHO (2010) and Thailand's National Economic and Social Development Plan (Ministry of Public Health 2014).

The 'SaiYaiRak Hang Krobkrua Project', supported by WHO/UNICEF and established by HRH Princess Srirasmi in 2005, is a key project supporting breastfeeding for Thai mothers at present. This project underpins family bonding to help create an ideal environment for babies. HRH Princess Srirasmi is a model for mothers to breastfeed and she promotes child development under the 'Sufficient Economy Scheme' (Ministry of Public Health and Ministry of Social Development and Human Security Thailand 2008). During the time when HRH Prinsrirasmi gave birth to Prince Teepangkorn, the princess decided to dedicate her efforts to help tackle some of the problems that Thai children and youths face. She realized that having a strong family bond is the basic means for maintaining a good quality of life for the young Thai generation which in turn could help build a better society. The project focuses on promoting breastfeeding and educating parents with appropriate child rearing knowledge and techniques that are in accordance with the level of the child's development. This project organizes beneficial activities in communities while avoiding conflict of interest between the different parties involved. The project's managers coordinate their work with governmental and nongovernmental organizations and individuals in the community. An example of an outstanding project is 'Tambol Nommae' or 'Breast milk sub district'. In this project a title 'Tambol Nommae' is given to a sub district; the community members universally participate in an ongoing management process to protect, promote, and support breastfeeding with the cooperation of a network of associated governmental and nongovernmental organizations (Ministry of

Public Health and Ministry of Social Development and Human Security Thailand 2008). Examples of the roles of the associated governmental and nongovernmental organizations are summarized in Table 1.1

Table 1.1 Summary of Thai government and nongovernment organizations that support the 'SaiYaiRak Hang Krobkrua Project'

Institution	Mission
Government sectors	
Ministry of Agriculture and Cooperatives	To provide appropriate crop seeds and knowledge for families to plant those for domestic consumption so that families get good nutrition while lowering their expenses
Ministry of Public Health	To promote BFHI, according to WHO recommendations, in hospitals
Ministry of Social Development and Human Security	To manage the benefits for mothers with disability or no income, and help them to earn extra income for the family
Ministry of Industry & Ministry of Labour	To help working mothers returning to work to be able to continue to breastfeed: for example, setting rules that workplaces should have appropriate areas for working mothers to breastfeed or express breast milk
Ministry of Interior	Support councils/sub district administrative office in drafting a community strategic plan and allocate funds for communities
Ministry of Culture	Help revive breast milk culture to become a common practice again in Thai society
Ministry of Education	Include the issue of breastfeeding as part of the education curriculum
Associate State Emprise	
Thai Breastfeeding Centre Foundation	To serve as an important source of information website, where knowledge and techniques regarding practices are provided by experts. Women can ask questions and consult with the experts about their needs and difficulties

Overall, women who participated in the 'SaiYaiRak Hang Krobkrua Project' achieved a level of 29.6 per cent six months exclusive breastfeeding

(Sawasdivorn 2009). One of the reasons for the higher rate for six months exclusive breastfeeding in the 'SaiYaiRak Hang Krobkrua Project' compared to the national rate might be because the evaluation of achievement is calculated amongst the population of the participants in the project. Therefore, the rate might not represent the overall rate of the country. However, the statistics gathered do not just present the numbers and rates of successful mothers who meet the desired six month criterion; they also present the trends in breastfeeding in the country. The success of the princess in exclusively breastfeeding her son for six months has inspired Thai mothers and she has become a model for many Thai women. Having high respect for the royal family has also encouraged the Thai people to consider the decision to breastfeed. Another interesting point to be considered is that most hospitals which have adopted the 'SaiYaiRak Hang Krobkrua Project' are provincial hospitals which serve people from quite different contextual backgrounds as compared to the hospitals in Bangkok. This aspect might have contributed to the better rate of success in breastfeeding in the provincial hospitals. The study of the 'SaiYaiRak Hang Krobkrua Project' suggests that there is an increasing trend in achieving six months exclusive breastfeeding and this need to be fostered to improve rates nationally. Moreover, good cooperation between hospitals, government sectors, state enterprises and communities could help bring about the necessary support that will encourage mothers to breastfeed their babies. Although the hospital, where this current research was conducted is not yet a part of the 'SaiYaiRak Hang Krobkrua Project', the lessons learned from the project, particularly on the importance of effective coordination, could be adopted by a multidisciplinary team from the hospital to provide breastfeeding support for Thai women.

1.2.2 Hospital policy regarding breastfeeding support

Studies and reports have indicated that BFHI could encourage breastfeeding (Merten et al. 2005; World Health Organization 2006; Schmied et al. 2011b; Venancio et al. 2011; World Health Organization 2013b). Hospitals can be accredited for BFHI status, when and if they apply the 'Ten Steps to Successful Breastfeeding' and are not accepting free or cheap formula milk from sales representatives of any brand (World Health Organization 2013b). At present,

not all hospitals in Thailand could truly claim the title of BFHI, because one of the main criteria for their accreditation is that they should not receive breast milk substitutes, purchase them at low cost or be giving out free samples at the hospitals (Health Promotion Center Region 4 2013). This might be difficult for university hospitals with tertiary care units such as the hospital where my research was conducted which has not at this time been BFHI accredited. One of the reasons for this might be because it is a tertiary hospital which generally has to deal with a large number of cases of complications for both mothers and babies and within this medical model of care, breast milk substitutes are necessary. While this circumstance might be acceptable, it is suggested that addition efforts and strategies need to be developed and implemented to steer the medical care in the direction which will best benefit mothers and children.

Although the hospital's policy on accepting free samples of breast milk substitutes from companies could be economical, considering no advertisements are allowed at the hospital, it has an indirect adverse effect in promoting breastfeeding. The health care professionals who provide care for mothers and babies may develop a mind-set that accepts formula milk as a breast milk substitute and might easily offer bottles to mothers. Such personnel might not value spending time sitting and providing breastfeeding support, especially when dealing with high workloads. The babies may also develop difficulty in sucking at the breast when reunited with their mothers because they have become used to sucking from bottles (Hurst & Meier 2010). Therefore, while breast milk substitutes are necessary in some cases, minimising the use of formula milk, and the promotion of breastfeeding by the health care professionals, should be an issue of more concern than it currently appears to be.

One government hospital in Bangkok, like many hospitals around the world, follows the BHFI and the 'Ten Steps to Successful Breastfeeding' to help promote breastfeeding (World Health Organization 2010b). It has a written breastfeeding policy, and provides training for the health care team to acquire the skills necessary for implementation (World Health Organization 2010b). These steps and this policy are the basis for general care procedures uniformly applied to postpartum women by nurses and other health care professionals. However, not fully adopting the 'Ten Steps to Successful Breastfeeding' as a hospital policy could be a barrier to successful initial breastfeeding and

exclusive breastfeeding for six months. As Thailand is a member of both WHO/UNICEF, the BFHI and the 'Ten Steps to Successful Breastfeeding' have been promoted at hospitals throughout the country, particularly at government hospitals. Being accredited as a BFHI is a challenging major step in improving the quality of maternity and child services of the hospital. This transitional period, prior to becoming a BFHI, is crucial because there are many challenges to overcome such as having sufficient numbers of skillful health care professionals to provide breastfeeding support as well as totally absorbing the 'Ten Steps to Successful Breastfeeding' into hospital policy and practices. During the transition period others strategies which could help counter the low rates of mothers achieving breastfeeding should be considered. This highlights the significance of this study.

1.2.3 Social, cultural and demographic issues which might affect breastfeeding

There are various reasons responsible for the low rate of Thai women achieving six months of exclusively breastfeeding despite national and hospital policies promoting breastfeeding. Some social influences such as the impact of formula milk and short maternity leave seem to be prominent factors hindering the success of mothers from achieving breastfeeding exclusively for six months. Some demographic variables may influence breastfeeding behaviour, such as age, gravida, educational level, marital status and employment (Winterburn 2007; Racine et al. 2009; Wen et al. 2009).

International business, particularly formula milk companies, has influenced many colonial countries after World War II. The growth rate of the formula milk industry dramatically increased in many developing countries, hence reducing the number of mothers exclusively breastfeeding. The successful marketing strategies of different formula milk brands are one of the reasons for the drop in breastfeeding. For example, they have provided free samples for the hospitals or sponsoring conferences for health care professionals (Dykes 2006; Thai Breastfeeding Organization 2007; Palmer 2009).

Another effective advertisement strategy is establishing brand recognition by using healthy and good looking babies in the advertisements and on their product labels. These advertisements influence parents to believe that taking

particular formula milk could benefit their babies (Thai Breastfeeding Organization 2007). As a result, formula milk became a social norm for feeding babies in Thailand over sixty years ago. This situation is consistent with the report of the WHO which stated that Thailand was among the countries with the lowest rate of six month exclusive breastfeeding in 2006; although the rate increased to 15 per cent in 2012 (OECD/World Health Organization 2012; World Health Organization n.d.). Acceptance of formula milk as a substitute for breast milk among Thais is one of barriers against achieving increased breastfeeding rates and targets as set by the nation. While the breastfeeding rate of Thai mothers continues to be low and the law on restricting advertisement for formula milk according to the International Code of Marketing of Breast Milk Substitutes has yet to be passed, the provision of breastfeeding support by health care professionals could be a vital approach to help increase mothers' abilities to breastfeed at present (Thai Breastfeeding Organization 2007; World Health Organization 2008).

Short maternity leave is another significant factor affecting breastfeeding behaviour among Thai women (Laisiriruangrai et al. 2008; Tangsuksan & Ratinthorn 2011). According to Thai Law, chapter 3, section 41, a pregnant employee is entitled to 90 days maternity leave (Labour Protection Act BE 2541 n.d.-a). However, chapter 5, section 59 says that women on maternity leave are to be paid fully equal to their normal wage, but for not more than 45 days (Labour Protection Act BE 2541 n.d.-b). Having a short maternity leave, with only half of their working days paid, encourages mothers to return to work earlier than their maternity leave required. Statistic shows that 45 per cent of the Thai workforce is female (Statistical Forecasting Bureau 2012). An average number of people in a family are at 3.2 (Statistical Forecasting Bureau 2012). These two statistics imply that child rearing after maternity leave is a significant issue for families having both parents working. Many families choose to put their children into day care while some rely on relatives and friends to look after their babies (Tangsuksan & Ratinthorn 2011). Therefore, it is necessary that mothers have sufficient knowledge and are well prepared before returning to work, in order to sustain breastfeeding until six months or beyond.

Studies indicate that spousal support is an encouraging factor in breastfeeding (Clifford & McIntyre 2008; MacArthur et al. 2009; Putthakeo et al. 2009; Racine

et al. 2009; Dashti et al. 2010). However, two recent studies conducted in Bangkok, Thailand, one quantitative and the other qualitative, did not point out spousal support as a significant factor in supporting breastfeeding (Laisiriruangrai et al. 2008; Tangsuksan & Ratinthorn 2011). The reasons for this might be because the number of studies on factors influencing the issue of breastfeeding available in Thailand is limited due to the rather low number of mothers achieving breastfeeding exclusively for six months in the past decades. Different cultural traits of people in different societies might also be a reason for this lack of success. A qualitative study mentioned that grandmothers are significant people in supporting other types of feeding (Tangsuksan & Ratinthorn 2011). A quantitative perspective indicated maternity leave and intended time to breastfeed as significant factors affecting breastfeeding among Thai women living in Bangkok (Laisiriruangrai et al. 2008). These results are consistent with other studies which revealed that grandmothers are people who are involved in feeding babies (Clifford & McIntyre 2008; Grassley & Eschiti 2011; Liu et al. 2013).

There is some progress in passing the law to help support mothers to breastfeed and in child rearing. For example, a law passed by the Thai government allows male government officers to have the benefit of up to 15 days leave to help their wives look after their lawful child (Royal Thai Government Gazette 2012). Although this law does not have a direct impact in increasing the breastfeeding rate, it is still considered a support and help to mothers (Thai Breastfeeding Organization 2014). However, laws regarding the increase of time for maternity leave in Thailand are not expected to be passed imminently. Work, which might be a factor affecting breastfeeding among Thai's women living in Bangkok, is a very interesting area to explore.

A recent randomised controlled trial (RCT) study conducted at the hospital in Bangkok where this research was also conducted revealed that the matter of mothers' self-efficacy levels is another factor affecting breastfeeding (Kupratakul et al. 2010). The RCT, using a Knowledge Sharing Practice with Empowerment Strategies (KSPES) based on Gibson's theory as a tool for intervention, was conducted in Chulalongkorn Memorial Hospital, Bangkok, with the aim of increasing mothers' self-efficacy in breastfeeding (Kupratakul et al. 2010). The knowledge was transferred by means of sharing discussion through storytelling, sharing experiences by best practices, demonstrating and

voicing thoughts during the antenatal and post natal period. The result revealed that 20 per cent of mothers in the experimental group were exclusively breastfeeding compared to none in the control group (Kupratakul et al. 2010). Although the result of the programme could help increase mothers' perceptions of their capability in breastfeeding, the researchers did not recommend the programme as a means to support a larger population of mothers for several reasons (Kupratakul et al. 2010). One such reason was because this strategy is more appropriate for mothers living in cities rather than mothers living in rural areas due to the differences in lifestyle. This strategy might not be practical due to the extra workload that the health care professionals will have to take on in running such a programme. This study also pointed out the challenges that needed to be overcome in order to initiate a better routine of standard care to promote breastfeeding and to help mothers to achieve exclusive breastfeeding at six months (Kupratakul et al. 2010). A better understanding regarding mothers' needs of breastfeeding support from the health care professionals might help guide nurses in providing services at the hospital. This area needs to be explored. It also implies that, while the breastfeeding rate is still low, it is important that other approaches should be addressed. This is one of the aims of the study.

1.3 Chapter summary

Based on 11 years of clinical experience, working as a midwife/nurse for an antenatal clinic, delivery room, postpartum unit and neonatal ward at one government hospital in Bangkok, I consider the likelihood of increasing the rate of breastfeeding among Thai's women challenging. Those experiences made me realise how important breastfeeding support from the health care professionals is in helping mothers gain knowledge and ability to improve the chances of success in their initial attempts to breastfeed and eventually help increase the national rate of mothers who achieved exclusive breastfeeding for six months. Nurses play a key role in this success. Not having been accredited as BFHI due to not having fully adopted the 'Ten Steps to Successful Breastfeeding', hospital policy makers and staff are currently facing a major challenge. A shortage of well-trained nurses also discourages and limits breastfeeding support being provided to postpartum women. So far, there is

little empirical research available that has explored Thai mothers' experiences of factors influencing their breastfeeding behaviour and the perceptions of support they require from nurses or other health care professionals. Although there is an international tool to help assess and evaluate gaps of practice of breastfeeding support, the World Breastfeeding Trends Initiative (WBTi), an appropriate local tool to help facilitate breastfeeding support at the hospital, is still lacking (International Baby Food Action Network Asia 2014). This lack of information highlights the need for this study. The ultimate goal of the research is to help increase the number of mothers who achieve breastfeeding exclusively for six months by assisting the health care professionals, especially nurses, in providing breastfeeding support according to the needs of individual mothers. The 'Breastfeeding Support Package' consists of the 'Breastfeeding Support Tool' and the leaflet. The package has been developed with the hope that it could be of practical use to help facilitate and enhance nurses' and other health care professionals' abilities aiding them to provide the required support for individual mothers and helping those mothers to breastfeed immediately after birth.

1.4 The structure of the thesis

Chapter 1 provides an introduction and justification for conducting the research. Chapter 2 demonstrates the search strategy and analyses the literature identified as relevant to the topic of this research. From the synthesis of literature reviews four main aspects of breastfeeding can be determined: a) the benefits of breastfeeding, b) factors affecting breastfeeding, c) breastfeeding interventions and d) breastfeeding assessment tools. Chapter 3 explains methods for the conduct of phase I of the study. The research objectives for the first phase of the study were to explore women's experiences of the factors affecting breastfeeding along with their needs for breastfeeding support required from the health care professionals. Therefore, a pragmatic qualitative method was the design adopted for conducting the study. The research population is made up of women who visited the Family Planning Clinic at one government hospital in Bangkok, Thailand. Ethical considerations and trustworthiness issues are also presented. Chapter 4 deals with the process of analysis using Creswell's steps of analysis. Three themes

that contribute to 'women's experience of breastfeeding' and three themes that contribute to 'women's needs for breastfeeding support from health care professionals' are then discussed accordingly informed by Thailand's cultural context. Data analysis of the information gathered from the participants is used as the basis for developing the 'Breastfeeding Support Package' which consists of the 'Breastfeeding Support Tool' and the leaflet. Chapter 5 describes the methods for the conduct of phase II of the study. This consists of an evaluation of the 'Breastfeeding Support Package' experienced by the participants. A pragmatic descriptive qualitative research design is used to conduct this component of the study. The three groups of participants involved in this research were: i) women who participated in the first phase of the study; ii) postpartum women who nurses used the package with them and iii) nurses who used the package. Telephone interviews were used to assess the understanding of language used in the tool from five women who contributed the interviews in Phase I. Semi-structured interviews were conducted at the postpartum ward at one government hospital, Bangkok, Thailand, so I could collect data from five postpartum women and five nurses. An inductive approach is used for the data analysis. Ethical considerations and issues of trustworthiness are illustrated. Chapter 6 illustrates the process of analysis of the interview data from phase II, using Thomas's five steps inductive approach (Thomas, 2006). The final themes from the analysis which are the 'platform to communicate' and the 'platform to support' are then presented. The findings from the three groups of participants are presented while common findings are compared. Chapter 7 discusses the two final themes from the analysis. Thai cultural aspects affecting people's thoughts, behaviour and ways of communicating their needs regarding breastfeeding support to the nurses are the main points discussed. This is followed by an examination of the current hospital policy. Comparing other breastfeeding tools to the 'Breastfeeding Support Package' indicates the uniqueness of the study. Chapter 8 illustrates implications and recommendations from the study through the three domains of practice, education and research. The main focus is on the benefits of the package in helping facilitate nurses to provide breastfeeding support at the hospital while taking into account its present non-affiliated BFHI condition. Finally, Chapter 9 concludes by reflecting upon the process of conducting of the research. Challenging experiences obtained from conducting the study such as the process of interviewing and the analysis of qualitative data is

explained. The outcomes of certain unexpected conditions that arose during data collection such as the political crisis in Bangkok are revealed. Overall conclusions of the study are presented. The plan for the application of the findings of the study in future practice is also presented.

Chapter 2: Literature Review

2.1 Introduction

This chapter presents the search strategy and synthesis of the literature to review the evidence base about facilitating breastfeeding. The four main domains that emerged from the synthesis of the literature are: a) benefits of breastfeeding, b) factors affecting breastfeeding, c) breastfeeding interventions and d) breastfeeding assessment tools. The analysis of the knowledge gathered from the literature review illustrates the existence of a knowledge gap regarding breastfeeding support in Thailand and highlights the significance of the study.

2.2 Search strategy

The search strategy for the literature review is based upon electronic databases accessed via the website of the University of Southampton including Cochrane, CINAHL, PubMed, MEDLINE, and PsyInfo. The Cochrane collaboration is one of the most valuable sources for evaluating healthcare interventions using systematic reviews. The evidence from systematic reviews is placed on the highest level of the hierarchy of evidence, followed by the well-designed randomised controlled trial (RCT), controlled trial without randomisation, case-control and cohort studies, systemic reviews of descriptive and qualitative studies, single descriptive or qualitative studies, and finally evidence from the opinions of authorities and/or reports of expert committees (Melnyk & Fineout-Overholt 2005). However, continual research is also very important to represent up-to-date aspects regarding breastfeeding. Therefore, other sources of databases were also searched. CINAHL is the main database source for searching due to the availability of numerous articles related to midwifery, nursing and allied health. PubMed contains large numbers of articles related to life sciences while MEDLINE includes information from international medicine, clinical sciences, and biomedical references (Petticrew & Roberts 2006). PsyInfo database includes articles in relation to the psychology aspects of behaviour. The word ‘breastfeed’ was the key term initially used for searching. The

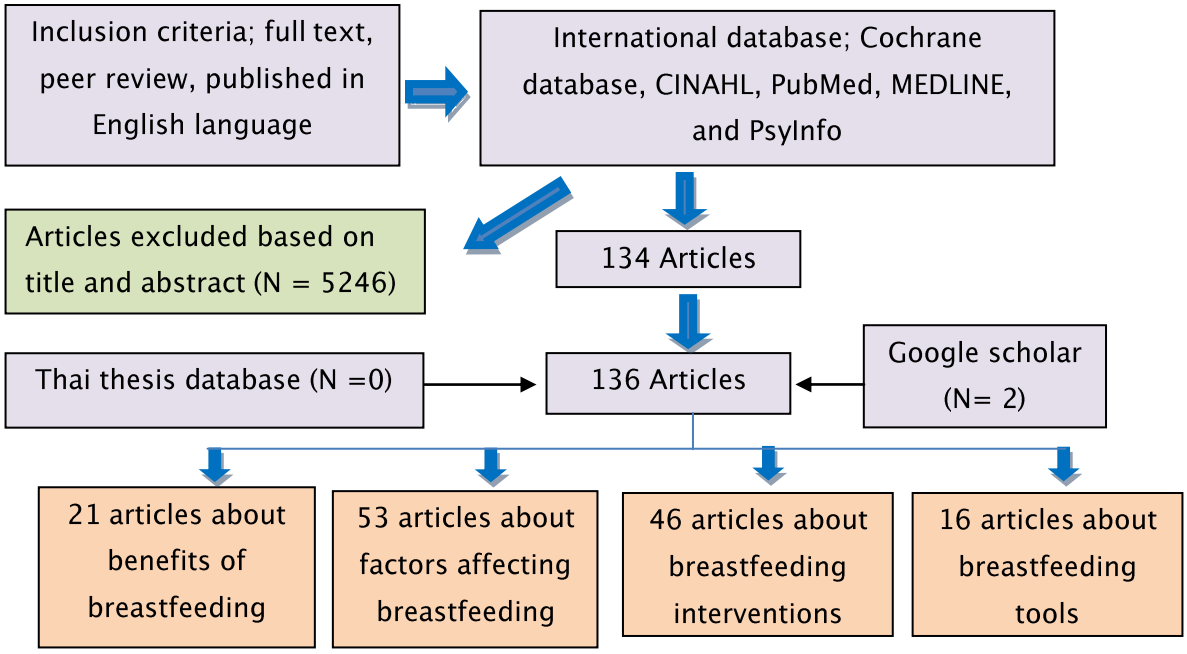
Boolean operators, such as 'AND' and 'OR' were used to identify all relevant articles in the search (Beaven & Craig 2007). Truncation such as an asterisk (*) is used for searching articles containing the search word with other endings. For example, the search for intervent* would search intervention and interventions (Beaven & Craig 2007). Breastfeed*, tool*, instrument*, support*, intervent*, benefit* and factors* were words used to search related articles for the study. Articles with full text that were peer reviewed and published in the English language during the 10 year period 2002 to 2012 were the criteria for selecting the articles. The reason for choosing articles which were published in the past 10 years was because they lie within the time frame representing the current situation regarding breastfeeding. Although, the main search was undertaken in October 2010 regular updates were carried out up until September 2014.

Using the electronic search strategy, over 5,000 articles were found which were relevant to my study. Duplicated articles from the search were identified and removed. The titles of the journals were read. The articles related to biochemistry or mechanism of the substances and illnesses related to breastfeeding such as HIV, mothers and babies with cleft lip or palate, or very low birth weight were excluded. The title and abstract of each article were then scanned, read and categorised for selection purposes. Articles which covered two or more domains were read and categorised into each domain according to their dominant orientation and results.

The search produced only three Thai articles on breastfeeding (Kaewsarn et al. 2003a; Kaewsarn et al. 2003b ; Youngwanichsetha 2013). Due to the limited number of research papers regarding breastfeeding conducted in Thailand found from the search strategy, the Thai thesis database was also searched. However, no articles related to the topic were found. Although Google scholar was not considered a good source for locating research articles because it is known to be less systematic and have fewer restrictions on papers. However, due to the limited availability of relevant papers related to the Thai context that website was also searched. The keywords used in the search were 'breastfeed' and 'Thai'. Two interesting articles in the Thai context were found. One was a randomised controlled trial in King Chulalongkorn Memorial Hospital (Kupratakul et al. 2010) while the other was a piece of qualitative research published in 2011(Tangsuksan & Ratinthorn 2011).

A last updated search of articles was undertaken in April, 2015. In total, the result of the literature searched included four domains with 136 articles: 21 papers were related to the benefits of breastfeeding; 53 to factors affecting breastfeeding; 46 to breastfeeding interventions; and 16 to breastfeeding assessment tools (see Appendix B). The process and outcome of the search strategy is presented in Figure 2.1.

Figure 2.1 The process and outcome of the search strategy



2.3 Review and appraisal of Thai articles regarding breastfeeding

Five Thai articles related to breastfeeding were found from the search strategy (Kaewsarn et al. 2003a; Kaewsarn et al. 2003b; Kupratakul et al. 2010; Tangsuksan & Ratinthorn 2011; Youngwanichsetha 2013). Two of the five were conducted by the same authors in 2003. Both were survey studies; one was about Thai traditional postpartum practices and the other was about Thai nurses' beliefs on breastfeeding and postpartum practices (Kaewsarn et al. 2003a; Kaewsarn et al. 2003b). Both studies were conducted at Ubon Rachathani province, Thailand.

Ubon Rachatani is a province located in the North-eastern part of Thailand while Bangkok is in the centre. Total population of Ubon Rachatani is around 1.8 million. Bangkok is the capital city of Thailand, where government offices, large education institutions and hospitals, are to be found. It is the centre of communication, transportation, finance and commerce. Bangkok is the city with the highest population in Thailand. It has approximately 5.6 million in household registration. However, if the nonregistered population is also included it is over 10 million (Ministry of Interior 2013).

Kaewsarn and colleagues recruited 500 women into their study on Thai traditional postpartum practices. The study revealed that the traditional practice of Thais mostly focuses on using 'heat' such as mothers' 'lying by fire' after delivery or using a heat lamp on the perineum, taking warm baths, and having hot drinks while the baby should not have colostrums but should have some boiled water (Kaewsarn et al. 2003a). These practices continue even though there is no evidence with which to support many of these practices. The researchers also indicated that mothers of women and mothers-in-law have a great impact on traditional postpartum practice and breastfeeding (Kaewsarn et al. 2003a). A large sample size is a strong point of the study, whereas not using women who have direct experience of Thai traditional beliefs when developing the content of the tools and pilot tested, is a limitation of the study. Both studies were undertaken in Ubon Rachatani province, where there is a strong belief in traditional post birth practice. The post birth practices of mothers living in the rural part of the country might be slightly different from mothers living in an urban environment such as Bangkok due to different lifestyles. It could be implied that cultural belief about traditional post-delivery practices and lifestyles are important factors that should be considered by health care professionals. Therefore, for successful breastfeeding support mothers and mothers-in-law of the women should be invited to participate in the parental/parenting classes. Improving nurses' attitudes and knowledge regarding breastfeeding should be taken into account in order to successfully support and encourage postpartum women to breastfeed.

In the study of nurses' beliefs regarding breastfeeding and postpartum practices it was found that nurses have some conflicts regarding Thai traditional beliefs and contemporary practices such as the discarding of

colostrums or feeding boiled water to babies whereas half of the nurses support breastfeeding immediately after delivery (Kaewsarn et al. 2003b). Having insufficient knowledge and out-dated information regarding post-delivery care and breastfeeding among nurses were also reported as problems (Kaewsarn et al. 2003b). However, the sample of the study includes registered nurses and technical nurses who have different levels of knowledge regarding breastfeeding, postpartum care and traditional beliefs (Kaewsarn et al. 2003b). There were 20 items in the questionnaire. The researchers developed the questionnaire by reviewing the literature and analysing the interview data from nine Thai women with and without experience of traditional postpartum practices. Using convenience sampling to recruit the participants seemed to be a limitation of this study. A pilot test was conducted with the questionnaire on nine Thai nurses with different backgrounds and specialities which might have had an effect on the comprehensive understanding regarding postpartum care.

Youngwanichsetha (2013) aimed to investigate factors affecting breastfeeding in mothers having a history of gestational diabetes mellitus (GDM). This is a prospective descriptive study. The study used two instruments developed by the researcher: a) the 'Exclusive Breastfeeding Intention Questionnaire' (EBFIGDM) based on the theory of planned behaviour and b) the 'Exclusive Breastfeeding Practice Questionnaire' (EBFPGDM) for postpartum women with a history of gestational diabetes mellitus based on practice guidelines recommended by the WHO. The results found that some demographic data such as age, employment, parity, body mass index, duration of newborn being admitted to the NICU, and mothers' intention to breastfeed, are significant factors affecting mothers with diabetes mellitus when deciding whether to attempt to breastfeed exclusively for six months (Youngwanichsetha 2013). Although the population considers mothers with a history of gestational diabetes mellitus with the successful rates of breastfeeding exclusively for six months at 46.7 per cent, breastfeeding support practices at the hospital should be taken into account and applied to other hospitals. The statistic of the participants who achieved breastfeeding exclusively for six months, was much higher than the national overall rate at 15 per cent in 2012 (OECD/World Health Organization 2012). Therefore, the breastfeeding support practices of the health care professionals at the hospital where the research was conducted and local cultural beliefs and other social support variables regarding breastfeeding might be a significant means in providing support to the women.

Some of the demographic data such as having a history of gestational diabetes mellitus itself might be an issue influencing the success of exclusively breastfeeding for six months. This success could be due to the mothers receiving special breastfeeding support when compared to women without any complications during birth and post-delivery. The study gave no details about hospital policy. For instance, whether they were accredited as BFHI or work in cooperation with the 'SaiYaiRak Hang Krobkrua Project' which might influence the higher rate of mothers achieving six months exclusive breastfeeding was not indicated.

A randomised control trial was used to examine the effect of the Knowledge Sharing Practice with Empowerment Strategies (KSPES) on exclusive breastfeeding with 80 postpartum women. The results found that KSPES helped increase the rate of mothers achieving breastfeeding exclusively for six months in the experimental group at 20 per cent compared to nil in the control group. The study's findings suggest the efforts to improve standard breastfeeding support as provided by the health care professionals at two hospitals where the research was conducted helped increase the number of mothers wanting to breastfeed (Kupratakul et al. 2010). Although the number seems to be significant, there was no explanation about the insignificant differences in breastfeeding rate between the experimental and the control group on day seven and on the third month after birth which might be considered as a limitation. There was no woman who was successful in breastfeeding exclusively for six months in the study therefore consideration should be put on standard breastfeeding support at the hospitals where the research was conducted.

Another qualitative study aimed to explore experiences and factors affecting 29 full-time working mothers to breastfeed. The results showed that 'women having insufficient knowledge regarding breastfeeding' was the most significant issue hindering the achievement of them breastfeeding exclusively for six months. Not having a carer looking after their babies also discouraged mothers from continuing breastfeeding when they returned to work (Tangsuksan & Ratinthorn 2011). However, collecting the data from the women who visited the well-baby and lactation clinics at the hospital could be biased because they tend to breastfeed their babies and this might affect the findings of the study. This study involved one hospital and receiving the standard care

from the health care professionals at the hospital might be another factor influencing mothers in the study to breastfeed.

Among the articles, two conducted in Bangkok confirm the low rate of breastfeeding exclusively for six months that mothers in the capital city are achieving. The low rate highlights the significant need for health care professionals to develop strategies to help increase mothers to initially breastfeed and exclusively breastfeed for six months. The summary of the five articles regarding breastfeeding research conducted in Thailand is presented in Table 2.1.

Table 2.1 Description of Thai articles regarding breastfeeding

Authors & Articles	Description
Kaewsarn et al. 2003a Traditional postpartum practices among Thai women	**Methods:** A survey study used a self-completion questionnaire developed by the authors as a data collection method. The questionnaire consisted with 39 items using dichotomous series answer (yes and no). A descriptive statistic was used to analyse the data. **Participants:** Five hundreds women who were at 6 to 10 weeks post-delivery first visiting postpartum clinic appointment at the Ubon Ratchathani Hospital, Thailand. Age range of the participants is between 18 to 49 years. **Interventions:** none **Outcomes:** Thai traditional postpartum practices are about the notion of 'heat' which includes 'lying by fire', 'avoiding having certain kinds of foods', 'taking hot baths' and 'having hot drinks'. Other beliefs regarding post-delivery activities, such as 'avoidance of shampooing hair, avoiding cold areas, and avoiding having sexual activity' are also noted. Mothers and mothers-in-law seemed to be the most significant people influencing traditional beliefs in the women.
Kaewsarn et al. 2003b Thai nurses' beliefs about breastfeeding and postpartum practices	**Methods:** A survey study that used a questionnaire developed by the authors. Descriptive statistics were used to analyse the data. **Participants:** A total of 372 nurses, of which 231 were registered nurses and 141 were technical nurses working at an ante natal clinic, delivery room, postpartum ward and community health sectors in Udon Ratchatani province, Thailand, were recruited into the study. **Interventions:** none **Outcomes:** The results of the study showed that there is conflict between nurses' Thai traditional beliefs and contemporary evidence-based practice during post-delivery. Approximately 87 per cent of the participants

Authors & Articles	Description
	practiced using a heat lamp on perineum. Over 70 per cent agreed that there should be no sexual contact within eight to 10 weeks post-delivery; they should avoid cold weather, wind and rain, and breast massage. About 60 per cent believed in hydrotherapy while over 50 per cent supported placing hot bags on the abdomen and having hot drinks. Twenty to forty per cent agree that women should stay home, do body massage, practice squatting, apply a hot compress on breasts, take a warm bath and avoid having certain kind of foods, which are believed to have a counter benefit mother and baby. About two to 10 per cent agreed on lying by fire, doing no house work, sitz bath, no exercise, discarding colostrums and not to wash their hair.
Youngwanichsetha 2013 Factors related to exclusive breastfeeding among postpartum Thai women with a history of gestational diabetes mellitus	**Methods:** A prospective descriptive research was undertaken at two tertiary hospitals in Southern Thailand. A purposive sampling technique was used to recruit the postpartum women with a history of gestational diabetes mellitus admitted to the hospital. Three questionnaires were used to collect the data including a demographic data form; the Exclusive Breastfeeding Intention Questionnaire (EBFIGDM), which embedded the Theory of Planned Behaviour and was developed by the author. Thirdly, the Exclusive Breastfeeding Practice Questionnaire (EBFPGDM), based upon the WHO's breastfeeding practice guidelines and recommendations was used. It was also developed by the author. Pearson and Spearman correlation, t-test, binary logistic regression was the statistics used to analyse the data. **Participants:** One hundred and fifty women with a history of gestational diabetes mellitus were approached and 120 completed the participation (80 per cent response rate). **Interventions:** none **Outcomes:** Maternal age, employment, parity, body mass index, duration of admission of the babies at NICU and intention to exclusively breastfeed for 6 months are significant factors related to breastfeeding exclusively for 6 months.
Kupratakul et al. 2010 A randomised controlled trial of knowledge sharing practice with empowerment strategies in pregnant women to improve exclusive	**Methods:** A randomised control trial (RCT) examined the effect of the Knowledge Sharing Practice with Empowerment Strategies (KSPES) based on Gibson's theory on improving 6-month exclusive breastfeeding in postpartum women. Purposive sampling was used to recruit the participants into the study. A double blind technique was used in allocating the participants to each group. Telephone interviews were used to follow up participants' rate of breastfeeding. Chi-square, Mann-Whitney U test, t-test and unpaired t-test were the statistics used for analysis of the data. **Participants:** Total of 80 women: 40 participants each in experimental and control group. The participants were pregnant women over 32 week

Authors & Articles	Description
breastfeeding during the first six months postpartum	gestational age visiting the ante natal clinic at Chulalongkorn Memorial Hospital and Theptarin Hospital. **Interventions:** The participants in the control group received routine standard care which include two times being informed about breastfeeding at antenatal and post-delivery using KSPES, while the participants in the experimental group received routine standard care + KSPES (based on Gipson's theory). The participants in the control group received routine intra partum and postpartum care. Telephone interviews were undertaken to assess the rate of breastfeeding on days 7 and 14, and during months 1, 2, 3, 4, 5 and 6. **Outcomes:** KSPES significantly increases the rate of mothers who successfully breastfed exclusively at day 14, and months 1, 2, 4, 5 and 6. Twenty per cent of the participants in the experimental group achieved breastfeeding exclusively for six months when compared to nil in the control group.
Tangsuksan & Ratinthorn 2011 Experiences and contextual factors related to exclusive breastfeeding in full-time working mothers	**Methods:** A prospective qualitative research exploring women's experiences and contextual factors influencing exclusive breastfeeding by full-time working mothers was conducted. A purposive sampling technique was used to recruit the participants into the study. Semi-structured face-to-face interviews were used to collect the data. Content analysis was used to analyse the interview data. **Participants:** Twenty-nine mothers who visit the well-baby and lactation clinics at Sririraj Hospital were the participants in the study. **Interventions:** none **Outcomes:** Four main themes emerged from the analysis: insufficient information for breastfeeding during work, struggles in maintaining sufficient breast milk for six months, seeking information to facilitate breastfeeding and support from family members and child care. Following up breastfeeding condition post-discharge from the hospital using telephone interviews could encourage mothers to breastfeed.

2.4 Critical review of the evidence

The five steps employed in conducting a critical appraisal are: (1) comprehension (2) comparison, (3) analysis, (4) evaluation and (5) conceptual clustering (Grove & Burns 2008). The critique of the research process takes into account title, abstract, literature review, methodology, results, discussion

and interpretation and recommendations, all of which were adopted and used in the process of critical appraisal and synthesis in this study due to their flexibility and potential to be employed to critique both qualitative and quantitative evidence (Parahoo 2006). Each article was analysed and key points such as authors' names, publication year, country in which the research was conducted, design, participants, data collection method, data analysis, and results were illustrated in tabulated format. The example of a critical appraisal is illustrated (see Appendix C). The four main categories that emerged from the analysed articles are: benefits of breastfeeding, factors affecting breastfeeding, breastfeeding interventions, and breastfeeding assessment tools.

2.4.1 Benefits of breastfeeding

Colostrums, yellowish milk produced by mammary glands, are excreted during the first days post-delivery (Royal College of Midwives 2002; Riordan 2010b). It contains a high density of antibodies which can be absorbed directly into the baby's system. This passive immunity helps fight against infectious disease during children's early years. IgA, an immunoglobulin found in breast milk, plays a key role in protecting babies from gastrointestinal, as well as respiratory tract, infections (Meyers 2009). Prebiotics are component substances found in breast milk which help strengthen healthy bacteria naturally found in the gastrointestinal tract and which fight against harmful organisms such as Escherichia coli (E. coli) (Hale 2007). Likewise, breastfeeding can reduce the risks of diarrhoea in full term and prevent necrotising enterocolitis in preterm babies (Hale 2007; Meyers 2009). The studies underpinning the sources of this information are widely accepted as good sources of evidence.

A clinical review from multiple sources of databases found that babies who were exclusively breastfed for at least four months have a diminished risk of lower respiratory tract infection (Hoddinott et al. 2008). A cohort study from Israel conducted from December 1994 to 1997, which recruited 238 babies with a follow up after 18 months, found that even partial breastfeeding for over three months could prevent infections caused by enteric agents in babies (Bilenko et al. 2008). Without doubt, preventing both respiratory tract and

gastrointestinal tract infections can be claimed as significant short term benefits to six months exclusively breastfed babies (Hale 2007; Kramer & Kakuma 2009; Meyers 2009). Overall, breastfed babies have lower death rates when compared to formula fed babies (Kramer & Kakuma 2009; World Health Organization 2011; Horta & Victoria 2013).

Although breast milk is highly beneficial for babies, numerous proposed benefits of breastfeeding are still inconclusive. For instance, otitis media, one of the most common illnesses occurring among young children, is found less frequently in breastfed babies than those who are bottle-fed (Bilenko et al. 2008; Stevens et al. 2008; Meyers 2009; Rennick et al. 2013). A clinical review supports the reduction in the risk of lymphocytic leukaemia and acute myelogeneous leukaemia in children who are breastfed (Hoddinott et al. 2008). However, there is only one meta-analysis of 14 case-controlled studies of good or moderate quality (Hoddinott et al. 2008). Challenges in recruiting cases of babies with leukaemia who are exclusively breastfed might limit the number of studies in this area. The WHO has confirmed that benefits towards atopic eczema, or other atopic diseases including asthma, were not the result of six months exclusive breastfeeding. This conclusion is based on the results from a systematic review (Kramer & Kakuma 2009; World Health Organization 2011). The widely accepted sources of the evidence used, such as WHO and Cochrane database, suggested that breastfeeding exclusively for six months does not significantly reduce the risk of allergic diseases (Kramer & Kakuma 2009; World Health Organization 2011). One reason why a conclusive reduction in allergic disorders was not found could be that there were only a limited number of high quality pieces of research available.

A systematic review, which included a meta-analyses and a large RCT showed inconsistent results on reducing blood pressure and adipose measures at 6.5 years (Horta et al. 2007; Kramer et al. 2007). A recent cross-sectional analysis of 1,026 Canadian children found that exclusive breastfeeding for three months or more could prevent obesity in pre-schoolers (Twells & Newhook 2010). However, a longitudinal study involving 2,553 young adults found that there was no significant association between breastfeeding for four months and Body Mass Index (BMI) at 21 years (Shields et al. 2010). Another unclear issue is the effect of breastfeeding on diabetes. The evidence found that breastfeeding for three months or more could reduce the risk of diabetes in

childhood (Type 1 diabetes) (Hoddinott et al. 2008; Stevens et al. 2008). However there is no confirmation of the effect of breastfeeding on reducing the risk of Type 2 diabetes (Horta et al. 2007; Hoddinott et al. 2008). Among the articles mentioned earlier, the quality of studies as well as researchers' bias in recruiting the participants, are considered to be significant aspects affecting the validity of the results. Some of the characteristics such as genetics, eating habits and lifestyles are significant confounding factors which reduce the effect of the benefits of breastfeeding in preventing the onset of becoming overweight and the development of obesity in young adults.

The systematic reviews from the Cochrane database are placed at the forefront for the validity and reliability of their results (Melnyk & Fineout-Overholt 2005). This source concludes that breastfeeding could prevent infection of both respiratory and gastrointestinal tracts although the advantages of breastfeeding on blood pressure level, blood cholesterol, risks of obesity and risks of diabetes are still considered unclear (Horta et al. 2007; Kramer & Kakuma 2009; World Health Organization 2011).

It has also been suggested that breast milk is associated with greater intellectual ability (Henschel & Inch 1996; Kramer et al. 2008; Steer et al. 2010). Polyunsaturated fatty acid (PUFAs), docosahexaenoic acid (DHA) and arachidonic acid (AA) are all substances found in high concentrations in breast milk which are also crucial elements in the functioning of brain cells (Henschel & Inch 1996; Riordan 2010b). Likewise, breastfed babies have higher cognitive ability in verbal skills and overall developments than non-breastfed children (Kramer et al. 2008; Steer et al. 2010). There is evidence supporting a positive link between breastfeeding over a one month period and enhanced intelligence levels in the early years of life up to young adulthood (Horta et al. 2007). This may be due to special substances contained in breast milk which are beneficial for the functioning of the brains of babies. Therefore breastfed babies tend to achieve higher intelligence quotient scores (IQs) than those who have been formula-fed. However, some studies argued that breastfeeding might not be a significant factor affecting children's intelligence (Drane & Logemann 2000; Jain et al. 2002; Der et al. 2006; Jones & Rattray 2010). This is consistent with meta-analyses and information within the Cochrane database (Hoddinott et al. 2008; Kramer & Kakuma 2009). The reasons contributing to this uncertainty might relate to factors such as maternal literacy, race, poverty or home

environment that could minimise the magnitude level of statistical significance of the advantages of breastfeeding (Der et al. 2006; Hoddinott et al. 2008; Groen-Blokhuis et al. 2013; Gibbs & Forste 2014). Indirect behaviour of mothers, for example, touching during nurturing could stimulate babies and the intimacy of bonding helps mothers provide caring to babies as well (Fletcher 2002). Insufficient nutrient intake from mothers' food or mothers' exposure to a highly polluted environment could also have negative effects on the quality of breast milk (Hale 2007; Mead 2008). Weighing the evidence, most researchers support the view that breast milk is the best food for the optimal development of babies' brain function. However, without the proper promotion of child development according to their ages and sufficient nutrients based upon children's requirements, breastfeeding might not be the only influence on increasing children's cognitive abilities. Effects on babies' intellectual abilities therefore should be cautiously communicated while providing facts as well as helping to motivate their mothers to breastfeed (Kramer et al. 2008; Steer et al. 2010).

While the major interest in the advantages of breastfeeding is for babies, there are also advantages for mothers. Breastfeeding helps stimulate oxytocin, a biological substance that the pituitary gland produces, which helps promote uterine contraction after delivery. This helps in preventing postpartum haemorrhage which is the most common cause of death among mothers during post-delivery (Hoddinott et al. 2008; Kramer & Kakuma 2009). It is also suggested that breastfeeding can decrease the mothers' risks of other chronic diseases such as high blood pressure, hypercholesterolemia, and cardiovascular disease (Meyers 2009). Genetics and life styles during adulthood might have a high impact on vascular diseases. The results from two meta-analyses and a systematic review indicated that mothers who breastfeed their babies for a longer period had lower risks of breast cancer than those who did not breastfeed (Hoddinott et al. 2008). A clinical review reported that breastfeeding mothers with no history of gestational diabetes have a significantly decreased risk of diabetes when compared to those who did not breastfeed (Hoddinott et al. 2008; Meyers 2009). Among the long term health benefits of breastfeeding to mothers, decreasing risks of breast cancer is the most widely accepted due to the research evidence on the subject coming from well-designed studies. There were consistent findings which supported this belief in later periods. However, the benefits such as reduction in the risk of

breast cancer or other disorders have not been confirmed in the systematic reviews from the Cochrane database (Kramer & Kakuma 2009). The short term benefit of breastfeeding in reducing the risk of postpartum haemorrhage is accepted while other benefits to breastfed mothers need to be updated from high quality articles prior to using them to inform women about the merits of breastfeeding.

Breastfeeding seems to have a relationship with decreasing the risk of mothers experiencing postnatal depression. However, without screening for depressive symptoms at the base line and lacking a definition of the classifications of breastfeeding, the results are still debatable (Hoddinott et al. 2008; Donaldson-Myles 2011). Only short term benefits such as prolonged menstruation periods and gradual weight loss are confirmed to be advantages for six months exclusive breastfeeding mothers (Kramer & Kakuma 2009).

In addition to this, breastfeeding is economical. During the early years of a child's life the outlay on purchasing formula milk could be a significant expenditure for a family. In 2000 most American families spent between US$ 78 to US$92 (£47 to £56) monthly on formula milk for each three-month-old baby (Oliveira & Prell 2004). Based on this researcher's experience and observation, Thai mothers spend between 3,000 and 5,000 baht (£60 to£100) each month on formula milk (Thai Breastfeeding Organization 2012). The higher expenditure of Thai parents might be because of higher taxes on imported dairy products. However, breastfeeding is not cost free because women need to have a sufficiently healthy diet to produce quality breast milk. Nevertheless, this cost is considered minimal when compared to the money, time and energy put into preparing bottled milk. In fact, breast milk is always available and convenient. Mothers who breastfeed do not need to prepare the milk or the bottles or have to wash up used bottles or risk infection due to poor hygiene. The money and time spent on breastfed babies may also be less than formula fed children due to the breastfed baby having a lower risk of contracting infectious diseases during its early years. They have less chance of being admitted to the hospital thus saving expenses of hospital bills and earning time when the parent is absent from work to look after the baby. Conversely, mothers intending to breastfeed their babies are faced with some drawbacks. For instance, they could experience pain from sore and/or cracked nipples and the engorgement of breasts (Renfrew et al. 2007). However, these

drawbacks are often short-term and can be resolved by best practices. The benefits of breastfeeding for babies and mothers' health, as well as the family's economic condition, are evident while indirect advantages which are related to social aspects should also be taking into account. These facts should be conveyed to women at the onset of pregnancy in order to help increase their intention and motivate them to breastfeed.

To sum up, breast milk has been acknowledged as the best food for babies, while more evidence is still needed to confirm the long term benefits of breastfeeding for both children and mothers (World Health Organization 2011). Economic reasons due to lower rates of hospitalisation from infectious diseases during children's early years as well as savings on powdered milk are among the direct benefits for 'breastfeeding families' (World Health Organization 2011; Thai Breastfeeding Organization 2012). Additionally, indirect advantages of breastfeeding include further opportunities for creating quality human resources. Healthy babies have more capability in physical and mental development.

From my experience, some staff has misunderstood the benefits of breastfeeding. Therefore, it is necessary that the health care professionals, in particular nurses/midwife working with pregnant women and postpartum women, have sufficient knowledge and up-to-date information from reliable sources prior to conveying that information to the women. In recognition of the misunderstanding and to avoid over or under statements about the benefits of breastfeeding, summarised information regarding the benefits of breastfeeding was included within the research project presented in this thesis and in the leaflet to help facilitate nursing staff and/or other health care professionals while using the tool.

2.4.2 Factors affecting breastfeeding

This section presents the evidence base that underpins the factors affecting breastfeeding. The results can be grouped into two main categories: individual characteristics and social related factors.

2.4.2.1 Individual characteristics

There have been studies which indicated that factors affecting breastfeeding include age, gravida, delivery method, maternal literacy level, babies' condition and attitude toward breastfeeding. Older mothers seem to have higher rates and duration of breastfeeding (Winterburn 2007; Dare & Joseph 2011; Dennis et al. 2013; Dachew & Bifftu 2014). Even though first time mothers appear to have greater commitment to breastfeed than second time mothers, having previous experience positively affects their perception to breastfeed (Winterburn 2007; Dennis et al. 2013; Kazue 2013). This implies that it might be difficult for second time mothers to breastfeed if they did not do so the first time. This might be because a mother who is busy with the second child finds it easier and quicker to do the things that she has experienced before. Higher maternal literacy levels have been associated with prolonged breastfeeding (Dare & Joseph 2011; Bouras et al. 2013; Bai et al. 2014). A longitudinal cohort study conducted in Hong Kong, which recruited 1,277 mother-baby pairs, showed that mothers with a university degree have a two and a half times better chance to continue breastfeeding after they return to work than those with an education level that is secondary or below (Bai et al. 2014). The explanation for this might be because the nature or type of work which the mothers with high educational level do is different from the work that lower educated mothers do. Therefore, they could better manage their time and work to sustain breastfeeding. It may also be that the more educated women are more likely to have accessed the best evidence which advocates breastfeeding and so the women have more determination to do what the evidence indicates.

Mothers who had the 'intention to breastfeed' appear to have a higher rate of exclusive breastfeeding for six months than those who did not have 'intention' (Ceriani et al. 2003; Gilmour et al. 2009; O'Connor et al. 2009; Bouras et al. 2013; Loke & Lai-Kwai 2013; de Jager et al. 2014). The reasons for this might be because they perceived increased benefits of breastfeeding, especially to their baby's well being. Those mothers with high 'intention to breastfeed' make more effort address their problems, such as asking people with breastfeeding experiences to help, so they could achieve their expectation or intention to breastfeed. However, they may feel discouraged when facing the reality of initially breastfeeding such as the problem of nipple soreness which is the most common discomfort for mothers (Ceriani et al. 2003; Gilmour et al.

2009; O'Connor et al. 2009; Bouras et al. 2013; Loke & Lai-Kwai 2013; de Jager et al. 2014).

Mothers who perceived high self-efficacy seemed to have a higher rate of success in breastfeeding exclusively for six months than those who have low levels of self-efficacy (Bouras et al. 2013; Loke & Lai-Kwai 2013; de Jager et al. 2014). Breastfeeding is natural. Therefore, mothers with no experience in breastfeeding may feel that breastfeeding is simple and easy while some might expect to have copious breast milk during early post-delivery. Dealing with difficulty in helping the babies latch on to the breasts or not having copious breast milk to feed babies immediately post birth may decrease the mothers' perception on their ability to breastfeed. Providing sufficient practical information regarding breastfeeding and early support to mothers by skilled health care professionals, could help decrease the feeling of difficulty, as well as increase mothers' self-efficacy to breastfeed.

In addition to the above, methods of birth could be obstacles for mothers. Mothers who have had a Caesarean section (C/S) have more difficulty in initial breastfeeding. However, delivery type does not affect the overall breastfeeding rate or duration (Cakmak & Kuguoglu 2007; Pe'rez-Ri'os et al. 2008; Zhu et al. 2013; Raghavan et al. 2014; Suzuki 2014). This might be because mothers with C/S delivery have wound pain and therefore might have difficulty positioning a baby to breastfeed. However, the hospital environment, for example a BHFI environment, might have a higher impact than methods of birth in initial breastfeeding. Admission of babies to hospitals or special care units due to severe illnesses and abnormalities can affect breastfeeding (Cox et al. 2014; Suzuki 2014). For instance, babies who have a craniofacial anomaly or cardiac defects may have difficulty in breastfeeding because of respiratory problems (Wallis & Harper 2007). Although these demographic characteristics are still not concluded as factors affecting the cessation or success of initial or exclusive breastfeeding for six months, the association of such factors and breastfeeding represents the risk for an early cessation of breastfeeding. Postpartum women like pregnant teenagers who are primigravida and having to undergo a C/S delivery or having low maternal literacy with low intention and self-efficacy to breastfeed might have a higher possibility to cease breastfeeding. Health care professionals should consider these factors when providing breastfeeding support for individual mothers. Different cultural

contexts might exert different effects on mothers' breastfeeding behaviour. Therefore, it is necessary for the health care professionals to have a broad understanding about mothers with a high risk of cessation of breastfeeding and plan to provide breastfeeding support according to the individual mothers' needs, conditions and lifestyles. Although there is evidence of the factors that influence breastfeeding success, this is predominately in developed or Western cultures. There are limited studies that look into factors affecting breastfeeding in Thai women. Therefore, one of my research aims is to investigate factors affecting breastfeeding among Thai women.

2.4.2.2 Social related factors

A) Family support

Studies have indicated that spouse support is one of the factors which affect breastfeeding (Clifford & McIntyre 2008; Putthakeo et al. 2009; Racine et al. 2009; Dashti et al. 2010). Women with no spouse support tend to discontinue breastfeeding relatively quickly (Clifford & McIntyre 2008; Racine et al. 2009). It was found that mothers in the United States, from low income families receiving no spouse support, tend to discontinue breastfeeding sooner than those who receive spouse support (Racine et al. 2009). Spouse support also positively affects breastfeeding behaviour of both Laotian and Kuwaiti mothers (Putthakeo et al. 2009; Dashti et al. 2010). The studies are mainly quantitative research, with large sample sizes and were carried out on diverse groups from different cultures and backgrounds. The findings therefore may also be applicable to Thailand.

In addition to this, a qualitative exploratory study showed that new Australian spouses desired to be involved in supporting breastfeeding (Tohotoa et al. 2009). Other family members, such as grandmothers, could also exert an effect on breastfeeding (Clifford & McIntyre 2008; Grassley & Eschiti 2011; Choudhry & Wallace 2012; Schmied et al. 2012; Liu et al. 2013). A meta-ethnographic synthesis which searched the qualitative and quantitative articles published during 2000 to 2012 using the critical appraisal skill programme (CASP) tool to assess the quality, found that female relatives have an important role in supporting breastfeeding for mothers who migrated from developing countries to Western countries (Schmied et al. 2012). The importance of

mothers-in-law or female relatives' role in either supporting or discouraging is consistent with a qualitative study in 2012 that revealed that conflict on breastfeeding between South Asian mothers-in-law and women, who live in the UK, could influence mothers' decision to cease breastfeeding (Choudhry & Wallace 2012). It suggested that partners and mothers-in-law seemed to have dominant role in child caring among women of Western and Asian background. Quantitative research conducted in a rural area of Thailand reported that mothers and mothers-in-law are the most influential people in postpartum practices and breastfeeding (Kaewsarn et al. 2003a).

Different factors have to be taken into account for Thai mothers, particularly those who work in cities. Due to changes in family lifestyle nowadays, both husbands and wives usually have jobs. Many families that migrated from rural to urban environments, choose to send their babies back home to let their grandparents or relatives help raise them. Moreover, the lack of support from members of the older generation due to living in the nuclear family style of many city residents causes such difficulties as the lack of a care giver to help look after the baby when the mother has to return to work. This induces partners to decide to send their babies to day care centres or hire a nanny to look after their babies at home and to use a breast milk substitute, thinking that it would be more convenient for the care givers. A perception of having support could have a positive influence on breastfeeding (Brand et al. 2011). Therefore, spouses or other family members who are taking the responsibility of looking after the children are the key persons influencing breastfeeding. This concept is consistent with a recent qualitative study conducted at a different tertiary hospital in Bangkok, Thailand which reported that family members and child care workers are factors impacting on full-time breastfeeding mothers (Tangsuksan & Ratinthorn 2011). A study conducted in Ubon Rachatani province, Thailand revealed that mothers and mothers-in-law of women seemed to have influence on both breastfeeding and child rearing, while a qualitative study recruiting 29 full time mothers conducted in the inner city area of Bangkok, shows a different aspect (Kaewsarn et al. 2003a; Tangsuksan & Ratinthorn 2011). Having to return to work along with a lack of carer to help take care of babies seemed to be a major factor discouraging breastfeeding. By inference, it is important to find out what affects women's breastfeeding behaviour.

B) Employment

Employers can exert influence upon breastfeeding habits as well. It was reported that approximately 43 per cent of the American workforce is female, of which half are mothers with infants under one year old (Calnen 2010). Numerous studies indicated that maternal leave is a significant factor resulting in decreased or terminated rates of breastfeeding (Renfrew et al. 2007; Baker & Milligan 2008; Racine et al. 2009; Calnen 2010). Mothers who have to return to work by between the second and fourth months of their maternity leave have a higher risk of terminating breastfeeding (Racine et al. 2009; Dare & Joseph 2011; Dachew & Bifftu 2014). Although the studies were mostly conducted in Europe with three further studies being conducted in the US, a prospective study in Bangkok, Thailand, also resulted in a similar finding. That is that the duration of maternity leave is an important factors affecting breastfeeding among Thai full time mothers (Tangsuksan & Ratinthorn 2011).

Even though many employers have good knowledge of the benefits of breastfeeding, they tend not to provide facilities to support breastfeeding mothers at their workplaces (Clifford & McIntyre 2008; Tsai 2013). About 74 per cent of workplaces in the US during the past 25 years (1984-2009) did not offer a reserved room for their employees to express breast milk (Grummer-Strawn & Shealy 2009). Thailand statistics showed that women make up 45 per cent of the total workforce (Statistical Forecasting Bureau 2012). The results of a research study found that some of the workplaces were not flexible about time to express breast milk (Tangsuksan & Ratinthorn 2011). This study also found employers and colleagues' attitudes discouraged full-time working women to breastfeed. Breastfeeding or expressing breast milk is regarded as a personal issue (Tangsuksan & Ratinthorn 2011). The reasons for this could be that a business's main focus is on profit and preparing rooms or providing time for mothers to breastfeed might not prove to be directly cost effective for the company. Therefore, very limited consideration was given to this issue by employers. It is also implied that while long-term benefits for mothers and babies are cost effective, insufficient family income and the possibility of employers' businesses being adversely affected seem to be the short-term challenges for breastfeeding mothers when at work.

C) Media and advertisements

Media are an important issue affecting mothers' behaviour and beliefs (Foss 2010). The marketing of and by the formula milk industry has had a powerful impact on the family as well as society (Dykes 2006). The benefits of formula milk, based on research, could influence mothers' perceptions. For instance, adding docosahexaenoic acid (DHA) and arachidonic acid (ARA) can increase brain development while increasing Prebiotics can have a beneficial effect on the elimination system of babies when compared to formula milk that is without these substances (Fitzgerald 2010; Liu et al. 2013). However, women do not appreciate the fact that breastfeeding provides the best food for their babies (World Health Organization 2008; World Health Organization 2014a).

Sponsorship is another strategy promoting their milk products. For example, giving out free samples of breast milk substitute, supplying free milk for sick babies admitted to hospitals and sponsoring conferences on maternal and child health are some of the strategies companies producing breast milk substitutes use to market their products (Thai Breastfeeding Organization 2007). Heavy investment on television advertising by formula milk companies to convey the message that their brands are beneficial to babies' health is another business strategy that discourages breastfeeding (Thai Breastfeeding Organization 2007). In comparison, babies' health problems such as being allergic to cows' milk protein and the contamination of bottles are not advertised (Riordan & Smith 2010). This could imply that the positive image created by formula milk producers could be a barrier to promoting breastfeeding.

In 2004, 27 countries passed a law to use the International code of Marketing of Breast Milk Substitutes, while many other countries agreed to use the law partially or voluntarily. At present the Thai government has not yet passed law to restrict advertisements on breast milk substitutes (Thai Breastfeeding Organization 2007; World Health Organization 2008). Formula milk has been used as a substitute for breast milk for many decades in Thailand and many health care professionals may have positive attitudes toward formula milk. They might have misconceptions about the benefits of formula milk based on advertisements in many kinds of media and may even have been influenced to provide formula milk in bottles routinely as opposed to practising based on evidence based knowledge. While waiting for the law to be passed, other

sources and organizations which promote breastfeeding, such as the Thai Breastfeeding Organization and 'SaiYaiRak Hang Krobkrua Project', should be more proactive in providing the facts about the benefits of breastfeeding and the disadvantages of formula milk to mothers in particular and society in general.

D) Health care professionals

Health care professionals can and do play a key role in promoting breastfeeding. Several studies from developed countries in Europe indicated that support by health professionals significantly helps to increase breastfeeding duration (Britton et al. 2007; Dyson et al. 2008; Christopher 2009; Racine et al. 2009; Abba et al. 2010; Nickel et al. 2013). Studies from Asian countries also presented similar results (Su et al. 2007; Awano & Shimada 2010; Kupratakul et al. 2010). A randomised controlled trial involving 450 women in Singapore from 2004 to 2005 indicated that mothers who had received postpartum support from breastfeeding counsellors had higher rates of achieving six months of exclusive breastfeeding when compared to mothers who received routine care (Su et al. 2007). However, there was a rather high number of drop-outs and loss of follow up (83 cases) which is considered the weakness of the study. The majority of participants (48 per cent of the research population) were Malays and this might limit the generalisation of the findings of the study regarding other ethnicities (Su et al. 2007). Among health care professionals, breastfeeding counsellors and midwives seem to be the personnel who are most involved in providing breastfeeding support in many countries. However, the case is different in Thailand where the main health care providers who offer breastfeeding support are registered nurses. Different educational systems could provide different levels of knowledge and skills in providing breastfeeding support. In Thailand, nurses who completed a four-year nursing programme and passed a 'board exam' would register for 'the practitioner in nursing and midwifery licence (first class)' (Ingram et al. 2011; Thomson et al. 2012). This could be one of causes of limited knowledge, regarding breastfeeding support, among nurses. This suggests that those who work in postpartum areas need to take an additional study programme in breastfeeding as their initial training programme may not have given enough attention to breastfeeding topics.

Studies have suggested that health care professionals may have insufficient knowledge about breastfeeding. Limited knowledge about breastfeeding is the main drawback among health care professionals (Mozingo et al. 2000; Su et al. 2007; Clifford & McIntyre 2008; Abba et al. 2010). A phenomenological study from the US in 2000, a RCT in Singapore in 2007, exploratory qualitative research in Niger, West Africa in 2010 and review articles in 2008 all suggested that limited knowledge and skills regarding breastfeeding support among health care professionals is a global problem. Lack of knowledge regarding breastfeeding among health care professionals could result in the provision of contradictory or conflicting advice to mothers (McInnes & Chambers 2008; Laantera et al. 2011). A qualitative review from reliable databases such as CINAHL, Medline and Cochrane, which included 40 qualitative articles published during 1950 to 2008, revealed that conflicting advice from health care professionals is one of the barriers for successful breastfeeding (Laantera et al. 2011). Moreover, qualitative research conducted in Bangkok also found that having insufficient knowledge about how to continue breastfeeding at work, maintaining sufficient breast milk and seeking for more information to facilitate breastfeeding are discouraging factors to full-time breastfeeding mothers (Tangsuksan & Ratinthorn 2011).

Health care professionals' characteristics, such as attitude toward breastfeeding, communication skills and their relationship with the mothers, are important issues when providing breastfeeding support. Studies suggested that equivocal attitudes towards breastfeeding are influential drawbacks among health care professionals (Mozingo et al. 2000; Su et al. 2007; Clifford & McIntyre 2008; Abba et al. 2010). A piece of observation-based research found that some health care staff are misinformed about and/or do not believe in breastfeeding and, therefore, practice ill-informed breastfeeding support and fail to encourage mothers to breastfeed (Abba et al. 2010). However, this study involved different hospital staff such as doctors, nurses and health care workers and this may influence different levels of understanding regarding breastfeeding (Abba et al. 2010). A focus group conducted in the north-east of England in 2006 and a qualitative review in 2011 also suggested that health care professionals with a negative attitude towards breastfeeding was one of the themes emerging from the synthesis of qualitative articles (McFadden & Toole 2006; Laantera et al. 2011). A qualitative synthesis of articles published between 1990 and 2007, which were mainly based on Western countries and a

recent metasynthesis of mothers' experiences in relation to breastfeeding support conducted in 2011 identified a new theme that emerged from the studies concerning 'health care relationship' (McInnes & Chambers 2008; Schmied et al. 2011a). A recent review on papers published between 1995 and 2011 focused on developing health care professionals' communication skills in providing breastfeeding support to the mothers (Demirtas 2012). This infers that even though support from health professionals could positively influence breastfeeding, health care providers' negative attitudes and insufficient knowledge might have negative effects upon the mothers who wished to breastfeed. Prior to supporting mothers to breastfeed, it is important to ensure that the health care professionals, in particular those who work with pregnant women and babies, have updated knowledge and believe that breast milk is the best. They then could obtain a better understanding of the topic, transfer their information, exude a positive attitude toward breastfeeding, follow best practice and increase their ability to communicate the information to mothers and their helpers with the skills to support mothers.

The policy in promoting breastfeeding might be another issue affecting its practice. The 'Ten Steps to Successful Breastfeeding' has been adopted and implemented at hospitals around the world during the past two decades, and numerous studies have indicated that BFHI can and does also encourage breastfeeding (Merten et al. 2005; World Health Organization 2006; Schmied et al. 2011b; Venancio et al. 2011). However, the overall rate of mothers worldwide who exclusively breastfeed their children for six months has still not met the established goal (World Health Organization 2010b). From this result it may be inferred that, even though the BFHI policy seems to benefit hospitals' health care professionals in facilitating support for mothers, in practice barriers remain and continue to influence the negative breastfeeding rate globally. From a feminist perspective, this might be because less attention is put on promoting issues associated with motherhood. In particular, breastfeeding is seen as a political project for the rights of women. For this reason, breastfeeding is not prioritised in many countries around the world (Huasman 2004). Also, the rationale for not prioritising breastfeeding might be because providing breastfeeding support is short term and costly in terms of the numbers of staff needed and because of the educational requirements, while the long term benefits of breastfeeding on babies' health are not obvious or easily seen. This 'low profile' also highlights the significance of health care

professionals having positive attitudes toward translating policies to promote breastfeeding, such as the 'Ten Steps to Successful Breastfeeding', into practice (World Health Organization/United Nations Children's Fund 1989; World Health Organization 2006).

In conclusion, in order to encourage and support mothers in nurturing their babies, barriers to breastfeeding should be removed or minimised, whereas supporting factors should be maximised. Having sufficient knowledge about breastfeeding and using best practice as a guide to providing care are necessary for health care professionals. Positive attitudes toward breastfeeding should also be encouraged through education; the subject should be well understood by health care professionals so that they will have a clear understanding about breastfeeding prior to educating mothers or others. Formula milk should be accepted as a substitute for breast milk only for a specific reason. Individual characteristics should be taken into account when providing holistic care to mothers. Breastfeeding support for working mothers is another issue that should be a topic for major consideration. Cooperation between health care professionals and communities could help reduce obstacles and inconveniencies for mothers after being discharged from hospital. Legal support, such as extended maternity leave with pay and workplaces where there are high numbers of women in the workforce, should provide facilities such as private areas or day care to help encourage women to continue to breastfeed when they return to work. All of the factors mentioned above will shape the social trend to move forward in promoting breastfeeding, particularly in Thailand. These factors also highlight the significance of conducting this study, in order to better understand factors affecting the breastfeeding behaviour of women presently living in Bangkok, Thailand.

2.4.3 Breastfeeding interventions

A Cochrane systematic review reported that education sessions during the antenatal period are an effective strategy in increasing the initial take-up and duration of breastfeeding (Lumbiganon et al. 2012). A recent systematic review which evaluated the included articles following the Cochrane's criteria indicated that breastfeeding support post-birth, in particular at the women's houses, seemed to have the highest impact in supporting mothers to

breastfeed (Skouteris et al. 2014). Both systematic reviews suggested that there is still no specific breastfeeding intervention to help provide breastfeeding support to mothers (Lumbiganon et al. 2012; Skouteris et al. 2014). However, providing knowledge regarding breastfeeding appeared to be a powerful strategy in helping to increase the rate of mothers achieving breastfeeding exclusively for six months or longer (Lumbiganon et al. 2012; Skouteris et al. 2014). The main reason for not being able to identify effective breastfeeding interventions is because of limitations in conducting high quality studies (Lumbiganon et al. 2012; Skouteris et al. 2014). The significance of providing information in relation to breastfeeding is confirmed by other systematic reviews which concluded that providing education sessions regarding breastfeeding in groups and/ or to individual mothers is the key element in increasing the rates of mothers who exclusively breastfeed for six months (Pate 2009; Haroon et al. 2013).

Globally, BFHI and the 'Ten Steps to Successful Breastfeeding' are recommended as strategies to promote breastfeeding in hospitals around the world (World Health Organization 2010b). The results from the systematic reviews from the Cochrane database in 2012 and two systematic reviews from Renfrew and colleagues in 2009 and 2010, reported that 'rooming-in' and 'skin to skin contact', seemed to help mothers to breastfeed (Renfrew et al. 2009; Renfrew et al. 2010; Jaafar et al. 2012; Moore et al. 2012). However, with only a limited number of high quality studies available for the systematic reviews, evidence of the effect of rooming-in or skin to skin contact which considered best practice cannot be considered conclusive at present (Jaafar et al. 2012; Moore et al. 2012). In Thailand, not every hospital practices rooming-in for the mothers and babies. This is particular true among the university hospitals. Influence from policy makers focusing on promoting breastfeeding, adopting rooming-in and encouraging skin to skin are important steps for hospitals throughout the country to achieve accreditation as BFHI.

Systematic reviews from the Cochrane database found that support from both professionals and lay persons, such as family support, is the most effective strategy to extend breastfeeding, rather than only receiving support from a single source (Britton et al. 2007; Renfrew et al. 2012). There were 34 RCTs from 14 countries in 2007 and 67 studies from 27 countries were reviewed in 2012 (Britton et al. 2007; Renfrew et al. 2012). It could be concluded from the

analysis of the studies that any support offered to mothers based upon their needs and visits on a regular basis from health care professionals seemed to help support breastfeeding performance (Renfrew et al. 2012).

Studies investigating the provision of breastfeeding support are published worldwide. Fathers' participation in breastfeeding seemed to be able to increase mothers' success in breastfeeding exclusively for six months in many studies (Maycock et al. 2013; Mitchell-Box & Braun 2013 ; Bich et al. 2014). Cooperation between peer supporters and the community to support mothers from initial to prolonged breastfeeding is addressed as important strategy to promote breastfeeding in a systematic review and an article in 2012 (Demirtas 2012; Sudfeld et al. 2012). A systematic review of 209 articles in 2006 regarding breastfeeding support to teenage mothers and an ethnography study in 2013 indicated that 'trust between health care professionals or supporters' is important for mothers to initiative and prolong breastfeeding (Hall-Moran et al. 2006; Flacking & Dykes 2013). Health care professionals and breastfeeding supporters working to support mothers to breastfeed need to have sufficient knowledge and skill to help provide the support. A clinical review of 15 articles conducted in nine different countries also confirmed that nurses or midwives who attended at least 18 hours education programme recommended by the World Health Organization benefitted with providing breastfeeding support (Ward & Byrne 2011). This confirmed the importance of knowledge and skills of health care personnel working with mothers. They also need to understand mother's circumstances and local beliefs, such as issues related to herbs, which people believe to help stimulate breast milk production or other galactogogues (Budzynska et al. 2012; Zapantis et al. 2012). This implied that cooperation among people working in hospitals such as paediatricians, nurses, network and community nurse; and providing support with head, hand and heart are significant aspects of mothers' success to breastfeed (Martens 2002; Whalen & Cramton 2010; Ingram et al. 2011; Demirtas 2012; Thomson et al. 2012).

Programmes to increase mothers' self-efficacy to breastfeed are used in many Asian countries such as China, Japan and Thailand (Awano & Shimada 2010; Kupratakul et al. 2010; Otsuka et al. 2014; Wu et al. 2014). Combinations of breastfeeding education and home visits are also used to promote breastfeeding (Furman & Dickinson 2013; Karp et al. 2013). Educational

programmes and telephone counselling are used to support mothers (Tahir & Al-Sadat 2013; Flax et al. 2014). Education sessions are also combined with the theory of planned behaviour (Giles et al. 2014). Interactive computer sites have been used to help provide breastfeeding information when there is limited availability of health care professionals (Edwards et al. 2013). However, a systematic review indicated that computer and internet support strategies might prove limitations in providing breastfeeding support to the mothers due to its costs and the time lapse between requesting and receiving support from the health care professionals (Pate 2009). Among numerous breastfeeding interventions, theoretical underpinning of self-efficacy seemed to be an effective strategy to help enhance a mother's ability to breastfeed. A programme which helped increase women's levels of self-efficacy through a knowledge sharing strategy, was used in a recent study at the hospital where this study was conducted (Kupratakul et al. 2010). However, the hospital's environment regarding the promoting of breastfeeding and a shortage of staff able to provide breastfeeding support might be barriers to success.

In summary, the provision of knowledge regarding breastfeeding by health care professionals is the key to helping to increase mothers' ability to breastfeed. A combination of breastfeeding sessions during antenatal and postpartum seems to produce more positive results in promoting breastfeeding. This might be a significant approach for increasing the rate of mothers achieving six months' exclusive breastfeeding. Having well-coordinated multidisciplinary teams of well-trained health care professionals, including lay workers, might be another key point in establishing breastfeeding. Due to the limited amount of intervention regarding the need for breastfeeding at the local hospital now, my research aimed to develop strategies for health care professionals to provide support for mothers to breastfeed and to continue for six months.

2.4.4 Breastfeeding assessment tools

Needs assessment is a systematic process which aims to identify or search for gaps between the current situation and required results (Kaufman et al. 2002). A health needs assessment is a scientific method aiming to identify or search for health issues taking into account population, agreed priority of health

problems and appropriation of resource distribution (Cavanagh & Chadwick 2005). The five steps of health needs assessment are as follows: getting started, identifying health priorities, assessing a health priority for action, action planning for change and moving on (Cavanagh & Chadwick 2005). Breastfeeding has been the subject of needs assessment analysis in several projects. Therefore, to obtain an overall view of the evidence basis underpinning breastfeeding practice, needs assessment applied to breastfeeding is considered. 'Needs' in this study refers to any kind of requirements regarding breastfeeding, including knowledge, attitudes, beliefs, and practices of women.

The World Health Assembly (WHA) and UNICEF adopted the Global Strategy for Infant and Young Child Feeding in 2002. In 2005, due to the prevalence of inappropriate feeding and malnutition in the first year of life of children worlwide, WHA adopted the resolution WHA 58.32 , the 'Innocenti Declaration on the Protection, Promotion and Support of Breastfeeding'. In 2005, the International Baby Food Action Network (IBFAN) Asia used the Global Strategy for Infant and Young Child Feeding as a framework in developing the World Breastfeeding Trends Initative (WBTi) tool. The WBTi consisted of 10 areas and 15 indicators and was launched as a tool to assess the real breastfeeding situation of the participating countries. In 2008, WBTi was introduced in 81 countries 40 of which completed it. Although Thailand has actively participated with IBFAN Asia, it was amongst the countries at risk of not successful breastfeeding in Southeast Asia (Gupta et al. 2012; Internatonal Baby Food Action Network Asia 2014). Being presented with real situations and increased ability for identifying the gap in action for success in promoting breastfeeding for the country are some of the benefits of using the WBTi tool, which policy makers could use to identify local action, and in particular, in hospital policy to promote breastfeeding.

A number of instruments to assess attitudes, beliefs, needs and barriers to breastfeeding have been developed in the past 20 years. For instance, the Gender-Role Attitudes toward Breastfeeding Scale (GRABS) (Kelley et al. 1993); Iowa Infant Feeding Attitudes Scale (IIFAS) (De La Mora & Russell 1999); Maternal Breastfeeding Evaluation Scale (MBFES) (Leff et al. 1994); the Breastfeeding Attrition Prediction Tool (BAPT) (Ryser 2004); and the Breastfeeding Self-Efficacy Scale-Short Form (BSES-SF) (Dennis 2003). Among

these tools, BSES-SF has been adopted for use in many countries such as Spain, Poland, Australia, the UK and the US (Wutke & Dennis 2007; Gregory et al. 2008; McCarter-Spaulding & Dennis 2010; Oliver-Roig et al. 2012; Karen et al. 2013) and Cronbach's alpha coefficient yielded an acceptable reliability level. Another recent tool developed in the U.K. in 2007 to assess attitude of young people about breastfeeding is based on Planned Behaviour Theory (Giles et al. 2007). Although the alpha coefficient is acceptable at 0.61 to 0.93, the tool was only a piloted test. Developing an updated version of the tool or using it with a larger population might be beneficial for users to adopt when providing breastfeeding support.

Other tools related to laching on are: LATCH, Hazelbaker Assessment Tool for Lingual Frenulum (HATLFF and Mother-Infant Breastfeeding Progress Tool (MIBPT) (Jenson et al. 1994; Amir et al. 2006; Johnson et al. 2007). Although LATCH is commonly used by health care professionals to guide breastfeeding practice, lack of a detailed link between breastfeeding problems and how to provide breastfeeding support might be a limitation.

Tools in relation to breastfeeding are Breastfeeding Support Skills Tool (BeSST), Interactive Web-based Breastfeeding Monitoring System (LACTOR) and Feeding Category (FeedCat) (Moran et al. 2004; Ahmed & Ouzzani 2013; Noel-Weiss et al. 2014). The reliability of the BeSST is at a high level at 0.79. LACTOR is a new, computer-based interactive tool designed to deal with breastfeeding problems and reporting to lactation counsellors. This might limit women who do not have access to, or knowledge in using, computers and the internet. Although FeedCat helps clarify the definition of each type of feeding and its reliability is rather high, its initial small sample size might be a weak point of the study. In conclusion, some assessment tools, such as WBTi, in relation to breastfeeding are designed to be used in a more general or broader situation, as per the macro view, while some tools are used for specific purposes, such as LATCH. Descriptions of the tools regarding breastfeeding are presented in Table 2.2.

Table 2.2 Summary of breastfeeding assessment tools

The tool	Core concept of the tool
GRABS (Kelley et al. 1993)	Determine maternal breastfeeding attitudes (six items; five point Likert-type scale)
IIFAS (De La Mora & Russell 1999)	Examine maternal attitudes and intended feeding behaviour (17 items; five point Likert-type scale)
MBFES (Leff et al. 1994)	Identify mothers' satisfaction with breastfeeding (30 items; five point Likert-type scale)
BAPT (Ryser 2004)	Identify mothers who have tendency to wean breastfeeding early(52 items; six point Likert-type scale)
BSES-SF (Dennis 2003)	Determine mother's self-efficacy to breastfeed (14 items; five point Likert-type scale)
LATCH (Jenson et al. 1994)	To assess breastfeeding practice. There are five components in LATCH: latch, audible swallowing, type of nipple, comfort of breast and nipples, and holding position (each component has three scores; 0 to 2)
HATLFF (Amir et al. 2006)	To assess babies with toungue tie on sucking from breasts. Two main items include, appearance and function items. The appearance items consisted of appearance of toungue when lifted, elasticity of frenulum, length of lingual frenulum when tongue is lifted, attachment of lingual freulum to tongue, and attachment of lingual frenulum to inferior alveolar ridge. The function items consisted of lateralization, lift of tongue, extension of tongue, spread of anterior tongue, cupping, peristalsis, and snapback. The score is ranked between 0 and 2.
MIBPT (Johnson et al. 2007)	To assess breastfeeding progress by evaluating mother and baby relationship. It consists of eight Items: mothers' respond to infant feeding cues, mothers go no longer than three hours between feeding attempts, infant grasps areolar tissue with mouth open wide, lips visibly flanged outward, nutritive sucking bursts noted, mothers independently positions self for feeding, no nipple trauma present on mothers' nipples, and no negative comments about breastfeeding.

The tool	Core concept of the tool
BeSST (Moran et al. 2004)	To assess breastfeeding support skills of midwives and breastfeeding supporters. There are five components of breastfeeding including emotional, esteem, instrumental, information and network.
LACTOR (Ahmed & Ouzzani 2013)	To assess the interactive web-based breastfeeding monitoring system. There are two components: mothers' portal and lactation portal. Women and lactation counsellors can be contacted via emails and web-based.
FeedCat (Noel-Weiss et al. 2014).	Measure infant feeding patterns and to describe type of feedings (Seven categories: exclusively breastfed, exclusively breast milk fed, predominantly breastfed, predominantly breast milk fed, partially breast milk fed, minimally breastfed, minimally breast milk fed and weaned).

To sum up, these breastfeeding assessment tools were developed in a Western context, mostly focusing on assessing and predicting the mothers' ability to breastfeed. Such a context may not be suitable to be adapted for the study of Thai mothers living in cities due to their different socio-cultural circumstances. Therefore, my research aim is to develop a package which can be used in a local hospital in Bangkok, Thailand by health care professionals to provide breastfeeding support to the mothers.

2.5 Chapter summary

The benefits of breastfeeding are widely acknowledged. For instance, breast milk naturally contains complete nutrition for babies as well as the substances which could help prevent illnesses in childhood. It also contributes to the development of greater intellectual capability. Breastfeeding helps decrease mothers' health risks and is more economical than formula feeding. Overall, research confirm the benefits of breastfeeding to babies, especially short term, while long term advantages still need more high quality evidence to support.

Studies indicated many different factors can affect women's breastfeeding behaviour. These factors are related to levels of support from family, employers, health care professionals and duration of maternal leave. Other factors relate to demographic characteristics such as the mothers' intention and ability to breastfeed. Breastfeeding is both natural and learned behaviour (Palmer 2009). Women's ability to breastfeed seemed to be strongly determined by their decision to breastfeed and the length of time that they want to breastfeed. However, there are limited numbers of studies in relation to factors hindering the achievement of the level of breastfeeding set by Thailand's National Economic and Social Advisory Council (2010). Therefore, one of my research aims is to investigate factors affecting breastfeeding behaviour among Thai women living in Bangkok, Thailand.

While policies supporting breastfeeding, such as the 'Ten Steps to Successful Breastfeeding' and BFHI, have also been adopted by hospitals as guides for health care professionals to encourage breastfeeding, there is still no practical conclusive intervention in providing breastfeeding support. This is consistent with a qualitative study and a RCT conducted in Bangkok, which revealed that there are still no specific practical guidelines to support breastfeeding (Kupratakul et al. 2010; Tangsuksan & Ratinthorn 2011). The lack of local guidelines could cause difficulty and uncertainty regarding appropriate advice and care to be provided by health care professionals. Subsequently the lack of sufficient initial support after delivery, and/or prior to discharge from the hospital, is an obstacle for mothers wishing to achieve six months' exclusive breastfeeding. The hospital where my study was conducted has not, as yet, fully adopted the 'Ten Steps to Successful Breastfeeding'. Current hospital policy is based on a medical model prior to fully adopting the 'Ten Steps to Successful Breastfeeding' and being accredited as a BFHI. During this transition period specific interventions which suit the local conditions of the hospital in promoting breastfeeding are needed. This is the gap in the hospital's current intervention initiative which highlights the significance of conducting my research project.

The literature reviews suggest that, at present, all the breastfeeding tools have been developed in a Western context and there is still no tool to facilitate nurses and guide them in providing care for mothers according to their needs of breastfeeding support. Lacking breastfeeding tools based on, and derived

from, a Thai context is the gap in current knowledge relevant to this research topic. My research is therefore aimed to understand the needs of breastfeeding support from health care professionals. The needs identified by the participants are used to develop the 'Breastfeeding Support Tool'. My focus is to use the tool as an approach in improving breastfeeding support at the hospital.

My background as a nurse/midwife and nursing instructor in obstetrics induces me to consider knowledge to be the key element in increasing women's ability to breastfeed. Therefore, knowledge is a fundamental informer of my project. The 'Breastfeeding Support Package' which I have developed is designed to include this essential knowledge. Nurses/midwives are assumed to have sufficient proficiency to provide breastfeeding support to the mothers. The 'Breastfeeding Support Package' may help fill the gap in the knowledge and may be used as a key to increase the number of mothers achieving six months of exclusive breastfeeding.

2.6 Research aims

The ultimate goal of this study is to increase the percentage of women in Thailand who successfully breastfeed exclusively for six months. This project's aims were to contribute to accomplishing this goal by analysing the Thai mothers' experiences of factors influencing their breastfeeding behaviour and the mothers' perceptions of the support they received and require from nurses or other health care professionals to breastfeed their babies. In response to the data gathered the 'Breastfeeding Support Package' was then developed to support breastfeeding. To achieve the research aims, a two part study was planned. The research questions and objectives of each phase of the study are as given below.

2.7 Phase I: Mothers' experiences of factors influencing their breastfeeding behaviour and mothers' perceptions of the support they require from nurses or other health care professionals to help them to breastfeed their babies

2.7.1 Research questions

1. What are mothers' experiences of factors that influence their breastfeeding behaviour?
2. What are mothers' perceptions of the support they need to help them to breastfeed their babies?

2.7.2 Research objectives

1. Identify a group of Thai postnatal mothers from one government hospital in Bangkok who experienced receiving breastfeeding support from health care professionals.
2. Explore mothers' experiences of factors that influence their breastfeeding behaviour.
3. Explore mothers' perceptions of the support they require, from nurses or other health care professionals to help them to breastfeed their babies.
4. Based on the data from the women and the evidence base underpinning breastfeeding best practices, develop a 'Breastfeeding Support Package' to be used by nurses working at a postpartum ward with mothers, enabling women and nurses to identify the support that mothers need to achieve six-month exclusive breastfeeding.

2.8 Phase II: Evaluating the 'Breastfeeding Support Package' an initial review of nurses' and mothers' experiences of using the 'Breastfeeding Support Package'

2.8.1 Research questions

1. To what extend do women from phase I of the study understand the language used in the 'Breastfeeding Support Tool'?
2. What are nurses' experiences of the application of the 'Breastfeeding Support Package' for providing breastfeeding support to the postpartum women?
3. What are mothers' experiences of using the 'Breastfeeding Support Tool' to facilitate the identification of their needs for breastfeeding support?
4. What are mothers' perceptions of the breastfeeding support provided by nurses, or other health care professionals, as a result of using the package?

2.8.2 Research objectives

1. Assess the face validity of the 'Breastfeeding Support Tool'.
2. Explore nurses' experiences in using the 'Breastfeeding Support Package'.
3. Explore mothers' experiences in using the 'Breastfeeding Support Tool' to inform the support needed from nurses or other health care professionals to breastfeed.
4. Explore mothers' perceptions of the breastfeeding support provided by the nurses, or other health care professionals, as a result of using the 'Breastfeeding Support Package'.

The literature review has been presented, followed by the research aims, questions, and objectives. The methods used to conduct Phase I of the study are then presented in Chapter 3.

Chapter 3: Methods Used for the Conduct of Phase I: Mothers' experiences of factors influencing their breastfeeding behaviour and mothers' perceptions of the support they require from nurses or other health care professionals to help them to breastfeed their babies

3.1 Introduction

The study is divided into two phases, only Phase I is explained in this chapter. Phase I explores factors affecting breastfeeding and the need of breastfeeding support from health care professionals. This chapter describes the model of health promotion as a framework for investigating breastfeeding behaviour. The underpinning research theory, including a descriptive research methodology, paradigm and approach, is explained. One government hospital in Bangkok, Thailand, was the research setting for this study while methods of recruiting the participants, data collection, and analysis are illustrated. The ethical considerations and trustworthiness of the study are then discussed.

3.2 Health promotion framework for researching breastfeeding activity of Thai women

This research was not driven by the theory of health promotion models but used Pender's Health Promotion Model to obtain better understanding of the data gathered in Phase I instead.

In 1986, 'health promotion' was first defined by the WHO during the first international conference on health promotion as follows:

> *"Health promotion is the process of enabling people to increase control over, and to improve, their health. To reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and to realize aspirations, to satisfy needs, and to change or cope with the environment" (World Health Organization 1986).*

There were no major changes to the definition of 'health promotion' from 1986 until 2005. However, there is more focus on actions in the following conferences: the second at Adelaide, South Australia, in 1988, the third at Sundsvall, Sweden in 1991, the fourth at Jakarta, Indonesia in 1997, the fifth at Mexico city in 2000 (World Health Organization 2009b). The definition seemed to be extended at the sixth conference in Bangkok, Thailand in 2005.

> *"Health promotion is the process of enabling people to increase control over their health and its determinants, and thereby improve their health" (World Health Organization 2009b).*

The definition was kept the same as in 2005 in the seventh global conference at Nairobi, Kenya in 2009 and the eighth at Helsinki, Finland in 2013 (World Health Organization 2009a; World Health Organization 2013a).

The core concepts of health promotion comprised the holistic view of health and the necessity for improving people's health (Clark & Paraska 2014). The evidence in Chapter 2 illustrated the benefits of breastfeeding on people's health. This is consistent with the breastfeeding objectives of the WHO's campaign of 'Healthy People 2020' on the topic area 16 'maternal, infant and child health' to address the issue of increasing the rate of mothers who achieve breastfeeding (Clark & Paraska 2014). My perspective regarding breastfeeding is as a health promoting behaviour and that women should breastfeed their babies. Breastfeeding in this study is, therefore, defined as one of health promoting behaviour to help improve the health status of the people. The concept of health promotion is relatively new although several models have already been developed (Cross 2010). The examples of health promotion models are presented in Table 3.1.

Table 3.1 Main characteristics of examples of health promotion models

Model	Main characteristics, strengths and limitations of the model
Tannahill's model of health promotion (Downie et al. 1996)	There are three domains: health education, prevention and health protection. Seven activities in achieving health promotion are: (1) prevention, (2) health education for prevention, (3) preventive health protection, (4) health education for preventive health protection, (5) health education, (6) health protection and (7) health education for health protection. The strength of this model is that it is simple. However, lack of an explanation for each principle seemed to be a weak point for adopting this model into practice.
Beattie's model of health promotion (Beattie 1991)	The model is focused on providing intervention. Four quadrants represent areas of health promotion: health persuasion, legislative action, personal counselling and community development. The horizontal axis illustrates the intervention, individual and collective, while the vertical axis illustrates the mode of intervention (authoritative and negotiated). The strength of the model is its practicality whereas labelling and attempting to change people's behaviour seemed to be a weakness.
Caplan and Holland's four paradigms of health promotion (Caplan & Holland 1990)	The model focused on a political view of health promotion. Four quadrants consist of radial humanist, radial structuralist, humanist and traditional. The horizontal axis presents subjective and objective while the vertical axis illustrates radical change and social regulation. The strong point of this model is the importance given to a holistic view of health. However, its lack of practicality might be a weakness.
Tones' empowerment model of health promotion (Tones & Tilford 2001)	The key concept is about how the combination of health education and healthy public policy contributes to health promotion. The core element is empowering people to be able to have healthy behaviour. The strong point of the model is increasing people's autonomy, while its' limitation is it might work well in a community setting, not a hospital setting.

Model	Main characteristics, strengths and limitations of the model
Pender's Health Promotion Model (1982)	The model illustrates the motivation of people to engage in health promotion behaviour, revised in 1996 and 2006 (Pender et al. 2006). Variables influencing health promoting behaviour consists of three aspects: (1) individual characteristics and experiences which are prior related behaviour and personal factors such as age and educational; (2) behaviour-specific cognitions and affects which are perceived benefits of action, perceived barriers to action, perceived self-efficacy, activity-related affects, interpersonal influences, and situational influences and (3) behavioural outcomes. Pender mentioned six sub-scales of healthy lifestyle which are: health responsibility, physical activity, nutrition, interpersonal relations, spiritual growth, and stress management. The strong point of the model is the explanation of people's health behaviour. However, the development of the model, based upon a specific health care system and its applicability to other contexts, might be a limitation.

Amongst the five health promoting models mentioned, Pender's (1982) is one of the nursing models likely to be used in nursing practice, as apart from other nursing theories, such as Orem's self-care model of nursing (Pender et al. 2006; Clark & Paraska 2014). The model was first developed in 1982 and revised in 1996 and 2006, having been tested and adopted in many studies from multiple settings and multicultural contexts although mainly in the US where the model was developed (Pender 1982; Pender et al. 2006; Cross 2010; Pender et al. 2011; Clark & Paraska 2014). For instance, the model was tested for its psychometric characteristics by Pender and colleagues in teenagers in the US in 2006 and the reliability was good (a Cronbach alpha between .75-.95) (Hendricks et al. 2006). The test for its fitness on the 'commitment to a plan to exercise' in Korean adults with chronic illness found that prior experiences and perceived benefits to exercise were significant factors accounting for 54 per cent of the variance of 'commitment to a plan for exercise' (Shin et al. 2005). Also, Pender's model was adopted for various groups of people such as using the instrument in assessing lifestyle among

Chinese students and the results found that the students were low in all six dimensions of health promoting behaviours (Dong et al. 2009). In an exploration study of Kuwait college students, it was found that 'physical activity' should be addressed as a priority in preventing obesity in this group (Naser Al-Isa et al. 2011). The model is often used in nursing fields in Thailand to investigate the predicting power of 'perceived benefits', 'perceived barriers' and 'spouse support' on health promoting behaviour of pregnant women who are thalassemia carriers (Wiriyawattana 2002) and in examining 'social support' factors affecting women who attended a menopausal clinic in Chantaburi province (Wattanasart 2003).

My perspective regarding breastfeeding is as a health promoting behaviour which is consistent with the concept of Pender's model. The details and explanation of factors influencing health promoting behaviour such as perceiving benefits, barriers, and self-efficacy might help better comprehend the breastfeeding behaviour of Thai mothers which was one of the aims of my study. Pender's model was developed in the context of a health care system, informed by a medical model, similar to the hospital where my research was conducted. These are the reasons for choosing Pender's health promotion model for aids in understanding once data collected.

3.3 Underpinning research theory

3.3.1 Research paradigm and approach

According to the literature review concluded in Chapter 2, it seemed that several studies attempted to find the best ways to help increase the number of mothers achieving breastfeeding exclusively for six months (Jaafar et al. 2012; Lumbiganon et al. 2012; Moore et al. 2012; Bich et al. 2014; Skouteris et al. 2014). However, many studies were conducted in Western societies. There are few studies, regarding breastfeeding support conducted in Thailand, especially in Bangkok, the capital city. Differences in cultural context and people's lifestyles might affect adopting international breastfeeding guidelines by health care professionals in order to support mothers. My perspective of breastfeeding is that it is the best practice. Breastfeeding support should be

provided according to mothers' needs and consideration should be put on the specific guidelines which could help increase the rate of mothers who achieve six months of exclusive breastfeeding.

The three main concepts in the research are ontology (view of the nature of reality), epistemology (perception about the nature of knowledge) and methodology (ways to generate knowledge) (Morgan 2007). The four research paradigms are: (1) post-positivism, (2) constructivism, (3) participatory and (4) pragmatism (Creswell & Clark 2011). Post-positivism is associated with the quantitative approaches while constructivism relies on the qualitative approaches. The participatory paradigm uses collaborative approaches but addresses more quantitative than qualitative (Creswell & Clark 2011). The pragmatism paradigm believes that there is no complete single or multiple truth and focuses on solving practical problems at present (Creswell & Clark 2007; Morgan 2007; Feilzer 2010). My research project focused on the low rate of breastfeeding mothers and attempts to develop strategies to help solve breastfeeding problems in Thailand at present. Therefore, the study is consistent with concept of pragmatism paradigm.

There are major differences between qualitative and quantitative philosophies (Holloway & Wheeler 2002; Topping 2010; Creswell 2013; Toles & Barroso 2014). Quantitative philosophy believes that the truth is objective and attempts to detect the fitness of the existing theories with the participants' data. Such a view involves interpreting from scores accumulated from the result of statistical analysis and relies on specific steps of statistical analysis to reduce bias (Holloway & Wheeler 2002; Topping 2010; Creswell 2013a; Toles & Barroso 2014). In comparison, qualitative philosophy believes that truth is subjective and complex. The nature of the qualitative model is interest in participants' life experiences and discovered meaning of the phenomena being investigated. In qualitative philosophy the researcher is an instrument for collecting and interpreting the data, using multiple ways to assure the accuracy of the results and reporting any identified biases (Holloway & Wheeler 2002; Topping 2010; Creswell 2013; Toles & Barroso 2014). Conducting qualitative research might have limitations when it comes to the generalisation of research findings to the general population (Creswell & Clark 2011).

There are differences on research methodologies for each research paradigm. While post-positivist bases itself on a deductive logic (top down), constructivist researchers conduct their research relying on an inductive (bottom up) approach (Creswell & Clark 2011). The perspective of induction is from the participants' view and contributes to broad generalisations, whereas the deductive model moves from a theory or hypothesis to specific data, in other words from the general to the particular (Creswell & Clark 2011). Pragmatism usually uses abduction which move back and forth between induction and deductive when conducting the research (Morgan 2007; Feilzer 2010).

Choosing the best research design can help to facilitate answers to the research questions (Gorard 2010; Creswell & Clark 2011). The main five approaches of qualitative studies are narrative, phenomenological, grounded theory, ethnographic and case study (Creswell 2013). Grounded theory focuses on discovering social processes and aims to generate theory. This involves systematic steps and is usually employed when there is no existing theory (Polit & Beck 2010; Toles & Barroso 2014). Phenomenology values gathering and reflecting daily life experiences in order to enlighten one's perspectives and to attempt to generalise findings based on common issues found in human beings (Todres & Holloway 2010; Toles & Barroso 2014). Ethnography emphasises cultural patterns and understanding the meaning of human experiences gained through intensive interview and observation (Holloway & Wheeler 2002; Toles & Barroso 2014). Case study focuses on a particular case, or multiple cases, and aims to capture unique stories while narrative focuses on reflecting individual experiences through story telling (Holloway & Wheeler 2002).

To sum up, Phase I of the study investigates mothers' breastfeeding experiences regarding factors that influence their breastfeeding behaviour and the support they require from nurses or other health care professionals. The aim of the study was consistent with qualitative philosophy which believes in multiple realities and the nature of the reality which focuses on mothers having experiences to breastfeed. My study neither aimed to generate theory, as in grounded theory, nor explore individual life stories as in narrative research. Neither does it not focus on culture, as in ethnography, nor does it fit with the phenomenological and case study models. Therefore it does not fit with the main five research approaches mentioned earlier (Parahoo 2006; Pope & Mays

2006; Polit & Beck 2010). Information from the participants' views regarding breastfeeding contributes to in-depth understanding about factors affecting their breastfeeding behaviour and their real needs of breastfeeding support from health care professionals. This is the most important part of this research in helping to comprehend the phenomenon and to help develop the tool to be used in Phase II, in order to help facilitate the health care professionals within the hospital in providing breastfeeding support, which is indicated as a practice problem at present. The data derived from the participants' views contributes to broad generalisations (bottom up) and is consistent with the principle of an inductive approach within qualitative philosophy. It was therefore an inductive approach adopted for use within my study. Also, the focus of the study was on the breastfeeding practice problem at the hospital at present. Therefore, pragmatic qualitative is a paradigm of the study.

3.4 Research setting

The study is conducted at a government hospital in Bangkok, Thailand. The hospital provides tertiary care in the heart of Bangkok, Thailand's capital city. Over 5,000 mothers deliver at the hospital each year. The maternity service is medically led. However, the main health services are staffed by, and dependent upon, registered nurses while equal numbers of nurse assistants (or practical nurses) and trained nurse aids work in teams to provide care to postpartum women. 'Registered nurse assistants' are people who passed a one year course for a nurse assistant's qualification while those who pass a six months' short training course are 'nurse aids'. Four types of postpartum wards are available at the hospital: single bed, two beds, four beds and six beds. Although the ratio between registered nurses, practical nurses and nurse aids is approximately 5:3:2 for 80 beds of the six bed wards available, in reality the ward is not always fully occupied.

The settings and environment for the research are considered essential elements in creating a constructive relationship between the participants and the researcher (Holloway 2008). The Family Planning Clinic (FPC) is chosen as the venue for conducting Phase I of the study. This is because the mothers received standard services at the hospital. Standard services that women receive include ANC, DR, PP, NR and the FPC for postnatal check-up. Mothers

who received the services at the FPC have already had experiences with breastfeeding. Most of them were at the second or sixth week postnatal. A two week appointment is often necessary for mothers experiencing complications, such as high blood pressure or high levels of blood sugar, during or at post-delivery. Mothers without any complications have an appointment at the sixth week.

As a nursing instructor training nursing students of the Thai Red Cross College for the past 11 years, being familiar with the study venue is a great advantage when conducting the research. The hospital where the research was conducted is used as a teaching hospital for nursing students and medical students. I am employed by the Thai Red Cross College of Nursing and am not employed by the hospital. Although in my educational role I use the hospital setting as a venue to instruct nursing students, I have not trained students within the hospital where the research is being conducted for the past four years. Therefore, there is no current relationship between myself and the hospital staff, thus controlling for potential bias. Indeed the past association gives me a level of credibility within the hospital.

3.5 Research design

3.5.1 Participants' inclusion and exclusion criteria

Participants in my study were postnatal women who experienced breastfeeding and had accessed standard breastfeeding services at the government hospital in Bangkok, Thailand. Purposive sampling was used to recruit the participants who met the inclusion criteria for the interview (see Table 3.2).

Table 3.2 Justification for inclusion and exclusion criteria (Phase I)

Inclusion criteria	Corresponding exclusion criteria	Justification
♦ Hold Thai nationality		The research aims to study breastfeeding behaviour of Thai mothers.
♦Have experiences of breastfeeding their current child		One of the research objectives is to explore women's experiences regarding breastfeeding. Therefore, women who have experience of breastfeeding their current child could share their experiences.
♦ Are attending the six weeks postnatal check-up appointment		It is indicated that the sixth week is a critical point of time when a third of mothers stop breastfeeding (Semenic et al. 2008; Kupratakul et al. 2010). Mothers visiting obstetricians for their postnatal check-up had experienced breastfeeding and received standard services at the hospital during ANC, delivery and postpartum. Therefore, they were selected for this study.
♦ Have living babies	Terminated their pregnancy e.g. abortion Lost their babies i.e. stillbirth or neonatal deaths	The research aims to explore mothers' experiences of factors influencing their breastfeeding behaviour and mothers' perceptions of the support they require from nurses or other health care professionals to breastfeed their babies; therefore, mothers who terminated their pregnancy are excluded. They will be informed by health care professionals to suppress lactation by breast binding or support bras during the first few days. Therefore, they may not have a current experience of breastfeeding (Swift & Janke 2003).
♦ Have no serious postpartum complications		Maternal complications often require medication treatment in which chemical substances could be passed on through breast milk and which therefore might

Inclusion criteria	Corresponding exclusion criteria	Justification
		affect breastfeeding activity (Fri'guls et al. 2010).
	Have babies with severe illnesses or abnormalities e.g. heart disease, cleft lip and cleft palate	Severe illnesses and abnormalities in babies can affect breastfeeding. For instance, babies who have craniofacial anomaly or cardiac defect may have difficulty in breastfeeding (Wallis & Harper 2007).
	Are prohibited from breastfeeding i.e. having positive HIV	Although breastfeeding is an alternative for mothers who are well treated by antiretroviral drugs (Slater et al. 2010), in Thailand there are still many controversies. Nevertheless, the study aims to study breastfeeding behavior. Therefore, those who are prohibited from breastfeeding are not included.
♦ Have no verbal communication problems		Verbal communication is required for the interview.
♦ Are first time mothers or multiple times mothers		The focus is on breastfeeding. Therefore, all mothers who breastfeed can share their experiences.
♦ Went through any type of delivery method i.e. normal delivery (N/L), forceps extraction (F/E), vacuum extraction (V/E) and Caesarean section (C/S)		Methods of delivery do not affect overall breastfeeding rate or duration (Riordan & Hoover 2010b). Therefore, mothers who experienced any mode of delivery could be recruited.
♦ Legally and physically able to give consent		According to Thai's Criminal Code of Law, men and women who reached the age of 18 could legally give consent (Criminal code of law 1997). In order to protect participants' right, a parental consent to participate in this study is

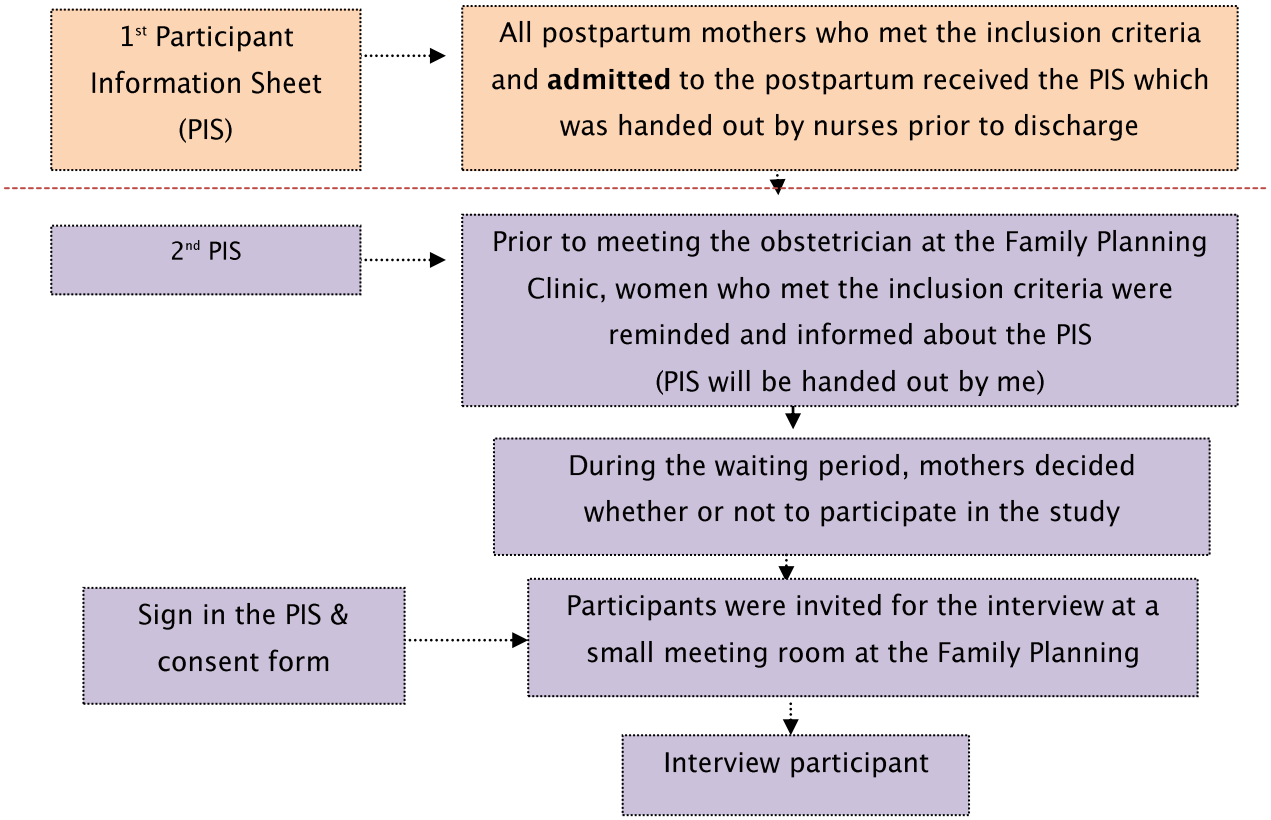
Inclusion criteria	Corresponding exclusion criteria	Justification
		required for the participants under 18 years old.
♦ Agree to participate in the study	Declined participating in the study.	Participation in the study is on a voluntary basis. Therefore, declining participation is possible at any point in time.
	Have difficulty handling their children during the visit	To avoid mothers being stressed and distracted during the interview.

In qualitative research, the number of participants can be justified depending on the researcher's view of 'saturated information' (Polit & Beck 2010). The researcher may cease data collection when there are no new themes emerging during analysis of interview data. Small samples, for example four to forty, are sufficient for qualitative research (Holloway 2008; Creswell 2013). This implies that the number of participants in the sample may be determined by data saturation. For instance, in one topic relevant study, 10 participants were selected to be interviewed about factors affecting the duration of breastfeeding (Hawkins & Heard 2001). This current research is similar to the study of Hawkins and Heard (2001), in its design and the main issue of the study which is exploring factors affecting breastfeeding, by using a qualitative approach. However, the differences are the ethnic group of samples and the time of study. In another qualitative study, 11 postpartum women were interviewed about using a positive environment (snoezelen room) to promote breastfeeding when they were admitted to the hospital. Data saturation was achieved (Hauck et al. 2008). Considering the research design, others' experiences of similar studies and considering what might be a realistic number of data sets to collect and analyse, 15 women was the original target aim. Over 40 women were invited to participate in the study, while 17 accepted the invitation.

3.5.2 Recruitment

The recruit plan was that, on discharge from the postpartum ward at the hospital, postpartum women were handed a participant information sheet (PIS) by nurses working on the ward (see Appendix E). The sheet explained the study, enabling them to decide whether to or not to participate in the study when they came for the six weeks postnatal check-up appointment. The next contact was when the participants returned to the hospital for their postnatal check-up. Prior to the mothers meeting the obstetrician, I introduced myself, gave them a new copy of the PIS (see Appendix E) then questioned them using inclusion criteria as a guideline (see Table 3.2). The recruitment process is summarised in Figure 3.1.

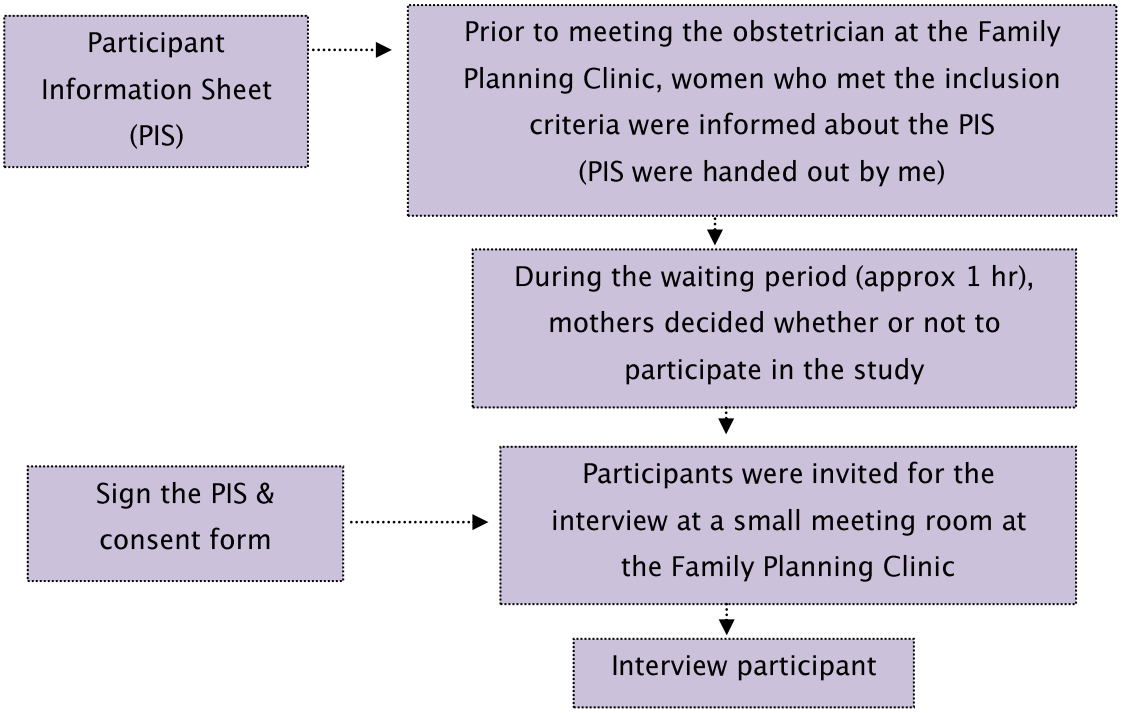
Figure 3.1 Recruitment process (Phase I)



However, the original plan was not practical because the process of approval from the hospital Ethics Committee took time. The time span to receive approval is expected to be a month. However, the actual time taken was one and a half months. The project was approved by the University of Southampton in January. The documents were then submitted for ethical approval to the government hospital in Bangkok but for a variety of reasons there were delays

with the approval. In addition there were several public holidays, such as Chakri Memorial Day, the ceremonial of HRH Princess Maha Chakri Sirindhorn, and the Songkran Festival (Thai New Year) in Thailand during which research activity was not appropriate. Thus the data collection schedule was modified in accordance with the agreement with the hospital. The rationale for receiving agreement with the hospital includes: (1) it was stated that there was no intervention with the participants, (2) the questions being asked were not sensitive questions, (3) the project was not to be conducted with vulnerable people, (4) considering with the busyness of postpartum women, there was a high possibility that the women did not read information in the PIS received prior to them being discharged from the hospital and (5) there was sufficient time for women to make an informed decision about participation while visiting the post natal check-up at the FPC. As a result, the project was conducted between April 1 and 30, 2012. The revised process was that the PIS was handed to the participants by me, to inform them about the study. While waiting for the appointment they were given a time of approximately one hour to read about the study and decide whether or not to participate. After the check-up, the participants who agreed to participate in the study were invited for an interview in the room prepared for the purpose. Prior to the interview they were asked for permission to record the interview using a digital recording device and were asked to sign a written informed consent (see Appendix G). The revised recruitment process is summarised in Figure 3.2.

Figure 3.2 The revised recruitment process (Phase I)



3.5.3 Data collection

A qualitative interview is intended to elicit and understand others' experiences (Rubin & Rubin 2005). In order to answer the research questions of Phase I, interviews were used as the data collecting method. Unstructured interviews are used in studies where researchers have a broad topic or idea to explore, while the participants' responses inform the subsequent questions (Rubin & Rubin 2005; Polit & Beck 2010). Semi-structured interviews are usually used when researchers have a list of broad questions, which have to be asked during the interview, to ensure that all questions are covered (Rubin & Rubin 2005; Polit & Beck 2010). Follow-up questions are usually prepared to encourage participants during the interview. Broad and follow-up questions are formulated in the interview guide (Rubin & Rubin 2005; Rosaline 2008; Polit & Beck 2010). The degree of control on the topics of the interview seemed less in an unstructured interview when compared with a semi-structured interview. In my study the scope of topics of the interview of Phase I of the study covered mothers' experiences of factors affecting breastfeeding and needs of breastfeeding support from the health care professionals. Therefore, using a semi-structured interviews format was appropriate and was chosen as the way to gain answers to my research questions. The initial questions,

following up questions to encourage the participants to elaborate, and prompt questions which help mothers to further explain and clarify their ideas, were asked during the interviews (see Appendix D) (Arksey & Knight 1999; Britten 2005; Rubin & Rubin 2005; Rosaline 2008).

Demographic variables have been reported as affecting breastfeeding. These variables include: age, gravida, educational level, marital status and employment (see Table 3.3). Therefore, personal data was requested at the end of the interview, when it was anticipated that a good rapport between the researcher and participant will have been established (see Appendix D) (Oppenheim 1992; Arksey & Knight 1999).

Table 3.3 Rationale for selected demographic data

Demographic data	Rationale
Age	Older mothers seem to have higher rates of breastfeeding (Winterburn 2007).
Gravida	Primigravidas appear to have higher intentions to breastfeed than multigravidas (Winterburn 2007).
Marital status	Families with no spouse support tend to discontinue breastfeeding (Racine et al. 2009).
Employment	Mothers who have to return to work during the 2nd– 4th months of their maternal leave have a higher risk of terminating breastfeeding (Racine et al. 2009).

The duration of interviews varied from 45 to 90 minutes, depending on the time available and the participant's endurance (Holloway 2008). The interviews in this phase took approximately 45 minutes. According to my experience, having worked in this field for over a decade, three quarters of an hour is a reasonable duration for an interview with breastfeeding women attending the FPC.

A digital recording device was used to record the interviews with prior written permission from the participants. The interview was conducted solely by me. To make sure the interviews were of high quality, it was planned to conduct one interview per day, while two were accepted with a break between each interview (Patton 2002).

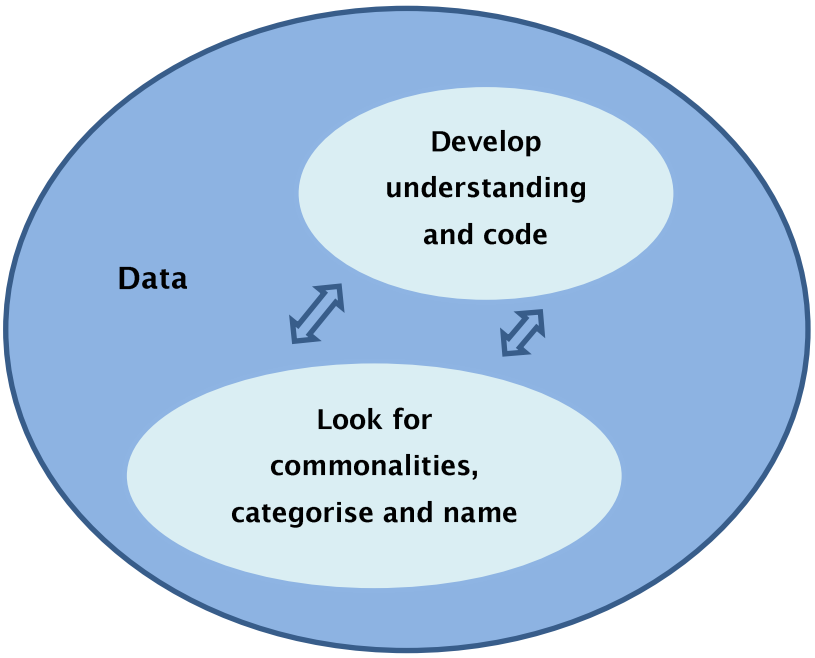
Interviews were conducted in a small meeting room at the FPC which was furnished with two chairs and a table. My chair was positioned on the right-hand-side of the participant's chair while a table was positioned to her right-hand-side to facilitate note-taking by me. Occasional notes were made during the interview to aid recall for formulating any follow up questions (Rice & Ezzy 2001). Moreover, looking over the notes before their transcription stimulated initial thoughts and helped facilitate writing up my diary notes (Patton 2002). After completing each interview, information in relation to body language, such as eye contact and facial expression, was written down in my diary to help promote recall of the interview (Strauss & Corbin 1998; Rice & Ezzy 2001; Patton 2002; Gibbs 2007).

3.5.4 Data analysis

A) Theory

Thematic analysis, a process for encoding explicit themes by grouping commonalities of meaning, was used in this study (Boyatzis 1998; Holloway & Freshwater 2010; Toles & Barroso 2014). Several approaches were used to generate themes from qualitative data. Smith and colleagues devised six steps to generate themes in phenomenological analysis which are: (1) reading and re-reading, (2) initial noting, (3) developing emergent themes, (4) searching for connections across emergent themes, (5) moving to the next case and (6) looking for patterns across cases (Smith et al. 2009). Charmaz developed two phases of coding in grounded theory which are: (1) initial coding and (2) focus coding (Charmaz 2006). Creswell demonstrated the four main steps of data analysis which are: (1) data managing, (2) reading/memoing, (3) describing/ classifying/ interpreting and (4) representing/ visualising (Creswell 2007). Creswell (2007) clearly presents a data analysis process step by step; hence making it easier to understand. As a novice qualitative researcher guidance with clear steps was needed to provide actual directions in practice. Although Creswell's analysis process was chosen to underpin this phase of the study, conceptualisation of the overall analysis processes is presented in Figure 3.3.

Figure 3.3 Core concepts of thematic analysis



B) Data preparation

The digital recordings were transcribed verbatim by me. Translation is another issue to address when conducting the interview in a language (Thai) different from the language being used to write this thesis (English). The main focus of analysing the data is to understand the meaning of the participants' words within their cultural context. Feeling embarrassed or bad about asking for more time to express breast milk at her workplace might be quite difficult to understand by people in Western countries. The word that explains such feeling is 'kreng-jai', a very common Thai social value. There is no direct translation and interpretation was required (Smith et al. 2009). The example of this is translation of Heidegger's work from German to English and others of his works in interpretation of Japanese and Chinese languages (Reinhard 1996). With my Thai language fluency and cultural understanding, six transcripts out of 17 were translated into English and analysed, to facilitate understanding when consulting with my supervisors. Due to translating from Thai to English during the analysis being very time consuming, the rest of the transcriptions were analysed in Thai. An example of translation of the transcript from Thai to English is presented (see Appendix I). Themes, subthemes and some of the participants' words related to themes were translated into English.

C) Analysis

In this study, prior to the analysis of data, the participants' thoughts were passed on to the researcher via the interview process. My diary notes could enhance understanding of the interviews by presenting immediate ideas or notes relating to non-verbal communications during the interview (Patton 2002). Data analysis was begun after the completion of the first interview. Commencing data analysis early not only allows a better recall of ideas and feelings from the interview but also enables adjustments to be made to improve the next interview (Patton 2002). The analysis of the participants in this study is a result of the researcher thinking about the participants' thoughts, which is called a 'double hermeneutic' (Smith et al. 2009). Details regarding the process analysis are presented in Section 4.3 Process of analysis.

3.6 Ethical considerations

3.6.1 Maternal and neonatal safety

Non-maleficence and beneficence are two significant principles when conducting research with human beings (De Angelis 2011). Researchers have a responsibility to avoid doing harm (non-maleficence) and provide the highest potential benefits to the participants (beneficence) (Beauchamp & Childress 2008; De Angelis 2011; LoBiondo-Wood & Haber 2014). There was no anticipated harm to the post natal women through having them participate in the study, due to being asked for their views on their care, without any intervention or alteration of care. Nevertheless, mothers needing immediate health care support during the interview will immediately be put under the care of appropriate nurses or health care professionals in order to safeguard patients' rights. It could be argued that there was a potential benefit to the women because the interviews provided them with the opportunity to ask questions and get some answers to their questions without any impact on the study or their care. It also allowed me to refer them to health care professionals if needed. The women may also have obtained some satisfaction in feeling that, by contributing to the study, each was helping health care professionals to provide better care to other mothers.

3.6.2 Consent

To facilitate the process of obtaining informed consent, the PIS for phase I (see Appendix E) was offered when the mothers visited for their postnatal check-up at the FPC. Approximately one hour was given to the possible participants to read the PIS and decide whether they would participate in the study. The PIS emphasised the voluntary basis of their participation in the research and their freedom to withdraw from the study at any point. Anyone who took part was asked to complete and sign an informed consent document prior to the interview (see Appendix G). According to Thailand's Criminal Code of Law, the age of consent is 18 years old (Criminal code of law 1997). In order to protect participants' rights, a parental consent to participate in this study is required if the participant was under 18 years old (see Appendix F).

3.6.3 Confidentiality

Participants' rights, dignity and privacy were protected firstly, by being informed about the confidentiality of the data gathered and secondly, by immediate deletion of data upon the withdrawal of a participant. No participants' names were made public in order to preserve both confidentiality and anonymity (LoBiondo-Wood & Haber 2014). In the recording of data, numbers were assigned to participants instead of names. No birth date information, patient identification number (I.D.) or any other I.D. numbers were included in the interview.

3.6.4 Data protection

Data collected will be kept in a locked cabinet at the post-graduate student office at the Faculty of Health Sciences, University of Southampton for 10 years, after which it will be destroyed. The transcriptions and researcher's notes were safely stored in the researcher's password protected laptops and computers.

3.6.5 Ethical approval process

The ethical concerns relevant to my study are ethical approval, informed consent, confidentiality and the safety and wellbeing of both mother and baby. The research protocol was submitted for a Faculty Enhanced Peer Review to the Faculty of Health Sciences, University of Southampton, UK prior to requesting approval from the Ethics Committee at one government hospital in Bangkok, Thailand (see Appendix J and Appendix K respectively). The Ethical approval process in Thailand took approximately one and a half months. A document of approval from the peer review and supervisors was translated from English into Thai by me.

3.7 Trustworthiness

In qualitative research, the four main aspects employed to address trustworthiness are credibility (confidence of the participants' reality); dependability (showing consistency of data over time and repeatability); confirmability (extent to which the findings are shaped by the respondents); and transferability (applicability of the findings to other similar contexts (Guba & Lincoln 1989; Holloway & Wheeler 2002). Prior to conducting my research, the research protocol, which provided the rationale for the research design, including choosing the right participants according to the inclusion criteria, recruitment process, methods of data collection and analysis, had been justified in the above sections. More details about justification during the conduct of the research are given in Chapter 4 in order to address the issue of the audit trail (Holloway & Wheeler 2002).

While undertaking the interviews, I did not dress in my usual nurse's uniform in order to maintain the role of a researcher as opposed to a nursing instructor. The reason for this was to minimise any bias that may occur during the interview. Not being confronted by 'a nurse' may have caused the answers of the participants to alter and it helped to ensure that the information gathered from the participants is true. The participants' own words presented the meaning of their viewpoints. My regularly checking the accuracy of my understanding of the meaning of the participants' comments, shared during the interview with the participants, helped to obtain their real meaning,

thereby promoting credibility (Lincoln & Guba 1985; Wolf 2003; Holloway 2008).

Inviting a competent peer to take part in my study helped enhance confirmability and dependability of data (Lincoln & Guba 1985; Wolf 2003; Holloway 2008). An assistant professor in the Midwifery and Child Nursing Department of Mahidol University with 11 years' experience in lecturing in obstetrics was invited to take part. With extensive experience in conducting qualitative research using thematic analysis, she was qualified for the work and helped identify themes in Phase I of the study. Transcription of the interview from the recorder, and themes identified, were conveyed to her for appraisal. The transcripts were analysed separately by her before meeting with me to compare emerging themes that had been identified. Consultation on themes identified between the competent peer and I was carried out after the analysis of the first case at a suitable time for both parties. Regular consultation concerning the data analysis process was undertaken with the two supervisors to help ensure confirmability of the findings.

During the data analysis process, the use of my diary notes, along with the interview data, reflected my thoughts and feelings during the interviews and this facilitated an understanding of the information shared (Holloway 2008). When identifying themes, I quoted some excerpts from the interviews to show the transparency of the study. The initial coding was available for checking (see Appendix H and Section 4.3 Process of analysis). All original data from a participant was recorded. These included transcriptions from the interviews, my diary notes and analysed data which were all saved on file on my computer, which was protected by password and could only be accessed upon request so as to enhance methodological and empirical credibility. In addition to this, in this study the large amount of data from interviews represented thick description which promotes transferability (Holloway 2008).

3.8 Chapter summary

A descriptive qualitative research approach was selected for the study. Phase I aimed to investigate women' views on factors affecting breastfeeding and their needs for breastfeeding support from the health care professionals. A

government hospital in Bangkok, Thailand, where I had experience working in the obstetric field, was the setting for this project. Women attending their sixth-week postnatal check-up at the Family Planning Clinic were the participants for Phase I. Semi-structured interviewing was the data collecting method, while thematic analysis was used to analyse the interview data.

The approval of the ethical considerations from the ethics committee had been obtained from the hospital prior to collecting the data. The participants' rights were treated with high regard by rendering data anonymous and all research data were kept safely in files. The data was addressed for trustworthiness by placing a high value on the central issues of credibility, dependability, transferability, and confirmability. The process of analysis, findings and discussions are presented in Chapter 4.

Chapter 4: Process of Analysis, Findings, and Discussion for Phase I: Mothers' experiences of factors influencing their breastfeeding behaviour and mothers' perceptions of the support they require from nurses or other health care professionals to help them to breastfeed their babies

4.1 Introduction

This chapter presents the process of analysis followed by the findings and discussion of Phase I of the study. The process of analysis is underpinned by the steps of data analysis outlined by Creswell (2007). The study is predicated on the hypothesis that women should breastfeed and that the particular context of Thai women is a contributory factor to the low breastfeeding rate. Therefore, the aims of the first phase of the study were to investigate mothers' experiences in relation to factors influencing their breastfeeding behaviour and mothers' perceptions of the support they require from nurses or other health care professionals to breastfeed their babies. To achieve this, semi-structured interviews were conducted. The data gathered from the interview was used to inform the development of a 'Breastfeeding Support Package' to be used in the second phase of the study. The data analysis process, findings, discussions of the findings and development of the package are illustrated.

4.2 Description of the participants

The age range of the seventeen participants was between 16 and 38 years. According to Thai's Civil and Commercial Law, men and women who reached 18 years old could be legally married. However, the court permits marriage

before the legal age if consent is given by legal guardians (Criminal code of law 2005). The teenaged participant in this study had been given verbal permission by her parents to live with her husband, a common practice in Thailand. As pointed out above, in Thailand the age of consent is 18 years (Criminal code of law 1997). Therefore, parental consent was given for the teenage mother to take part prior to her participation in the study.

Eight of the participants were bachelor degree graduates. One of the eight participants had a background in nursing. The participant with the highest educational level had completed a graduate degree, while the one with lowest completed only ninth grade from a secondary school (at age of 16). The teenage participant had to leave school due to her pregnancy but had plans to return to school a year later. Three participants completed Advanced Subsidiary Level (AS level, at age 17) studies, three had a vocational diploma, while one had a vocational certificate. Sixteen participants were living with their spouses, while one was separated. Eleven participants were full-time employees, one was in part time work, while five were housewives.

Thirteen participants were first time mothers (two had a history of abortion, one had twins, while the rest were second time mothers. Three participants were exclusively breastfeeding at the time of the interview. Six participants were mainly breastfeeding along with using some formula milk while one also gave water her baby. Seven participants were relying mainly on formula milk (three used a little breast milk, one feeding bananas, and three babies were totally formula fed). Traditionally, bananas are fed to young children in Thailand because of the belief that bananas are filling and help babies to sleep well and longer and that they also make babies 'chubbier' (Thai Breastfeeding Organization 2012). This belief endures despite the fact that breast milk is the best food for babies, while other liquid or solid foods are not recommended for feeding infants for the first six months (World Health Organization 2011; Thai Breastfeeding Organization 2012). While a qualitative study is not about representativeness, based on my experiences working in the obstetric field, these characteristics of the participants seemed like a typical group of women using the services at the hospital. Characteristics and numbers of participants are described in Table 4.1.

Table 4.1 Characteristics of the 17 participants

Characteristics	No. of participants	Characteristics	No. of participants
Age		**Educational level**	
< 20	1	Year 9	1
20-24	5	Certificate	1
25-29	5	Diploma	3
30-34	4	AS Level	3
>35	2	Bachelor	8
		Master	1
Marital status		**Employment**	
Living together	16	Full time	11
Separated	1	Part time	1
		Housewife	5
***Gravida/Parity**		**Feeding methods at present**	
$G_1P_{1-0-0-1}$	10	Exclusive breastfeeding	3
$G_1P_{0-2-0-2}$	1	Breast milk + little formula milk	6
$G_2P_{1-0-1-1}$	1	Breast milk + water	1
$G_3P_{1-0-2-1}$	1	Mostly formula milk+ little breast milk	3
$G_2P_{2-0-0-2}$	4	Formula milk + banana	1
		Total formula milk	3

* Gravida is the total number of times a woman has been pregnant. Parity includes four numbers which are the number of times of having full term pregnancy, preterm pregnancy, abortion, and having alive children, e.g. $G_2P_{1-0-1-1}$ means that it is a second pregnancy with having one full term, no preterm, one abortion and having a child at the present.

There were only three out of 17 participants, who were breastfeeding exclusively at the sixth week postnatal while 14 were not. Based on the evidence in this study, the global goal set in 2010 to increase the rate of exclusive breastfeeding at six months to 50 per cent is very challenging (World Health Organization 2010b). This is consistent with the RCT conducted at the same hospital which found that no mothers receiving standard care achieved six months exclusive breastfeeding (Kupratakul et al. 2010). Although interviews were conducted at the sixth week post natal, the rate of six month exclusive breastfeeding could not be confirmed. The possibility of achieving six months of exclusively breastfeeding is very low. This highlights the significance of the development of the 'Breastfeeding Support Package' to be used in helping breastfeeding support services at the hospital.

4.3 Process of analysis

Semi-structured interviews were transcribed verbatim, checked for accuracy, and analysed using Creswell's steps of thematic analysis (Creswell 2007). The justification for using Creswell's steps of analysis is presented in Chapter 3 Section 3.5.4 Data analysis. The four main steps of data analysis are: (1) data managing, (2) reading/memoing, (3) describing/ classifying/ interpreting and (4) representing/ visualizing (Creswell 2007).

Step 1 Data managing

After completing the interviews of the 17 participants, the transcripts from the voice recorder were transcribed verbatim in Thai language into files on my computer. I read through the 17 transcripts and the six transcripts were selected for preliminary analyses because of their differences in characteristics, including ages, experiences in being a mother, and the types of delivery (participants 1, 3, 6, 8, 9 and 15). These six transcripts were translated from Thai to English to facilitate consultation with my research supervisors to ensure the agreement of interpretation. A Thai student studying for a PhD in linguistics was contacted to back translate a transcript from English to Thai in order to confirm the accuracy of language being used. However, the remaining 11 transcripts were analysed in Thai to save time and prevent the loss of the accuracy of the meaning when translating from Thai to English as mentioned in Chapter 3 Section 3.5.4 Data analysis. All transcripts are available upon request. An example of a case of translation from Thai to English is demonstrated (see Appendix I).

Step 2 Reading and memoing

In this step, the transcripts were read and re-read several times to ensure the accuracy of the meaning of what was being said during the conversation. 'Initial codes' were noted immediately (memoing), while reading through each transcript line by line. Highlighting the keywords, line by line, is the first procedure for initial coding (Charmaz 2006). The initial coding used was 'in vivo code'. In 'in vivo coding' exact words spoken by the participants could be used, such as codes which reflect their actions. Codes also could use specific

terms which are commonly known in the nursing field (Charmaz 2006; Creswell 2007). An example of initial codes of a participant is presented in Figure 4.1.

Figure 4.1 Example of initial coding (from participant 1)

line	Conversation	Initial coding
84	.....My baby didn't know how to suck. He is used to the bottle...	Baby does not suck at breast due to bottle use

Step 3 Describing, classifying and interpreting

Two hundred and fifty initial codes were re-read and grouped, according to their commonality, to identify emerging codes. Thirty nine emerging codes were classified, interpreted and named to form 16 sub-themes and six themes respectively (see Figure 4.2). The example of step 3, describing, classifying and interpreting is demonstrated in Figure 4.3.

Figure 4.2 Classifying codes to them

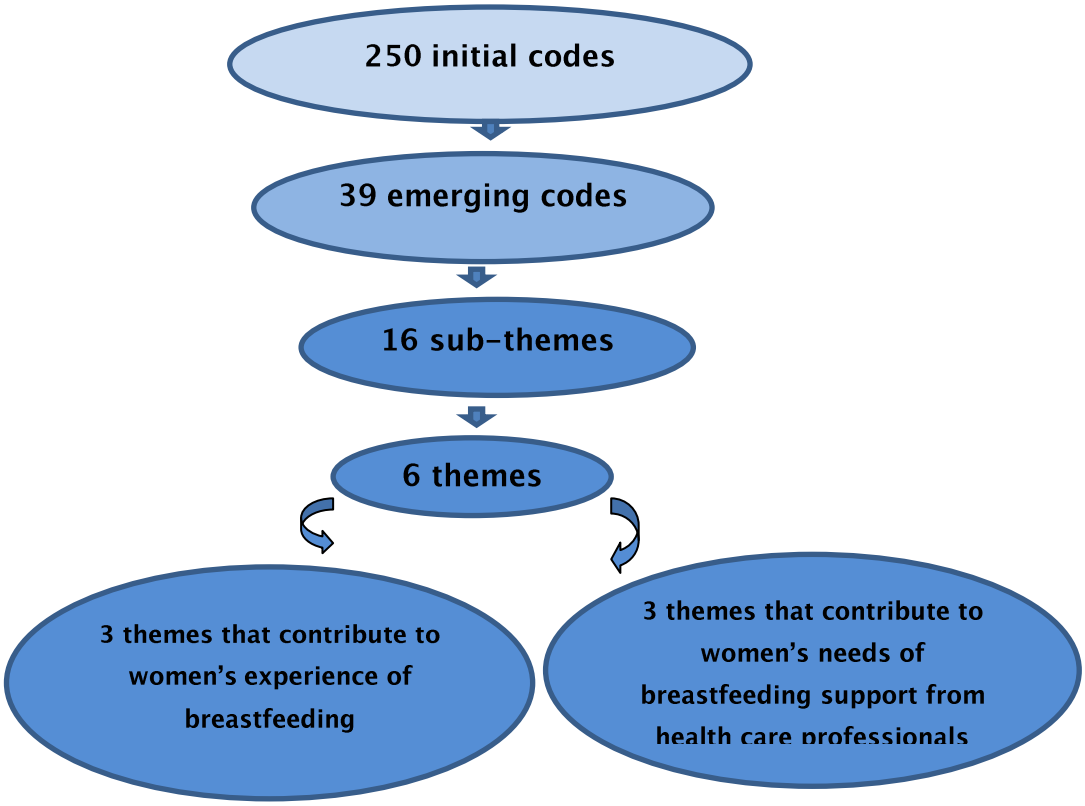
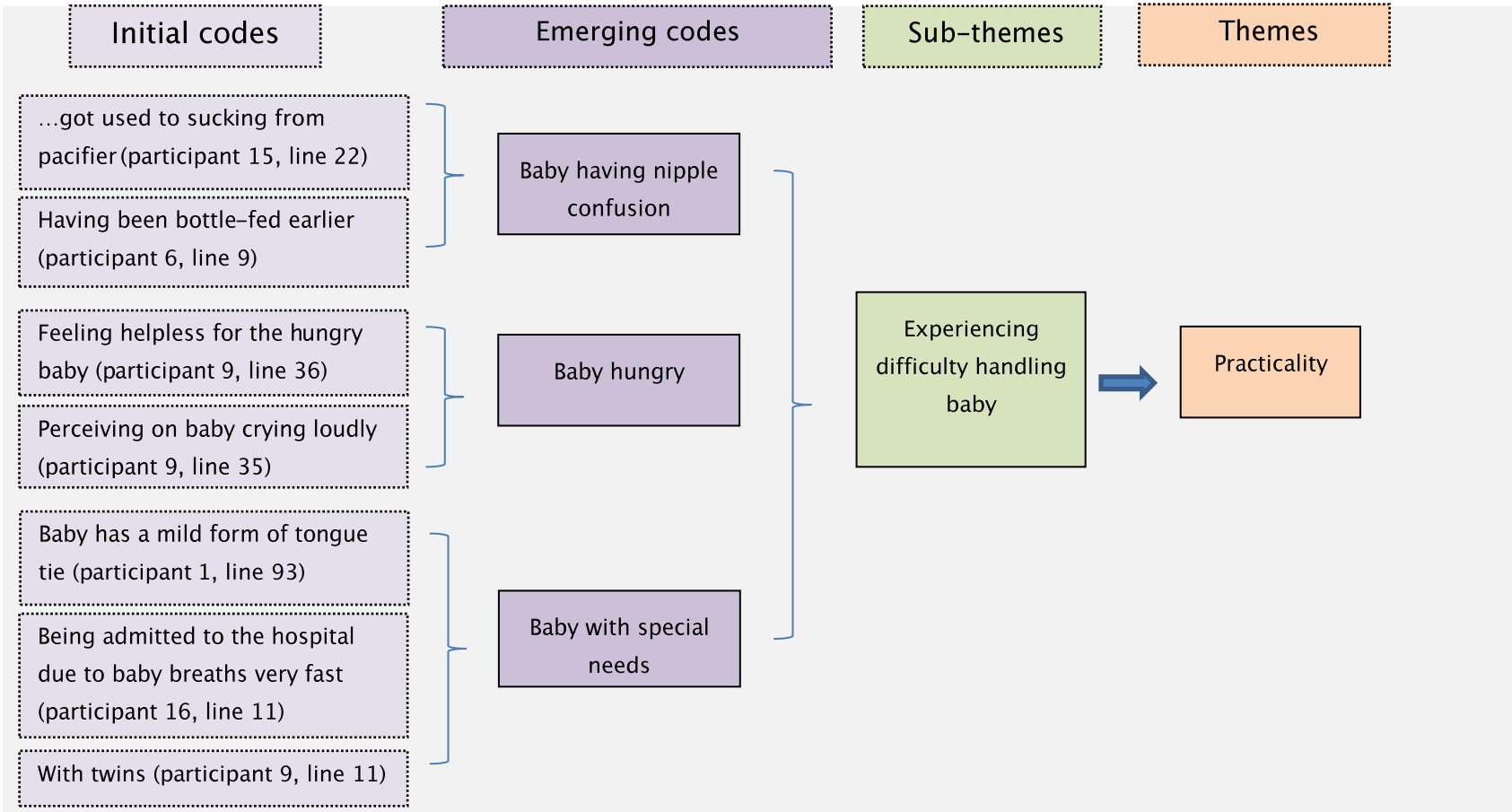


Figure 4.3 Examples of Step 3: describing, classifying and interpreting



Step 4 Representing and visualizing

Each transcription was tabulated and each line was numbered in landscape layout format to easily back track the original data. Each table consists of two columns: left, for what the participant had said, while right, for initial codes (see Figure 4.1). Selected extracts from the transcripts under the quotation, which identified the important points to support themes and sub-themes, were selected and introduced in an italic form. The example of an open code of a participant is illustrated in Appendix H. The examples of themes and sub-themes of each participant, as described by line, are presented in Table 4.2. The themes, sub-themes and emerging codes that contribute to women's experience of breastfeeding and needs of breastfeeding support from health care professionals are presented in Figure 4.4 and Figure 4.5 respectively.

Table 4.2 Example of factors affecting breastfeeding as described by line

Number of participant (P) **Themes, sub-themes, sub-ordinates, and emerging codes**	1	9	12	13
Emerging code: Experience difficulty during baby cry **Sub-theme**: Experiencing difficulty handling baby **Theme**: Practicality	69	26	-	14, 44
Emerging code: Specific information about keeping breast milk **Sub-theme**: Information related to breastfeeding **Theme**: Knowledge	-	154, 157	168	-

Figure 4.4 The themes that contribute to women's experience of breastfeeding

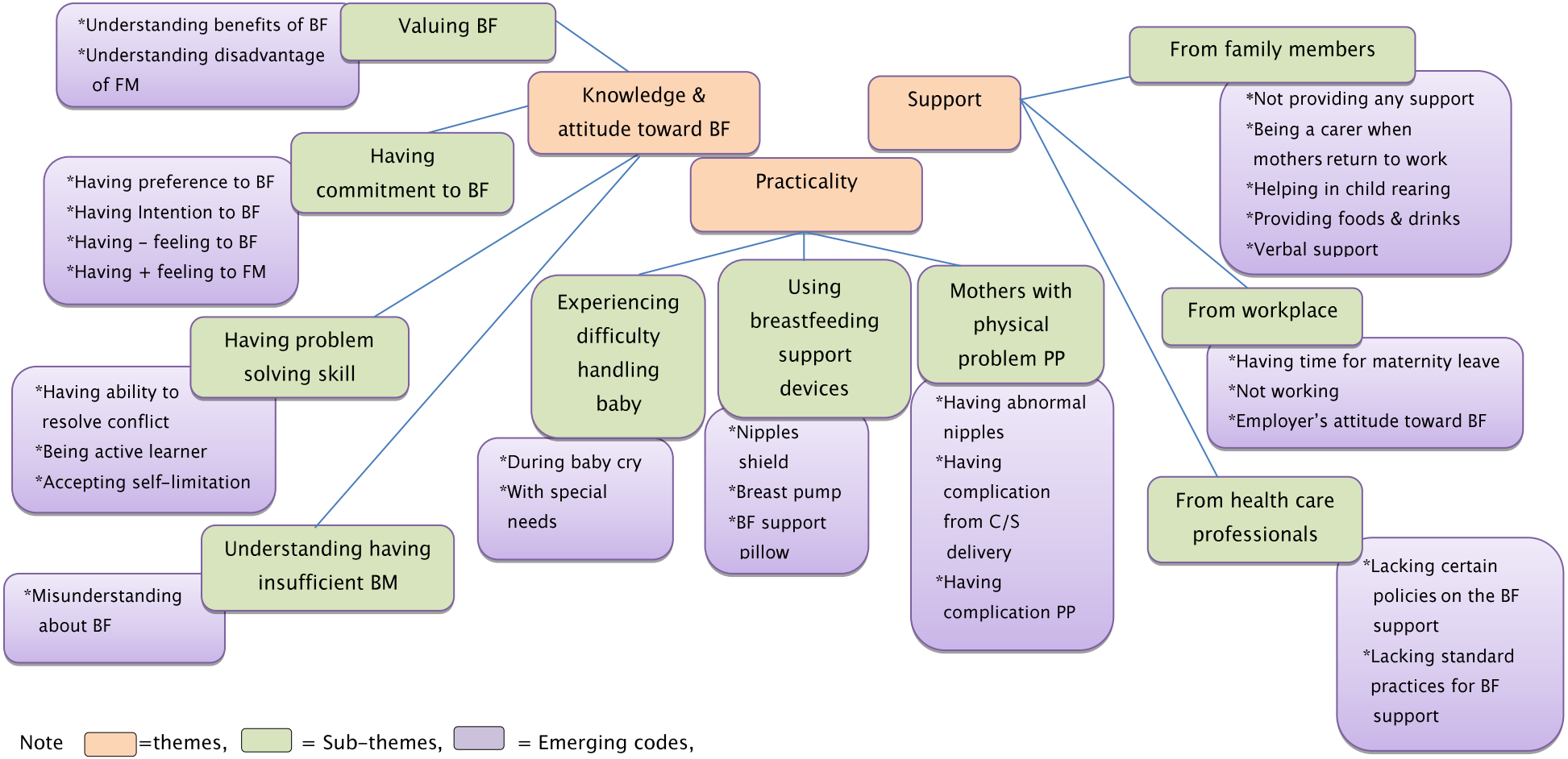
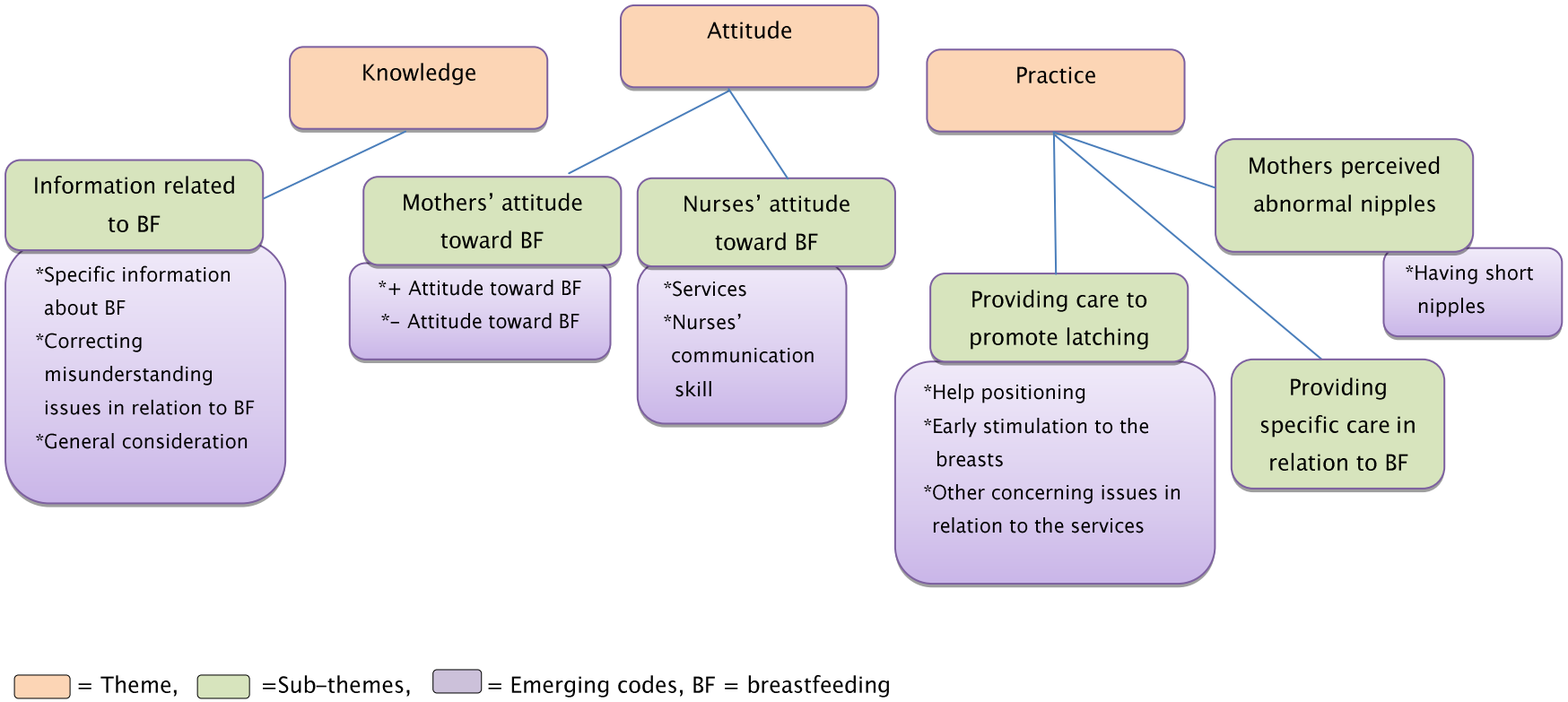


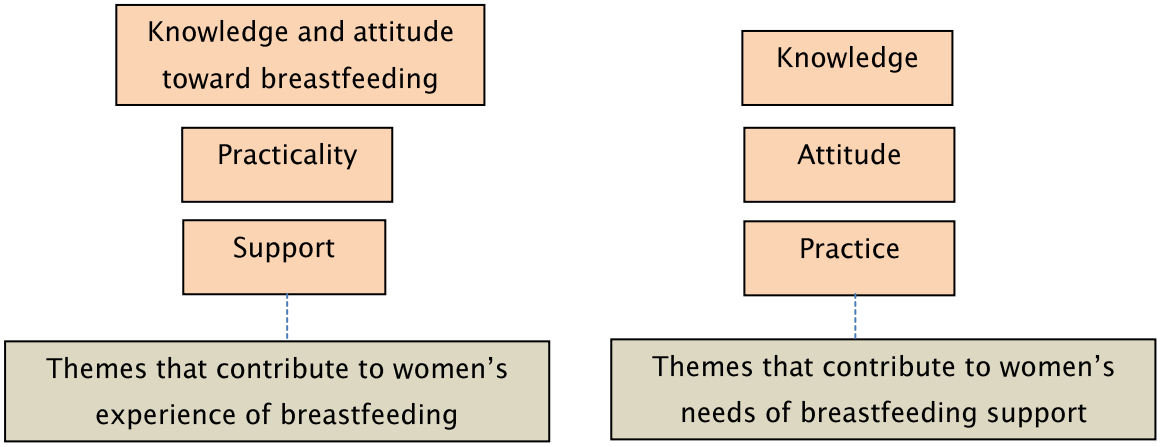
Figure 4.5 The themes that contribute to women's needs of breastfeeding support from health care professionals



4.4 Findings

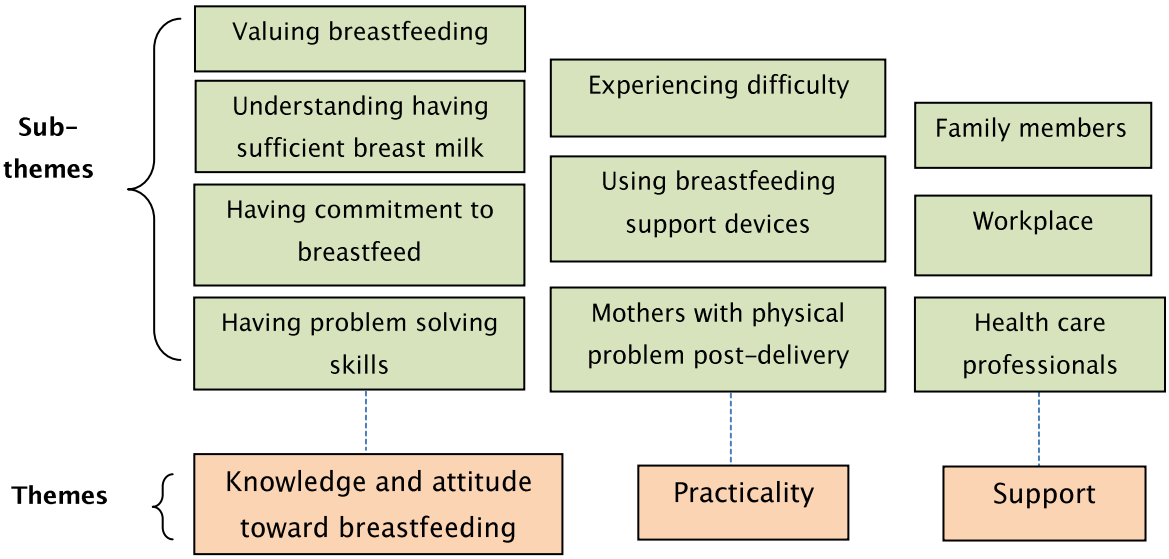
The research aim of the first phase of the study was to investigate mothers' experiences of factors influencing their breastfeeding behaviour and mothers' perceptions of the support they require from nurses or other health care professionals to breastfeed their babies. In order to answer the research questions of phase I of the study, sub-themes and themes that emerged are presented in Figure 4.6. Then each theme and sub-theme is discussed.

Figure 4.6 Summary of the sub-themes and themes that emerged



Each sub-theme which emerged from the analysis of the three themes that contribute to 'women's experience of breastfeeding' is presented in Figure 4.7.

Figure 4.7 Sub-themes of the themes that contribute to women's experience of breastfeeding



4.4.1 Theme: Knowledge and attitude toward breastfeeding

There are four sub-themes: 'valuing breastfeeding', 'understanding having insufficient breast milk', 'having commitment to breastfeed' and 'having problem solving skills' under the theme of 'Knowledge and attitude toward breastfeeding'.

4.4.1.1 Sub-theme: Valuing breastfeeding

All participants seemed to understand the benefits of breastfeeding. The major reason all 17 participants mentioned was advantages to the babies' health, especially on their physical well-being. Examples are 'babies being healthy' (participants 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 15, 16 and 17), breast milk has 'complete essential nutrients for babies' (participants 2, 10, 14 and 16) and breast milk is 'beneficial to babies' digestive system' (participants 9, 10, 12, 15 and 16). However, three participants also mentioned intelligence levels (participants 6, 8 and 14) and five mentioned babies' emotional aspects as benefits of breastfeeding (participants 5, 8, 12, 14 and 15).

> *I don't want her to suffer when she grows up, for example by getting sick often. (participant 6, line 88).*
>
> *The baby can get complete nutrition…(participant 14, line 106).*
>
> *Breastfed children have better mental development and do better in school, but not everyone. Some of them (participant 8, line 41-42).*
>
> *…because it's a good thing to promote the relationship between mother and child (participant 8, line 137-138).*

Although the benefits of breastfeeding for babies' health has been reported in many studies, there was no indication that it directly benefits children's emotional and intellectual ability (Hale 2007; Kramer & Kakuma 2009; Meyers 2009; World Health Organization 2011). The lack of affirmation on this point is understandable because there could be many factors affecting a child's intelligence quotient such as maternal literacy, race, poverty or home environment (Der et al. 2006; Hoddinott et al. 2008; Groen-Blokhuis et al. 2013; Gibbs & Forste 2014).

Interestingly, eight participants considered the economic aspects (participants 3, 7, 8, 9, 10, 12, 14 and 17). This is consistent with a report from the Thai

Breastfeeding Organization (2012) which indicated that breastfeeding mothers could save about 80 pounds per month or nearly 1000 pounds per year. The teenage participant emphasised her body image (participant 8). She understood that breastfeeding could help reduce her weight. It could also be inferred that the benefit of breastfeeding on body image may be of concern for some mothers.

> *Part of my reason includes the expenditure. I don't have to spend on formula milk. That's a lot of money. I have sent money to my grandmother before for my first child; it comes to 4,000 baht per month (participant 7, line 16-17).*
>
> *If I breastfeed my child, my weight would reduce quicker. I don't want to be fat. I think it's quite a good way to reduce weight by breastfeeding (participant 8, line 32-33).*

Other perceived benefits, which might lead to misunderstandings regarding breast milk were: breastfed babies seem to be 'more obedient' than those who were bottle fed' (participant 8) and they are 'chubbier', 'look brighter' and 'happier' than formula fed babies (participant 15). This suggests that babies' physical appearance, such as being 'chubby', is preferable for some mothers.

> *I understand that during the past that's how people fed their babies. They fed the babies with rice milk and breast milk. These children became good and listened (participant 8, line 45-46).*
>
> *…when I have some milk flow, when his mouth goes off the nipples…His face would look bright (looking excited as she speaks). But when he is bottle feeding, he looks green and dark as if the brightness and freshness is not there (participant 15, line 154-158).*

While all the participants expressed the benefits of breastfeeding, some demonstrated their knowledge by indicating the disadvantages of formula milk. Nine participants made comments on the disadvantages of formula milk regarding babies' health (participants 1, 3, 4, 6, 8, 11, 12, 13 and 17). Four participants expressed their worry about the baby having allergies (participants 1, 4, 16 and 17) and two mentioned 'asthma' (participants 4 and 11). Three participants were concerned about the harm formula milk could cause to babies' guts (participants 8, 9 and 13) and one particular participant found that after being admitted to the hospital her twins had developed large amount of 'gas' after being formula fed (participant 9).

It's my first time (I breastfed about half a month to a month). He doesn't have immunity. He got into the hospital since three months old. He got asthma and often gets sick (participant 4, line 6-7).

I think it made the babies cry because they might have stomach problems…The doctor inspected the babies and found that they have stomach problems and gave some medicine…(participant 9, line 101-103).

But in my feeling I wanted to consult the doctor about what ingredients in formula milk causes allergies. It seems like he is developing. Looking at his breathing I know that he is still young but there is sound. I am afraid that he has then tendency to have allergies that's why I am also breastfeeding him (participant 15, line 107-111).

In fact, breast milk contains a high density of antibodies produced by mammary glands during the first week post-delivery (Royal College of Midwives 2002; Riordan 2010b). Allergy concerns are due to most formula milk being produced from cow's milk, therefore some babies might experience adverse effects, such as cow milk intolerance, from breast milk substitutes (Pollard 2012). However, there are still controversies about the disadvantages of formula milk to babies' health, suggesting that formula milk may not be harm free, whereas it has been proven that breast milk is the best food for babies (World Health Organization 2010b). Such issues also suggest that mothers do not understand about the content of breast milk.

4.4.1.2 Sub-theme: Understanding having insufficient breast milk

One factor that the participants in this study indicated as a barrier to breastfeeding was that they did not have sufficient breast milk for their babies. Despite the physiological fact that it is unusual for women to have insufficient breast milk production for their babies, participants did not seem to understand this fact (Riordan 2010a). They related having insufficient breast milk to not having breast engorgement (participants 5, 6, 9 and 10), breast size (participants 13, 14 and 16), genetics (participant 16) and breast augmentation (participant 14). Six participants assessed sufficiency of breast milk for babies by observing whether babies' cry after breastfeeding (participants 2, 4, 6, 10, 11 and 13). Having to feed the baby often means that the baby is not having a sufficient amount of milk (participant 5). Four participants believed that giving

some formula milk after breastfeeding could promote better sleep for babies (participants 2, 5, 13 and 14).

> *My breast didn't engorge much. I tried using a breast pump…I got less than an ounce. Sometimes before breastfeeding, I tried squeezing, just little came out (participant 10, line 13-14).*

> *My mom also didn't have breast milk. I don't think our family have much milk. My breasts are also small(participant 16, line 21-22).*

> *Breast milk is not enough for my baby. When I fed formula milk also the baby stopped crying, and was able to sleep longer. It seemed that he was full (participant 5, line 9-10).*

It was not only the participants who were unable to exclusively breastfeed their babies that worried about having sufficient breast milk, participants who were able to exclusively breastfeed at the time of the interview placed this issue as a major concern when they had to get back to work as well.

> *From my experience I should not be stressed…But the important issue is every mother including me who doesn't have breast milk to feed her child will have a lot of stress (participant 3, line 154-157).*

This concern implies that not having a copious milk supply during a couple of days post-birth seems to have disappointed the participants' expectations, creating the idea that they might not have sufficient breast milk. In fact, it takes about a week for the body to adjust and produce a balanced amount of breast milk (Riordan 2010a). During this time, the key to achieving sufficient breast milk to feed the baby is to breastfeed frequently (Riordan 2010a). It could be implied that the reason that women did not know the information might be because they had not been told or had not received the information in a way that they could remember.

4.4.1.3 Sub-theme: Having commitment to breastfeed

'Intention' is defined in the Macmillan's dictionary as 'a plan in mind to do something', while 'commitment' means 'a strong belief or promise to do something, or a determination to work hard on something' (Rundell 2007). According to this definition, all the participants had the intention to breastfeed

including the participant who did not establish breastfeeding and the two participants who only breastfed once a day. They stated that they had the intention to breastfeed since the outset of their pregnancy. It could clearly be seen during the interview that two participants seemed to have the commitment to breastfeed (participants 1 and 3). They told of their experiences of trying many ways to sort out their problems until they were successful in breastfeeding exclusively. However, the word 'commitment' is quite subjective and cannot easily be measured.

Seven participants said they intended to breastfeed for three months (participants 4, 5, 9, 10, 12, 13 and 14), while six participants planned for six months (participants 6, 11, 12, 13, 16 and 17). However, neither group of participants was exclusively breastfeeding at the time of the interviews, which was at six weeks postnatal. There were only three participants who were still breastfeeding at the time of the interviews and they said that they intended to breastfeed for at least eight months (participants 1, 3 and 8). However, no participant clearly defined whether it was six months exclusive breastfeeding or a combination of breastfeeding and formula feeding. This implied that the participants seemed not to know the recommendation that they should aim to exclusively breastfeed for six months.

> *I plan to breastfeed as long as possible (participant 3, line 28)…I think it's me, myself that is the most important (participant 3, line 40).*
>
> *Because I had the intention to breastfeed my baby for six months, I had this intention even before he was born. If I could, I would continue to breastfeed him until he is one (participant 6, line 71-72).*

'Having intention' could imply that the participants already had the thought of breastfeeding their babies, but how they were going to do so was still unclear. It could be argued that their intention to breastfeed might have come from two sources, which include their inner and social expectations, such as the health care professionals and social norms. The strength of their intention could not be measured. Nevertheless, having an intention seems to be just a starting point that positively affects breastfeeding, while being faced with discouraging factors could challenge or stop them from breastfeeding.

Although all the 17 participants reported that they intended to breastfeed, negative attitudes toward breastfeeding might have been the cause of their

discouragement. For instance, 'breastfeeding seemed to be difficult' (participant 9) and 'required more hard work' (participant 17), 'six months exclusively breastfeeding is impractical for working mothers' (participant 12), and 'breastfeeding is not easy for helpers who look after the babies when mothers return to work' (participant 4).

> *I think most working women who don't breastfeed their babies are just lazy. That's why they are willing to spend their money on formula milk…It is less tiring and boyfriends or other people can easily help look after them (participant 17, line 88-90).*

> *I have heard it before (6 month exclusively breastfeed); I think that it's good. I would love to be able to do it, but as I have mentioned…,therefore I have to work (participant 12, line 74-75).*

> *My mother, who I've asked to help with looking after my first child, has to work as a sales person in a store. She is very busy and you just can't tell her to defrost breast milk…She needs to rush and breast milk is not practical. You need more time for that (participant 4, line 64-67).*

Inadequate knowledge about formula milk might also be an issue hindering breastfeeding. For instance, two participants believed that nutrients added to formula milk are beneficial to babies' health (participants 12 and 15). One mentioned that formula milk could be used as a substitute to breast milk (participant 16). One participant said that it was convenient to use formula milk (participant 4) while one reported that formula milk was a solution for mothers having insufficient breast milk (participant 6). Another understood that formula fed babies sleep better compared to breastfed babies (participant 17).

> *'Milk brand' is quite good according to my opinion and what I saw in their advertisement…His excretion also was good just like what you hear in the advertisement. They have complete nutrients and plusses (participant 15, line 106-109).*

Breast milk is recommended as the best food for babies and formula milk should not casually be used as its substitute (World Health Organization 2011). In fact, formula milk is not a harm free product. These key messages are important and might help motivate more mothers to consider breastfeeding.

4.4.1.4 Sub-theme: Having problem solving skills

'Problem solving' is defined in the Macmillan's dictionary as 'a process of finding solutions to problems' (Rundell 2007). Some participants mentioned that they had to deal not only with problems related to breastfeeding but also with attitudes toward feeding from other family members such as their mothers-in-law. This issue is part of the Thai cultural context which might be different from Western culture. That is, mothers-in-law have an active role in child rearing, which also includes feeding the child. Participants had different ways to deal with problems related to breastfeeding, such as using their ability to resolve conflict and being an active learner. However, some mothers chose to accept their limitation in not being able to breastfeed.

Two participants had to comply with the wishes of their mothers-in-law to formula feed their babies when admitted to the hospital (participants 1 and 12). Another participant stated that she had to comply with her mother-in-law's decision on feeding the baby water and banana, along with breastfeeding, although she did not agree with the idea (participant 13). These three participants seemed to try to avoid having conflict with their mothers-in-law.

> *While I was being admitted at the hospital, my mother-in-law told me that my baby wasn't full yet…and she just went to get some formula milk to feed the baby. I dare not say anything (participant 12, line 140-142).*

Although some participants seemed to have difficulty handling their problems, one seemed to actively seek for other practical options to help solve her breastfeeding problems (participant 1). For instance, she asked for permission to stay longer at the hospital in order to visit the Breastfeeding Clinic, thinking that she could manage breastfeeding when she returned home and avoid conflict with her mother-in-law. After realising that her breast milk had decreased due to using formula feed along with breast milk, she decided to exclusively breastfeed and stock up her breast milk in bags, as much as possible, before she planned to go back to work. She succeeded in what she intended to do for the baby. The teenage participant also had to deal with disagreements with her mother-in-law, who wanted to look after and formula feed her granddaughter at night (participant 8). The participant did not allow formula feeding but insisted to express breast milk for bottle feeding instead.

> *…After pumping for some time the milk I used to get per day reduced from 3-4 ounces to 1-2 ounces. I was shocked by the reduction because I was actively pumping every three hours…It was very stressful for me and I was wondering why this is so difficult. So I called up my friend who is a nurse. She told me that I must also let the baby suck my nipples often. Also the webpage that I read said that I should let the baby suck to stimulate milk production. It works better than expressing. I decided to start things over again. I let my baby suck very often. I totally rejected formula milk (participant 1, line 158-165).*

> *If she (my mother-in-law) wants to take my baby to stay with her overnight I will pump my milk and put it in bottles for her (participant 8, line 64-65).*

In addition to having the ability to resolve conflicts, being an active learner is also another significant strategy that helps mothers to breastfeed. An active leaner is defined in the Macmillan dictionary as 'someone who does a lot of different activities and has a lot of energy and interests.' In this study, seven participants seemed to be active learners. They tried different ways to solve their problems and searched for more information using various sources, both lay and professional, such as magazines, booklets, web pages, and even reading through milk bags labels (participants 1, 3, 4, 6, 8, 12 and 16). However, among the participants, only two used professional sources (participants 1 and 6), while the rest preferred social media sources, such as 'Facebook' or 'Pantip'. 'Pantip' is a famous webpage aimed to share experiences in many aspects depending on members' demands. However, the reliability of the information from this webpage needs to be seriously considered. Three of the seven participants used information services from formula milk companies, such as WebPages and call centres (participants 1, 3 and 4).

> *I was in so much stress that I decided to call up 'formula milk brand' call centre to consult about whether expressing stimulates milk production in the same way as baby sucking or not. They answer was yes, but I heard from others that they are different (participant 1, line 187-189).*

> *I got most of the details from the net. I visit Pantip webpage and read all sorts of things there (participant 3, line 36-37).*

These cases suggest that being an active learner is a personality trait, which is important for mothers in solving problems related to breastfeeding. Although searching information from non-professional sources could give mothers

information that they are looking for, accuracy and validity from these sites could not be guaranteed.

Contrary to those participants who were active learners, some participants seemed to easily accept their limitations in breastfeeding their babies. Two participants said that they went through stress for not being able to breastfeed (participants 14 and 15). Another two blamed themselves (participants 7 and 9), while one felt that she is a failure (participant 6). One of the reasons for having these negative emotions might be because they had the intention but were disappointed for not being able to breastfeed their babies. They tried to decrease their expectation on the duration of breastfeeding (participants 2 and 6), accepting formula milk as a substitute for breast milk (participants 11 and 16), even giving up breastfeeding in some cases. One participant had not established breastfeeding (participant 9), another two stopped breastfeeding from the second week post-birth (participants 10 and 16), while three breastfed once a day (participants 6, 14 and 15).

> *I want to be able to achieve six months but I can't. I just can do three months (participant 2, line 62).*
>
> *After I had decided to use formula milk, I was in stress for a week. Then I believed that I really didn't have breast milk. I have already tried every way (participant 14, line 111-112).*
>
> *I just couldn't do it (participant 9, line 56-57). I could get less than an ounce. I am not sure whether the problem was with the pumps or not, because they were rather old. Or it might be just me. It might just be 50/50 (participant 9, line 161-162).*

Women who were successful in breastfeeding seemed to have sufficient knowledge regarding breastfeeding and positive personal characteristics, such as having high intentions to breastfeed and effective problem solving skills.

4.4.2 Theme: Practicality

There are three sub-themes to practicality: 'experiencing difficulty handling baby', 'unsuccessful in using breastfeeding support devices' and 'mothers with physical problems post-delivery'.

4.4.2.1 Sub-theme: Experiencing difficulty handling baby

Many participants expressed that they experienced difficulty, not only in dealing when babies crying, but the level of difficulty increased when also having to deal with babies with special needs.

Ten participants indicated that they experienced difficulty in handling babies having nipple confusion during feeding times (participants 1, 4, 5, 6, 9, 10, 13, 14, 15 and 16). They understood that their babies had been bottle fed before reuniting with them. Even though it is recommended not to have artificial teats or pacifiers in the hospital (World Health Organization 2010b), formula milk in a bottle was a common practice among the participants in this study. Therefore, dealing with babies going through nipple confusion seems to discourage participants to breastfeed. This has increased the participants' stress and caused them to take up formula bottle feeding more eagerly.

> *I would put the pumped milk into the bottle. She doesn't like sucking directly from my breasts. She would use her tongue to push my nipple off her mouth because she is used to bottles (participant 6, line 34-36).*

> *Actually the first milk of the baby wasn't breast milk any way. The nurse had already bottled fed him the first time. The baby already learned to suck a pacifier and already got used to that (participant 15, line 21-23).*

Some participants were going through other types of difficulties, such as having to care for babies with special needs. One has twin babies (participant 9), one has a baby with a mild tongue tie (participant 1) and the other has a baby with abnormally rapid breathing (tachypnea), who was admitted to the intensive care unit at post-birth (participant 16). The participant with twin babies perceived that the level of difficulty in handling and feeding twins without a helper was too great; therefore she was unable to establish breastfeeding. The participant with the baby with a mild tongue tie was fortunate to receive the advice from a nurse working at the Breastfeeding Clinic, this was to massage the baby's tongue, and she followed the advice. The participant whose baby was admitted to the hospital had high stress from worries about her baby's condition. She was able to handle a combination of breastfeeding and formula feeding for only two weeks before totally switching to formula feeding.

My baby didn't know how to suck. He is used to the bottle (participant 1, line: 84)…At the Breastfeeding Clinic, the nurse opened my baby's mouth and found that she was tongue tied, a mild one (participant 1, line 92-94).

My babies are also twins which made it much more difficult to breastfeed. One child was difficult enough (participant 9, line 174-175).

After Caesarean section delivery, my baby's breathing rate was high. I have to stay nine days at the hospital until the doctor allows my child to go home (participant 16, line 4-6).

4.4.2.2 Sub-theme: Unsuccessful in using breastfeeding support devices

Breastfeeding support devices, such as nipple shields and breast pumps were provided to the mothers in order to help facilitate breastfeeding (Riordan & Wambach 2010b). However, they did not seem to be very practical for the participants in this study.

Four participants reported that they could not use the nipple shields after returning home (participants 1, 9, 13 and 16). The main reason for this is because the nipple shields did not stick well to their breasts.

Then they went and brought a nipple shield…so I bought it because it may work for my children. But when I tried it on it always fell off. They tried it for me but when I took it home and did it myself it stuck for a while then fell off again. It didn't stick well (participant 9, line 166-169).

Besides being unsuccessful in using nipple shields, six participants expressed difficulty in using breast pumps (participants 9, 10, 12, 14, 15 and 16). They did not seem to have sufficient information about the advantages and disadvantages of the different types of breast pumps.

About the breast pump, as planned earlier, I didn't get to use it at all. My friend gave me a breast pump, a manual one. I used it but no milk came out. So I changed it for the one given by another friend which was an electric pump. That one also didn't help much. I could get less than an ounce. I am not sure whether the problem is with the pumps or not, because they were rather old (participant 9, line 158-162).

Breastfeeding support pillows also did not seem to be very useful with the participants in this study. Four participants, who had a C/S delivery, reported that they were not satisfied with using breastfeeding support pillows (participants 7, 9, 13 and 15) due to the fact there is contact between the pillow and the operation wound causing pain and irritation.

> *One more thing, I also have to find a pillow to support myself. It wasn't a comfortable thing to do. It irritated my wound (participant 9, line 169-171).*

Not having sufficient information and lack of demonstrations on how to use the devices effectively might be problems that discouraged mothers from breastfeeding. Using a breastfeeding support pillow might be problematic for mothers with a C/S wound, whereas demonstrating alternative breastfeeding positions, such as the 'football' hold might be more beneficial. Introduction of breastfeeding support devices to the mothers should be limited while helping practice proper breastfeeding positions should be recommended.

4.4.2.3 Sub-theme: Mothers with physical problems post-delivery

Participants with physical problems, such as perceiving having abnormal nipples is a problem to breastfeeding. Having a C/S wound, and having complications post-delivery, might inhibit initial and later stages of breastfeeding. Six participants who experienced difficulty with initial breastfeeding perceived that they have abnormal nipples. Four of the six participants mentioned that they had short nipples (participants 9, 12, 13 and 16). Two of the six participants were able to breastfeed on only one breast (participants 12 and 13). Three participants experienced pain from cracked nipples (participants 1, 13 and 15). Cracked nipples could cause severe pain during breastfeeding while short nipples could be difficult for the baby to latch on to (Smith & Riordan 2010). However, they all tried their best to breastfeed although they were suffering pain.

> *Since the beginning, I couldn't breastfeed because my nipples are inverted and they don't stick out. Little milk came out. My left nipple is short and on my right the nipple doesn't stick out at all. It is sunk inside (participant 13, line 8).*

> *My nipples were cracked and some blood was flowing (participant 15, line 92-93).*

Six of the seven participants who had C/S delivery reported having wound pain and complications such as leg numbness resulting from epidural block (participants 7, 8, 9, 13, 15 and 16). In fact, they needed more time to recover from anaesthetic drugs used during the operation which could affect initial breastfeeding (Smith & Riordan 2010).

> *Right after my delivery, this was a Caesarean section…When I came into the room my legs were still numb…The next day my mother and husband had not come yet. I also still have problem moving my body. My wound was hurting and that part too (participant 15, line 10-13).*

Some participants interrupted breastfeeding due to having physical complications post-delivery. Three participants reported having hypertension at post-birth (participants 3, 8 and 15). One of the three participants had abnormal blood sugar and hypertension (participant 15). One had cervicitis and was admitted to the hospital after returning home (participant 10).

> *I was supposed to breastfeed my child in the morning but the doctor did not allow **to** me because I was on medication for blood pressure (participant 3, line 89-90).*

> *I had a stomach-ache, headache, and high fever. I came to see the doctor and he told me that I have cervicitis. I had to be admitted into the hospital for six days. He told me not to breastfeed. I don't live with my baby. The grandmother is looking after my baby and only uses formula milk (participant 10, line 19-22).*

Having to deal with difficulties to breastfeed postnatal seemed to discourage mothers in initially breastfeeding. Early proactive care provided by nurses/midwives could help decrease these difficulties and ensure mothers' ability to breastfeed.

4.4.3 Theme: Support

Three main areas that the participants reported support from included: family members, workplaces, and health care professionals.

4.4.3.1 Sub-theme: From family members

'Support' that the participants indicated receiving most from family members was verbal support, providing foods and drink, help in child rearing, and being a care provider when they returned to work. Eight participants expressed that they have received verbal support from their partners (participants 3, 4, 7, 8, 10, 11, 14 and 16), mothers-in-law (participants 2, 4 and 17), grandmothers (participant 7 and 10) and friends (participants 1 and 9). Only three mentioned that they received verbal support from other family members, for example fathers-in-law (participant 12). Another participant, who separated from her husband, received support from her sister (participant 6), while the teenage participant received support from her aunt (participant 8). This implied that, in spite of spousal support, female family members are significant in giving care to the mothers during the postnatal period.

> *Yes, my fiancé. He told me that if our child would like to breastfeed then we should go with it. He supported me to breastfeed (participant 3, line 34-35).*

> *My mom and his mom too told me to breastfeed the baby (participant 4, line 48).*

One participant indicated that her husband prepares warm drinks to enhance breast milk flow (participant 8). Seven participants reported that their mothers helped prepare foods which are believed to help enhance breast milk production (participants 4, 5, 6, 10, 11, 15 and 16), while three received this type of support from their mothers-in-law (participants 2, 3 and 4). Foods with herbs believed to help breast milk production, reported by the participants in this study, were banana blossom, ginger, and liver. These are foods and drinks traditionally believed to help enhance milk flow (Thai Health promotion Foundation 2010); however, more supportive evidence on these effects is required.

> *My boyfriend also told me that if I have good milk flow, I should breastfeed my baby. He bought me milk, Ovaltine to support my milk flow. I heard that having warm drinks can stimulate milk flow (participant 8, line 36-38).*

> *My mom would cook gaenglieng (Thai spicy mixed vegetables soup), fried ginger, and garlic chives for me to help stimulate my milk flow (participant 6, line 112-113).*

> *She (mother-in-law) advised me to drink warm water so that I would have a lot of milk flow. She cooks me food which is believed to help enhance my milk flow, for example, gaengliang, and always had warm water available (participant 2, line 135-136).*

The participants in this study received only minimal support from their partners in child rearing. Only two participants received some help in child rearing from their spouses (participants 9 and 13).

> *He helped in preparing milk, washing bottles, and during the night each one of us looks after each baby (participant 9, line 89-90).*

> *My husband drives in the morning and then would stay home all day. He told me that he could look after the baby. Like today while I'm coming to the hospital, he is looking after the baby (participant 13, line 99-100).*

It was not only support received during the initial stage of post-birth that was important, having care providers was another important factor in sustaining breastfeeding. Eight participants indicated that their grandmothers will be the ones looking after the baby when they have to return to work (participants 1, 4, 5, 7, 10, 11, 14 and 15). Unfortunately, four of the eight participants' grandmothers live up country. Therefore, the babies would be separated, sent to their home town after the maternity leave is due to end (participants 5, 7, 10 and 11), while the other four live nearby (participants 1, 4, 14 and 15). Three participants had their aunts looking after their babies when they returned to work (participants 12 and 17) or school (participant 8). One participant had the owner of her boarding house as a carer (participant 3). This implied that the participants whose carers live in rural areas may stop breastfeeding after maternity leave (three months) while those with a carer living close by might have a higher possibility of sustaining.

> *I will bring him to my mom. They live in Srinakarintr. I will let him stay there (participant 15, line 292).*

> *After 3 months we will send him to grandmother to take care of him. We can't afford to leave our job to look after the baby (participant 7, line 91).*

Contrary to those participants who expressed that they received support from their family members, some had discouraging experiences instead. Seven participants expressed that their family members did not provide any support

for breastfeeding (participants 1, 5, 6, 7, 9, 12 and 13). One participant separated from her partner since her pregnancy (participant 6), while another participant has a husband living in another area due to his career (participant 5). Three participants mentioned that they were being pressured by their mothers-in-law for such things as requesting formula milk when being admitted to the hospital or feeding other food when being at home (participants 1, 8, 13).

> *Although we already have a child, he still wants to hang out with his friends like before. He helps sometimes but mostly he would just lie around because he is still recovering for an injury in his leg from car accident. I have to do everything else (participant 12, line 27-28).*

> *I did not have much support from my family members. When the nurse brought my baby for feeding, my baby would only bite my nipples and not suck. My mother-in-law then asked me to get some formula milk from the nurse to feed the baby because she doesn't want the baby to be hungry (participant 1, line 66-70).*

> *It's because his grandmother wants her to have it. If I didn't allow it then she would ask me to mash banana and she would feed that to the baby anyhow (participant 3, line 71-72).*

According to Thai culture, married women would traditionally move in to live with the husband's family. However, there are an increasing number of families that prefer to live separately from the extended family, following the Western way of living in a nuclear family, which means a family with two parents and children. Both the participants living with their husband's families were discouraged from breastfeeding because of the way their mothers-in-law took charge of formula feeding, or feeding other foods to babies. The two mothers were reluctant to express their feeding wishes to their mothers-in-law. Having sufficient information that recommended breastfeeding practice and other foods might help mothers deal with conflicts of ideas about the feeding.

Based on what the participants have said, the majority of the participants in this study did not seem to have received breastfeeding support from their spouse or mothers-in-law. Although most spouses did not support formula milk, they also did not seem to take any active role in supporting breastfeeding. This suggests that the decision to breastfeed seems to mainly lie with the participants themselves. One of the reasons for this might be because the women and their

family members lacked information about breastfeeding and skills to solve problems related to breastfeeding.

4.4.3.2 Sub-theme: From workplaces

Maternity leave and employers' attitudes toward breastfeeding were perceived as factors affecting breastfeeding for the participants in this study. Eleven of the 17 participants were working full time for different companies (participants 1, 2, 3, 4, 5, 7, 9, 10, 11, 15 and 16), one was working part time selling garments (participant 17), while five were housewives (participants 6, 8, 12, 13 and 14). Nine of the eleven participants who were working full time indicated that their maternity leave affected their ability to breastfeed (participants 1, 2, 3, 4, 5, 7, 10, 11 and 15). Six of the nine participants had been given three months maternity leave (participants 1, 2, 3, 5, 7 and 15), two participants reported they had been given 45 days (participants 4 and 10), while one said that she had been given only one month (participant 11). The six participants who had three months maternity leave seemed to be able to breastfeed more than the rest of the participants. According to Thailand's Labour Protection Act Law (see Chapter 1 Section 1.2.3 Social, cultural and demographic issues which might affect breastfeeding), having a shortened maternity leave, and only a half of their maternity leave days paid, caused some participants to return to work earlier. This discouraged their breastfeeding.

> *I already started working. I had only been off work for one and a half month. It seems that it's the company's regulation (participant 4, line 21).*

> *If I was given only one month then I could breastfeed only for one month, then I have to go and work. I actually could ask for another month leave but I will not get any pay. I don't really know how many months I was supposed to get, but the maximum is not more than two. There have been mothers taking leave for two months and getting paid for only one (participant 11, line 82-84).*

Employers' attitudes toward breastfeeding could either be supportive or discouraging. Only two participants reported that their workplace encouraged breastfeeding (participants 3 and 4). One of the two participants was allowed to go home to breastfeed her baby during lunch as her house was close to the workplace (participant 4). Another participant received support from her workplace by being allocated time and a place with privacy to express breast

milk, and a refrigerator to store the milk (participant 3). However, three participants expressed that they had to deal with a high work load after returning to work (participants 1, 3 and 11), while one participant said breastfeeding was a personal issue (participant 2). Three mentioned that they had to express breast milk whilst being in the toilet (participants 4, 7 and 11) and one indicated that her workplace did not support breastfeeding (participant 9). In fact, mothers need a clean venue to express breast milk (Rojjanasrirat & Wambach 2010).

> *My work place was also supportive. I was allowed to breast pump for my child at 9 a.m., noon and 3p.m daily…They have a place for me to breastfeed. It was at the dispensary. I could go there. It was set in one of the corners separated by a curtain similar to the one in the hospital…Each time took around 30 minutes. From the experience with my first child I think my work place supported me well (participant 3, line 15-19).*

> *It was in toilet. I go into the toilet and put down the toilet cover. Before going in, I would prepare everything and then I would go in and sit and pump my breast milk. They didn't have a place for me (participant 11, line 71-72).*

> *Mostly I saw them using formula milk. When they came back to work they all stopped breastfeeding. There were only a few. Some used pumps. I heard that they would bring their own breast pumps and pump their milk in the bathroom I think (participant 9, line 234-236).*

Four participants who were housewives indicated that they had not decided whether they should try to find a job (participants 6, 12, 13 and 14), while the teenage participant planned to return to school after a year (participant 8).

> *I am not sure. I will continue to try and see. My intention is to just continue breastfeeding as well as bottle feeding her. In the beginning my intention was for six months (participant 6, line 86-87).*

It could be inferred that support from the mother's workplace seems to be a significant factor affecting participants, who were full time employees, in their decision to continue breastfeeding. The participants who perceived that their workplace was supportive tended to continue breastfeeding after they returned to work, while the participants who did not receive support from their workplace appeared to wean the babies off breastfeeding prior to returning to work. Although having short maternity leave and non-supportive employers' attitudes

toward breastfeeding seemed to discourage breastfeeding, it is interesting to note that the participants without a job also did not breastfeed exclusively for six months.

4.4.3.3 Sub-theme: From health care professionals

Even though the BFHI was launched by WHO/UNICEF to promote breastfeeding worldwide, through the 'Ten Steps to Successful Breastfeeding', in practice barriers still remain (World Health Organization/United Nations Children's Fund 1989). Lacking a clear policy on breastfeeding support and lack of local standard practice could be barriers for the health care professionals, in particular nurses, providing sufficient support to the participants. For instance, breastfeeding immediately within a half-hour post-delivery and encouraging mothers and their babies to stay together for 24 hours after birth (rooming in) are recommended for successful breastfeeding. However, it appears that none of the 17 participants received this support (World Health Organization 2010b). Only three participants were given the opportunity to immediately interact with their babies after delivery (participants 2, 9 and 15). Moreover, six participants mentioned that they received samples of formula milk from the hospital's staff (participants 1, 6, 7, 10, 13 and 14). Although the person who handed it to her was not a health care professional working at the hospital, the 'gift' was in breach of the International Code of Marketing of Breast-Milk Substitutes by WHO (World Health Organization 2008). Five participants understood that their babies were formula fed before reuniting with their mothers and they thought this discouraged initial breastfeeding (participants 1, 2, 6, 8 and 15).

> *My child was delivered at 2 am. At 4 am I was sent to a ward to rest. In the morning they bathed my baby around 7 am, fed my baby with formula milk, and then brought him to me (participant 2, line 66-67).*

> *When I came for maternity check-up, there was a blue sign with a dolphin picture. I read it. I also received a box of sample formula milk (participant 13, line 145-146).*

The hospital policy affected the standard practice or guideline for the health care professionals in providing breastfeeding support to the participants. For instance, one participant indicated that she received contradictory advice about cup feeding and bottle feeding from nurses working at different wards

(participant 15). All 17 participants mentioned that health care professionals offered formula milk in bottles for babies. Only one, whose baby had a mild tongue tie, was transferred to the Breastfeeding Clinic for specific help regarding her baby's condition (participant 1).

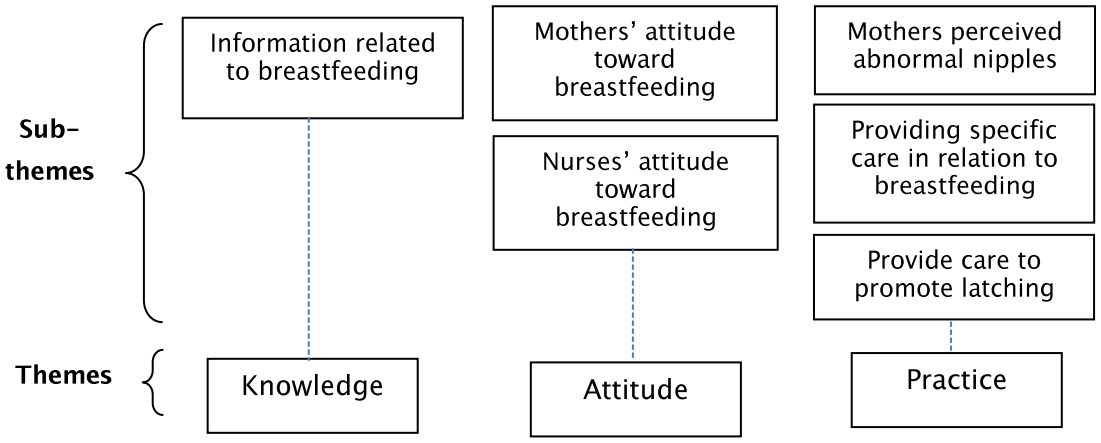
> *When they brought the baby, they would ask whether I have enough breast milk to feed the baby. If not then they would get some milk from 4th floor. I think they told me the time, it was 5 p.m., 9 p.m., 1 a.m., I couldn't really remember (participant 17, line 108-109).*

> *There should be some adjustment through consultation between the newborn room and the room upstairs…I am not sure what it's called, the room that we rest in. They seem to have different theory. When the baby cries, the nurse at the newborn room suggest to bottle feed because that is the natural sign that they are hungry. But that nurse came to see me and scolded me and my mother, and told us not to bottle feed because the baby will not breastfeed then (participant 15, line 40-45).*

The 'Ten Steps to Successful Breastfeeding' was not fully adopted by the hospital. Therefore, the participants in this study did not seem to have received adequate support from the health care professionals at the hospital (World Health Organization/United Nations Children's Fund 1989). Having standard practices and guidelines might be more helpful in promoting breastfeeding to mothers.

The second aim of phase I of the study was to investigate mothers' needs of breastfeeding support from the health care professionals. Therefore, the focus was mainly on the data in relation to the breastfeeding support needs the participants reported. In addition, the services that the participants received from the health care professionals, which are related to the support they required, are also presented. In order to answer the research question, each sub-theme which emerged from the analysis of the three themes that contributes to 'women's needs of breastfeeding support from health care professionals' are presented in Figure 4.8.

Figure 4.8 Sub-themes of the themes that contribute to women' needs of breastfeeding support from health care professionals



4.4.4 Theme: Knowledge

4.4.4.1 Sub-theme: Information related to breastfeeding

Many participants in the study indicated that they perceived that they have insufficient breast milk to feed their babies. Therefore, it was not surprising that seven participants recognised that they required more information about breast milk production (lactogenesis) (participants 1, 2, 3, 4, 6, 9 and 14). Three participants said that the main issue they wanted to know more about was how to have copious breast milk for their babies, particularly when returning to work (participants 2, 4 and 14). Three participants needed information about alternatives to help enhance breast milk production such as medicine and herbal galactogogues (participants 2, 3 and 6).

> *…Are there any alternatives that could help me achieve six months breastfeeding? For example, what to do if our milk stock run out, what are other ways to stimulate, what are other ways to increase the breast milk? (participant 2, line 148-150).*

Traditional beliefs that certain food and drink, such as having warm drinks or ginger drinks, having banana blossoms or liver could enhance breast milk production, could lead the participants to misunderstand the facts about breast milk production (participants 6, 12, 13 and 17) (see Section Theme: Support, Sub-theme: From family members).

It was not only more information about how to stimulate breast milk production that the participants needed, they were also unsure about their baby's daily needs. Six participants expressed that they did not know about babies' requirements such as the amount of milk per day that the baby requires, the gap between feeding, whether to feed the baby if they are still sleeping and recommended duration for breastfeeding (participants 2, 3, 4, 5, 9 and 12).

> *The important thing is they should let us know…whether we should wake our babies up to breastfeed when they are still sleeping? (participant 3, line 137-139)*

While many participants indicated that they were concerned about breast milk production and baby's requirement, some that had to return to work also mentioned about sustaining breastfeeding. Nine participants wanted to know more about how to express, store, prepare, and the expiration of breast milk as well as how to use milk bags (participants 2, 3, 4, 5, 8, 9, 10, 12 and 17). Four participants wanted more information about breast pumps (participants 2, 3, 12 and 17). One participant asked about weaning breastfeeding babies (participant 5).

> *They did mention something about storing breast milk but not in detail. The nurse said that if my milk started to flow then I could collect and store it. I could put it in the freezer for 3 months. They didn't teach me how to express and gave no details on how and for how long to keep it (participant 10, line 76-78).*

> *Another thing that I want to know is what indicators can I observe when a baby is weaning and what do I need to do to stop breastfeeding. If milk flow continues, what do we need to do. I want to know how I should put myself in this situation (participant 5, line 90-92).*

Participants indicated that they wanted to have more information on different issues regarding feeding. Two of the three participants were not sure whether water should be given to breastfed babies (participants 9 and 15), while one participant asked about when to start feeding semi-solid, and solid food (participant 12). Three participants needed information about the effect of drugs used during lactation (participants 3, 6, and 11). However, three participants were concerned about making decisions to formula feed (participants 2, 9 and 15). One needed more information on nipple hygiene (participant 2) and one requested information on contraceptive methods (participant 8).

> *I would like them to have more information, for example, how old should they be before giving solid food. I have to look for this by myself. Relatives and elder family members told me that I can start giving it after six months. They didn't tell me what the baby can eat of how to prepare it. Some older relatives told me that after three months, I can give a mixture of mashed liver and vegetables, that sort of thing (participant 12, line 171-174).*

> *The advice I want from them, for example in my case, I can only breastfeed for three month. I want to know what formula milk would be best for my baby. I want them to tell me the brand that is the most similar to breast milk. They just give general information and I don't know which brand is better (participant 12, line 103-105).*

It can be seen that issues related to breastfeeding, such as lactogenesis, how to have copious breast milk, baby's requirements, keeping and storing breast milk, as well as other issues such as feeding other foods and drinks, drugs used during lactation, nipple hygiene and using contraceptives during lactation, were the topics the participants in the study wanted more information about.

4.4.5 Theme: Attitude

4.4.5.1 Sub-theme: Mothers' attitudes toward breastfeeding

The mother's attitude toward breastfeeding was another significant aspect for successful breastfeeding. Seven participants indicated having discouraging attitudes regarding breastfeeding (participants 6, 7, 9, 10, 12, 13, and 14). For instance, one participant was shy about breastfeeding in public (participant 12) and one thought that delay in reuniting with the baby, on the third day post-birth, was good (participant 7). Two participants gave up breastfeeding very early (participants 9 and 14). One participant blamed herself as the problem for not having sufficient breast milk (participant 10). Two participants believed that feeding both breast milk and formula milk is acceptable (participants 6 and 13).

> *I left the hospital on the 5th day after delivery. I can't breastfeed my baby because I have visitors coming. That time I was shy to breastfeed so I gave him formula milk instead. People just keep coming. It wasn't convenient to breastfeed (participant 12, line 155-156).*

Having a negative attitude towards breastfeeding, such as believing that six-months exclusively breastfeeding is impractical for working mothers (participant 12) and/ or having positive attitudes toward formula milk, such as believing that nutrients being added into the formula milk benefit baby's health, or that formula milk could be a substitute of breast milk (participants 12 and 15) could also discourage mothers from breastfeeding (see Section 4.4.1.3 Sub-theme: Having commitment to breastfeed).

4.4.5.2 Sub-theme: Nurses' attitudes toward breastfeeding

Among the health care professionals at the hospital, nurses were the key persons in providing the services and information about breastfeeding to the participants (participants 2, 4, 6, 9, 11 and 16). Therefore, nurses' attitudes toward breastfeeding directly affected the participants.

Thirteen participants talked about different issues concerning services provided by the nurses (participants 1, 2, 3, 5, 6, 8, 10, 11, 12, 13, 14, 15 and 16). What they expected to receive in the form of breastfeeding support from the nurses includes: (1) need more practical and in-depth information about breastfeeding (participants 2, 3, 5, 8, 10 and 14), (2) need for every nurse to be able to provide standard care for mothers (participants 1, 2 and 12), (3) advice should also be provided for the family members (participants 1, 2 and 14), (4) nurses should set first time mothers as a priority in providing support (participants 14, 15 and 16), (5) nurses should have more consideration for mothers who do not have sufficient breast milk (participants 6 and 15), (6) too many contradictory pieces of advice were received from nurses working on different wards (participant 15), (7) there should be more specialists in breastfeeding available to provide the services (participant 14) and (8) nurses should offer greater encouragement to mothers to nurture their baby at night and to promote breast milk production (participant 1).

> *Those working at the postpartum ward should have more knowledge of solutions to breastfeeding problems similar to those working at the Breastfeeding Clinic (laughing). They also should provide information, such as that about the Breastfeeding Clinic, where we can get support when there are problems. It would be very helpful because we can get information and learn different technique.*

> *What we learned there is not just theories but experiences from others* which *were real problems and ways to solve them (participant 1, line 265-271).*

It was not only more services and care in relations to breastfeeding support from nurses, which the participants requested. The ways nurses communicate was another issue about which the participants indicated concern. Three participants expressed that they were not satisfied with the way the nurses communicated to them (participants 3, 9 and 14). For instance, one participant felt that nurses were not sympathetic (participant 3). Two participants expressed rather strong negative feeling about nurses, such as that 'nurses acted like commanders' (participants 9 and 14), 'very mean' (participants 9 and 14), 'very serious', 'like a factory' (participant 9) and 'threatened patients and did not use kind words' (participant 14).

> *There the nurses acted like commanders. They told me that if I can't breastfeed my babies then they would not be strong. They were very mean. They told me that I should follow their way and should work hard. I thought to myself what I should do (participant 9, line 164-166)...I felt that the atmosphere was very serious ...it was like a factory. There was no individual care (participant 9, line 182-183).*

This theme has highlighted the importance of both knowledgeable and caring staff in providing breastfeeding support to the women.

4.4.6 Theme: Practical

4.4.6.1 Sub-theme: Mothers perceived abnormal nipples

Unsuccessful use of breastfeeding support devices, such as nipple shields, was reported by the participants. Therefore, it could be understood why the participants who perceived having abnormal nipples expressed the need for more practical ways to support them to breastfeed. For instance, one participant asked for more information on how to extend her short nipples (participant 12) while another was not sure how to deal with her cracked nipples (participant 1). Three participants wanted more information about using nipple shields (participants 1, 9 and 16).

> *With already cracked nipples I wasn't sure what I could do (participant 1, line 85).*

> *I want them to tell me how to solve my nipples problem. I didn't know before that I have to pull them earlier. I only learned later and they don't come out properly. If I had been told at the time I came for maternity check-up, it would have been better. Some people have been told since they got pregnant that they should pull every day so they would stick out (participant 12, line 104-107).*
>
> *The first night that I was home I still had difficulty getting my child to suck from the nipple shield. After trying for a long time, so I decided not to use it and let her suck directly from my nipples even though they were cracked and sore (participant 1, line 143-146).*

Any misunderstanding about having abnormal nipples as a barrier to breastfeeding should be corrected while information about preventing cracked nipples should be given to the mothers in order to encourage their breastfeeding.

4.4.6.2 Sub-theme: Providing specific care in relation to breastfeeding

Five participants suggested providing more specific care about breastfeeding. Three of the five participants preferred individual care to help promote breastfeeding (participants 2, 9 and 14), especially by spending more time with the mothers during the breastfeeding period (participants 9 and 14). One participant requested that there should be a standard assessment and guideline for breastfeeding support (participant 2). Two participants expressed that having classes on general information about breastfeeding would be useful (participants 14 and 17) while one participant thought that the support should be provided at both ANC and PP in order to help mothers to be successful in breastfeeding (participant 9). She also suggested that a class should be run by experienced mothers rather than just showing videos. Mothers should be separated into two groups because there are mothers who might need more intense support and others just needing general nurses to work as a team. Breastfeeding problems should be resolved before discharging mothers from the hospital (participant 9). Two participants mentioned that leaflets about breastfeeding should be made available (participants 3 and 12). One participant suggested that a call centre that opens during working hours would benefit mothers in finding out more information regarding questions they have on breastfeeding (participant 3).

> *I would like to have full attention from a nurse the first day she brought my baby. She doesn't have to be with me all the time but give me more attention, maybe every five or ten minutes. She should be able to set an alarm. It seems that the time when my baby is feeding, they should come and observe, or come when I call (participant 14, line 195-200).*

> *There should be a call centre. It would be good if there is (participant 3, line 161).*

Standard breastfeeding support, received from the health care professionals at hospital at present, seemed not to meet individuals' requirements for breastfeeding support. Improving services in promoting breastfeeding at the hospital is considered important.

4.4.6.3 Sub-theme: Providing care to promote latching on

There were still some technical barriers in promoting breastfeeding to the participants in this study such as in positioning and early stimulation of the breasts. Some participants suggested that there should be hand-on practices on child rearing.

Two participants indicated that they received advice on positioning. One of the two participants said she received information about different holding positions, of which cradle holding worked best for her (participant 5). Another participant thought that information about the holding position might not benefit second time mothers (participant 3).

> *On how to hold a baby for feeding, other positions are also useful but I use only one, the cradle (participant 5, line 38-39).*

> *For example, how to carry a child wasn't really useful for me. I can carry him every way. This is already my second child (participant 3, line 65-66).*

While some participants understood that early stimulation of the breasts was one of the keys to successful breastfeeding, others did not. Three participants expressed that the health care professionals should provide more opportunity for them to have stimulation of their breasts immediately after delivery because they understood that it could help them to have better milk flow (participants 1, 3 and 5). Controversially, two participants commented that reuniting with their

babies on the second day, post-birth, was not ideal for C/S mothers (participants 9 and 15).

> *I really wanted to have my baby sucking my milk right after delivery (participant 1, line 211-212).*

> *Since post-delivery…bringing babies to me on the second day did not help at all. My wound was hurting. They should have brought them on the third day (participant 9, line 60-61).*

Other practices to help improve the services of the hospital, as suggested by the participants, were: practical ways to help baby's sucking, introducing hospital's regulations, baby follow-up appointment, ways to contact the hospital after being discharged from the hospital and hospital's policy which should prioritise promoting breastfeeding. These requests and expectations are realistic and standard internationally.

Three participants suggested that the health care professionals should provide more information about services being provided at the hospital (participant 11), about the hospital's regulations regarding times of visiting (participant 15), and future appointments to assess babies' breastfeeding condition and health before mothers are discharged from the hospital (participants 9 and 15).

> *There should be appointments to ask us whether we are successful in breastfeeding or not (participant 9, line 206).*

Two participants said that the services being provided by the health care professionals might not be practical. For instance, immediate sucking to the breasts after birth might not be ideal (participant 11), dropping formula milk on nipples to encourage baby's sucking and providing breastfeeding support pillows which were uncomfortable (participant 15).

> *They drop milk on my nipple to motivate the child to suck to stimulate my milk flow. They didn't have to do that. My child loves sucking my nipples (participant 15, line 85-86).*

Four participants expressed that there was a lack of demonstration on bathing a baby (participants 12 and 16), providing a contact number for mothers to consult on breastfeeding problems was missing (participants 1 and 3). One participant said that the hospital should take breastfeeding support more seriously (participant 1).

> *It would be good if there were a call centre that can give us proper answers. To be practical, there should be someone who can answer me (participant 3, line 146-147).*

This evidence suggests that many women have knowledge gaps and have been misinformed regarding breastfeeding. In fact, women know what they actually need of breastfeeding support from the health care professionals, and this is one of the best sources of information in developing the tool to be used as a guide in providing specific breastfeeding support to meet their needs.

4.4.7 Summary of the findings

The participants stated that, in the main, the information and services that they received from health care professionals did encourage them to breastfeed. Nurses played a key role in interacting with the participants, while obstetricians seemed to be less involved in supporting breastfeeding. Nevertheless, participants were still looking for better services and wanted to have more practical knowledge regarding breastfeeding. If the overall low rate of breastfeeding mothers is to be confronted, developing better supporting practices for these mothers would be a challenging aspect for nurses working in the maternity field.

The policy of the hospital impacts the health care professional's activity in providing care for the mothers. Not fully adopting the 'Ten Steps to Successful Breastfeeding' into the services at the hospital can be seen as discouraging mothers from breastfeeding (World Health Organization 2006). However, attempting to best help facilitate nurses working in the obstetric field to support mothers to breastfeed their babies within the hospital's environment, is the aim of this research rather than discussing the hospital's policies. Also, slowly working to ensure policies are appropriate is important in making progress with the breastfeeding services of the hospital. The emphasis is placed on the participants' needs of breastfeeding support provided by nurses. The themes and sub-themes that emerged show that there are significant issues which should be considered by the health care professionals when providing breastfeeding support to postpartum women.

In conclusion, it is clear that there is a gap between the present services provided by the health care professionals and the services which the participants believe could help support them to breastfeed. The needs of each participant are likely to be different. For instance, a mother who had experience breastfeeding her first child might not need help in latching on or positioning her subsequent baby, but would prefer support in more specific aspects such as ways to enhance breast milk production at her work place. The discussion explores this further and possible practice based solutions.

4.5 Discussion of the findings

To obtain a better understanding of the findings from Phase I, themes that contribute to 'women's experience of breastfeeding' and themes that contribute to 'women's needs of breastfeeding support from health care professionals' are discussed in relation to practice and wider literature. The information gathered from the interview data was used to contribute to the development of the 'Breastfeeding Support Package'.

4.5.1 Themes that contribute to women's experience of breastfeeding

Attitudes toward breastfeeding and formula feeding among the participants developed across Thai cultural norms. Formula milk and bottle feeding has been a Thai social norm in feeding babies for over 60 years since after World War II (Thai Breastfeeding Organization 2007). This implies that since then, the present parents' generation accept formula milk as a choice for feeding children. Many countries around the world are concerned about the possible disadvantages of formula milk and strictly follow the International Code of Marketing of Breast Milk Substitutes. This code aims to protect babies' right to avoid being harmed by breast milk substitutes (Thai Breastfeeding Organization 2007; World Health Organization 2008). At present, there is still no restriction on advertisements for formula milk on television or other media, as a law on this in Thailand has yet to be passed. With the success of different strategies used by formula milk companies, the use of formula milk is widespread in Thailand (Thai Breastfeeding Organization 2007). The marketing strategies being used to promote the formula milk brands include heavily advertised benefits of formula

milk, establishing brand recognition by using healthy babies on containers and boxes as well as advertisements and the sponsoring of medical conferences. The benefits of substances added into certain brands, which are claimed to help develop children's intellects and benefit their elimination systems (Fitzgerald 2010), could persuade mothers to buy and use formula milk, thereby depriving babies of the benefits of breast milk (Thai Breastfeeding Organization 2007). Images of healthy babies are being portrayed in the advertisements of formula milk, potentially misleading mothers about their benefits, while the negative side, such as the higher possibility of being allergic to cow-milk protein and milk contamination is never presented to the public (Riordan & Smith 2010). The hospital's policies on banning any kind of advertisements or promotion campaigns of formula milk brands, such as accepting their sponsorship for organising conferences for health care professionals, giving out free samples in the hospital or using hospital staff in their campaign, should be strictly observed. All these marketing strategies being used to promote formula milk brands seem to have had an impact on Thai culture and are obstacles for achieving successful breastfeeding.

Although WHO/UNICEF launched BHFI and the 'Ten Steps to Successful Breastfeeding' in 1991 (World Health Organization/United Nations Children's Fund 1989; World Health Organization 2006), the hospital where this study was conducted still has not fully adopted these guidelines. Progress of breastfeeding promotion in Thailand in the past 25 years seems to have been very slow and it could be clearly seen why by looking at how the hospital responds to the call of WHO (World Health Organization n.d.). This slowness to respond to WHO's call reflects the rate of mothers who achieved breastfeeding exclusively for six months in 2006: it was 5.4 per cent (World Health Organization n.d.). It was not until the past nine years that a serious breastfeeding promotion campaign was started in Thailand by the Thai Breastfeeding Centre Foundation. The campaign took off on June 16, 2005. Another breastfeeding campaign is the 'SaiYaiRak Hang Krobkrua Project', supported by WHO/UNICEF, which was established by HRH Princess Srirasmi in 2005 (Thai Breastfeeding Organization 2007; Ministry of Public Health and Ministry of Social Development and Human Security Thailand 2008). The success of HRH Princess Srirasmi in the six months exclusive breastfeeding for her son (Prince Teepungkorn Rassameechoti) became a model for many Thai mothers. Continual campaigning has helped increase the rate of mothers who achieved breastfeeding exclusively for six

months to 15 percent in the year 2012 (OECD/World Health Organization 2012). Although, at present, Thailand has not achieved its national goal of 30 percent exclusive breastfeeding for six months (National Economic and Social Advisory Council 2010), the trend which is slowly increasing indicates that breastfeeding is becoming more popular in Thai society (Thai Breastfeeding Organization 2007). Valuing breastfeeding seems to be an encouraging factor for the participants in this study. The main reasons for their positive attitudes, that the participants mentioned, were the benefits of breast milk on babies' physical health, promoting bonding between mothers and babies and being economical. Moreover, some other benefits, such as the mother's gradual weight loss, might be important factors as well, particularly among teenage mothers and those who are serious about keeping in shape. However, other information expressed by the participants is still uncertain, such as increasing intellectual development, so it should not be claimed as an advantage of breastfeeding because there are a variety of factors affecting babies' intelligence (Der et al. 2006; Hoddinott et al. 2008; Groen-Blokhuis et al. 2013; Gibbs & Forste 2014). According to Pender's health promotion model, perceived high benefits could motivate people to have health promoting behaviour. The value of breastfeeding should be communicated to the mothers to help motivate them to breastfeed (Pender 2011). A comparison of the benefits of breastfeeding expressed by the participants, with the evidence base, is presented in Table 4.3.

Table 4.3 Comparing the benefits of breastfeeding expressed by the participants with the evidence base

Benefits of breastfeeding	Supporting information
Babies 'getting strong' or 'not getting sick easily' (participants 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 and 17)	This is true based on the fact that breast milk contains antibodies which can prevent illness in babies (Royal College of Midwives 2002; Riordan 2010b). This is consistent with the recommendation by WHO that 'breast milk is the best food for babies' as well as with many studies which indicated that breastfeeding could minimise risk to babies from respiratory and gastrointestinal tract infection (Kramer & Kakuma 2009; World Health Organization 2010b; World Health Organization 2011; Horta & Victoria 2013).
'Promoting warmth and love' and 'creating a bond between mothers and the babies' (participants 5, 8, 12, 14 and 15)	The bonding and attachment between mothers and babies will have an impact on their emotions and personality when they are adult (Bowlby 2005).
'Losing weight quicker' (participant 8)	Gradual weight loss is confirmed to be one of the advantages of six months exclusive breastfeeding mothers (Kramer & Kakuma 2009).
Being 'very economical' (participants 3, 7, 8, 9, 10, 12, 14 and 17)	This fact is supported by the Thai Breastfeeding Organization (2012) which indicated that breastfed mothers could save about 80 pound per month. Comparing to formula fed babies, the value of breastfeeding could be extended much further considering the lower risk of babies being admitted to the hospital due to illnesses and the amount of expense a family could save by not purchasing formula milk. However, mothers should also be informed about the fact that breastfeeding is not cost free. During breastfeeding, mothers should also consider taking an appropriate and healthy diet (World Health Organization & UNICEF n.d.).

Benefits of breastfeeding	Supporting information
'Intelligence' (participants 6, 8 and 14)	It has been suggested that breast milk is associated with the development of greater intellectual ability (Henschel & Inch 1996; Kramer et al. 2008; Steer et al. 2010). However, there are many factors affecting babies' intelligence, such as maternal literacy, race, poverty or home environment (Der et al. 2006; Hoddinott et al. 2008).

From an analysis of the data gained from the 17 participants, it was found that all of them had the intention to breastfeed. However, only three of them had achieved exclusive breastfeeding at the time of the interviews (participants 1, 3 and 8). The magnitude of this gap is of concern.

Studies indicated that some demographic characteristics, such as maternal age, gravida, and literacy are factors affecting breastfeeding (Winterburn 2007; Dare & Joseph 2011; Dennis et al. 2013; Dachew & Bifftu 2014). However, the three participants who exclusively breastfeed, have different individual characteristics. There was a first time teenage mother who completed ninth grade in study. Two were first time mothers who graduate with a bachelor's degree. Due to fact that the study has only seventeen participants, it cannot be concluded whether these individual characteristics also influence breastfeeding. The interesting point is all of the three 'successful' participants indicated that they had a strong intention to breastfeed exclusively for over six months to a year. While the intention to breastfeed is subjective and difficult to measure, having an intention to exclusively breastfeed for at least six months or more might mean that they had decided or committed themselves to breastfeed, as well as perceive their self-efficacy to do so (Bouras et al. 2013; Loke & Lai-Kwai 2013; de Jager et al. 2014). This is consistent with Pender's health promotion model which indicates that perceiving self-efficacy is one of the factors which could affect people in doing health promoting activities (Pender 2011). Mothers' perceptions of their self-efficacy could affect their commitment to breastfeed (Pender 2011). These demographic characteristics could provide nurses and health care professionals with a broader understanding about mothers with a high risk of breastfeeding cessation. These factors could also be used in planning proper support for

individual mothers. Strategies to increase mothers' self-efficacy, such as increasing their knowledge regarding breastfeeding and equipping them with skills to solve breastfeeding problems through breastfeeding education, should therefore be considered by the health care professionals at the hospital.

Theory regarding self-efficacy has been an interest of many researchers and was included in the programme to promote breastfeeding recently in China, Japan, and Thailand (Awano & Shimada 2010; Kupratakul et al. 2010; Otsuka et al. 2014; Wu et al. 2014). However, qualitative research conducted in Japan, where 781 pregnant women were recruited into the study, indicated that the programme would not have a positive impact on breastfeeding if the hospital does not have the appropriate environmental context, according to BFHI standard (Otsuka et al. 2014). This research may have some limitations regarding the details of observation of mothers' efficacy to breastfeed. Consider the condition of the hospital where my research was conducted. It has not fully adopted the 'Ten Steps to Successful Breastfeeding' and hasn't been accredited as a BFHI. The environmental context and practice of the hospital, which does not meet the WHO standard, therefore does not support breastfeeding. At present, the hospital is also facing a shortage of nursing staff. Based on the analysis above and recognising that while the long term aim might be to change the hospital policies and fully adopt BFHI and the 'Ten Steps to Successful Breastfeeding', better support for women who wish to breastfeed is urgently needed to cope with the present, less than ideal, situation. This support is most likely to come from the nurses working on postpartum wards (World Health Organization/United Nations Children's Fund 1989; World Health Organization 2006). It was concluded that to meet the need of individual women using the service, nurses must first identify the mothers' needs in order to be able to provide them with the required support. Drawing on professional knowledge of the evidence base for breastfeeding, the decision was made to develop the 'Breastfeeding Support Package', consisting of a tool and an evidence-based information leaflet. This package might be a means to facilitate and guide nurses working at the postpartum ward and to provide postpartum women who use the service with more accurate information in order to meet their particular requirements as well as the needs of their babies. The details regarding the 'Breastfeeding Support Tool' and 'leaflet' are further discussed (see Section 4.5.3.3 Development of the 'Breastfeeding Support Package').

The participants, particularly those mothers with C/S delivery who experienced difficulty during initial breastfeeding in this study, did not seem to have received support with rooming-in (Cakmak & Kuguoglu 2007; Pe'rez-Ri'os et al. 2008; Zhu et al. 2013; Raghavan et al. 2014; Suzuki 2014). The ratio between mothers having C/S delivery and vaginal delivery at one government hospital in Bangkok in 2010 was 47.6 to 52.4 per cent (2,423 and 2,672 respectively) (Chulalongkorn Memorail Hospital 2010). High rates of C/S delivery at the hospital may be due to several reasons. For example the hospital may be a tertiary and university hospital where there are numbers of mothers with complications. Although C/S is indicated by the obstetricians, it could result in maternal or foetal complications. Preferences of some obstetricians and mothers have also increased the rate of C/S delivery. Caesarean delivery seems to benefit mothers who are afraid of going through the normal delivery process (tokophobia) (Hofberg & Ward 2007). Epidurals, which are commonly used during C/S delivery, also have negative indirect effects on breastfeeding (Riordan & Hoover 2010). After birth, the participants and their babies were routinely separated for a short period of time in order for the paediatricians to assess for any baby's abnormalities. Prior to reuniting the babies with their mothers, nurses working in the NR would assess the readiness of mothers to breastfeed at the ward they are being admitted into. The time period before reuniting the baby and the mother may vary depending on many factors such as mother's and baby's health condition. In practice, the child will be reunited with the mother within eight hours, while with C/S delivery the child will be reunited with the mother on the next day. One of the reasons for this is to protect the child from unforeseen circumstances, due to the limitation of mobility and movement of the mother. Examples of these cases are complications post C/S delivery and need for receiving intravenous fluid for 24 hours. Mothers having a C/S delivery are usually given epidural anaesthetic drugs which in some cases cause numbness of legs and impaired mobility post-birth. Such separation of the mothers and babies post-birth, which is against the rooming-in recommended by WHO, would often result in babies having been fed with formula milk from a bottle several times prior to being reunited with the mother. This could possibly be one of the causes of nipple confusion (World Health Organization 2010b). Babies experiencing nipple confusion may not only discourage mothers from breastfeeding at the outset of the postnatal period, but can also create more difficulties for mothers in dealing with breastfeeding

problems, after being discharged from the hospital (Jaafar et al. 2012). Delay in sucking could cause oxytocin, a hormone which helps with breast milk ejection, to decrease (Riordan 2010a). Therefore, such confusion delays the onset of breast milk production. Immediately supporting a mother while she is recovering from a C/S, such as rooming-in and skin to skin contact, should be promoted regardless of the type of delivery she went through. A team of multidisciplinary colleagues, such as nurses, midwives, or nursing lecturers, should be involved in putting together a more comprehensive maternity policy for the hospital (Hatem et al. 2009).

Numerous qualitative, quantitative, and systematic reviews from Europe and Asian countries confirmed that health care professionals can significantly help increase the rate of breastfeeding (Britton et al. 2007; Su et al. 2007; Dyson et al. 2008; Christopher 2009; Racine et al. 2009; Abba et al. 2010; Awano & Shimada 2010; Kupratakul et al. 2010; Nickel et al. 2013). However, services that do not meet the needs of the mothers and provide conflicting advice discourage breastfeeding (McInnes & Chambers 2008; Abba et al. 2010). This is consistent with the findings of my study which revealed that the three mains problems in receiving breastfeeding support, which discourage the participants from breastfeeding, were: receiving inconsistent or contradictory advice and practice, having limited support from nurses working at the Breastfeeding Clinic and nurses' attitudes and practice toward formula feeding.

Not having sufficient knowledge is one of the most significant points hindering nurses in providing breastfeeding support to the mothers. The most common reason for not continuing breastfeeding is participants' perception of having little or no breast milk. Lack of information regarding breast milk production from nurses is an important issue discouraging participants to begin initial breastfeeding, as well as being a cause of early cessation of breastfeeding, as reported by the participants. The details about lack of information regarding breastfeeding are discussed in Section Themes that contribute to women's needs of breastfeeding support from health care professionals. Mothers with some physical difficulties, such as having short nipples, need more information and specific support during post-birth to help their babies to initially succeed in suckling. The advice a participant (participant 9) received from the health care professionals to do nipple pulling exercises (Hoffmann's exercise) during pregnancy does not seem practical and is not recommended (Riordan & Hoover

2010). Although positioning and latching on are important for success in breastfeeding, mothers who have difficulty breastfeeding directly from nipples tend to give up their breastfeeding during the early postnatal period (Walker 2010). These 'early leavers' could also consider using nipple shields made from thin silicone to help them sustain breastfeeding of their babies (Riordan & Wambach 2010a). Mothers should be given demonstrations on how to use them correctly as well as the opportunity to practice using breastfeeding support devices, such as nipple shields or breast pumps before they are discharged from the hospital. For instance, issues about the nipple shields not sticking well could be solved by applying a small amount of water before putting it on to help grip the device (Walker 2010). Mothers with complicated issues, such as having a tongue-tied baby, having twins, and mother or baby, or both, being admitted to the hospital, might have more difficulty in establishing breastfeeding. The nurses demonstrated cup feeding to help improve babies sucking in the case of twins, which is a recommended practice (Pollard 2012). However, neither of the mothers continued to practice cup feeding their babies. It might be because of the traditional belief that cup feeding is associated with aspiration. This misunderstanding can be easily corrected by a well-trained professional. This also implies the importance of ensuring that all health care professionals have proper knowledge for them to do their job and convey the messages that are in-line with the WHO to the mothers (World Health Organization 2006). Having more nurses trained on breastfeeding counselling might help breastfeeding services meet to the needs of individual mothers. Setting an appropriate schedule and budget for training obstetric nurses is an important aspect that the policy maker should bear in mind for improving breastfeeding support. Spending time with the mothers to assess nipples, providing specific support according to the requirement of mothers, and bed-side coaching on latching on, could help encourage mothers to breastfeed right from early post-birth. However, the shortage of nursing staff, and the absence of lactation consultants, could have a negative impact on providing breastfeeding support for individual mothers.

Living in an extended family could help support women in child rearing because there are more people available to help and they could also learn indirectly about breastfeeding from other experienced family members, especially the more senior members in the family. Conversely today more and more couples live in a nuclear family, separated from their parents due to their work and other

reasons. Spousal support has been shown to encourage mothers to breastfeed in countries such as Britain, Australia, and the US, but according to the findings of my study, the participants did not get any significant breastfeeding support from their spouses (Clifford & McIntyre 2008; MacArthur et al. 2009; Racine et al. 2009). Although most spouses do not agree with formula feeding, they did not take an active role in encouraging breastfeeding. However, the key person in making the decision whether to breastfeed or not, is the participant herself. A mother's own desire could very well be one of the reasons for not breastfeeding her baby (Jaafar et al. 2012). A piece of qualitative research showed that new Australian spouses desire to be involved in supporting breastfeeding (Tohotoa et al. 2009). This might be different from Thai culture, where males have the responsibility for working and providing income for the family while house chores and child rearing responsibilities belong to women (Thai Breastfeeding Organization 2014). This is consistent with the results from the interviews with all of the participants in my study. The role of men and women vary in different countries. For example, in Western culture women and men tend to share more of the responsibilities of child rearing than in the Far-East. Issues related to male dominance are also a concern and were regarded as discouraging factors to breastfeeding in an ethnography study conducted in the UK (Dykes 2006). This emphasises the importance of the point that mothers should have as much essential information as possible to guide breastfeeding, as well as to convince their spouses and other family members that breastfeeding is best for babies (World Health Organization 2011).

The participants living with the spouse's family were faced with different challenges, such as having to deal with disagreement with mothers-in-law about the feeding of their grandchild. Mothers-in-law have been indicated as one of influencing factors on breastfeeding in different cultures (Ingram et al. 2003; Clifford & McIntyre 2008; Grassley & Eschiti 2011; Liu et al. 2013). A literature review, which included articles from large multiple databases written since 1996, indicated that experiences of women's mothers and mothers-in-law have an impact on mothers' decision on babies' feeding in Europe and Asian countries (Clifford & McIntyre 2008). The importance of the role of mothers-in-law in supporting breastfeeding is also reported in China (Liu et al. 2013). Mothers-in-law have also been indicated by the participants in this study as people of high importance in Thai families. Six out of the 17 of the participants live with their husbands' families, while the rest live on their own. Compared people in the

West, the Thais seem to rely more on their partners' families. The mothers-in-law of the participants have been actively involved in child rearing and have a strong influence on formula feeding the baby. Therefore, health care professionals providing breastfeeding support should keep in mind that information regarding breastfeeding should also be provided not just to the spouses and mothers but to mothers-in-law and other family members who are immediate care providers to the mother as well.

Women's characteristics, such as having problem solving skills and being active learners, could help solve problems in relation to babies' feeding. For instance, women who are confronted with disagreements with their family members, regarding babies' feeding, need to have good problem solving skills to help resolve the problems more effectively. Being an active learner is a significant characteristic in dealing with breastfeeding problems. The health care professionals at the hospital should have a better understanding of influential family members who do not support breastfeeding. Look for opportunities for them share their thoughts and experiences while providing information about the benefits of breastfeeding and their role in supporting the mothers. Having sufficient knowledge and practice regarding breastfeeding could also increase a mother's ability to deal with breastfeeding problems and disagreements about feeding.

The participants living in a nuclear family have to deal with the difficulty of finding helpers to look after their babies when their maternity leave is over. However, two participants who migrated from up country chose to send their babies back home and let their grandparents or relatives help out. Therefore, they decided to stop breastfeeding after three months. Not having a care provider seemed to be a major problem for women in Bangkok city. This situation is confirmed by a recent qualitative study conducted in Bangkok which revealed that child care workers are a factor impacting full-time breastfeeding mothers (Tangsuksan & Ratinthorn 2011). The findings indicated that support the participants received from their workplace was minimal. For example, there were neither proper break time during the day, nor a private room for breast milk expression and there was no refrigerator for storing breast milk. Recently a law was passed allowing husbands employed by the Thai government to have up to 15 days leave, with pay, to look after the baby after birth. Even though the period may seem short, it shows that society is giving more attention to the

importance of breastfeeding. An extended maternity leave with pay and a policy to support breastfeeding at the workplace, such as a day care centre at work, could help working mothers to sustain breastfeeding if laws regarding these issues are passed in the near future.

In conclusion, the hospital policies could well be a part of the problems of inhibiting the promoting of breastfeeding. Examples are not rooming-in, lack of skin to skin care, or separation between mothers and babies post-birth. Mothers whose babies have special requirements, such as having tongue tie, being twins, and having difficulty in sucking (participants 1, 9 and 15 respectively) should also be assessed and provided with specific support at the Breastfeeding Clinic. The existence of these issues suggests that the services provided by the health care professionals at the present time might not meet the mothers' needs for breastfeeding support and should be perceived as important. Taking a more proactive approach by nurses working at the Breastfeeding Clinic and postpartum ward, such as walking around the ward and assessing the mothers might have more benefits in supporting mothers to breastfeed. This leads to the significance of the development of the 'Breastfeeding Support Package' which was developed to help nurses assess mothers with babies with specific requirements and provide them with breastfeeding support.

4.5.2 Themes that contribute to women's needs of breastfeeding support from health care professionals

Information related to breastfeeding, correcting of misunderstandings about breastfeeding and general considerations are requested by the participants. Having insufficient breast milk seemed to be the most common problem which discouraged all participants from breastfeeding, while misunderstanding about signs whether one is having copious breast milk need to be corrected. In fact, the participants may possibly not have been adequately educated about the normal physiology of lactation. Therefore, they did not seem to understand that most mothers do have sufficient breast milk for their babies (Smith & Riordan 2010). Some misunderstandings about having sufficient breast milk have been questioned by the participants. Among these misunderstandings are those of linking having little breast milk in the early days post-birth with not having sufficient breast milk to feed their babies, or having breast engorgement means

having copious breast milk. The participants also wanted to know different ways to help enhance breast milk production (participants 2, 3 and 6). 'Galactogogues', are substances found in certain kinds of herbs, food, and drugs which help promote breast milk production (Powers 2010). In Thai tradition and culture there is a well-established belief that certain kinds of foods, herbs or drinks could enhance and stimulate breast milk production. Although, there is no evidence which supports the traditional belief that having ginger, banana blossoms, or drinking warm water during breastfeeding could stimulate milk flow, these beliefs could be used as topics to enhance nutritional knowledge and to reinforce the supportive approach to breastfeeding mothers. Lactation is a natural process for most mothers. Taking medicine to stimulate breast milk production should not therefore be prioritised, except for those who have a specific health problem. Other options to help stimulate milk flow, such as helping with positioning and latching on, should be considered as approaches to supporting breastfeeding. Information about lactogenesis and galactogogues should be clearly explained to the mothers by the health care professionals during the time of admission to the hospital.

Some common questions often asked by the participants or which might be considered sensitive to mother's feelings are important aspects of breastfeeding support. For instance, 'How do we know that baby is getting sufficient breast milk?' (participants 2,4,5 and 9) or 'Whether we should wake our children up to breastfeed when they are still sleeping?' (participant 3). The gap between the times of feeding (participant 4) and information to evaluate that the babies are having sufficient breast milk (participant 12) should be conveyed to the mothers to help reduce stress related to the perception of not having sufficient breast milk to feed their babies. It can be concluded that the participants needed more information on the baby's requirements and in evaluating whether the baby is having sufficient breast milk.

In addition, the participants indicated that they did not know how to choose bags for storing breast milk, express breast milk, store and prepare breast milk, plan milk stock and express and collect breast milk at the work place (participants 2, 3, 4, 5, 8, 9, 10, 12 and 17). Information about continuing breastfeeding after being discharged from the hospital, and preparing to breastfeed before returning to work, should be provided to the participants. Other requirements for the participants in relations to information were: (1) the

expiry period for prepared formula milk and whether they are supposed to feed water to the baby (participants 9 and 15 respectively), (2) contraceptive methods (participant 8), and (3) nipple hygiene (participant 2).

Nurses' attitudes toward breastfeeding and services are important to encourage mothers, when they are being admitted to the hospital. However, the way the nurses carry out their services has also disappointed the participants (participants 4, 9 and 14). Some of the comments expressed by the participants regarding the services indicated that they were very stressed while receiving certain services. For example from the mother of twins: 'I felt that the atmosphere was very serious'; 'it was like a factory' (participant 9). Another comment which shows that the health care professionals were not supportive was: 'the nurses acted like commanders' (participants 9 and 14). The characteristics of nurses that the participants were looking for were: (1) speaking politely, (2) having sympathy for the mothers, (3) having practical skills and knowledge, (4) providing continuing care and (5) having the ability to explain the reason for having each activity. Nurses working at postpartum ward, newborn ward, or Breastfeeding Clinic should bear in mind that these characteristics are preferred by the mothers while providing nursing care and giving them advice to create a positive environment to support breastfeeding.

Mothers who perceived they had abnormal nipples revealed that they wanted more information on how to extend their nipples during their pregnancy so they could breastfeed their babies' more easily during the postnatal period (participant 12). In fact, help on positioning, such as the football holding position, proper latching on and using thin nipple shields could help facilitate them. Details about the effective use of the nipple shield were also requested by the participants in this study.

The participants also gave suggestions of how to improve services at the hospital to support mothers with breastfeeding. Examples are to have individual care (participants 2, 9 and 14) and arranging classes, run by the health care professionals to help deal with breastfeeding problems that mothers could attend, before their discharge from the hospital. Moreover the participants also requested specific care in relation to breastfeeding, such as help in positioning (participants 3 and 5), immediate stimulation to the breasts after delivery (participants 1, 3 and 5) and appointments to assess children's breastfeeding condition after discharge from the hospital (participants 9 and 15). Home visits

after discharge from the hospital might be a solution to help mothers solve breastfeeding problems which might occur after the mothers returned home. However, this service is not available at the moment. Setting up a call centre or providing a contact number for mothers to consult about breastfeeding was suggested by two participants (participants 1 and 3) as a possible solution to answering mothers' problems. However, a shortage of nursing staff is another issue for consideration.

To sum up, having a parental class or an effective breastfeeding class, and health care professionals or a lactation consultant present in the postpartum ward, are considered significant steps for the health care professionals to convey necessary information related to breastfeeding for mothers. Educating their family members, who have significant roles in looking after them and their babies, so that they could positively support breastfeeding, is another problem-reducing suggestion (Gagnon & Sandall 2011). This contributes to the significance of the second phase of the study, to develop a package of the 'Breastfeeding Support Tool' and leaflet. Essential knowledge is to be used as a guide to convey specific information and specific services in relation to individual needs for nurses to provide effective breastfeeding support to the mothers.

4.5.3 Development of the 'Breastfeeding Support Package'

The original idea was to develop a needs assessment tool. However, it became apparent from the analysis that supporting information is needed to be used along with the assessment sheet. The principle of health needs assessment is presented, followed by the development of the 'Breastfeeding Support Packge'.

A health needs assessment is a scientific method aiming to identify or search for health issues, taking into account population, agreed priority of health problems, appropriation of resources distribution, and to identify or search for gaps between the current situation and required results (Kaufman et al. 2002; Cavanagh & Chadwick 2005). The five steps of health needs assessment are: (1) getting started, (2) identifying health priorities, (3) assessing a health priority for action, (4) action planning for change and (5) moving on (Cavanagh & Chadwick 2005).

The concept of needs assessment was applied to this study for a number of reasons. Firstly, a needs assessment could be conducted in the light of the WHO recommendations and Thailand's national policy, which both aim to increase the number of mothers achieving six months of exclusive breastfeeding (National Economic and Social Advisory Council 2010; World Health Organization 2010b). This indicated that breastfeeding has been set as a health priority in the maternity field, not just in Thailand but globally. Secondly, a recent study conducted at Chulalongkorn Memorial Hospital revealed the low rate of mothers receiving support at the hospital in achieving breastfeeding exclusively for six months (Kupratakul et al. 2010). Lastly, it was congruent with nursing practice for the nurses working at the obstetric field to promote breastfeeding support to the women.

Nurses, as part of their nursing role, and prior to providing care to mothers, normally follow steps in the nursing process which include assessment, diagnosis, planning, implementation and evaluation (Kozier et al. 2008). It could be argued that assessing mothers' needs for support with breastfeeding, which is the first step of the nursing process, could be another mechanism to encourage mothers to initially breastfeed (Kozier et al. 2008). Although, a number of instruments regarding breastfeeding have been developed in the past 20 years, there is still a lack of tools which focus on women's perceptions of their needs for breastfeeding support (see Chapter 2 Section 2.4.4 Breastfeeding assessment tools). This phase of the study involved the development of a 'Breastfeeding Support Package' for the benefit of mothers and babies, as well as health care professionals.

The development of the 'Breastfeeding Support Package', which consists of a tool and a leaflet, is aimed to benefit children and mothers, as well as to improving the services provided by hospitals to help increase Thailand's national rate of breastfeeding mothers. Firstly, the 'Breastfeeding Support Tool' helps to identify specific support required by each individual mother. The leaflet contains all essential information mothers need to know. Therefore it is convenient for health care professionals to use and convey the information to those who need it. It is ideal for the health care professionals to have sufficient knowledge regarding breastfeeding support. But in fact a lack of knowledge might be one of the problems, hence the leaflet is also needed. The use of the package may enable nurses to provide care that is tailored to individual needs of postpartum

women, aiming to best support breastfeeding. When more mothers breastfeed, it encourages a change in behaviour and the perception to breastfeed naturally, as well as the possibility of reaching the national goal, of 30 per cent of women achieving six months' exclusive breastfeeding, increasing (National Economic and Social Advisory Council 2010).

The content for designing the 'Breastfeeding Support Tool' is based on two main sources of information: participant and professional. The data from the participants presents the mothers' actual needs and is used as a major input in developing the tool. However, there might be some issues which do not emerge from the participants that could be significant. Therefore, sources of professional information is used to fill this possible gap. Information from professional sources is used, such as a breastfeeding couselling guide and lactation counselling information related to breastfeeding support (Parris et al. 1999; World Health Organization & UNICEF n.d.). Although the nursing intervention of lactation counselling, developed in 1999, does not contain significant detail, it could provide the overall scope of information regarding breastfeeding. Part of my knowledge about breastfeeding derives from my clinical background working as a nurse/midwife and nursing instruction with postpartum women at the hospital. This experience will allow me to reflect on and respect local culture.

Closed-ended questions were used to develop items in the tool. A 'neutral category' is suggested for use in facilitating the responses of mothers who have made no decision over the negative or positive aspects of breastfeeding (Saris & Gallhofer 2007). Therefore, 'yes', 'no' and 'unsure' were chosen to be used for the response scale. The development of the 'Breastfeeding Support Tool' is presented (see Appendix A).

The tool, which has personally been developed by the researcher, is comprised of 33 key items which are divided into 13 domains as follows:

- General knowledge about breastfeeding (items 2 to 4)
- Lactogenesis (items 5 to 8)
- Galactogogues (item 9)
- Feeding other foods and weaning breastfeeding (item 10)
- Baby's requirements and evaluating if the baby receives sufficient breast milk (items 11 and 12)

- Proper latching on and breastfeeding positions (items 13 and 14)
- Using a nipple shield (items 16 and 17)
- Preparing to breastfeed before returning to work (items 18 to 21)
- Expressing breast milk by hand (item 22)
- Using breast pumps (item 23)
- Discussing with women (items 25, 31 and 32)
- Other important issues (items 29 and 30)
- Formula feeding (item 33).

Consider the sub-theme 'knowledge' for example. Items 5 to 8 represent the main issues which the participants were worrying about relating to 'having sufficient breast milk'. Items 18 to 20 indicate 'how to keep breast milk'. Items 25, 31 and 32 are under the sub-theme of 'attitude' while items 13 and 14 are under the sub-theme of 'practice'. The developed 'Breastfeeding Support Tool' is presented in Appendix A. The justification for including each item of the tool, via the item's role, is presented Table 4.4.

Table 4.4 Justification in developing the items of the 'Breastfeeding Support Tool'

Items/ questions	Justification
1	To assess mothers preference of feedings (breast milk or formula milk)
2	The findings of the study found that perceive benefits of breastfeeding could motivate the participants to breastfeed (Pender 2011).
3	To inform the recommendation to breastfeed (World Health Organization 2010a)
4	
5	To assess mothers' perception of having insufficient breast milk. It is the main problem of the participants in my study
6	To inform mothers about the keys to stimulate breast milk production and ways to have sufficient breast milk
7	The participants seemed disappointed with not having copious breast milk early post-delivery.
8	To correct misunderstanding about physical appearances which the participants' belief could affect to breast milk production
9	To correct misunderstanding about Thai traditional galactogogues
10	To correct misunderstand about starting to give other foods to babies and weaning off breastfeeding
11	To inform and correct misunderstanding about babies' requirements and evaluation of babies having sufficient breast milk
12	To reassure frequency of feeding
13	Assess and provide support about latching on
14	Assess nipple characteristics
15	To inform about breast hygiene
16	Assess and demonstrate effective use of nipple shield
17	
18	Assess mothers' intention to sustain breastfeeding when returned to work
19	Assess mothers' attitude toward breastfeeding exclusively for six months
20	To inform ways to sustain breast milk supply when mother returns to work
21	To inform preparing to breastfeed before return to work

Items/ questions	Justification
22	Assess, inform and help practice expressing breast milk
23	To inform on using breast pumps
24	Assess difficulty to breastfeed, and help according to mothers' requirement or what is needed
25	Assess and discuss about breastfeeding stress
26	Assess mothers' confidence to breastfeed
27	Assess babies' health problems affecting breastfeeding
28	To refer for further breastfeeding support
29	To inform about sources of information and support regarding breastfeeding, after mothers are discharged from the hospital
30	Assess whether mothers have other needs for support
31	Assess family and social support for breastfeeding
32	Discuss with the key family members who help support mothers to breastfeed
33	Provide information for mothers who decide to formula feed

A leaflet was developed to be used alongside the tool to help facilitate nurses in providing information about breastfeeding to the postpartum women. Three main sources of supported information in the leaflet were from the analysis of participants' data, the Cochrane's database, and WHO's guidelines. However, content regarding information relating to Thai practices, such as traditional galactogogues, were taken from the website of the Thai Breastfeeding Organisation and from research. Examples of the content from the analysed interview data of participants of Phase I include information such as answers for questions often asked, uncertain or frequently misunderstood issues. The leaflet is illustrated in Appendix M.

4.5.4 Summary of discussion

Analysis of the interview data indicated two significant domains of factors affecting breastfeeding: namely, internal and external influences. Knowledge and attitudes toward breastfeeding are the intrinsic factors, while practicality and support are extrinsic. Both could affect the breastfeeding behaviours of the participants. Thai cultural contexts and social norms, such as the role of spouse or mothers-in-law and the standard practice for maternity services, might also affect the way the participants think and behave which, in turn, might be different from other cultures and nations.

Lacking sufficient knowledge about breastfeeding seems to be the major problem hindering breastfeeding for the participants. Lacking practical support from the health care professionals during the early postnatal period contributed to a perceived increase in the level of difficulties for mother wishing to breastfeed and lacking support from family members and the workplace aggravated the problems. The hospital's policy to promote breastfeeding has an impact on the health care professionals while a shortage of staff makes the conditions more challenging for them to develop the appropriate care that helps promote breastfeeding.

Nurses working with mothers during the postnatal period also need to have sufficient knowledge, optimistic attitudes and time to support breastfeeding. Considering the case of one hospital, this does seem to be a problematic issue at the present. Therefore, this highlights the significance of the second phase of the study. To attempt to support breastfeeding, it was theorised that the 'Breastfeeding Support Package' might enable nurses to practice the following points: (1) consider breastfeeding in caring for every woman (2) assess a woman's individual breastfeeding need, (3) provide current evidence-based information to women, (4) provide women with breastfeeding support and (5) refer women to additional support. The methods for conducting the study of Phase II are presented in Chapter 5.

Chapter 5: Methods Used for the Conduct of Phase II: Evaluating the 'Breastfeeding Support Package': An initial review of nurses' and mothers' experiences of using the 'Breastfeeding Support Package'

5.1 Introduction

This chapter illustrates the methods for conducting Phase II of the study. The second phase aimed to evaluate the 'Breastfeeding Support Package'. This chapter describes the underpinning research theory including research methodology, paradigm and approach. A government hospital in Bangkok, Thailand, where the first phase of the study was conducted, was the setting. Methods of recruiting the participants, data collection, and analysis are explained. The ethical considerations and trustworthiness of the study are presented. For consistency, the term of the 'tool' is used interchangeably with the 'Breastfeeding Support Tool' and the 'package' is used for the 'Breastfeeding Support Package' throughout this chapter, as well as the remaining chapters.

The original research plan to conduct Phase II of the study has been subjected to some changes due to the findings from 17 participants, comments from internal examiners and a peer review. The changes affected the samples, such as using three groups of the participants: those who contributed to Phase I of the study, nurses and the women who were admitted to attend the postpartum ward, instead of only postpartum women. The changes also affected the method of collecting the data, such as using telephone interviews instead of sending questionnaires by post.

5.2 Underpinning research theory

5.2.1 Research paradigm and approach

Phase II aimed to evaluate the package which was developed based upon the findings from Phase I. A qualitative philosophy is used to assess the understanding

of participants from Phase I of the language used in the tool, as well as to obtain understanding of postpartum women's and nurses' experiences regarding the use of the package (Polit & Beck 2010). Information from the three groups contributed to in-depth understanding about the package and this is consistent with the inductive paradigm (Creswell & Clark 2011). In Phase II, a pragmatic qualitative paradigm aimed at understanding daily phenomena was adopted. The rationales for using a qualitative philosophy and pragmatic paradigm in Phase II of the study are described in Chapter 3 (see Section 3.3.1 Research paradigm and approach).

5.3 Research setting

The study was conducted at a government hospital in Bangkok, Thailand. The description of the hospital is mentioned in Chapter 3 (see Section 3.4 Research setting). The postpartum wards were chosen as venues for conducting Phase II of the study. This is because the objective of this phase of the study attempted to understand the nurses' and postpartum women's experiences in the use of the package. The interviewing of postpartum women was undertaken at their beds, while the nurses were interviewed in a small meeting room on the postpartum ward.

5.4 Research design

5.4.1 Participants' inclusion and exclusion criteria

Participants in the second phase consisted of three groups of people: participants who contributed the interviews from Phase I of the study, nurses and postpartum women who used the package.

5.4.1.1 Participants who contributed the interviews from Phase I of the study

In this part of the research, the target group was 17 mothers who were interviewed at their six-week postnatal check-up in Phase I of the study. This group were re-contacted by phone for face validation of the tool (Jones & Rattray 2010). However, the possibility of losing personal connection with the participants for a period of over one year after the interview, being unable to contact the participants due to changes of address or phone number, or changes of opinion about participation

over time, could all be factors influencing low response rates of the participants. Therefore, five participants or more was considered to be a realistic number to recruit for this phase of study. The inclusion and exclusion criteria of the participants are presented in Table 5.1.

Table 5.1 Justification for inclusion and exclusion criteria (participants from Phase I)

Inclusion Criteria	Corresponding exclusion criteria	Justification
1. Participated in the first phase of the study		The research aimed to explore face validity of the developed tool from the participants of Phase I of the study. Therefore, mothers who were interviewed are recruited.
2. Agree to participate in the study	Declined participating in the study.	Participation in the study is on voluntary basis. Therefore, declining participation at any point of time is excluded from the study.

5.4.1.2 Nurses working at the postpartum ward

To answer the research questions designed to investigate nurses' experiences of the application of the package to the postpartum women, nurses working on the postpartum ward who met the inclusion criteria are the research population for this part of the study (see Table 5.2). There are over 30 registered nurses in total, working in different types of postpartum wards including standard six bed wards, two bed rooms, and single bed rooms (Chulalongkorn Memorail Hospital 2010). There are 5,272 mothers delivered at one government hospital in Bangkok, Thailand in 2010 (the lowest number of deliveries was 223 in May, while the highest was 536 in September and the average was 439) (Chulalongkorn Memorail Hospital 2010). However, not every nurse working on the postpartum ward could apply the package to the mothers, particularly those at the tertiary care hospital, which handles many patients with complications. One of the many reasons for this potential deficit could be a shortage of nurses. For instance, there are five nurses on the day shift, and three working in the afternoon and night shift, each in charge of over 80 beds. However, there are other health care personnel, such as practical nurses and nurse aids, who help provide care for mothers.

Among the five nurses working on the postpartum ward, one was working on an 'uncomplicated ward', three on a 'complicated ward' and one on the 'private ward'. Considering the number of cases admitted at the postpartum ward and the high work-load of the nurses, a period of two weeks was given for nurses to apply the package in practice in the hope that nurses could use the package with 20 postpartum women. Five nurses working on the postpartum ward who used the package were then invited to determine the appropriateness and the utility of the tool.

Table 5.2 Justification for inclusion and exclusion criteria (nurses)

Inclusion Criteria	Corresponding exclusion criteria	Justification
1. Working on any type of postpartum wards, such as uncomplicated, complicated, two bed or single room at a government hospital in Bangkok, Thailand		The research aims to study the views of nurses working at the postpartum ward about the use of the package. Therefore different types of ward nurses could be recruited.
2. Have experience using the 'Breastfeeding Support Package'		The research aims to study those nurses working on the postpartum ward who had experience in using the tool with the postpartum women to assess their needs of breastfeeding support and who used the package as a guide in providing breastfeeding support to them.
3. Agreed to participate in the study	Declined participating in the study	Participation in the study is on a voluntary basis. Therefore, declining participation at any point of time will trigger exclusion from the study.

5.4.1.3 Postpartum women

To answer the research questions of investigating mothers' experiences, following the use of the tool by nurses to help identify their needs for breastfeeding support, mothers who were admitted to the postpartum ward, and who met the inclusion criteria, formed the sample for this part of the study (see Table 5.3).

Table 5.3 Justification for inclusion and exclusion criteria (postpartum women)

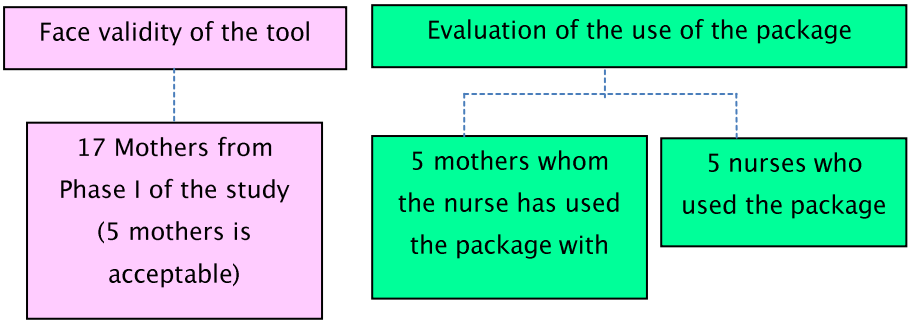
Inclusion Criteria	Corresponding exclusion criteria	Justification
1. Hold Thai nationality		The research aimed to study Thai mothers' experiences about the use of the package.
2. Women who intended to breastfeed		The tool was about the needs of breastfeeding support. Therefore, women who were not intending to breastfeed did not obtain any benefits from utilising the package.
3. Are first time or previously experienced mothers		The focus was on mothers' experiences about the use of the package. All mothers who used the package can share their experiences.
4. Went through any type of birth method i.e. normal delivery (N/L), forceps extraction (F/E), vacuum extraction (V/E) and Caesarean section (C/S)		Methods of birth do not affect overall breastfeeding rate or duration (Riordan & Hoover 2010). Therefore, mothers who experienced any mode of birth could be recruited.
5. Being admitted to any type of postpartum ward, such as uncomplicated, complicated, two bed or single room at one government hospital in Bangkok, Thailand		Using the package with the postpartum women helped facilitate nurses working in the postpartum ward in providing breastfeeding support to the individual women, which was one of the aims of the study. The participants received similar standard care from nurses and/or other health care professionals' team from the hospital.
6. Have living babies	Terminated their pregnancy e.g. abortion Lost their babies i.e. stillbirth or neonatal deaths	The research aimed to investigate mothers' perceptions of the support they require from health care professionals to breastfeed their babies; therefore, mothers who terminated their pregnancy are excluded. They are informed by health care professionals to suppress lactation by breast binding or support bras during the first few days (Swift & Janke 2003); therefore, they do not need any kind of breastfeeding support from nurses.

Inclusion Criteria	Corresponding exclusion criteria	Justification
7. Have no serious postpartum complications		Maternal complications often require medication treatment in which chemical substances could be passed on through breast milk and which therefore might affect breastfeeding activity (Fri'guls et al. 2010).
	Have babies with severe illnesses or abnormalities e.g. heart disease, cleft lip, cleft palate, etc.	Severe illnesses and abnormalities in babies can affect breastfeeding. For instance, babies who have craniofacial anomalies or cardiac defects may have more difficulty in breastfeeding (Wallis & Harper 2007).
	Are prohibited from breastfeeding i.e. having positive anti HIV	Although breastfeeding is an alternative for mothers who are well treated by antiretroviral drugs (Slater et al. 2010), in Thailand there are still many controversies. Nevertheless, the study aims to study mothers' experiences about the use of the 'Breastfeeding Support Package'. Therefore, those who are prohibited from breastfeeding were not included.
	Have severe emotional disturbance	For instance, postpartum depression, postpartum psychosis mothers who need medication therapy may not be ready or able to participate in this study (Riordan 2010c).
8. Have no verbal communication problem		Verbal communication is required for the interview.
	Declined participating in the study.	Participation in the study is on a voluntary basis. Therefore, declining participation at any point of time will trigger exclusion from the study.

A small number of participants is appropriate in this qualitative study and can provide useful data. The point of data saturation depends on the judgement of the researcher (Polit & Beck 2010). The reasons for this are explained in Chapter 3 (see Section 3.5.1 Participants' inclusion and exclusion criteria). In order to answer the

research questions of Phase II of the study, three groups of participants, numbering 15 in total, are required. Hence each group contained five participants. As the focus of the interviews was on nurses' and mothers' experiences in relation to using the package, purposive sampling was used for selecting participants for the interview (Bowling 2009; Polit & Beck 2010). The participants included in Phase II of the study are presented in Figure 5.1.

Figure 5.1 Three groups of participants of Phase II of the study



5.4.2 Recruitment

5.4.2.1 Recruitment of five women who had been interviewed at Phase I of the study

The design to recruit the group of 17 mothers, who were interviewed at their six-week postnatal check-up in Phase I, was based upon re-contacting by post for face validation of the tool, but phone calls were chosen instead (Jones & Rattray 2010). The reasons for conducting the telephone interview are explained in Section 5.4.3 Data collection. Each of the participants was reminded briefly about the study and its objective and then asked for permission to record the interview. They were asked to share their thoughts regarding the appropriateness of the items and understanding of the language used in the tool, as well as given opportunities to make any comments they wished to. The summary of the recruitment process of the participants is presented in Figure 5.2.

5.4.2.2 Recruitment of five nurses who used the 'Breastfeeding Support Package'

I informed the head nurses on the postpartum wards about the study, even though they should have received the study documents from the nursing management group after ethical approval has been obtained. This was to ensure that they have sufficient information and to clarify any questions in relations to the study, for example the process of data collection. The head nurses then invited me into the monthly meeting for those nurses working on the postpartum wards. I used the meeting to briefly explain the nature of the study, the inclusion and exclusion criteria for postpartum women and the duration of the use of the package to all of the nurses. The nurses who were willing to participate in the study then received training from me on how to use the package.

Although there are approximately 30 nurses working on the postpartum ward, it was recognised that five nurses who worked the morning shift (from 8 a.m. to 4 p.m.) were more likely to use the tool than those working in the afternoon (from 4 p.m. to 12 p.m.) and night shifts (from 12 p.m. to 8 a.m.). This prediction was based on the higher ratio of nurses to patients in the day shifts, compared to the afternoon and night shifts, which only have three available nurses. In reality, within the period of the two weeks made available to apply the tool, approximately 20 mothers admitted to the postpartum ward were assessed by nurses.

All nurses working on the postpartum ward who were willing to participate received a PIS (see Appendix T). On the third week, five of the nurses who applied the package to postpartum women were asked for their willingness to participate in the study. Those who were available (depending on their shift), and who agreed to participate, were asked to sign a consent form (see Appendix U) and were subsequently invited for the interview to determine the appropriateness and utility of the package, data being gathered by using the interview guide (see Appendix P).

5.4.2.3 Recruitment of five mothers who experienced the use of the 'Breastfeeding Support Package'

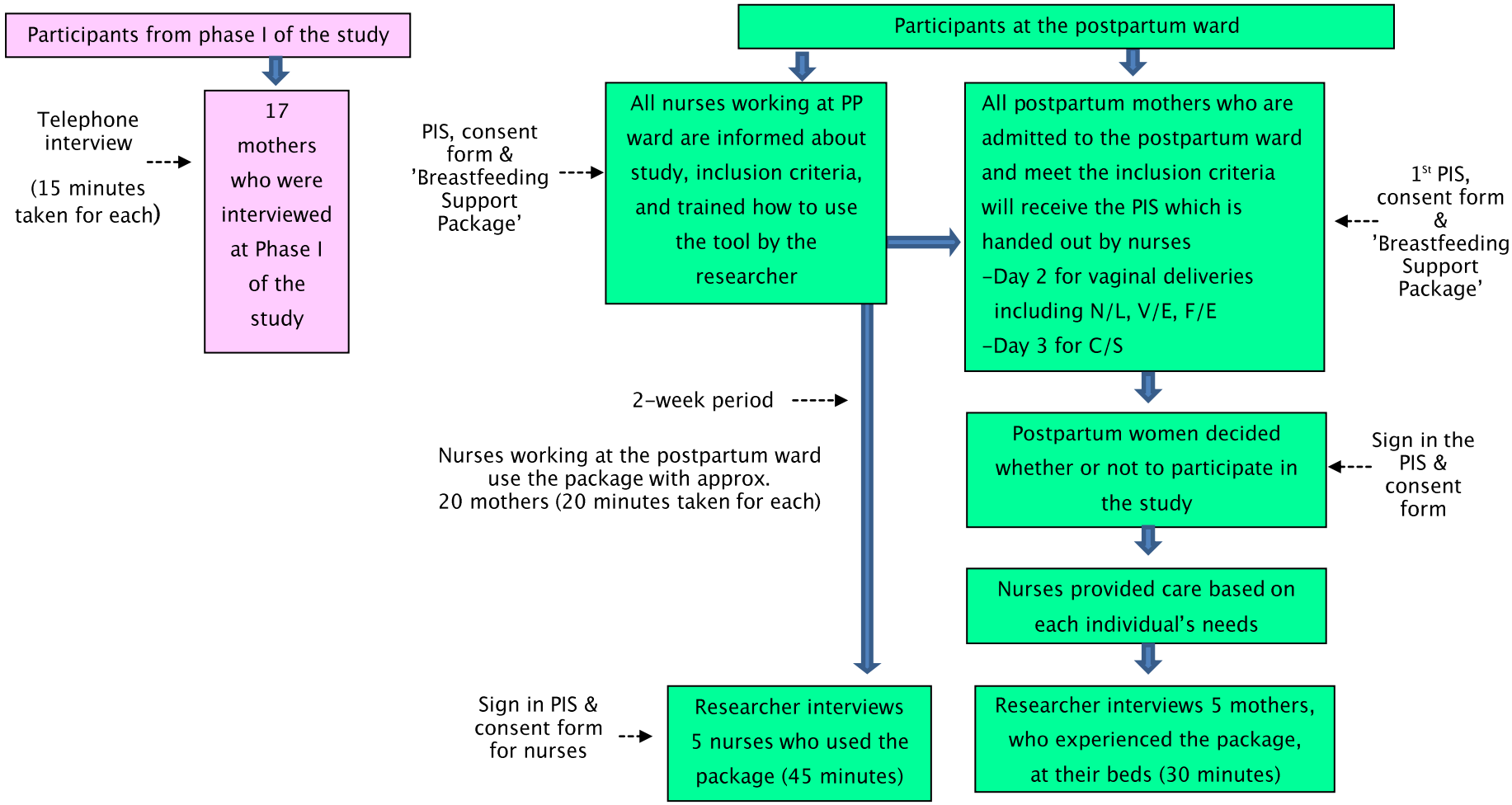
All women admitted to the postpartum ward, at the government hospital in which this research was carried out, received a recruitment pack containing a PIS, which

provided information about the study, a consent form and/ or a parental consent form (see Appendix Q, Appendix R, and Appendix S respectively), handed out by nurses working on the ward. Then PIS explained the study, and enabled the mothers to decide whether to or not to participate in the study. In Thailand, the age of consent is 18 years old (Criminal code of law 1997). Therefore, participants below the age of consent were provided with a parental consent form (see Appendix S). The first day after birth may not be a suitable time for participants to complete the too, because it was likely that mothers suffered from physical symptoms such as exhaustion (Brown & Lumley 2000). However, due to the shortening of the hospitalisation period nowadays, with average hospitalisation duration for vaginal delivery of two days, women who had a vaginal birth, including V/E and F/E, were assessed on the second day. Mothers who delivered by C/S are normally in hospital for a longer period, usually three to five days. It was acknowledged that these individuals may have difficulty in being assessed on breastfeeding support on the second day post operation. They were assessed for readiness to use the tool on the third day. Those who agreed to participate, and who signed the consent form, would then be asked all the items in the tool by nurses working at the postpartum ward. The approximate time taken for using the tool is 20 minutes. Following that, the participants received breastfeeding support according to their needs. This support was provided by the professional nurses working at the postpartum ward. Due to the hospitals' only partial adoption of the 'Ten Steps to Successful Breastfeeding' policy to promote breastfeeding (World Health Organization 2010b), being a tertiary and university hospital, baseline breastfeeding support might be appropriate, the tool would expand to that which is required at a basic level. It could be assumed that there is sufficient breastfeeding support for mothers. Therefore, the nurses could use the package to provide support or refer the mothers to other health care professionals who could provide specific support, according the mothers' needs, for example, meeting with the nurses working at the Breastfeeding Clinic.

A few hours after receiving the breastfeeding support from nurses working at the postpartum ward, and before the mothers went home, I introduced myself and informed them about the PIS (see Appendix Q). The first five participants who the nurses used the package with, and who had agreed to participate in the study, were interviewed at their bedside. Prior to the interview, they were asked to give their permission to record the interview, using a digital recording device, and to sign a

written informed consent form and/ or a parental consent form (see Appendix R and Appendix S respectively). Then the participants were interviewed following the interview guide (see Appendix O). The recruitment process is summarised in Figure 5.2.

Figure 5.2 Summary of the recruitment process



5.4.3 Data collection

In order to answer the research questions of Phase II, three groups of participants were recruited. Telephone interviews were used for data collection with the mothers who were interviewed in Phase I, while a qualitative face-to-face interview was used for postpartum women and nurses who used the package.

Telephone interviews could be a useful approach where other approaches, such as face-to-face interviews, were difficult to organise. However, losing in-depth understanding might be a limitation when compared to face-to-face interviews (Internatonal Baby Food Action Network Asia 2014). With almost a two-year gap between the first and second interviews, the participants might have moved away and this might result in a low rate of postal response. Therefore, telephone interviewing was chosen to assess the face validity of the tool with the participants from Phase I of the study. Telephone interviews with the participants from Phase I took approximately 15 minutes. A gift in appreciation was given to the participants who completed the phone interview. The gift was either a childrearing handbook or a children's storybook in Thai, which cost £1 to £2 each.

Semi-structured interviews were used as a method to obtain perspectives and thoughts of mothers and nurses in this phase (Rosaline 2008; Polit & Beck 2010). Semi-structured face-to-face interviews were used to obtain mothers' experiences of using the tool, in order to identify their needs for breastfeeding support provided by nurses, and to note and record nurses' experiences of using the package. This was in order to provide breastfeeding support to the postpartum women admitted to the postpartum ward. The duration of interviews in this qualitative research varied from 45 to 90 minutes, depending on the time available and the participant's endurance (Holloway 2008). In this phase of the study, the interviews took approximately 30 minutes for the postpartum women and 45 minutes for nurses working at the postpartum ward, allowing respondents to expand on their thoughts and opinions, as well as to consider the validity of language used in the tool (Burns & Grove 2009). Based on my experience, having worked in the obstetric field for ten years, it is a reasonable duration for an interview with early postpartum women who were still at the postpartum ward. This rather sensitive interview was conducted with

participants admitted to the standard ward, at their bedsides with curtain closed, and in the rooms for those in the private wards, to uphold the respect for participants' privacy and for their convenience. This is necessary because, during postpartum, mothers undergo many activities, such as breastfeeding, spending time with babies and other routine care procedures. After the interview was completed, I verbally thanked all the women for their participation.

Interviewing the nurses working on the postpartum ward, who had experienced using the package, took place in an appropriate available room, on the postpartum wards where they work. The room used for interviews was set up with two chairs and a table. My chair was positioned on the right-hand-side of the participant's chair while a table was positioned more towards the interviewee's right-hand-side, in order to facilitate my note-taking. Note-taking during the interview was used to help the researcher to ask subsequent questions to enable the expansion and clarification of points made by the participants (Rice & Ezzy 2001). All the five nurses received a thank you card for participating in the study.

An interview guide was used to facilitate the interview process highlighting question areas to cover during the interviews with the participants from Phase I who were the postpartum women and nurses (see Appendix N, Appendix O and Appendix P respectively) (Arksey & Knight 1999). During the interviews, open-ended questions were used to encourage participants to elaborate their responses (Britten 2005). Broad questions were used in order to explore participants' experiences and perceptions of the utility of the package. Prompt questions were then asked in order to encourage the participants to further explain and clarify their thoughts and experiences (Rubin & Rubin 2005; Rosaline 2008).

A digital recording device was used to record the interviews after gaining prior written permission from the participants. The interviews were conducted solely by me. I initially planned to conduct one interview per day to ensure I was able to fully concentrate, but found that I was able to undertake two interviews, with a break in between, and maintain the quality of the interview (Patton 2002). Rationales about using note-taking during the interview and my diary notes are explained in Chapter 3 (see Section 3.5.3 Data collection).

5.4.4 Data analysis

The process of analysis of this phase was different to that of Phase I in view of the fact that this is about 'evaluation of the package'. In general, identifying themes seemed to be the core concept in the analysis of qualitative data. However, the differences lie in the theories underpinning each research approach (Polit & Beck 2010). For instance, Strauss and Corbin's theory is often cited in ground theory analysis, Spradley's analysis is often used with ethnographers while Van Kaam's is favoured for phenomenological research (Polit & Beck 2010). However, other approaches that do not embed specific theories mentioned earlier could be identified as components of the 'inductive approach', such as Thomas' steps of general inductive approach (Thomas 2006). According to my experience, Creswell's theory, which was used in Phase I analysis, seems to be more suitable for generating themes to answer research questions in a broader perspective. However, Thomas's might fit well with specific purposes, such as evaluating the package which is the research objective of Phase II of the study. Thomas' approach for analysis of qualitative data is cited in over a thousand recent papers, such as a qualitative study of older people with complex needs in 2009 (Jorgensen et al. 2009). With its clearly explained step-by-step analysis process, this approach was chosen to be used for the analysis process in the second phase of the study. Thomas's five steps of general inductive approach was used for the analysis of the interview data: (1) preparing raw data file, (2) close reading of the text, (3) creation of categories, (4) overlapping coding and uncoded text and (5) continuing revision and refinement of category system (Thomas 2006). Process of analysis is further explained in Chapter 6 (see Section 6.3 Process of analysis). Data analysis began after the completion of the first interview. Commencing data analysis early not only allowed me to better recall ideas and feelings from the interview, but also enabled the making of adjustments to improve the next interview (Patton 2002).

With my Thai language fluency, cultural understanding, experience obtained from the analysis of Phase I of the study, four cases in total, including one from a telephone interview, one from the postpartum women, and two from nurses, were translated from Thai into English. The rest of transcripts were analysed in Thai. Themes, sub-themes, emerging codes and some of participants' words related to themes, were translated from Thai to English to

enable comprehension of the data and were refined through discussion with my supervisors. Rationales for analysis of the transcripts in Thai are explained in Chapter 3 (see Section 3.5.4 Data analysis B).

5.5 Ethical considerations

There was no anticipated harm to the postpartum women and nurses, should they participate in this study. However, any woman needing urgent care during the interview would immediately be sent to health care professionals at the postpartum ward. There was a potential benefit to the women because the package that the nurses used with the women could guide breastfeeding support. They then received the support according to their needs, and might be referred for further breastfeeding support if required. The women may obtain better satisfaction from participating in the research because they receive extra breastfeeding support when compared to those receiving standard service at the hospital. Nevertheless, nurses could also obtain up to date information regarding breastfeeding and use it in providing breastfeeding support to other women admitted to the postpartum ward who were not part of this study. Nurses could as well reflect on their services to the mothers regarding breastfeeding support and this might help improve their promoting of breastfeeding support at the hospital.

To ensure the process of obtaining informed consent, prior to using the package, the women were informed about PIS by nurses (see Appendix Q). Approximately one hour was given to the women who passed the requirement to read the PIS and decide whether to participate in the study. Any woman who agreed to participate in the study was asked to complete and sign a consent form (see Appendix R). Those who were aged less than 18 years old were asked to have a parental consent form completed and signed by their parents (see Appendix S).

Approximately one hour was given for nurses working at the postpartum ward to decide whether to participate in this study after the PIS was distributed by me (see Appendix T). Those who agreed to participate were asked to complete and sign the consent form (see Appendix U).

In order to ensure complete respondent confidentiality, the study number of participants who contributed interviews from Phase I was kept the same. Pseudonyms were chosen to use in Phase II, instead of numbering participants, in order to help avoid confusion in tracking back to participants' data.

Details regarding the ethical concerns relevant to the study, such as data protection and ethical approval process were explained in Chapter 3 (see Section 3.6 Ethical considerations). The document of approval from the University of Southampton and the government hospital in Bangkok, Thailand in which this research took place, are presented in Appendix X and Appendix Y respectively.

5.6 Trustworthiness

To address trustworthiness, four aspects were employed: creditability, dependability, confirmability and transferability (Guba & Lincoln 1989; Holloway & Wheeler 2002). The details of these four dimensions are presented in Chapter 3 (see Section 3.7 Trustworthiness).

To promote creditability, participants' words were regularly checked for meaning during the telephone interviews, as well as in face-to-face interviews with the postpartum women and nurses, to ensure the accuracy of my understanding of the participants' comments and shared experiences. To minimise bias that may occur during the interviews with the women admitted on the postpartum ward, I did not dress in my usual nurse uniform because Thai people in general tends to respect nurses and might conceal their opinions especially about services they received which might not be positive. The use of the extract quotes from the interview, examples of translations, and an example of initial coding are all offered to show the transparency of the analysis process. The large amount of data received from interviews with the three groups helped ensure thick description, which could promote transferability (Holloway 2008).

In this phase of the study, I did not use the competent peer because I have obtained the experience of analysing qualitative data from Phase I of the study. However, regular discussions with my two supervisors on themes identified

during the analysis process helped ensure confirmability and dependability of the findings.

5.7 Chapter summary

A pragmatic qualitative approach was used for this phase of the study. Phase II aimed to evaluate the 'Breastfeeding Support Tool' by assessing mothers' understanding of the vocabulary and language employed in the tool, as well as investigate experiences of postpartum women and nurses about the use of the 'Breastfeeding Support Package'. The postpartum wards of the hospital where I conducted Phase I of the study were the setting for this phase. The three groups of the participants involved in Phase II were: participants from Phase I, postpartum women and nurses who used the package. Telephone interviews were undertaken with the participants from phase I. A semi-structured qualitative interview technique was the data collection method used for Phase II, coupled with a general inductive approach used to analyse the interview data.

The data from Phase I shaped the restructuring of Phase II of the study. Changes in sample, data collecting methods and the 'Breastfeeding Support Package' required a second round of ethical approval. Ethical consideration from the ethics committee had been obtained from the hospital prior to collecting the data. The process of analysis of the interview data and findings from Phase II of the study are presented in Chapter 6.

Chapter 6: Process of Analysis and the Findings from Phase II: Evaluating the 'Breastfeeding Support Package' an initial review of nurses' and mothers' experiences of using the 'Breastfeeding Support Package'

6.1 Introduction

This chapter illustrates the process of analysis, followed by the findings of Phase II of the study. This phase of the study aimed to explore: (1) Phase I participants' views of the tool; (2) postpartum women's experiences of using the package and; (3) nurses' experiences of using the package. 'Experience' is 'the knowledge and skill that is obtained through time spent doing an activity or a situation that a person is involved in'. This study evaluates the package based on the women's and nurses' experiences of using the package.

Face validity of the tool was assessed by semi-structured telephone interviews with women from Phase I. Semi-structured qualitative interviews were conducted to evaluate postpartum women's and nurses' experiences on using the package. A general inductive approach was used for the analysis of the data (Thomas 2006). The findings from each group of the participants are presented below and commonalities and contradictory points compared.

6.2 Description of the participants

The three groups of research participants were the participants who contributed the interviews from Phase I of the study, postpartum women and nurses who used the package.

For the five participants who contributed the interviews from Phase I of the study and also participated in the telephone interview, the age range was between 16 and 35 years. Four of the participants were bachelor degree graduates while one had completed ninth grade. Four of the participants were

first time mothers while one was a second. The telephone interviews took approximately 14 to 15 minutes. All of the participants remembered their participation in the earlier phase of the study and were willing to participate in this second phase.

Of the five postpartum women interviewed, one was a first time mother and three were second while the other one was a third. The approximate time for the interview of each postpartum woman was 15 to 20 minutes.

All five nurses who participated in the study were trained in breastfeeding support and had at least 10 years' experience working in the postpartum ward. The two main types of postpartum ward are standard and private. The standard ward is subdivided into two wards, 'complicated ward' for postpartum women at high risk of medical complications, and 'uncomplicated ward' for those with no complications. Of the five nurses, one worked on the private ward, one on the 'uncomplicated' ward, while the other three were on the 'complicated' ward. The time taken for conducting the interview for each nurse was between 30 to 45 minutes.

6.3 Process of analysis

The process of analysis of this phase is different to that of Phase I in view of the fact that this is about evaluation of the package. Justifications for choosing Thomas's steps of analysis are described in Chapter 5 (see Section 5.4.4 Data analysis). Thomas's five steps of a general inductive approach were used for the analysis of the interview data as follows (Thomas 2006).

Step 1 Preparing a raw data file

After completing the first interview, the transcripts from the digital voice recorder were transcribed verbatim in the Thai language into files on the computer, until all 15 transcripts were completed. Four transcripts including one from telephone interviews, one from postpartum women, and two from nurses were translated from Thai to English to facilitate consultation with my supervisors. However, the remaining 11 transcripts were analysed in Thai to prevent the loss of any accuracy of the meaning resulting from the process of

translation. All transcripts are available upon request. An example of four translations from Thai to English is presented in Appendix W.

Step 2 Close reading of the text

All of the transcripts were read from start to finish several times to enable familiarisation and immersion with the data. To ensure understanding of the meaning of the conversations, the transcripts were then read through line by line. 'In vivo coding' was used to highlight the significant words to create initial codes (Charmaz 2006; Thomas 2006). Regular consultations with the two supervisors were made to ensure agreement of interpretation and coding. The details of 'in vivo coding' are presented in Chapter 4 (see Section 4.3 Process of analysis, Step 2 Reading and memoing). The example of initial coding is illustrated in Figure 6.1.

Figure 6.1 Example of initial coding (Nuam)

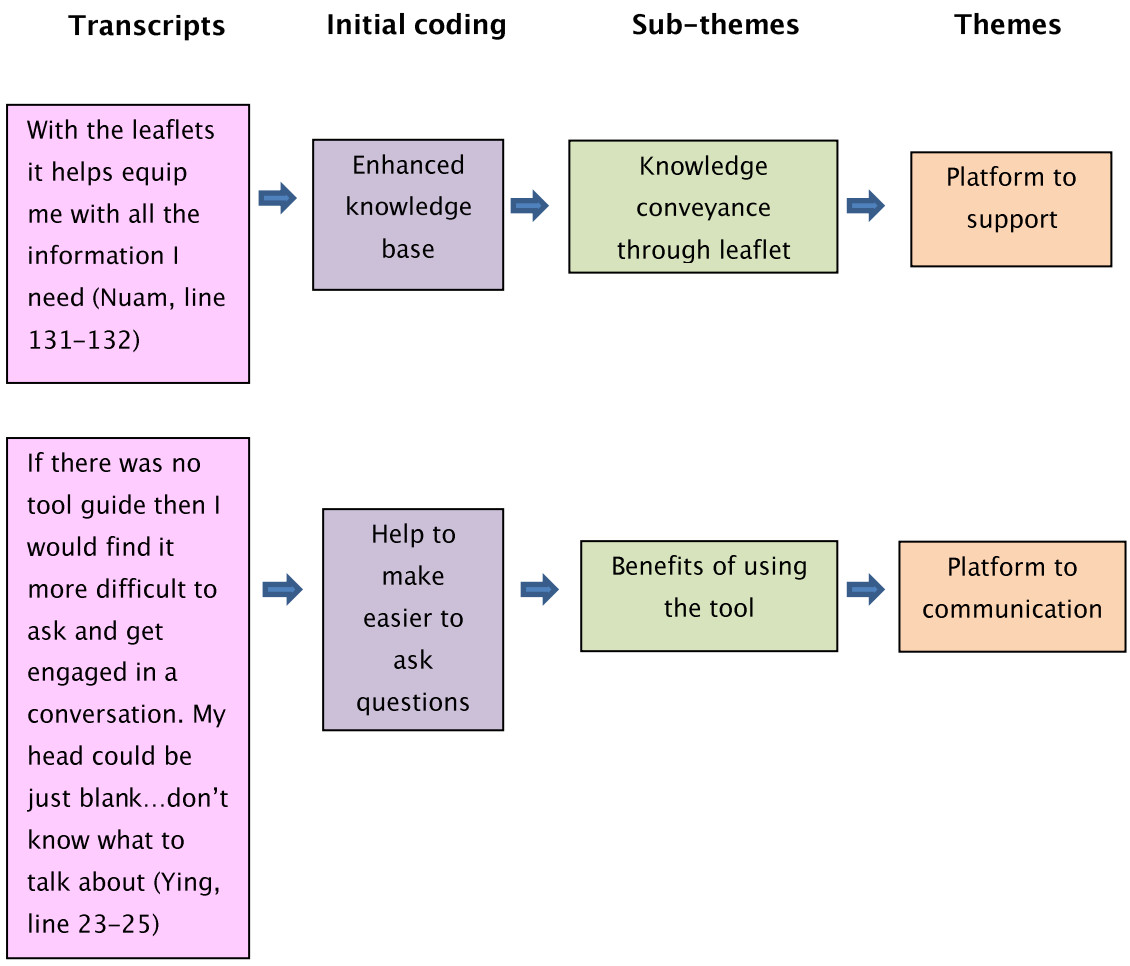
Line	Conversation	Initial coding
130	It helps me improve the assessment of my patients in breastfeeding.	Improved assessment
131 132	The assessment is better rounded. With the leaflets it helps equip me with all the information I need.	Enhanced knowledge base

Step 3 Creation of themes (categories)

In this study, categories were interpreted as themes. In the process of creating themes, hundreds of initial codes were identified, and sub-themes and themes were defined by discerning the similarities. Themes were manually classified and grouped, based on the objective of the study, which is evaluating the package. Initial codes irrelevant to the objectives of the study were kept to help cover all important aspects emerging from the text. For instance, 'information in the leaflets is well covered' (B, Nuam, Sa, Tok and Toy) was not directly related to the evaluation of the tool. However, it was an important code, contributing to the sub-theme 'knowledge conveyance through leaflet'

within the theme 'platform to support', as it directly indicates information about an adjunct of the tool, and it is contributing to the enhancement breastfeeding practice (see Figure 6.1). Examples of creation of themes are presented in Figure 6.2.

Figure 6.2 Examples of creation of themes (categories)



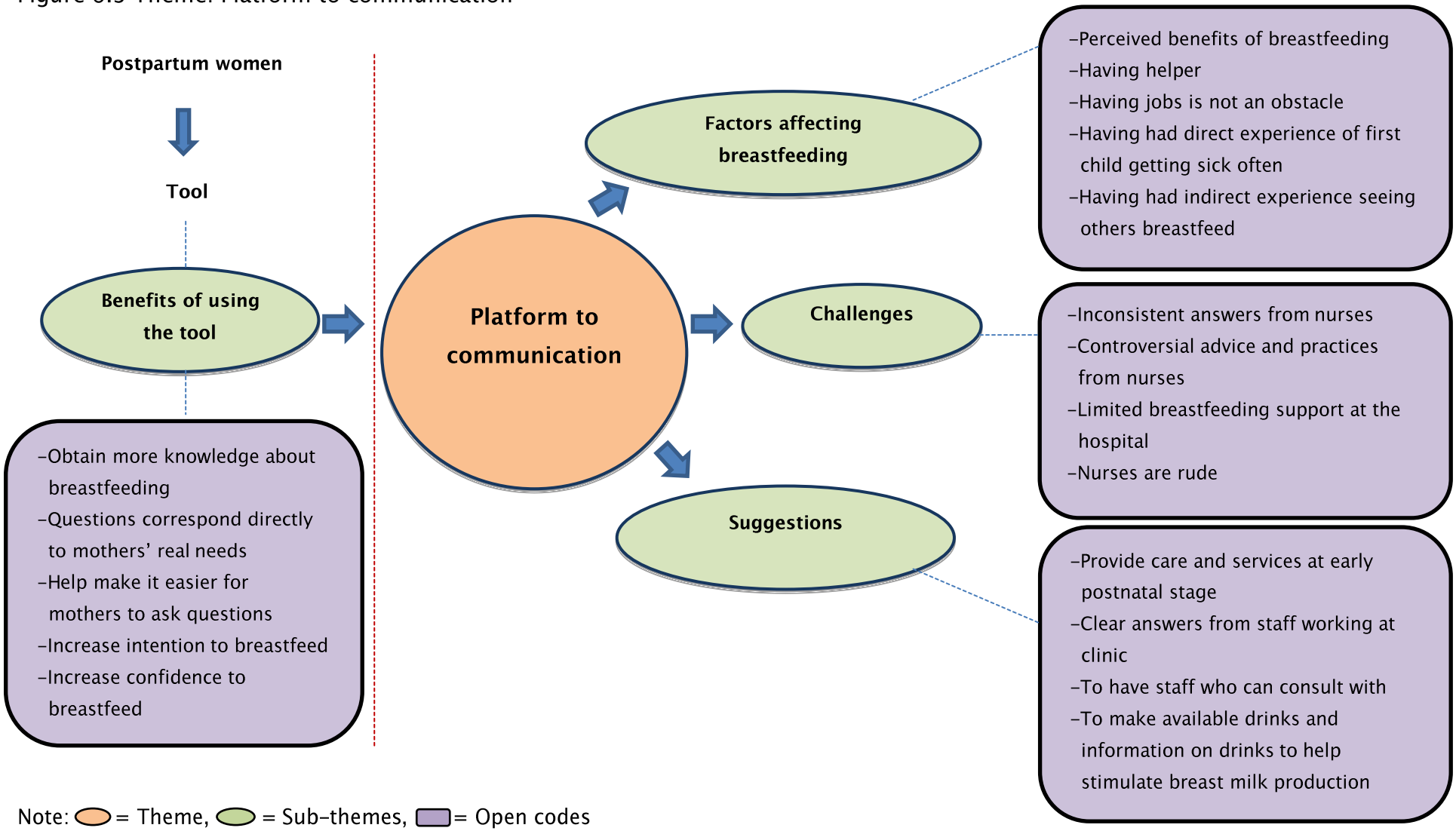
Step 4 Overlapping coding and uncoded text

All initial codes were re-checked with the raw data, sub-themes and themes on overlapping coding and uncoded text, to ensure that all key themes that emerged were captured from the data. Factual data provided by participants within the interviews was used as background information and did not contribute to the analysis, for example, being first time or second time mothers.

Step 5 Continuing revision and refinement of themes (categories) system

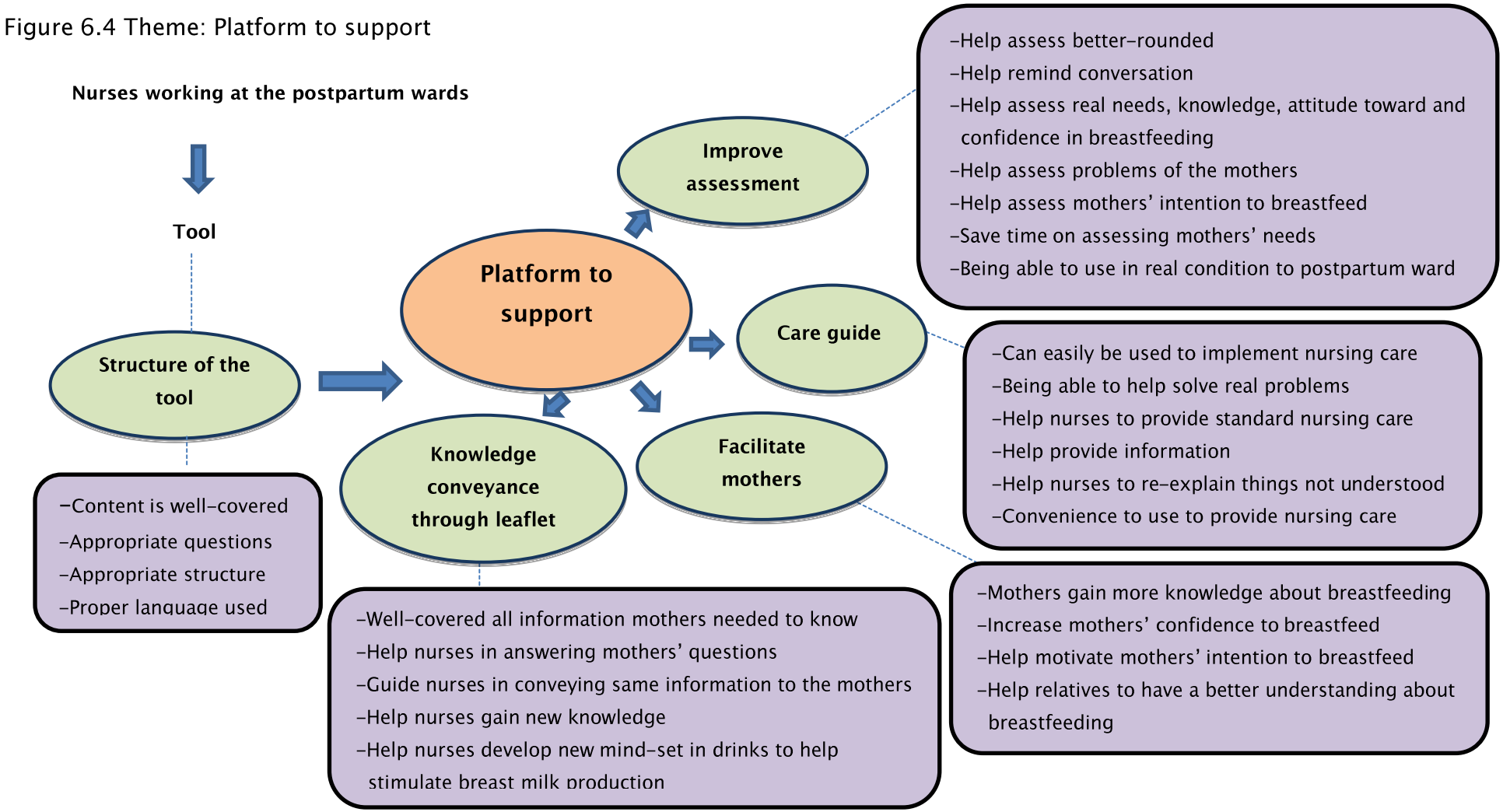
Providing the postpartum women with the tool to review, evaluate, and then share their opinions of how effective it was, gave them the platform to consider other issues. Examples of this step include being empowered to consider and ask about breastfeeding, to speak out and communicate their challenges and to offer suggestions on how to improve breastfeeding services for others wanting to breastfeed. All themes and sub-themes are presented in Figure 6.3 and Figure 6.4.

Figure 6.3 Theme: Platform to communication



Note: = Theme, = Sub-themes, = Open codes

Figure 6.4 Theme: Platform to support



Note: = Theme, = Sub-themes, = Open codes

6.4 Findings

The findings of the study are presented in the three participant groups: telephone interviews of the participants from Phase I of the study, interviews of nurses and postpartum women who used the package. The participants from Phase I of the study demonstrated face validity of the tool, by indicating their understanding of the language used in the tool. The package was evaluated by the nurses and the postpartum women based on their experience of using it.

6.4.1 Findings from the participants who contributed interviews from Phase I of the study

Although the familiarity between the participants and myself could be considered as positive for the interview, almost a two-year gap between the first and second interviews seems to have impacted the study. Only six of the 17 participants could be contacted, while five were recruited into this phase of the study. Changes of telephone numbers resulted in the loss of contact of some of the participants.

All five participants reported that the information that mothers needed to know was well covered by the questions in the tool and that the questions could be clearly understood (participants 1, 3, 8, 9 and 16). However, some questions needed a re-write to facilitate users' better understanding, such as question 4 (participant 16), questions 7, 13, 18 and 22 (participant 3), while question 30 needed to be separated (participant 16). The details regarding the comments about the questions made by the participants are presented in Table 6.1.

> *I think all questions are well-covered. There is nothing more to be added (participant 1, line 25).*
>
> *I understand the question (question 13), but I think it will be better if you write the sentence like; it is not difficult for babies to latch on (participant 3, line 17).*
>
> *Question 30 is too difficult and there are many points asked in the same question. It should be separated, one issue at a time (participant 16, line 80-81).*

Table 6.1 Questions mentioned by the participants from Phase I of the study

Q / P	4	7	13	18	20	21	22	30	33
P1	-	-	-	-	Repe-titive	Repe-titive	-	-	-
P3	-	Re-write	Re-write	Re-write	-	-	Re-write	-	-
P16	Re-write	-	-	-	-	-	-	Sepa-Rate	good

Four of the participants thought that the tool will help other postpartum women to understand breastfeeding better (participants 1, 3, 9 and 16). Two participants indicated that using the tool by nurses could provide an opportunity for postpartum women to ask questions openly (participants 1 and 3), while one participant thought that using the tool could motivate mothers to breastfeed (participant 9).

> *The benefit is mothers can have a better understanding because they can ask what they don't understand. It would benefit mothers themselves to get the answers. I agree that's a benefit of the tool (participant 3, line 33-34).*
>
> *If mothers know that breastfeeding is really beneficial, they will try harder to breastfeed. It's like a motivation. Although it's difficult to breastfeed, they will breastfeed (participant 9, line 11-12).*

Participants perceived the use of the tool in a broader context, that is, as an activity to promote breastfeeding within the hospital. Two participants suggested that the hospital policy should promote breastfeeding more (participants 1 and 3). One of the two participants asked for better promotion regarding the benefits of breastfeeding, while one thought that formula feed in bottles should not be allowed at the hospital (participants 3 and 1 respectively). Two participants suggested having a breastfeeding clinic and a person to help offer support while breastfeeding during the early days postnatal (participants 1 and 9). One participant pointed out that having guidelines for health care professionals in providing breastfeeding support could help mothers' success in breastfeeding (participant 9).

I think having a breastfeeding clinic and nurses working at the postpartum ward could help mothers better breastfeed their babies…I think hospitals should have a policy like that of Bumrungrad Hospital. They don't allow bottle feeding without prior permission from the mothers (participant 1, line 39-41).

The most important point for mothers, especially first time mothers, to successfully breastfeed is there should be a special room and someone who can really help support them during the first couple of days post-delivery. There should be a guideline to help support mothers before they are discharged from the hospital (participant 9, line 17-19).

Two participants indicated the need to focus more on the benefits of breastfeeding and the disadvantages of formula milk (participants 3 and 16 respectively). One participant raised an issue about preparing breast milk storage (participant 9). One participant was concerned about assessing teenage mothers on their intention to breastfeed prior to using the tool (participant 8).

…whether they know that breastfeeding along with formula feeding can cause excreting problem. The baby might have constipation. Breast milk is easily digested. Formula milk is difficult to digest (participant 16, line 102-104).

I think preparing breast milk stock is important and the issue is already included in some questions (participant 9, line 15).

I'm not sure what adults think about breastfeeding, but I think some of the teenage mothers don't want to breastfeed (participant 8, line 19). You should assess whether those teenage mothers want to breastfeed or not before using the tool with them (participant 8, line 23).

In conclusion, it appeared that all five women understood most of the language used in the tool. Only some minor changes of some questions were needed for clearer understanding. It could be assumed that the anticipated aims of the language used in the questions of the tool were achieved. The second interview also enabled these women to express their views about breastfeeding in general, and mostly positively.

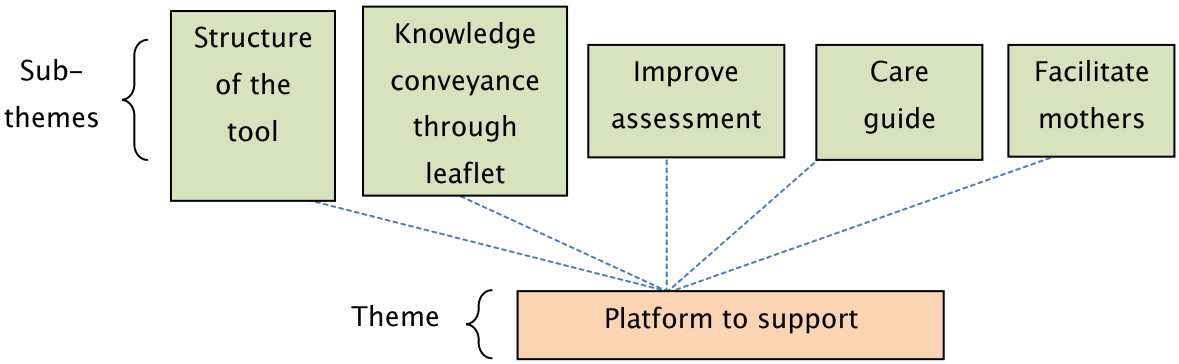
6.4.2 Findings from nurses and postpartum women who experienced using the package

Conducting qualitative face-to-face interviews with postpartum women and nurses in the hospital setting during political unrest was one of the challenges of this study. The hospital is located in the centre of Bangkok where anti-government protesters gathered and blocked all the roads around the hospital. The process of receiving ethical approval was delayed because the anti-government protesters were trying to 'Shutdown Bangkok'. This had the effect of decreasing the number of postpartum women in the hospital, thus reducing the number of potential participants. This reduction in the number of admissions of postpartum women had two negative effects: there were fewer available to be interviewed, and fewer women the nurses could use the package with. The political crisis also made it dangerous and difficult for me to travel and conduct face-to-face interviews at the hospital. Over 20 people in total were killed during the unrest. To ensure safety, phone calls were made to the nurses working at the postpartum ward to ask about the situation around the hospital prior to travelling to conduct the interviews. In total, six postpartum women and seven registered nurses were contacted, of which five postpartum women and five nurses participated in the study.

6.4.2.1 Results from nurses who used the package

Five sub-themes emerged from the data: 'structure of the tool', 'knowledge conveyance through leaflet, 'improve assessment', 'care guide' and 'facilitate mothers'. The sub-themes and themes are presented in Figure 6.5.

Figure 6.5 Summary of sub-themes and theme emerged from nurses the who used the package



The key message about the tool expressed by four nurses was that it covered all required topics about breastfeeding which they considered to be essential for postpartum women (Nuam, B, Toy and Tok). One nurse said that the tool could also be used to assess social aspects (Tok). This participant also indicated that the questions which were appropriate, and should be included in the tool, were questions 1, 4, 8, 20, 21, 24, 25 and 30 (Tok).

> *The tool covered all aspects that the women want to know about. All questions are pertinent and it is the strength of the tool (Toy, line 20-21).*
>
> *I think it's good because it covered all aspects including social aspect. It's well covered (Tok, line 39).*

Having an appropriate structure to the tool was commented on by three nurses (Nuam, B, and Sa). They expressed that having 33 questions in the tool and three scales of opinion, including "yes", "no" and "unsure", were good, because it presented the real condition of postpartum women's perception (Nuam, B, and Sa).

> *I don't think it's too much (33 questions) (B, line 75). It's good. It's very straight forward (3 scales) (B, line 77).*
>
> *It's good that it has a place for "not sure" because sometimes the patients might not understand. It's better than just "yes" or "no" (Nuam, line 65-67).*

The language used in the tool was understood well, as reported by three nurses (Nuam, Sa, and Toy). One of the three nurses indicated that the language was proper for both groups of the postpartum women, those with high and those with limited knowledge about breastfeeding (Nuam).

> *Actually the language used is easy to understand. When asked, the patient would then know what you are asking for. You don't need to explain (Naum, line 58-59).*

On the second sub-theme 'knowledge conveyance through leaflet', all the nurses remarked that information in the leaflet is well-covered in all essential topics (B, Nuam, Sa, Tok and Toy). Three nurses commented that the use of the tool along with the leaflet was very convenient (B, Tok and Toy). Two nurses reported that the leaflet was a good source of information for nurses and serves as a source of knowledge about breastfeeding especially for new nurses

(B and Nuam). One nurse indicated that the tool might change nurses' mindsets about their routine practice, such as providing ginger drink to postpartum women (B). One nurse indicated that information on the leaflets could guide nurses in conveying corresponding information to the mothers (Sa).

> *Having a leaflet is excellent because it can be used as a guide to provide accurate information to the mothers. If you didn't have it, it would be difficult for me, because I would have to find out the information to answer what the women ask me on my own. I might need to surf the internet. If not, it would be embarrassing (Toy, line 48-51).*
>
> *The leaflet is good. It helps nurses to understand and provide information in a consistent way to the mothers. Nurses are also not confused. It is like a manual which could help (Sa, line 51).*
>
> *For example, some new nurses, who are second year nurses, may have limited knowledge about breastfeeding. They might have studied but do not fully understand how to make the conversation. This information can then help them... (Nuam, line 132-135).*
>
> *I have always thought that if you drink a lot of ginger drink, it would help stimulate your milk flow. There are credible references which show that drinking lots of water helps stimulate milk flow. Using your form could change the mindset of some nurses. They could gain new knowledge from this (B, line 124-128).*

On the third sub-theme 'improve assessment', all five nurses mentioned that the tool helped improve breastfeeding assessment to be more comprehensive (B, Nuam, Sa, Tok and Toy). One nurse reported that using the tool helped in remembering what information had already been conveyed to the women (Nuam). Two nurses expressed that it was convenient and saved time in assessing mothers' needs for breastfeeding support (Nuam and Sa). All of the nurses said that the tool was useful and could really be used at the postpartum ward of the hospital (B, Nuam, Sa, Tok and Toy).

> *The strong point of the tool is that it helps us assess the patients in a more well-rounded way (Nuam, line 4-5). One of the good things is that it helps me remember the details of the conversation I had with the patient. Sometime we*

tend to forget that they might not be having any support when they are discharged from the hospital (Nuam, line 113-116). It can assess the confidence level, knowledge and attitude about breastfeeding (Nuam, line 171-172).

…Sometimes when I'm working on a shift, I have no time to check every mother's breasts. But if I use the tool, they immediately tell me so I can inspect and give them help (Sa, line 19-20).

Yes, they used the tool. The tool seems to be very practical, not just a made-up one. It can be used. It's a fine, good one (Toy, line 59).

On the fourth sub-theme 'care guide', all five nurses reported that they were able to apply the tool and could immediately provide specific care to the mothers (B, Nuam, Sa, Tok and Toy). One nurse indicated that the tool helped nurses to provide standard nursing care to mothers (Sa). Three nurses said that it helped nurses to provide information (Sa, Tok and Toy), while one reported that the tool helped to re-explain things that were not initially understood (B).

The strong point is that it can easily be a part of the nursing care routine. It seems to implement what we do (B, line 79-80).

At least it helps nurses in solving real problems of the mothers, such as having inverted nipples, then I can give them support (Sa, line 16-17).

I like to use the tool because it helps nurses to provide information about standard practice to the mothers. Every nurse might have different information, for example, on the expiration of breast milk kept in freezers (Sa, 10-11).

If I ask, and the mothers told me that they are not sure or don't know, I could then give them the information right away (Tok, line 26).

On the last sub-topic 'facilitate mothers', two nurses expressed that mothers could obtain more knowledge about breastfeeding (B and Sa). One nurse reported that the tool helped mothers gain confidence to breastfeed (Sa). One nurse indicated that mothers' relatives could obtain a better understanding about breastfeeding (Nuam). One nurse said that the tool helped motivate mothers' intentions to breastfeed (Toy).

It could help enhance a mother's understanding about breastfeeding. Some mothers have a big gap between their children, they don't remember. Having a tool is very good. It also could help increase mothers' confidence to breastfeed (Sa, line 53-55).

The benefit is that the relatives also learn, because they are the ones who will support the mother. They can help reinforce…After the discharge they also should have the knowledge, because they are the ones who will continue to support (Nuam, line 221-224).

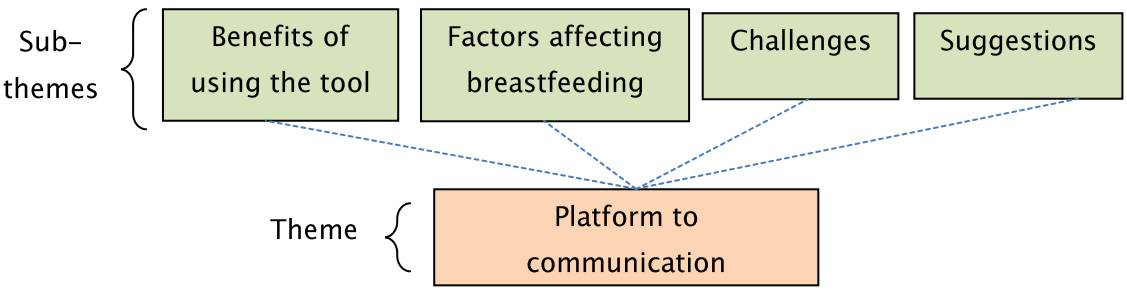
After using the tool with them, they seemed to have stronger intention to breastfeed. I also encourage them (Toy, line 64).

In conclusion, the tool appeared to benefit nurses in making it easier for them to assess mothers' needs of breastfeeding support as well as providing specific nursing care to the mothers, in particular knowledge regarding breastfeeding. Information in the leaflets seems very helpful when used along with the tool. It could be assumed that the aim of the study is achieved, in that the tool could facilitate nurses in providing breastfeeding support according to each individual woman's needs. It also seemed to have updated their knowledge; therefore the leaflet is an educational instrument for them.

6.4.2.2 Results from postpartum women who used the package

Four sub-themes emerged from the data: 'benefits of using the tool', 'factors affecting breastfeeding, 'challenges' and 'suggestions'. The sub-themes and themes are presented in Figure 6.6.

Figure 6.6 Summary of sub-themes and theme emerged from the postpartum women who used the package



On the first sub-theme, 'benefits of using the tool', all five postpartum women indicated that obtaining more knowledge about breastfeeding was one of the

benefits (Ae, Fai, Tan, Ying and Yo). A first time mother said that she has gained new knowledge about breastfeeding (Ying) while the rest of the women indicated that using the tool could help remind, confirm and update information in relation to breastfeeding (Ae, Tan, Yo, Fai). Three women expressed that the tool consists of questions regarding information and issues which mothers really want to know about (Tan, Yo and Ying). One woman felt easier in asking questions regarding breastfeeding while using the tool (Ying). One woman said that after receiving support from nurses, her intention to breastfeed increased while another reported an increment of confidence to breastfeed (Yo and Tan respectively).

> *It's good even though I already have my knowledge but I gain more information, for example, the benefits of breastfeeding, such as it is more economical (Yo, line 8)…it's really what I need to know (Yo, line 11).*

> *At the beginning I planned to breastfeed her for three months, but now I changed my mind to six months (Tan, line 13).*

> *If we don't know about something we could just ask. If there was no tool to guide then I find that it would be more difficult to ask and get engaged in a conversation. My head could be just blank…wouldn't know what to talk about (Ying, line 22-25).*

On the second sub-theme 'factors affecting breastfeeding', all five postpartum women expressed that the perceived benefits of breastfeeding were one of the factors that motivated them to breastfeed (Ae, Fai, Tan, Ying and Yo). Having a helper looking after baby and supporting breastfeeding was indicated to be another important factor influencing women to make the decision to breastfeed (Ae, Tan and Ying). Having flexible jobs such as in the government sector or family business could encourage women to breastfeed (Ae and Ying). The perception of the second time mother regarding her first child who often became sick because of having little breastfeeding (Ae) and the perception of three mothers on their ability to breastfeed from having seen others breastfeeding, (Fai, Tan and Ying) were important factors that motivated them to breastfeed. This means that the items in the tool included content regarding factors influencing breastfeeding. Using the tool with the women could also provide them with opportunities to reflect on their understanding about the

significance of breastfeeding, on ideas for future support and the need to sustain breastfeeding.

> *I think breastfeeding is economical and it is the main issue for me in deciding to breastfeed my babies (Yo, line 6).*

> *Nowadays my mom is with me so she can help look after the baby. When I have to go back to work, I will leave my baby with my neighbour. I will pay her 3,000 baht a month. She had the experience….helped me taking care of my first child (Ae, line 41-43).*

> *… I don't have to be at work all the time. I only have to go to work for 1-3 hours a day during the first six months…something like that. Even if I don't go it would be fine (Ying, line 34-36).*

> *I had to return to work after the three month maternity leave was over and didn't continue to breastfeed my first child after that. He would often get sick easily and his breathing is often abnormal, especially at night. I want to breastfeed my second child as long as possible, at least six months, and will continue breastfeeding him if I have enough milk (Ae, line 24-26).*

> *I saw my friend who lives in the same house with me breastfeed her baby for six months. I can see that her baby is very healthy. She inspired me to breastfeed my baby. I want my baby to be strong like hers (Tan, line 21-22).*

On the third sub-theme 'challenges', one postpartum woman indicated that she had received inconsistent answers, controversial advice and practices from nurses, and limited breastfeeding support at the hospital (Ying). One experienced impolite conversation from nurses (Fai). These findings are consistent with the results from the participants from Phase I of the study. Those results suggest that having inconsistent knowledge regarding breastfeeding, and inappropriate ways to communicate with the postpartum women, are challenging aspects for the health care professional working at the hospital. It also highlighted the significance of having a leaflet to be used along with the tool in providing breastfeeding information and support to the women.

> *I was new and the nurses gave me different answers (Ying, line 54-55). For example, I wasn't sure whether you need a warm press while massing your*

breast…The ways I was taught to massage were also different. The way to latch-on was also different (Ying, line 57-60). In my opinion, I want to see more support given to the mothers. I still feel that what we received was too little (Ying, line 73-74).

A nurse working at 4th floor taught me about latching on, but I still couldn't do it properly. That nurse scolded me and said, 'don't let the baby cry' then I feel tense (Fai, line 33-34).

On the last sub-theme 'suggestions', having a breastfeeding clinic available was suggested by one woman (Ying). She indicated that having staff who can clearly answer questions in relation to breastfeeding, and having someone whom mothers can consult with, is necessary in supporting mothers to breastfeed (Ying). To make available drinks and information on drinks which help stimulate breast milk production was suggested by another woman (Yo). This information implied the importance of having a breastfeeding clinic at the hospital to help promote breastfeeding. The findings were consistent with the results of Phase I regarding misunderstanding about breast milk production and traditional beliefs about drinks or foods that help stimulate breast milk production which should be corrected by health care professionals.

If there should be any, it would be that… in the beginning I was having many problems because I have no experience and wanted to receive regular care, such as being given advice (Ying, line 49-51)…There should be a clinic where we can get proper answers (Ying, line 63-64)…It would be good if there is someone who I can really consult with so I could feel more relaxed (Ying, line 87-88).

It would be good if there was some kind of drink served, or tell me what kind of drink could help stimulate breast milk production (Yo, line 26-27).

In conclusion, postpartum women obtained more knowledge about breastfeeding after nurses used the package with them. An increase of intention and confidence to breastfeed were the benefits of receiving breastfeeding support from nurses. It is interesting that the tool could open up opportunities for women to ask questions about topics that they really wanted to know about. This implied that two way communication and proactive breastfeeding support should be considered by the health care professionals in enhancing the quality of the services at the hospital. Receiving inconsistent

advice regarding breastfeeding also noted in the findings from Phase I of the study implied lack of guidelines being followed when providing information about breastfeeding. This lack of focus could be reduced by using the tool along with the leaflets, or by using translated breastfeeding guidelines from international sources. Allocating staff with breastfeeding counselling experience to run the Breastfeeding Clinic might help promote breastfeeding. However, the current shortage of staff at the hospital could be a challenge.

6.4.3 Common findings among three groups of the participants

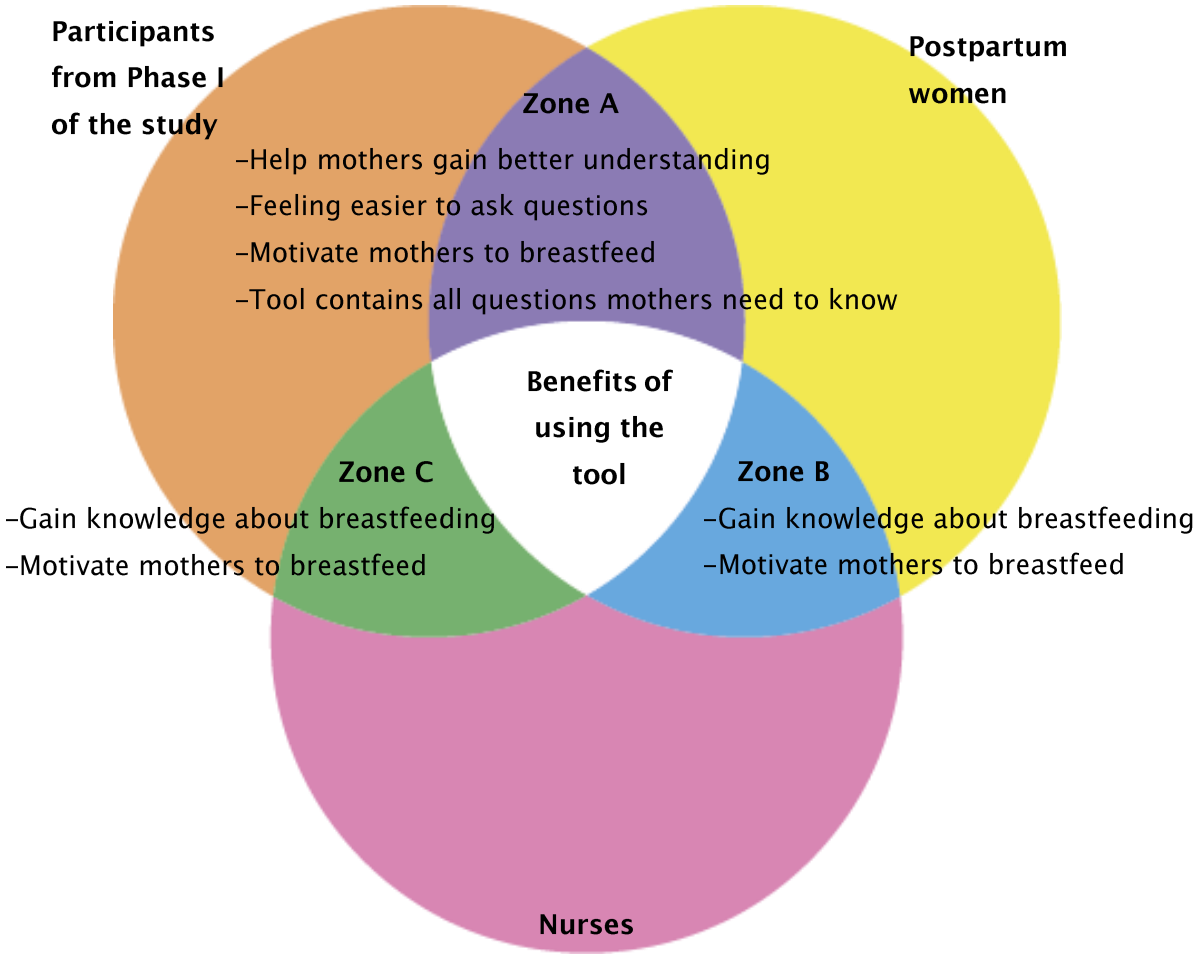
Analysis across the data sets highlighted commonalities in findings between the participants from Phase I of the study and postpartum women. This showed four main common sub-themes which are: (1) help mothers gain better understanding about breastfeeding (participants 1, 3, 9, Tan, Yo and Ying respectively), (2) feeling easier to ask questions regarding breastfeeding while using the tool (participant 1, 3 and Ying respectively), (3) motivate mothers to breastfeed (participant 9 and Yo respectively) and (4) contain questions which mothers really want to know the answers to (participants 1, 3, 8, 9, 16, Tan, Yo and Ying respectively) (see Figure 6.7, zone A). Among the four main sub-themes, the sub-theme that was most able to answer my research question was that the tool could help women identify their needs of breastfeeding support for the health care professionals, and this achieved objectives of the study. Moreover, the consequence of obtaining knowledge regarding breastfeeding was to increase their motivation to breastfeed. The contents of the tool confirmed that the data collected from Phase I identified the real needs of the women, which was a strong point of the tool.

Mutual findings between postpartum women and nurses have two main sub-themes: (1) gaining more knowledge about breastfeeding (Tan, Yo, Ying, and B and Sa respectively) and (2) motivating mothers to breastfeed (Yo and Sa) (see Figure 6.7, zone B).

Common findings between nurses and participants from Phase I of the study are: (1) obtaining more knowledge about breastfeeding (B, Sa and participant 1, 3, 9, 16 respectively) and (2) helping motivate mothers to breastfeed (Toy

and participant 9). A summary of the common findings of the participants are presented in Figure 6.7 (see zone C).

Figure 6.7 Summary of the commonalities



Common sub-themes among the three groups of participants helped to comprehend the participants' perspectives better regarding the use of the package. The common finding from the two groups of the women, who directly used and did not use the package, implied insufficient information regarding breastfeeding support received from the health care professionals. It also showed that with better understanding regarding breastfeeding, women had higher motivation to breastfeed. The comparison between the two perspectives, nurses' and women's, illustrated that both the tool and leaflet in the package helped them obtain knowledge about breastfeeding and increase women's motivation to breastfeed. The health care professionals could also reflect on their responsibility in providing and improving the breastfeeding

support given to the postpartum women by using the package to facilitate that breastfeeding support and to improve the quality of the services offered at the hospital. It could also reflect limited knowledge regarding breastfeeding among the health care professionals. The common finding among the three groups of the participants was that the tool benefited both women and nurses. This achieved one of the objectives of the study, which was to help facilitate nurses in providing breastfeeding support to individual women and help women identify their needs of support. This illustrates the strength of the tool, which implied its applicability to the real situation at the hospital, where delay in fully adopting the 'Ten Steps to Successful Breastfeeding' and a shortage of nursing staff are still the challenges at present. In conclusion, increasing knowledge and positive attitudes toward breastfeeding appear to be the core components of the benefits of using the tool, as indicated by the three groups of the participants in this study.

6.4.4 Suggestions for development

6.4.4.1 Questions in the tool

Although the tool is regarded as helpful and applicable overall, some of the questions were recommended for reconsideration. It was suggested that rearrangement of the order of the questions, such as with questions 1 to 4, should be done to avoid the feeling of having to jump back and forth while using the tool (Nuam). One nurse and one participant reported that question 4 seemed unclear for readers and needed to be revised (B and participant 16 respectively). Two nurses and one participant expressed that questions 1 and 3, 20 and 21, 31 and 32 were repetitive (Nuam, Tok and participant 1 respectively). One nurse reported that questions 18, 20 and 21 were not relevant to the real condition of the mothers (Toy). Two nurses pointed out that question 33 did not seem to be 'related to breastfeeding' (Sa and Tok). One nurse and one participant indicated that questions 10 and 30 covered 'multiple issues' and 'needed to be separated' (Sa and participant 16 respectively). The questions which needed to be revised for better understanding were questions 4 (B and participant 16), 7 (participant 3), 8 (B) and 13, 18 and 22 (participant 3). However, there was no comment about the

questions from the postpartum women who used the tool. All the questions commented on by the participants are summarised in Table 6.2.

> *For example, the first question on the intention to breastfeed… If we have read it before then we would know that we have to ask, 'How long do you intend to breastfeed and do you know the benefits of breast milk?' If question one could be replace by 'If you plan to breastfeed your baby, how long do you intend to do so?' Some patients have their own trend. We have to go to the second page to see (Nuam, line 30-35)…To put it in order for example, 1st, the intention for breastfeeding followed by the length of time intended to breastfeed and then the benefit of breast feeding would make it o.k. (Nuam, line 37-39).*

Table 6.2 Summary of the questions mentioned by the participants

Q / P	1	2	3	4	7	8	10	13	16	18	20	21	22	24	25	30	31	32	33
Nuam	Re-or RP	Re-or	Re-or RP	Re-or	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B	-	-	-	RW	-	RW	-	-	-	-	-	-	-	-	-	-	-	-	-
Toy	-	-	-	-	-	-	-	-	NS	NR	NR	NR	-	-	-	-	-	-	-
Sa	-	-	-	-	-	-	SP	-	-	-	-	-	-	-	-	-	-	-	NS
Tok	good	-	-	good	-	good	-	-	-	-	good	good	-	good	good	good	RP	RP	NS
P1	-	-	-	-	-	-	-	-	-	-	RP	RP	-	-	-	-	-	-	-
P3	-	-	-	-	RW	-	-	RW	-	RW	-	-	RW	-	-	-	-	-	-
P16	-	-	-	RW	-	-	-	-	-	-	-	-	-	-	-	SP	-	-	good

Note: = nurse, = participant, Re-or = Re-order, RP = Repetitive, RW = Re-write the sentence, NS = Not sure, NR = Not relevant to the real condition of the mothers, SP = Separate

One nurse mentioned that the content, which was important and should be added into the tool, was that of 'practical knowledge' (Nuam). Three of the five nurses indicated that more content relating to stimulating breast milk flow should be added (Nuam, B and Sa). Adding content relating to using drugs to help stimulate milk flow was suggested by two of the nurses (Nuam and B). However, certain issues regarding stimulating breast milk flow were still considered controversial. For example, two nurses agreed with applying breast massage (B and Sa), while another disagreed (Tok).

> *This tool only focuses on what the mothers have to say, but doesn't include the practical knowledge, such as holding position. It is a basic evaluation of their needs and how confident they are. It's just what I feel. When it comes to the reality whether they can put them into action we then would need a different tool, such as Latch score along with this, to ensure that after the knowledge part has be evaluated and supported, they can really put breastfeeding into practice and evaluate their success. This tool can't evaluate the success of breastfeeding but it can evaluate the confidence level, knowledge and attitude about breastfeeding. It can't evaluate their skill (Nuam, line 164-173).*

> *I think a topic about breast massage is lacking from the tool (Sa, line 61).*

> *No, I think it's ok. Breast massage is another issue…It's different. For example, for question 4 the nurses will teach about expressing breast milk. They can see the mothers' nipples and they can assess…(Tok, line 36).*

6.4.4.2 Structure of the tool

An idea about changing the structure of the 'Breastfeeding Support Tool' was given by two nurses (B and Sa). They suggested adding more details in 'block of nursing care' of the tool (B and Sa). One nurse suggested that in the three scales of opinion, the 'no' and 'unsure' places should be swapped (B).

> *What I felt, should have been in this tool is the presentation in points. Too many letters then the conversation wouldn't flow so well. It should be number (1) answer yes, no or not sure etc. If the mother's answer not sure then they could refer to so and so question etc. So they could finish it one by one. Sometime this can look very confusing.*

For example item 1..... ☐ *Yes*

☐ *No* } *for those answering no or*

☐ *Unsure* } *not sure/ Training required.....*

(B, line 95-103)

Two nurses suggested that the language used in the tool needed to be more spoken rather than written (B and Tok). However, this contradicted the other three nurses (Naum, Sa and Toy). One nurse mentioned that a person's educational level could affect the level of understanding (B). Nurses' different ideas regarding language used in the tool might be because of the differences in the background of women that they used the tool with. Women with higher education levels might be more familiar with more formal communication while those with lower levels of education might feel more comfortable and could understand general spoken language better. These issues were also covered in the content of the leaflet. While four nurses agreed regarding the sufficiency of the content of the leaflet, one working on a private ward suggested that a women that she used the package with, needed more research back up information to be convinced about the benefits of breastfeeding (Nuam). All women received a copy of the leaflet to take away with them, when they returned to their homes.

> *The language that you use here is like for those who graduated from a university with a bachelor or master's degree. If they are no problem, they would understand. But for those who only completed grade 3, 6, 4 or vocational certificate, they would just sit blank for a while then I have to reread the question for them again (B, line 115-120).*
>
> *When giving information to others, one has to study and know the details. For example, some people want to know if there are researches that back up the information given on the benefits of breast milk etc. (Nuam, line 80-83).*

6.4.4.3 Practice development

The information received from the participants who contributed to the interview in Phase I of the study, the postpartum women and the nurses who

used the package, described two main developments apart from using the package, hospital policy regarding promoting breastfeeding and specific nursing care could help mothers achieve six months exclusive breastfeeding.

Hospital policy should be more supportive regarding breastfeeding. This includes: (1) establishing a breastfeeding clinic (B, Nuam, Sa, Toy, Ying, Pa and Imm). (2) having more trained nurses in service (Sa), (3) stressing more on promoting breastfeeding at ANC, postpartum as well as after the mothers are discharged from the hospital (B) and (4) having doctors set up appropriate regulations on giving formula milk to prevent weight loss in babies (Nuam).

> *Yes, if the breastfeeding clinic still runs, it could help more mothers to achieve breastfeeding because they can continue to consult (Toy, line 86).*
>
> *If there were a centre then I can be sure that I will get proper answers. My baby has a different feeding time from other babies. If there were such a center then I could just walk there and consult and get the answers so I can feel more confident (Ying, line 68-71).*
>
> *They sent us to attend a breastfeeding course. After that they let the trainers train other nurses. They don't attend the course themselves. Sometimes the way we teach is not that good (Sa, line 76-77).*
>
> *The doctor would come and check baby's' health every morning and they would read the report. They said that if the baby loses a significant amount of weight there is an increased tendency that they would develop jaundice. According to their study of the trend of risk, they would definitely add formula feed…The second is that we do not let babies drink from a cup…the doctors also will not take any responsibility if the baby aspirates (Nuam, line 315-321).*

Having a strategy of providing breastfeeding support is important in helping mothers to be successful breast feeders. One nurse recommended using case management to provide services to the mothers and making leaflets and media available to promote breastfeeding (Sa). One nurse expressed that nurses' attitudes toward breastfeeding were important in providing care to promote breastfeeding (Toy). One participant suggested that there should be a guide-line for breastfeeding support (participant 9).

> *I want every nurse to assess their patients to see whether they have any problem, such as breast engorgement or having inverted nipples. They could then immediately provide nursing care, don't have to wait until problems come…(Sa, line 103-104).*

Um… there are fewer nurses who are interested in breastfeeding than those who are not because breastfeeding support is a time consuming work….(Toy, line 95-96).

There should be a guide line to help the mothers be able to breastfeed before being discharged from the hospital (participant 9, line 19).

It will be good if there are videos about expressing breast milk. We don't have anyone who can do audio-visual aids. Now we don't have it (VDOs) so we have to show it. We don't have any leaflets. I can't believe working in a big hospital and having no leaflets… (Sa, line 74-76).

To sum up, the hospital policy affects how staff can support women who are breastfeeding. However, changing the policy is challenging and needs cooperation between policy makers and multidisciplinary healthcare teams. Although the hospital policy has not been addressed in this study, it is worth considering this as a post-doctoral project to help mothers to be successful with breastfeeding, both initially and long term. In the current stage, with the low rate of mothers achieving breastfeeding exclusively for six months, the package could certainly help nurses working on the postpartum ward to provide breastfeeding information and practice to support women to breastfeed.

6.5 Chapter summary

The face validity of the tool confirmed by the participants, who contributed to the interview from Phase I of the study, showed a positive understanding of the tool. However, a few minor points needed to be reconsidered in order to provide better understanding for those using the tool.

The tool appears to benefit the nurses working at the postpartum ward, in both the standard and the private section, in giving a more well-rounded assessment to meet the breastfeeding support needs of postpartum women. However, the sample size was small and this issue is commented on in a later chapter. The use of the tool could guide nurses in providing specific nursing care to support mothers to breastfeed. Topics which the mothers wanted to know regarding breastfeeding are well-covered. Participants from all three groups made suggestions as to how to develop the structure of, and language

in, the tool. These points have been taken into account and will be implemented to enhance the overall quality of the final 'Breastfeeding Support Tool'. The leaflets seemed to be essential for nurses in using them along with the tool, and to convey information for the women in relation to breastfeeding.

The women admitted to the postpartum ward were able to better communicate their needs about breastfeeding support to the nurses because they had found a common voice. The benefit of the tool is important, especially for Thai mothers, because of the feeling of embarrassment to ask for help or support, a reluctance that seems to be part of many Thais' personal traits. The tool also benefits the women in obtaining support at the early postpartum period, which is crucial for successful breastfeeding.

In conclusion, the package could fill the gap between mothers' real needs for breastfeeding support and services provided by nurses. The package was shown to work well in the present conditions prevailing at the postpartum ward at the hospital. However, the development of the new version of the tool, and its application by more nurses working at the postpartum ward, is necessary to ensure its reliability. Chapter 7 will discuss the findings as well as making comparisons between the newly developed tool and other breastfeeding support resources that are currently available.

Chapter 7: Discussion of findings of Phase II: Evaluating the 'Breastfeeding Support Package' an initial review of nurses' and mothers' experiences of using the 'Breastfeeding Support Package'

7.1 Introduction

This chapter discusses the findings of Phase II of the study from the three groups of the participants: mothers who contributed to the interview from Phase I of the study, nurses who used the package, and postpartum women who the nurses used the package with. Pender's health promotion model is also linked to the discussion section. The original tool from Phase I (see Appendix A) is also compared to other available tools related to breastfeeding in order to see their commonalities and differences. Ideas incorporated from the suggestions of the participants for making adjustments for improving the tool are presented in this chapter, while a modified version of the tool is presented in Appendix Z.

7.2 Discussion of the findings

7.2.1 Face validity of the tool

The tool was developed using the data from the research findings of Phase I of the study. Telephone interviews were used to collect the data from the participants who had participated in the Phase I interviews, to assess the face validity of the tool. Although face-to-face interviews could obtain higher response rates and richer information, telephone interviews were considered appropriate (Civil and Commercial Code of Thailand 1976; Jones & Rattray 2010). One of the reasons for conducting telephone interviews was that there was almost a two-year gap between the first and the second interviews taking place, which caused difficulty in recruiting the participants to Phase II. The

mobile phone was used as an instrument for conducting interviews, instead of a landline instrument, because mobile phones are commonly available in Thailand (Civil and Commercial Code of Thailand 1976). However, only six of the 17 participants could be re-contacted, of these, five were recruited on the basis of their availability and willingness to participate.

The telephone did have its drawback while conducting the interview. For instance, some of the interviews were done while the mothers were taking care of their children, so they were occasionally distracted, while the amount of time that the interviewee was willing or able to spend on the phone also affected the quality of information received (Civil and Commercial Code of Thailand 1976). An indication by the interviewees that no additional questions were needed in the tool could imply that either the tool had covered all aspects well or that the participants felt they should respond to the questions asked quickly, therefore spending less time thinking before answering. Lack of eye contact, and being unable to observe nonverbal responses, such as facial expression and body movement during the telephone interviews, are impediments to a more in-depth understanding of the participants being interviewed (Internatonal Baby Food Action Network Asia 2014). By having to repeat certain questions contained in the tool several times one could conclude that the questions were not clearly understood, and therefore revision of some questions might be necessary. Another cause of the need to repeat questions could, of course, have been something as simple as loss of concentration due to distractions. Telephone interviews were definitely not considered as a method of data collection in Phase I due to its limited ability to capture details regarding body and facial expression in exploring women's experiences in breastfeeding. However, it is reasonable to use telephone interviews to assess understanding of language used in the tool for this phase of the study because of time limitation and the consequences of the political unrest in the country, at the time of Phase II of the research, which made travelling unsafe.

Different learning traits among the participants could also affect the level of understanding. Some people are better at learning by listening, whereas others are more 'visual learners' who enjoy reading. A member of the latter group could have been disadvantaged if involved in a telephone interview (Gregory et al. 2008). Relying on less than five main senses to interpret what has been told was another challenge in developing my listening skills to respond to the

participants. It was suggested that sending the tool by post to the women beforehand could have helped create better understanding during the interview. Although there was the possibility that busy mothers may not read it, it could be beneficial if they have a hard copy during the phone interview.

While acknowledging the limitations of conducting telephone interviews, the participants thought that the tool would benefit many mothers in obtaining knowledge about breastfeeding. Participants also pointed out 'the opportunity to ask' as one of the benefits of using the tool. This is interesting as the participants of Phase II indicated having similar views. Lacking knowledge about breastfeeding and lacking efficient communication between mothers and health care professionals could be barriers in providing and receiving sufficient breastfeeding support. This is a possibility that will be further discussed in the next section.

7.2.2 Theme: Platform to communication

The first research aim of Phase II of the study was to investigate postpartum women's experiences of using the tool to facilitate the identification of their needs for breastfeeding support. Interestingly, the women reported that they felt easier asking questions when using the tool. The reasons for this ease might be because first time mothers had no experience in breastfeeding. Therefore, they know little of what they have to deal with when they have to breastfeed. A mother who is in her second pregnancy might know better what other information she would like to ask or know more about because she already had the experience of being a mother before. This perspective is evident from Purnell's theory of cultural competence, which called the situation of 'I do not know what I do not know' as 'unconscious incompetent' and 'I know what I do not know as 'conscious incompetent' (Purnell 2013). However, using the tool did help the new mothers to open up a conversation with the nurses and ask questions about issues they wanted to know about in breastfeeding. From my clinical experience, the second time mothers also benefitted from using the tool. This is because they had the experience of breastfeeding and are expected to have knowledge regarding breastfeeding and might, therefore, hesitate to ask from nurses who are usually busy with their high workloads in particular. This implied that, prior to using the tool,

communication between postpartum women and the nurses could also be problematic. Using the tool indirectly advocates postpartum women to ask for their needs of breastfeeding support from the health care professionals.

Communication styles of health care professionals showed either a positive or negative influence upon providing breastfeeding support to the women (Demirtas 2012). A review of articles related to strategies for breastfeeding support, conducted between 1995 and 2011 from various databases, for example, CINAHL and Cochrane, revealed that the effective communication skills of the health care professionals were important in supporting women to breastfeed (Demirtas 2012). This review updated international papers in relation to breastfeeding support strategies published during the past 16 years. Among the thirty-eight articles reviewed, there was only one article citing non-Western research (Japan), while all the rest were done in Western countries (Demirtas 2012). A recent theory, such as Purnell's theory of cultural competence (2013), also indicates that communication is a cultural aspect which health care professionals should understand prior to providing care for their clients. It might therefore be implied that communication skills among health care professionals and postpartum women is an important issue worldwide.

The importance of issues relating to the communication skills of the health care professionals and breastfeeding support was confirmed by the Joanna Briggs Institute, an international leader of promotion and facilitation of evidence-based health care (Giles et al. 2007). The review of 31 qualitative studies which were mainly conducted in the UK and the US reported that when postpartum women do not want to interrupt nurses, due to the business of the ward environment, they seem to choose to keep quiet (Pate 2009). Another example of problematic communication between mothers and health care professionals in breastfeeding support was reported in a qualitative study conducted in the UK (World Breastfeeding Trends Initiative 2013). The report indicated that while the majority of mothers expected to receive breastfeeding support and be listened to about their needs, or informed of decisions about their babies' feeding from health care professionals, they were being told what they should do instead (World Breastfeeding Trends Initiative 2013). Although these two studies were conducted over ten years ago, based on qualitative view points, it could be inferred that communication barriers between health care

professionals and women receiving breastfeeding support is still a problem around the world. This showed commonality with the findings of this study.

There might be potential pressure linked to breastfeeding for the mothers. Either the source of their stresses is from mothers themselves or from other people around them, including the health care professionals. Although breast milk is considered to be the best food for babies, every mother has the right to decide whether to breastfeed or not. It is also important for the health care professionals to respect the mothers' decisions whether expressed verbally or non-verbally. Health care professionals should communicate accurate, current and evidence based information related to breastfeeding to the mothers. This should include the benefits of breastfeeding, common problems which they might encounter and ways to prepare for and solve different problems that might occur during the initiation of breastfeeding.

Despite the expectation of the mothers about the health care professionals providing appropriate breastfeeding support, people from different cultures have different perspectives about themselves. For example, women from a Thai cultural background can have difficulty in starting a conversation to request others to do something for them (Whalen & Cramton 2010). This ethnographic study provided clear understanding of Thai culture by the Western researchers. Although the small sample size, 14 participants, is a limitation of the study, having a co-researcher who is a Thai who could help comprehend the culture from an insider's view, and a researcher conducting the study from a Western background, who could help account for the outsider view, are considered strengths.

Some elements of Thai culture, such as feeling 'kreng-jai' and the existence of hierarchical differences of people in the society, could discourage patients in requesting support from the health care professionals. 'Kreng-jai' literally translating, 'Kreng'= to be afraid of, 'Jai'=heart, or meaning, to be afraid that your heart would feel uneasy or disturbed, is the feeling of embarrassment or reluctance to ask for help or support, because one would think that he or she is disturbing the 'askee', or refuse others' request (Whalen & Cramton 2010). The cultural element of 'kreng-jai' was reported as an important characteristic commonly evident among Thais and is a part of the Thai social value system (Whalen & Cramton 2010). An ethnographic study, which compared American and Thai culture, pointed out that social harmony and interpersonal

relationship are valued for Thais, whereas American culture emphasises more direct and assertive individualism (Ceriani et al. 2003). The cultural element of 'kreng-jai' also has impact on learning styles among Thais like being rather reserved or choosing to avoid asking questions. Such behaviour may well be viewed as a drawback to learning. Traditionally a major part of Thai education had been to focus on maintaining good manners and avoiding making mistakes (O'Connor et al. 2009). Students might have felt 'kreng-jai' to ask questions and were afraid that their teacher might 'lose face' if they could not answer the questions asked (Whalen & Cramton 2010). While 'kreng-jai' and avoiding making teachers 'lose face' is on a par with good manners, it is therefore understandable why students usually keep quiet while they are attending classes. The culture of "kreng-jai" is therefore instilled in Thais from childhood. The cultural element of 'kreng-jai' could discourage Thai people in questioning or requesting support from others. Therefore, it could be another influencing factor responsible for the communication problems between the women and nurses at the hospital.

The nurses who used the tool also said that the tool helped facilitate conversation about breastfeeding and helped provide breastfeeding support that met the women's needs. Analysis of these points might suggest that while research has shown that women are reluctant to ask, some nurses also find it difficult to start conversations about breastfeeding. While the nurses need more training and experience to counter this issue, the tool is one strategy that could help them cross the communication barrier between mothers and nurses.

In addition to this, social status may be one of the barriers to communication for women about their needs of breastfeeding support with the health care professionals. Thai society has a hierarchy or perception of power distance. Respect is praised. Showing deference to senior, wealthy or highly educated people is an expected social norm (Ceriani et al. 2003; Whalen & Cramton 2010). Questioning could be perceived as showing disrespect. Also, people often feel that highly educated or wealthy people are superior to those with lower educational status or wealth (Ceriani et al. 2003; Whalen & Cramton 2010). Therefore, postpartum women could feel uneasy to start a conversation to request breastfeeding support from the health care professionals. An important part of communication for the health care professionals to

understand is how they could best support the mothers to achieve initial breastfeeding. It is suggested that if using the tool is a part of the expected activity on the postpartum ward, then it would be accepted as part of legitimate postnatal care.

Nurses have a responsibility to promote breastfeeding, especially to postpartum women (World Health Organization 2010b; Ingram et al. 2011). Promoting breastfeeding is indicated as one of the competencies required of Thai registered nurses (Ingram et al. 2011). Supporting mothers to breastfeed is also a fundamental care, to be supported by health care professionals worldwide, in the 'Ten Steps to Successful Breastfeeding' project initiated by WHO (World Health Organization 2010b). A more proactive approach in providing services might help 'scale down' feelings of 'kreng-jai' and improve relationships between mothers and nurses. If using the package becomes a part of breastfeeding guidelines the impact of the cultural element of 'kreng-jai' could be significantly reduced, hence improving communication between nurses and mothers. Maintaining a positive personal relationship between postpartum women and health care professionals is highly valued, as indicated by the mothers from an interview of 21 British women in a qualitative study (World Breastfeeding Trends Initiative 2013). It is worth applying the knowledge to the Thai context where mothers have problems communicating their needs of breastfeeding support to the health care professionals. Additionally, in the Thai context using indirect communication channels is commonly practiced while straightforwardness is associated with rudeness (Whalen & Cramton 2010). By using the tool, nurses have helped overcome the communication problem. Nurses were more proactive in offering breastfeeding support services rather than waiting for the postpartum women to make the request. Therefore, the level of 'kreang-jai' could be reduced when women receive breastfeeding support from nurses without having to make the request themselves. Having the information leaflet for use alongside the tool ensures that sufficient knowledge is available. This knowledge security helps increase the confidence level of nurses, thus lessening their sense of the possibility of 'loosing face' when answering questions asked by the women.

In summary, cultural barriers influencing a mothers' hesitation to communicate their needs of breastfeeding support to the health care professionals could deprive mothers from gaining sufficient knowledge and skills regarding

breastfeeding. When the tool was used with the postpartum women it opened up a 'platform to communication' regarding their needs of breastfeeding support between themselves and the nurses. This implied that the tool could help the postpartum women to identify their needs of breastfeeding support to the health care professionals more effectively. In being more proactive in their approach in providing breastfeeding support, the nurses could lessen feelings of 'kreng-jai' felt by the women and create a positive relationship that could indirectly help encourage mothers to breastfeed.

7.2.3 Theme: Platform to support

The aim of Phase II of the study was to explore nurses' experiences of using the package to provide postpartum women with breastfeeding support. The key findings revealed that the tool increased their ability to assess and provide specific breastfeeding support according to the mothers' needs. One of the reasons for this was the knowledge being conveyed through the leaflets, as considered in 7.2.2.

The leaflet was praised as a vital source of information by all five nurses, because it covered all the evidence that they needed to provide information, as well as responding to questions regarding breastfeeding to the mothers. It is suggested that nurses might have insufficient or outdated information regarding breastfeeding which may hinder their ability to provide proper and current breastfeeding support to the mothers. This is consistent with other studies (Mozingo et al. 2000; McInnes & Chambers 2008; Abba et al. 2010). Two of these were qualitative studies (Mozingo et al. 2000; Abba et al. 2010), while one was a literature review from multiple source of databases, such as CINAHL, Medline and Psych Info, which was conducted in 27 countries, including Thailand and the UK, between 1996 to 2006 (McInnes & Chambers 2008). The results found that limited knowledge about breastfeeding is the main drawback for health care professionals in establishing effective support services to mothers.

This could be linked to Pender's Health Promoting Model which explained that health care professionals are the 'interpersonal influence' under the' Behavior-Specific Cognitions and Affect' aspect. The 'interpersonal influence' refers to

other's behaviour, beliefs, or attitudes regarding health promoting behaviour. Health care professionals seemed to be a primary source in providing support for people. While breastfeeding is highly beneficial and really needs priority attention, it is also crucial for health care professionals to have sufficient and up to date knowledge regarding breastfeeding prior to tailoring the quantity and quality of care to provide the needed support for the mothers. Breastfeeding, in my study, is one such health promoting behaviour and is a totally female focused activity but it may not have been given enough priority within the medical models of care. Promoting breastfeeding is considered the responsibility of nurses/midwives. Adopting the package could help educate nurses working on the postpartum wards to have sufficient knowledge regarding breastfeeding prior to attempting to educate the mothers.

Having insufficient knowledge regarding breastfeeding could bring about inconsistency of advice and practices, which were reported as barriers for promoting breastfeeding in many studies (McFadden & Toole 2006; Laantera et al. 2011; Schmied et al. 2011a). This is consistent with the findings from the participants from Phase I of the study which indicated they had received contradictory advice from nurses (see Chapter 4 Section 4.4.3 Theme: Support).

The causes of nurses having insufficient knowledge regarding breastfeeding could be limited education, lack of training and a lack of support from the hospital management staff. In Thailand, nurses have to complete a four-year nursing programme and pass a 'board exam' to be registered for 'the practitioner in nursing and midwifery licence (first class)' (Ingram et al. 2011; Thomson et al. 2012). Breastfeeding is usually a part of the obstetric subject with a total of four to six hours of class time (Martens 2002). This does not meet the requirement of the Baby Friendly Initiative course curriculum, which requires 20 hours for clinical and non-clinical staff (World Health Organization & UNICEF 2009). This is different from the UK curriculum, where midwifery is a course separate from the nursing programme at the bachelor's degree level, which requires either 18 months further study for a post-register programme or 156 weeks pre-registration training programme (Budzynska et al. 2012; Zapantis et al. 2012). However, the Thai curriculum serves best for training nurses with more flexibility to serve in different areas. Then, once they are permanently placed, they would be sent for more training to specialise in

specific areas. In fact, nurses working on the postpartum ward of the hospital, where the study was conducted, should have attended courses on breastfeeding practice and counseling; but, in reality, less than half of them did. Such an outcome suggests that breastfeeding is still not seen as a priority by the hospital management. Its view needs to be changed from being a medical model to one that is women centred.

The main reason for having a limited number of trained nurses in service might be due to the shortage of registered nurses working on the postpartum ward. The hospital policy only pays lip service to postpartum services, they are really not given priority. Postpartum services are often linked to 'Cinderella' in the maternity field in UK, in the sense they are suboptimum and not prioritised (Fraser & Cullen 2006; Wray 2006). Unsurprisingly, having only limited numbers of nurses trained in breastfeeding support also limits the knowledge and skills of the hospital staff in delivering support to the mothers. Although there are guidelines for providing breastfeeding support published by WHO (Renfrew et al. 2010; World Health Organization & UNICEF n.d.), their application in real situations and conditions of the hospital is still considered problematic. One of the reasons could be that the documents related to breastfeeding support courses are available to nurses that attended the courses and they are the ones who could easily retrieve these documents for personal use and training. Therefore, the trained nurses are usually the ones who have confidence in providing support while the untrained nurses are usually deprived of these sources of knowledge. However, training the trainers or using trained nurses as mentors for untrained nurses could be a solution for the current situation at the hospital. Working in shifts also reduces opportunities for mothers to receive consistent support from trained nurses. It is also difficult for untrained and inexperienced nurses to provide similar information and advice on breastfeeding support to the mothers because they lack sufficient knowledge and confidence regarding breastfeeding support. Having less than half of the nurses trained in breastfeeding support, could also limit the support that mothers should receive. This is consistent with results from the Cochrane data base, which indicated that health care professionals play a significant role in helping increase the duration of breastfeeding. Therefore, a shortage of sufficiently knowledgeable nurses to give consultations and support during the early postpartum period could hinder women to initiate breastfeeding (Britton et al. 2007; Dyson et al. 2008). It is

suggested that changing the policy of the Thai hospital where this research was based, to follow BFHI, would be important. While it could be argued that it is the nurses' own responsibility to always keep themselves updated and well informed in their practices, the management should also be responsible for preparing the ground to enable training to be initiated and new knowledge to be gained.

Nurses' attitude toward breastfeeding is also an important factor affecting the quality of nursing care being provided. This is consistent with an RCT study with a large sample conducted in Singapore and a review article which cited a study from Thailand which found that equivocal attitudes towards breastfeeding are the main drawbacks among some health care professionals (Su et al. 2007; Clifford & McIntyre 2008). Media plays an important role in influencing people's mind-set in society (Foss 2010). Many strategies are being used by different formula milk brands to promote their products, such as heavy advertising on television about their nutritional content and advantages and displaying images of healthy babies in the advertisement which could influence mothers' and health care professionals' perceptions on babies' feeding (Thai Breastfeeding Organization 2007). While a national ban is not yet enforced on the advertising of formula milk in Thailand, nurses are key sources in providing breastfeeding support to the mothers, but this support is dependent upon nurses having sufficient knowledge and a positive attitude toward breastfeeding (Thai Breastfeeding Organization 2007). Exposure to more information about breastfeeding being added to the nursing curriculum, and within clinical practices, may help nursing students to develop sufficient general knowledge and confidence about breastfeeding (World Health Organization & UNICEF 2009). It is also vital for nurses' instructors to have contemporary knowledge, to use more evidence based practice in training nursing students and to be more concerned in demonstrating effective communication when providing breastfeeding support to the mothers (Whalen & Cramton 2010; Ingram et al. 2011). Regular training and updating are essential for registered nurses working in the maternity field, such as ANC, DR, PP and NR, to promote breastfeeding to the mothers: training for which the hospital should provide budget for them to attend the breastfeeding counselling courses (Clifford & McIntyre 2008).

Hospital policy influences the maternity services of the hospitals in many ways. The 'Technocratic Model of Medicine' seems to play the key role in all aspects of care, rather than other care philosophies such as the holistic model of care. In following the 'Technocratic Model of Medicine', which emphasises the separation of mind and body, treating patients as objects which can be separated and fixed, could obstruct and does not fit well with the promotion of breastfeeding (Johnson et al. 2007). Examples of the 'Technocratic Model of Medicine' are: separating women and family, separating baby and mother instead of rooming in and paediatricians assessing neonates' health condition at the Newborn ward instead of by the mothers' bed. The drawback is that mothers and babies are separated for a short period of time post-birth and this doesn't support rooming-in, which is recommended by WHO (World Health Organization 2006).

The 'Technocratic Model of Medicine' focuses on aggressive treatment and short term outcomes. For example, there is greater emphasis placed on offering formula milk to babies losing over 10 percent of body weight to prevent neonatal jaundice than on promoting breastfeeding. The traditional practice of weighing babies while they are at hospital is also evident in some hospitals, as seen in an ethnographic study conducted in the UK (Dykes 2006). In fact, evidence based practice, such as breast milk jaundice, is a normal physiological condition (Beake et al. 2012; Sudfeld et al. 2012). WHO only recommends treatment of jaundice in babies which occurs on the first day and lasts over a period of two weeks (Beake et al. 2012; Sudfeld et al. 2012).

Another example of unsupported breastfeeding practice is that the hospital allows bottle feeding instead of cup feeding due to perceived risk to babies' choking. Bottle feeding could cause nipple confusion and increase the potential of early cessation of breastfeeding (Ward & Byrne 2011) and it is also considered a counter-productive practice to 'Ten Steps to Successful Breastfeeding', while cup feeding is recommended by WHO (World Health Organization 2006; Renfrew et al. 2010). The 'SaiYaiRak Hang Krobkrua Project' established by HRH Princess Srirasmi in 2005 continues the promotion of breastfeeding in Thailand and may eventually help to change society's views on breastfeeding (Ministry of Public Health and Ministry of Social Development and Human Security Thailand 2008).

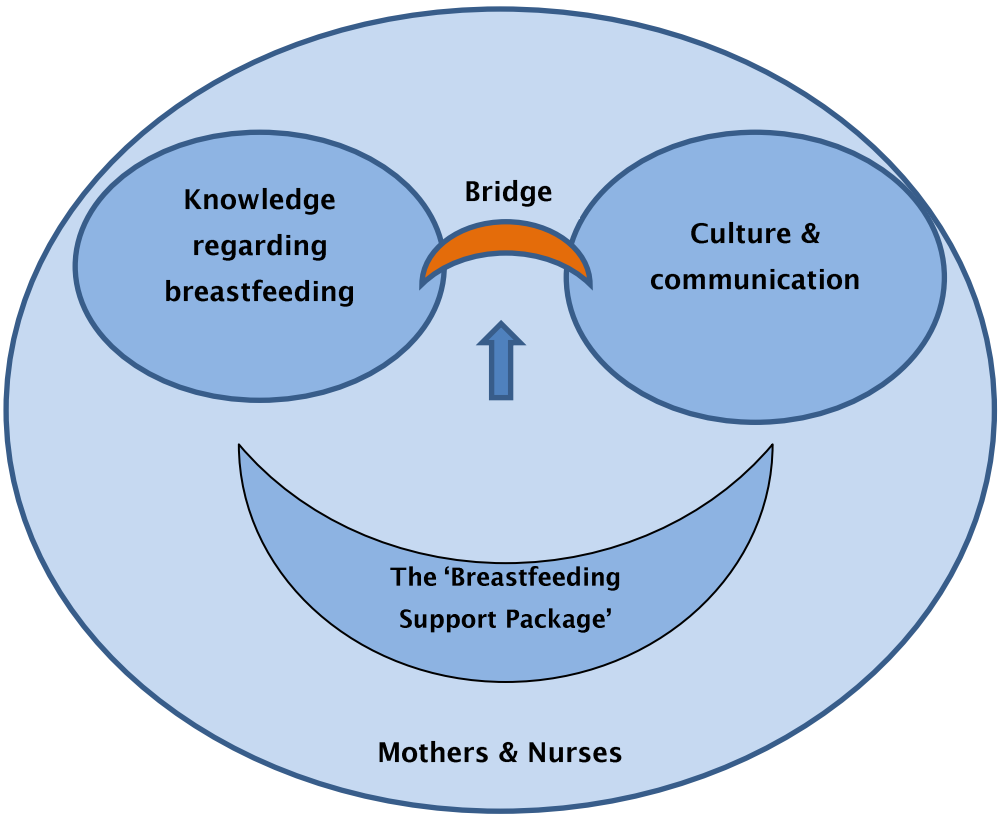
The BFHI environment is often interrupted by the hospital's policy. BFHI was launched by WHO/UNICEF in 1991 to promote breastfeeding worldwide (World Health Organization/United Nations Children's Fund 1989). Over 150 countries have adopted the 'Ten Steps to Successful Breastfeeding' strategy and hospitals in around 134 countries have been awarded the accolade of BFHI. The hospital where this research was conducted has not been awarded the title of a BFHI at present. A randomised controlled trial, conducted at the hospital, revealed that mothers receiving standard breastfeeding support from the health care professionals could not achieve breastfeeding exclusively for six months (Kupratakul et al. 2010). The present standard of routine breastfeeding support needs to be reconsidered for changes in order to improve the services at the hospital. The adoption of an 'Holistic Model of Medicine', which emphasises mind, body and spirit as one, instead of the 'Technocratic Model' might be one answer to promoting breastfeeding and total well-being of human beings (Johnson et al. 2007). BFHI environment should be promoted at the hospital to encourage mothers to initially adopt breastfeeding. This could be another challenging step for health care professionals and the policy makers of the hospital in improving the services to meet internationally acceptable standards as a BFHI.

In summary, the hospital's policy affects the promoting of breastfeeding services at the hospital. While short term benefits of promoting breastfeeding might not be obviously seen, the long term impact for a healthy population should be considered by the health care professionals to help support breastfeeding (Thai Breastfeeding Organization 2012). While there are still limitations to breastfeeding support, due to the limited number of specialist trained nurses who attended the breastfeeding counselling course at the hospital, using the package of the tool along with the leaflet, might be the first step to moving forward in helping to improve the quality of the current maternity services at the hospital. Also, focusing more on having competent nursing staff to support mothers to breastfeed could help improve breastfeeding support at the hospital and increase the number of mothers initially breastfeeding and then exclusively breastfeeding for six months. It is hoped such an initiative could increase the rate of breastfeeding in Thailand to reach its national goal, which is 30 per cent of mothers achieving breastfeeding exclusively for six months (National Economic and Social Advisory Council 2010).

7.3 The findings add to the body of evidence on breastfeeding

The synthesis of the literature review in Chapter 2 identified four domains regarding breastfeeding: 'benefits of breastfeeding', 'factors affecting breastfeeding', 'breastfeeding intervention' and 'tools in relation to breastfeeding'. Analysis of the data from my study found that, for Thai women, there are two main aspects of breastfeeding that are of high importance regarding breastfeeding support. These are 'knowledge about breastfeeding of both mothers and nurses' and 'cultural aspects and communication between mothers and nurses'. While knowledge regarding breastfeeding and practice are important in promoting breastfeeding, it could be argued that the pathway for tailoring the support to individual women in a way that respects their cultural background is vital. In Thai culture, where 'kraeng-jai' or' feeling reluctant to ask for help from someone' is a common experience, the use of the package could act as a bridge to connect the two aspects together (see Figure 7.1). It also helps to 'break the ice' in communication between nurses and mothers about breastfeeding and helps to guide breastfeeding support to the mothers. The ways that health care professionals communicate with the mothers is also very significant in either encouraging or discouraging those mothers to breastfeed. This was the highlighted in Chapter 4 (see Section 4.5.4 Summary of discussion).

Figure 7.1 Bridge of connection between the knowledge regarding breastfeeding, and cultural and communication



7.4 Comparing the 'Breastfeeding Support Package' to other tools related to breastfeeding

Several tools have been developed as part of strategies to encourage women to initiate and continue breastfeeding. Some seem more appropriate for use by the policy makers, in the government or the hospital, such as World Breastfeeding Trends Initative (WBTi) tool, while others are more suitable for clinical use by the health care professionals, such as LATCH. Although there are global strategies and tools to help guide and support breastfeeding for the health care professionals, barriers in adopting these tools into practices still remain. One of the main reasons might be because of a lack of local tools that fit well with the local culture and traditional practices as well as the organizational structure of the health care services. The hospital policy, which has not fully adopted the 'Ten Steps to Successful Breastfeeding' could be a reason hindering promoting breastfeeding at the hospital (World Health

Organization/United Nations Children's Fund 1989; World Health Organization 2006. Also, even if the hospital fully adopted the 'Ten Steps' or had been accredited as a BFHI, the package could still be beneficial to the health care professionals at the hospital due to its potential to help couter the differences of local and cutural beliefs and practices among the mothers and the health care professionals.

Several breastfeeding tools help assess women's and babies' important characteristics to establish breastfeeding, such as the Gender-Role Attitudes toward Breastfeeding Scale (GRABS) (Kelley et al. 1993), Iowa Infant Feeding Attitudes Scale (IIFAS) (De La Mora & Russell 1999), Maternal Breastfeeding Evaluation Scale (MBFES) (Leff et al. 1994), the Breastfeeding Attrition Prediction Tool (BAPT) (Ryser 2004) and the Breastfeeding Self-Efficacy Scale-Short Form (BSES-SF) (Dennis 2003). Among these tools, mothers' attitudes towards breastfeeding seemed to be the key domain being evaluated. However, these tools aimed to identify specific areas by which women could be encourage to breastfeed. They were also developed within the context of Western culture, which could be very different from Thai culture, even though the participants of the research were from urban areas.

The 'Nursing Care Plan for Lactation Counselling' indicates the nursing care that helps mothers to be successful in breastfeeding; however it lacks details in practice (Parris et al. 1999). For instance, it briefly indicates what the problems are such as 'correcting misconceptions, misinformation, and inaccuratacies about breastfeeding': it is pleasing to report the 'Breastfeeding Support Tool' contains more details on the misunderstood points which the mothers in this study indicated. Some of these examples are: 'do you think mothers with larger or smaller breasts tend to have enough breast milk?' and 'do you believe that certain herbs, foods, drugs, and drinking warm water could help stimulate breast milk production?'. The tool helps correct the misunderstanding that breasts sizes could affects breast milk production, as well as addressing concerns about galatogougues (Powers 2010; Riordan 2010a). The tool included a column of 'nursing care' to be provided to the mothers, which the research feedback has indicated as lacking. This could help ensure that the nursing care, required specifically by each individual mother, is implemented.

The ‘Breastfeeding Support Package’ could help improve the quality of breastfeeding services currently available at the hospital. From the research findings it seemed that nurses lack sufficient knowledge about breastfeeding, while the postpartum women apreared to have problems communicating their needs and were therefore not receiving effective support from the health care professionals. Using the tool could fill the gap between the two parties regarding breastfeeding support at the postpartum ward. Using the tool has helped open up conversations in a more natural and meaningful way between the women and nurses. Therefore, mothers are less hesitant to convey their true needs and hopefully will receive appropriate breastfeeding support according to their needs. While there was only a limited number nurses trained in breastfeeding couselling, the leaflet contained sufficient basic information for particularly new and inexperienced nurses to convey to the mothers. The leaflet, which was designed to be used alongside the tool, as a total package of breastfeeding support, contains the answers to questions often asked by mothers as well as research-backed information which helps educate and update breastfeeding facts for nurses.

In summary, the package is rather distinct from the all the tools mentioned earlier because its development was based on a Thai context of mothers’ real needs. The tool also incoporates ‘nursing care’ which links to the leaflet provided. Therefore, the overall package facilitates the health care professionals in providing more total and specific care to individual mothers.

7.5 Further development of ideas

After the suggestions from the mothers and nurses were analyzed and compared to the original aims of the study and the evidence base, changes to the language used, to be more colloquial, was the main issue. Overall, some content was added based on the feedback and analysis of what women and nurses indicated was needed or lacking. However, the change might not be obvious in the translated version in English. For example, the word for ‘know’ in Thai language could be both ‘saab’ and ‘ruu’. Saab is more official and more polite whereas ‘ruu’ is a more simple and unofficial form. Therefore, ‘ruu’ is the word to be used in the tool to make it sound more like a spoken language.

Apart from language issues, re-ordering questions (questions 1to 4), adding more details (question 7), adding a point on breast massage (question 9), separating questions containing two different points (question 10), rewriting sentences (questions 12 and 13), removing irrelevant issues on mothers returning to work (question 18), removing duplicated questions (questions 24 and 28) and combining similar questions (questions 31 and 32), are points to be considered for revision when constructing a new version of the tool, as presented in Table 7.1.

Table 7.1 Summary of questions and commented made by the participants

Questions	Improvement and rationales
1 to 4	Questions were re-ordered to be more fluent when asked to the mothers.
	The sentence structure of question 4 has been changed. However, the meaning of the sentence has been kept.
7	More detail about days before milk flow has been added.
9	Breast massage has been acknowledged in helping decrease breast engorgement (Hall-Moran et al. 2006; Renfrew et al. 2009; Renfrew et al. 2010). Therefore, information about breast massage has been added.
10	Question 10 has been re-ordered and has been separated into two questions.
12 & 13	Questions have been rewritten to sound more positive.
18	Questions 18 has been removed because it might not be relevant to all participants, such as those mothers who are housewives or not working, while the content about preparation before going to work has been included in questions 20 and 21.
20 & 21	Questions have been changed to cover both women returning to work and those who are not.
24 & 28	Questions are duplicates because they both convey the same massage. Therefore, question 24 has been removed while the details of the question have been integrated with question 28.
31 & 32	Questions 31 and 32 are quite similar. Coming up with a combination of these two was suggested by a nurse.
33	Although question 33 is not related to breastfeeding, it offers another choice for the participants that could benefit them in child rearing. Therefore, it was kept.

According to the nurses' recommendations, the column of 'opinion and nursing care' has been changed by describing in more detail how to ensure that the nurses clearly understand what activities they should be providing to the postpartum women. The modified version of the tool is presented in Appendix Z.

7.6 Chapter summary

Lack of sufficient knowledge regarding breastfeeding seemed to be the main barrier which not only discourages mothers from breastfeeding, but also causes more difficulty for the nurses in providing breastfeeding support to those mothers. Communication and long established social traits of Thais, such as 'kreng-jai' and 'not being straight forward' limit adequate breastfeeding support from the health care professionals. In using the tool with the women, a 'platform' was opened up for both parties, mothers and nurses, to communicate regarding the needs of breastfeeding support. The package also acts as a bridge connecting knowledge regarding breastfeeding and Thai cultural practices and ways of communication between mothers and nurses, which can help in promoting the breastfeeding behaviour of Thai women.

The lack of a BFHI hospital policy in promoting breastfeeding is a major problem, while having a limited number of trained nurses providing breastfeeding support, resulted in only a limited amount of support being provided to the mothers. With the situation of breastfeeding support at present, the tool could help nurses to easily identify mothers with basic and complicated needs related to breastfeeding support. Information in the leaflets helps nurses gain more confidence in providing breastfeeding support to the mothers. Using the package of the tool, along with the leaflet, might be a significant step in moving forward to improve standards of maternity care at the hospital, while there should be more stress on putting the 'Ten Steps of Successful Breastfeeding' into practice at the hospital (World Health Organization 2010b).

The tool had been revised and minor changes made according to the suggestions from the participants of the study. However, the main content of

the tool is still the same as the original version. The implementation of the package is presented in Chapter 8.

Chapter 8: Implications of Research Findings

8.1 Introduction

This chapter presents the recommendations of the study based on the analysis of the data from Phases I and II of this research. It also presents considerations of relevant policy and evidence. Implications for practice, education and research are suggested.

8.2 Recommendations

The ultimate aim of the study was to increase the number of mothers who achieve exclusively breastfeeding for six months. Breastfeeding is the best way of supplying nutrition to babies and is recognised as a part of national and global health promotion. This study focused on contributing to that aim through using the 'Breastfeeding Support Package' as an instrument to provide breastfeeding support via the health care professionals, particularly nurses. The key issues that arose from both phases of the study were: a) the lack of sufficient knowledge regarding breastfeeding for the nurses and postpartum women and b) communication barriers between women and the health care professionals. In order to help facilitate a higher quality of breastfeeding support services at the hospital, three main areas concerning implications and recommendations, those of practice, education, and research, are discussed.

8.2.1 Implications for practice

Breastfeeding could be promoted to women right from the beginning of pregnancy till post natal. According to the findings of the study, it is rather challenging to improve the quality of breastfeeding support services at the hospital. To be able to achieve this goal, it is necessary to get the cooperation of the permanent staff and nurses working in the maternity field, such as the ANC and PP. The three main competencies of leading services are: understanding the problem, using resources to fill service gaps and communication (Morgan 2007). As a nursing instructor, meeting with the head nurses working at the ANC and PP to consult about the real situation of

breastfeeding support at the hospital and organising the 'Breastfeeding Education Project' is one of the solutions. Consultation is important because head nurses' acceptance could ensure good cooperation from them, as well as from the nursing instructors and practical nurses. Once this is done, the shared goal of the project, which is 'providing excellent breastfeeding support to increase mothers' ability to breastfeed, could be communicated to all the nurses at ANC and PP (Morgan 2007; Marquis & Huston 2012). The next step is to present the project to a relevant governmental organisation, such as the Thai Health Organisation, to obtain funding. After the funding is obtained, publicise the project to get participants, women who are in their third trimester of pregnancy, to join the project.

At the same time, understanding nurses' and women's circumstances is very important in promoting breastfeeding. The understanding that breastfeeding promotion is an important duty which could always be done independently, without having to be instructed by doctors, should be embedded in every nurse (Ingram et al. 2011). The health care professionals' attitude toward breastfeeding is one factor affecting the breastfeeding behaviour of mothers (Mozingo et al. 2000; Su et al. 2007; Clifford & McIntyre 2008; Abba et al. 2010). The findings of the study showed that participants felt that breastfeeding is difficult (participants 4, 9 12 and 17) and were pressured by nurses for not having copious breast milk during the first two days postnatal (participants 3, 9 and 14). A lack of sufficient information about physiological changes and breastfeeding among nurses and women could be a cause of the problem. Nurses' having a mind-set that breastfeeding is important, easy, and natural, and not accepting formula milk as a substitute for breast milk, is important in encouraging mothers to breastfeed. Viewing the promotion of breastfeeding as one of their professional responsibilities could help nurses to plan and provide breastfeeding support, while still having to deal with their high work load (Ingram et al. 2011). Being proactive in providing breastfeeding support could help encourage mothers to breastfeed, while sharing a common goal. For instance, to help solve mother's breastfeeding problems before they are discharged from the hospital should be another strategy to help mothers be successful in their initial breastfeeding and to increase the number of mothers who can achieve breastfeeding exclusively for six months.

Some characteristics of women could affect breastfeeding. Extrinsic factors, such as support from family members, especially spousal support, could have either negative or positive affects on breastfeeding (Clifford & McIntyre 2008; MacArthur et al. 2009; Racine et al. 2009). However, studies conducted in Britain, Australia, and the US, where paternal roles supporting breastfeeding were investigated, might be different, depending on cultures (Clifford & McIntyre 2008; MacArthur et al. 2009; Racine et al. 2009). For example, the result of the study revealed that Thai mothers-in-law have active roles and significant impact on the feeding of new babies, instead of the child's parents, particularly the father. However, there is no study on the effects of support of mothers-in-law on the duration and success of mothers to breastfeed. Offering opportunities for key family members, who help look after babies after discharge from the hospital is important support for mothers to breastfeed. Such family members should be invited to take part in breastfeeding education sessions, including at the ANC and postnatal (Clifford & McIntyre 2008; MacArthur et al. 2009; Racine et al. 2009).

At ANC, the breastfeeding education class is essential in promoting breastfeeding. My study demonstrated that having a commitment to breastfeed was an important intrinsic factor to successful breastfeeding, which is consistent with the review yielded by the Cochrane database on the importance of maternal intention to breastfeed (Jaafar et al. 2012). However, intention to breastfeed is subjective and rather difficult to assess. A mother's intention, whether to breastfeed or not, is usually set prior to delivery. It is crucial for the health care professionals working at ANC to provide support to increase mothers' intentions to breastfeed. Such professionals can attempt this by informing mothers about the benefits of breastfeeding on neonatal wellbeing, the economic advantages to mothers and the disadvantages of formula milk, a point which was indicated as important by the participants in this study. This is consistent with the principle of Pender's Health Promotion model which explained that 'individual characteristic and experiences' and 'behavior-specific cognitions and affect' are factors that influence people's health promoting behaviour (Pender 2011). The 'health promoting behaviour' is the outcome of Pender's model. The 'behavior-specific cognitions and affect' aspect, such as 'perceived benefits', seemed to be significant factors affecting mothers in my study on breastfeeding. In practice, women's perception of the benefits of breastfeeding should increase by giving them more information

about the benefits of breastfeeding during pregnancy. Providing a breastfeeding class run by both lay and professional presenters could be one way to motivate mothers to increase their intention to breastfeed (Moran et al. 2004; Amir et al. 2006). The Cochrane database and a systematic evidence review also confirmed the effectiveness of educational programmes, presented by a mix of lay members and professionals, in increasing the rates of mothers' success in breastfeeding (Moran et al. 2004; Amir et al. 2006). It could be argued that there is still no effective programme for breastfeeding support that could help mothers succeed in breastfeeding exclusively for six months. However, from the findings of this study, it can be seen that a lack of knowledge regarding breastfeeding is one of the main factors discouraging mothers from breastfeeding (Lumbiganon et al. 2012; Skouteris et al. 2014). Therefore, educational classes for mothers, which provide opportunities for hands-on practice, are necessary and should be provided at the hospital.

The 'pueperium is another important phase to promote breastfeeding (Dyson et al. 2008). For mothers experiencing difficulty with breastfeeding, particularly first time mothers and the focus should be more on helping them to practice latching on and the optimal breastfeeding position. A participant of Phase I, who reported having difficulty in latching the baby onto the breast, was provided with limited and unsuccessful support and consequently did not establish breastfeeding (participant 9). Another participant, whose baby had a tongue tie, received 'sufficient' breastfeeding support from the nurses and as a result, exclusively breastfed for six months (participant 1). These examples show the importance of initiating breastfeeding support in relation to 'latching on' which is one of the main problems of mothers in the early postnatal period which affects the success rate of breastfeeding (Riordan & Smith 2010). This is consistent with the concepts enshrined in Pender's health promotion model, which indicated 'perceived barriers' as discouraging factors whereas 'perceived self-efficacy' as encouraging factors affecting people's health promoting behaviour (Pender 2011). Women's perception of barriers to breastfeeding should be discouraged through early provision of breastfeeding practice support, during the immediate postnatal period, as well as helping them deal with difficulties in breastfeeding. Providing this helps promote mothers' self-efficacy to breastfeed.

Regarding mothers' needs of breastfeeding support from the health care professionals, it was identified that many participants did not have sufficient knowledge about breastfeeding and they indicated that they would like to gain more knowledge from the health care professionals. Although the breastfeeding class which ran at ANC would help provide more information, it is essential to reiterate information, postnatal, because some mothers may have missed the class at ANC. Therefore, the regular running of specific classes regarding breastfeeding might help ensure that mothers will have received the essential information. A systematic review from Cochrane database also confirmed the effectiveness of a combination of antenatal and postnatal educational sessions as a means of increasing the rate of mothers initially breastfeeding (Dyson et al. 2008). However, there was only one study that met the criteria of good RCT design. Therefore, there was no recommendation on strategy of how to manage the class (Dyson et al. 2008). Also, the review investigated a study conducted in the US where mothers' background and needs of breastfeeding support might be different from Thai mothers. In fact, it is arguably necessary for the hospital to adopt the 'Ten Steps to Successful Breastfeeding' and 'BFHI'. This is consistent with the results of a recent systematic review which suggested that structured programmes, such as the BFHI to support breastfeeding, seemed to have a positive effect on initial breastfeeding and continued breastfeeding (Beake et al. 2012). At present, the hospital has not yet fully adopted the 'Ten Steps to Successful Breastfeeding' model. Cooperation of a multidisciplinary team, such as nurse instructors, nurses working at the postpartum ward and obstetricians, is necessary for establishing the guidelines for breastfeeding support, identifying which works best for the environment and the current condition of the hospital. In establishing a local programme, consideration should be placed on women's needs for breastfeeding support, educating women about breastfeeding and structured global breastfeeding programmes, such as the 'Ten Steps to Successful Breastfeeding' and BFHI (Dyson et al. 2008; Beake et al. 2012).

The lack of sufficient knowledge about breastfeeding of nurses working on postpartum and other wards, such as the NR, seemed to discourage the participants in my study. Nurses need to make sure that the information to be conveyed to the mothers is up to date. The findings of the study revealed that the nurses gave conflicting advice about breastfeeding, such as about cup

feeding and bottle-feeding. Advice regarding certain types of herbs and food that are believed to help to stimulate breast milk, such as ginger and banana blossoms, should be given with caution due to a dearth of high quality research in the field of Thai galactogogues, which could be used to support a particular perspective (Srisuwaphan 2013). Nurses should be well informed as to how to choose reliable sources of information, such as WHO, the Cochrane database, or the Thai Breastfeeding website, so they are able to obtain more, if not the most accurate, information regarding breastfeeding. Since most workplaces do not provide appropriate facilities for breastfeeding mothers, emphasis is focused on educating mothers who are returning to work. They could be provided with sufficient knowledge to continue breastfeeding, such as information about hand expressing, using manual or electric breast pumps and storing and using breast milk (Tangsuksan & Ratinthorn 2011). This recent qualitative study was conducted in Bangkok, Thailand. Therefore, it shared the real condition of Thai mothers living in the city like mothers mainly returning to work after three months maternity leave. Contact numbers, sources of information on breastfeeding and leaflets should be made available for mothers along with establishing a system of follow up from the health care professionals.

The findings of Phase II of the study indicated that a gap in communication exists between the mothers and the health care professionals working on the postpartum ward. Consideration should be given to using two-way communication, which is more effective than the routine services or watching videos about breastfeeding, to design the programme or sessions about breastfeeding (Dyson et al. 2008). However, Thai cultural aspects relating to the cultural mores of communication could be another challenge. Focus on two way communication and using participatory activities may help overcome this barrier (Whalen & Cramton 2010). Prior to providing support, every postpartum woman should be assessed concerning her needs for breastfeeding support, using the newly created 'Breastfeeding Support Tool'. Leaflets could be used as a good source of information for nurses to provide support to the mothers. Also, others tools, such as the LATCH assessment tool might be necessary when helping mothers to practice initial breastfeeding (Feilzer 2010). Mothers, who have perceived difficulties with breastfeeding, such as having babies with difficulties in sucking, having twins, or being under certain medical conditions,

need to be referred for breastfeeding counselling to gain reassurance relative to their ability to breastfeed.

The 'Breastfeeding Support Package' could be used as an instrument to help nurses working on the postpartum ward to provide breastfeeding support to the women. Prior to using the package meeting with the head nurses and obtaining the agreement to talk with nursing staff about the package should be considered. The package would then be introduced as a potential solution for facilitating nurses in providing breastfeeding support to the mothers. The benefits of the package of the tool and the leaflet could be presented to the nurses which cover: (1) saving time spent in assessing mother's needs of breastfeeding support, (2) facilitating nurses in providing specific care to the mothers, (3) helping both new nurses and mothers obtain knowledge about breastfeeding, (4) helping increase new nurses confidence levels in providing breastfeeding support, (5) providing a platform for nurses to think about improving their breastfeeding support and (6) being a platform for women to open conversation with the nurses. Another point should also be conveyed during the briefing, which is that improving breastfeeding support since the early stage post birth could help decrease the difficulty of initial breastfeeding, as well as increase the mothers' ability to breastfeed. The ability of nurses to improve their services could gradually increase nurses' autonomy. When women feel more comfortable talking with the nurses, they are then more open and likely to ask questions and make requests for breastfeeding support according to their needs. With more breastfeeding support being catered to their individual needs, they would then have more confidence to try to breastfeed. If a nurse agrees to use the package then that nurse would be informed on how to effectively use the package. In the practical part of training of nursing students, the students will have demonstrated to them how to use the package with mothers. Recording of mothers' satisfaction after using the package, and their success in achieving initial breastfeeding and exclusive breastfeeding for six months, will be collected and presented to the head nurse. If the result of using the package is positive then it could be presented at a higher level for its usage to be included in the hospital's daily life as a component of policy.

To help mothers to be successful in breastfeeding, hospital policy to promote breastfeeding is very important. The findings of the study revealed that there is

a lack of hospital policy to promote breastfeeding. Some practices which are part of the routine care, such as not rooming-in and allowing the distribution of formula milk at the hospital, are against the policy of BFHI and the 'Ten Steps to Successful Breastfeeding' (World Health Organization/United Nations Children's Fund 1989). The RCT research conducted at the hospital, where this study was conducted, also confirmed the necessity of reconsidering routine breastfeeding services because no mothers have achieved breastfeeding exclusively for six months (Kupratakul et al. 2010). At present, the hospital has not yet been awarded BFHI status. Therefore, the management or policy makers should seriously consider adopting the 'Ten Steps to Successful Breastfeeding' and see that nurses and healthcare professionals, as well as other support staff, strictly follow the policy (World Health Organization 2010b; World Health Organization 2013b). Also, much more effort should be put into promoting breastfeeding and applying evidence based input into the practice of breastfeeding support. As such, hospital policy in promoting breastfeeding is challenging, so post-doctorate research projects should be conducted to help raise the quality of the hospital's breastfeeding services.

Nurses and postpartum women who participated in the study reported that having only a small number of nurses trained in breastfeeding counseling limited breastfeeding services that mothers should receive. The policy makers at the hospital should manage nurses' task schedules to include time for nurses to attend the breastfeeding counseling training courses and set up budgets for this purpose. More in-house training should be organized for trained staff to train the untrained so that all the staff could be at the same level or standard of ability to provide quality service to the mothers for breastfeeding support. The summary of suggested practices at ANC, PP, and management are presented in Table 8.1.

Table 8.1 Summary of recommendations for breastfeeding support

Areas for improvement	Recommendation for breastfeeding support
Antenatal	- Offering breastfeeding classes run buy lay and health professionals. - Emphasis should be focused on the benefits of breastfeeding.
Postpartum	- Use the 'Breastfeeding Support Package'. - Design breastfeeding sessions with effective media or/and methods. - Having key family members participate in the breastfeeding session. - Using a two-way communication. - Update and use reliable sources of information. - Consideration should be put on providing sufficient information for mothers returning to work. - Help practice latch-on, especially with first time mothers. - Nurses having positive attitudes toward breastfeeding. - Having a breastfeeding counselling service.
Organisational management	- Adopt the 'Ten Steps to Successful Breastfeeding' and BFHI. - Make sure staff strictly follow the policy. - Cooperation of a multidisciplinary team to establish the guideline of breastfeeding support and standard information. - Having more nurses trained on breastfeeding counselling.

In summary, using the package of the tool alongside the leaflet could help facilitate nurses in providing breastfeeding more effectively and conveniently because the leaflet contains all the basic information that mothers need and most want to know about. It facilitates better communication and understanding between nurses and mothers and helps in establishing positive attitudes toward breastfeeding. Nevertheless, practice is an essential part of nursing care. Having limited numbers of trained nurses has made it difficult to provide proper breastfeeding support and this is a high barrier to breastfeeding support. In order to overcome this problem, nurses should regularly receive appropriate training and attend workshops for the new, inexperienced and untrained nurses in order to ensure that all the nurses in service receive appropriate training to provide breastfeeding support to mothers.

8.2.2 Implications for education

As indicated in Chapter 7 (Section 7.2.3 Theme: Platform to support), nursing students have to attend only four to six hours of the class on breastfeeding, according to the Bachelor of Nursing Sciences curriculum (Martens 2002). This limited number of hours is considered insufficient for breastfeeding support when compared to those set for international standard of competencies of registered nurses and global policy (UNICEF UK 2014).

Firstly, setting a consultative meeting with the curriculum team for Family Nursing to convey the importance and necessity of expanding the content, time and details of the course to produce competent nurses, is necessary (Ingram et al. 2011). Examples of UK curricula, such as midwifery, bachelor degree in nursing and requirements of the Baby Friendly Initiative course curriculum are given as a reference (see Chapter 7 Section 7.2.3 Theme: Platform to support) (World Health Organization & UNICEF 2009; Budzynska et al. 2012; Zapantis et al. 2012). General information regarding breastfeeding should be more focused on lessons provided by educational institutions so that nursing students could have accurate, appropriate and current evidence-based knowledge to support mothers to breastfeed. The content of any breastfeeding course should not focus mainly on theory but also on the practical, such as providing support for employed mothers who have to return to work after their maternity leave is due to end (Tangsuksan & Ratinthorn 2011). The education should include the importance of communication strategies to enable women to ask questions. Theories in relations to health promotion, such as Pender's model, could provide a better understanding of people having healthy behaviour, such as breastfeeding, which should be included in the lesson. Evidence based practice and its application should be introduced and incorporated into the lesson (Marquis & Huston 2012). Focus should also be put on building a positive view of breastfeeding among nursing students. This is because they have a major role in conveying the importance of breastfeeding, as well as supporting it to become a social norm, instead of formula milk. They could also be at the forefront in calling for the banning of formula milk advertisements on mass media, as part of the profession's voice. Another important point is to make a suggestion at the annual meeting for curriculum development to add promoting breastfeeding to be part of relevant courses, such as health promotion, while making sure that the details do not

duplicate that of other courses and that the practice is in line with family nursing subjects.

Secondly, the education department could, in partnership with the local hospital, develop a project to fund training for nursing instructors who could hold practical training sessions at the PP, with practice leaders, or with those who have an interest in breastfeeding counselling. This would increase the instructors' knowledge and skills, enabling them to train their students on the subject as necessary (World Health Organization & UNICEF 1993). Thirdly, I would present the findings of the study at the annual meeting of the Department of Child Nursing and Midwifery, during its conference day, and invite all the nurses in the obstetric field to attend. Lastly, at the PP, every morning, a briefing is regularly held before the next shift takes over duty. As a nursing instructor, I would attend the pre-conference briefing with the nurses when using the ward for teaching practical parts of nursing courses. During the pre-conference briefing, updates on breastfeeding could be shared.

In conclusion, it is essential for nursing instructors of midwifery to have sufficient and up to date knowledge prior to teaching their nursing students, thus becoming experts in the field. Expanding both content and time, regarding breastfeeding's place in the nursing curriculum, in both theory and practice, is necessary for increasing nursing students' capability in regard to their knowledge of breastfeeding.

8.2.3 Implications for research

The second phase of the study aimed to evaluate the 'Breastfeeding Support Package' by recruiting five postpartum women and five nurses to use the package. A research study using the tool, along with the leaflet, but with a larger population of women admitted to the postpartum ward at the hospital, could better assess its reliability. This suggests consideration for development of post-doctoral research projects, such as a piece of quantitative research to investigate the consistency of the 'Breastfeeding Support Tool', or a qualitative study to explore women's experiences of being supported using the package of the tool and leaflet. The comparison study on prior and post use of the 'package' should be measured, as well as evaluating the impact of the package

on the success of the mothers to initially breastfeed and exclusively breastfeed for six months. To extend the utilisation of the tool, groups of mothers and babies experiencing severe difficulty in breastfeeding should be recruited into the study, while using the tool in other government hospitals in Bangkok with participants' of similar background could help to ensure the generalisation of the study.

The findings of Phase II revealed that there is no media available at the postpartum ward to be used when providing the breastfeeding support to the postpartum women (Sa). Therefore, the most effective methods and media, or educational programmes, should be explored. To help mothers to achieve breastfeeding at a higher level, collaboration from a multidisciplinary team with professors in the field and nurses who have interest in promoting breastfeeding at the hospital, is needed to be involved in research to build a network of professionals with a common interest in the development of promoting breastfeeding at the hospital.

8.3 Chapter summary

Although breastfeeding has been promoted worldwide by WHO since 1991, the rate of breastfeeding is still low in many countries, both developed and developing. In Thailand, at the hospital where the research was conducted, lack of nurses' and health care staff's knowledge, understanding and skill about breastfeeding are the main drawbacks in providing breastfeeding support to those mothers who need it. The impact of this on mothers was seen in data from both Phase I and II and can be summarized as limiting communication opportunities for them to ask for breastfeeding support, and then getting consistent and accurate advice. Currently, the 'Ten Steps to Successful Breastfeeding' has not been fully adopted at the hospital, which is a management 'problem' regarding hospital policy, but which is also an undeniable barrier to breastfeeding support.

In the practice area, more emphasis should be given to increasing the competency of health care professionals, particularly nurses working at the postpartum ward, in helping mothers to successfully achieve initial breastfeeding, as well as to continue to breastfeed after their discharge from

the hospital. In education, nursing educators must have up to date knowledge and sufficient skills in breastfeeding counselling, so that they can successfully pass those positives on to the nursing students, while, at the same time, stressing what is truly practical and applicable in the present situation. On the research, there should be further studies investigating the reliability of the tool, as well as an evaluation of the outcome or the success of using the tool in breastfeeding support. Conducting research with a multidisciplinary team is important for the advancement of breastfeeding support services at the hospital. Chapter 9, which is the last chapter, reflects upon the overall picture, describes the strengths and limitations of the research and presents the overall conclusions of the research study.

Chapter 9: Conclusions and Reflexivity

9.1 Introduction

This final chapter reflects on the challenges that I encountered throughout conducting the research. The strengths and limitations of the study are presented and followed by overall conclusions.

9.2 Reflexivity of the study

Reflexivity is an ongoing process of self-critical awareness, which reflects on a researcher's role and relationship with participants and environmental contexts, which could enhance the credibility and dependability of the qualitative study (Holloway & Wheeler 2002; Patton 2002). In a qualitative study, the researcher is an instrument for collecting and analysing data. Therefore, it is necessary to critically reflect on all issues regarding questions, justifications and thoughts occurring throughout the project (Polit & Beck 2010). Taking this concept into consideration, the reflexivity of the study is presented as follows.

Having a professional background working in obstetrics and midwifery for over 10 years, I consider 'breastfeeding' vital for improving women and babies' health. Breastfeeding is one of the health promoting behaviours which aspires to make the health of Thai people better in the long run. One step towards achieving this would be enabling women to breastfeed. But it is generally recognised that increasing the rate of breastfeeding among Thai mothers, to reach the rate recommended by WHO, could be a challenging task (World Health Organization 2010a). The benefits of 'breastfeeding' are not limited to only mothers' well-being, but also could save babies' from infections at an early age of life and through to later life, thereby limiting health complications (Horta & Victora 2013). These facts inspired me to conduct the research project to help Thai mothers to be more aware of, and become successful in, breastfeeding exclusively for six months. It could be argued that women who do not wish to breastfeed could feel pressured. However, my study focused on mothers that have an intention to breastfeed, therefore this problem could be

minimised. My background as an educator might have some influence in encouraging me to think about an educational element in the development of my research questions and as part of my project. However, Phase I was designed to obtain women's views without an educational focus, although the data from these women highlighted several educational issues.

At the beginning of the study, it seemed appropriate to use a mixed method approach for conducting the research, however the experiences of conducting interviews and gathering the findings of Phase I shaped the design of Phase II of the study. The final research design comprised two phases using qualitative methods. The purpose of the first phase was to obtain a clear understanding of factors affecting mothers' breastfeeding and their needs of breastfeeding support from the health care professionals. The information obtained from the interview was used for the development of the package comprising the tool and the 'leaflet'. The package was then used and evaluated in the second phase of the study. However, designing two phases made it difficult for the Ethics Committee of the hospital to grant approval to conduct the research due to both phases of the study needing to be reviewed before granting approval. The approval took about two months, while time spent for clearing the ethical process was four months in total. This process was slightly longer than expected or planned for. Getting all the documents ready prior to submitting to the Ethics Committee of the hospital, such as the PIS, the research protocol, the tool and leaflets, was time consuming because they needed to be translated from English into Thai. While waiting for approval to conduct the research for Phase I, the head nurse at the FPC was contacted and informed about the study and to request permission for data collection.

Conducting a qualitative study is a challenging experience. Initially, as a novice researcher in a qualitative study, I found that collecting the data could be a rather difficult task and the analysis process was time consuming. Collecting the Phase II qualitative data was a challenging process, particularly having to do it during the time of political unrest in Thailand. The opposition party to the government was trying to 'Shutdown Bangkok' from December 2013 to May 2014. This affected the second phase of the study, which was conducted from January to March 2014. Therefore, there were fewer mothers coming to deliver at the hospital. The political situation made it dangerous for the people coming to the hospital because participants, understandably, did not want to remain

too long in the area which was surrounded by mobs and strikes. As fewer postpartum women were being admitted to the hospital, the duration for conducting the interviews took longer. Checking to make sure that the situation around the hospital was safe was a necessary task prior to travelling there and added stress for the researcher. Although the political unrest made it difficult to conduct the interviews, the effect on the quality of the data received is still not clear. If the political situation had been stable, a focus group might have being chosen to be used as a method of collecting data from the five nurses who used the package. This is because they could share their experience as well as exchange their views and thoughts regarding the use of the package and breastfeeding support provided at the hospital, which might affect data received. In addition, the imposition of martial law throughout the country in May 2014 caused a feeling of uncertainty for many Thai students who were granted scholarships. They were uncertain whether the policy regarding their grant would be changed. My personal budget has been prepared and designed to last until the completion of the study.

In Phase II, assessing face validity through telephone interviews limited the amount of information which could be obtained from the interviewees. Telephone interviews were the best option to access women who were, by then, 20 months postnatal. The telephone was also optimal for collecting data during Bangkok's politic crisis. However, sending the tool by post, prior to conducting the telephone interviews might have helped in gaining richer information from the participants because they could see the questions in the tool during the interview rather than having the researcher reading the questions to them over the phone. Although the similarity between the first and second phases of the study is the interviewing of mothers regarding breastfeeding, conducting the interviews of the participants being admitted to the postpartum ward in the second phase of the study was easier. The difference was that fewer women were willing to participate in the study when visiting the FPC. The reason for this might be because many of them did not take their babies along when visiting the doctors at the FPC. They had to rush back home after all procedures were done and this was not anticipated or considered when designing the study. Over 40 women were handed the participant information sheet, of which 17 agreed to participate in the study. The participants in Phase II were different from Phase I. The participants were postpartum women who were admitted to the hospital. Therefore, there was

the possibility of conducting the interviews bedside. In the recruitment process for five postpartum women who used the tool, only one declined due to a problem with time.

The analysis of qualitative data includes the translation of the transcripts from Thai into English. I fully translated the conversations of 10 out of 32 transcripts gathered and then open coded them. From my experience, translating nearly one third of the transcripts not only benefitted me in improving my English, but also helped my research supervisors to have a clearer understanding of the overall picture of the data gathered. The line-by-line technique is important for practicing open coding of the data, because focus can be put on specific sentences. Therefore, translation of the whole transcript and the line-by-line technique are recommended for novices in the process of analysing qualitative data. I chose to do it myself rather than paying a company to do it, in order to gain experience. However, translating and coding are extremely time consuming procedures, the former also involving potential matters which are causes for a researcher's concern (Reinhard 1996). A competent peer, who had experience in both the midwifery field and the analysis of qualitative data, was invited to check validity in Phase I. However, with the experience obtained from her and in doing the analysis process, the analysis of the data from Phase II was done solely by me. Discussion of the themes that emerged was carried out with the two supervisors, so helping to ensure the findings were from the data and not my bias. Working with the researcher support from a competent peer and my two supervisors helped ensure the credibility of the data and provided many experiences, which will be of benefit for future research activities.

During the four years I have been undertaking my Ph.D., time management seemed to be the most important skill in obtaining success at this educational level. I acquired knowledge and skills through the practice of critical thinking and conducting qualitative research. Studying for a PhD could be compared to a long journey, it is not going to be easy to reach the destination, but it is achievable if persevered. The summarised information mentioned in reflexivity of the study, the strong points and limitations derived from the study are presented in Tables 9.1 and 9.2 respectively.

Table 9.1 Strong points of the study

Title	Strong points
Strong points	1. There are the participants who contributed to the interview in Phase I of the study, nurses and postpartum women who used the package which helped ensure the creditability of the findings. 2. The qualitative study resulted in a better understanding of the real life conditions of mothers' circumstances. Therefore, the package of the 'Breastfeeding Support Tool' and leaflet fits well among mothers living in Bangkok at present and could be applied for use in real practice at the postpartum ward of the hospital. 3. During the analysis the qualitative data of Phase I, having a competent peer with experience in conducting qualitative research and thematic analysis, as well as having extensive experience in the maternity field, has helped facilitate me, as a novice researcher in qualitative field, with the analyses of the interview data.

Table 9.2 Limitations of the study

Title	Limitations
Limitations	1. This study is a piece of two phase qualitative research which has 17 participants in Phase I and 15 participants in Phase II. Therefore, a study with a larger sample size might be needed. 2. The study was conducted at a single setting, at one government hospital at Bangkok. Therefore, there might be limitations on the generalisation of the findings. 3. Using semi-structured telephone interviews to assess face validity of the tool might limit the information received from the participants of Phase I of the study because they could not see the tool. Therefore, sending the tool by post, followed by the telephone interview might have helped obtain richer information from the participants. 4. There are also some issues related to the use of the tool because the original 'Breastfeeding Support Tool' was developed in the Thai language so the meaning of the words used in different languages from different culture could be slightly different when translated. 5. The tool focuses on knowledge of, and attitude towards, breastfeeding. Therefore, it might be necessary to use others tool, such as LATCH scores, to provide breastfeeding support to the mothers in the area of practice, along with the 'Breastfeeding Support Package'. 6. There might be some bias on information received from the nurses, because all the nurses who used the tool had training in breastfeeding support so they tend to have the interest and were optimistic about breastfeeding. 7. The limited amount of information about personal characteristics of postpartum women who used the tool might affect discussion.

9.3 Overall conclusions

Although breast milk is globally acknowledged as the best food for babies, only approximately 5.4 per cent of Thai women breastfed exclusively for six months in the year 2006, however the number gradually increased to 15 per cent in 2012 (Bureau of Health Promotion 2006; World Health Organization 2011; OECD/World Health Organization 2012; World Health Organization n.d.). This statistic is far from the goal set by the Thailand's National Economic and Social Development plan, which was 30 per cent of exclusive breastfeeding at six months (National Economic and Social Advisory Council 2010). It is also very far from the WHO's global breastfeeding goal for 2010, which set the goal of initial breastfeeding at 75 per cent and exclusively breastfeeding for six months at 50 per cent (World Health Organization 2010b). An interesting RCT study was conducted in 2010 (at the same hospital where this research took place) using a Knowledge Sharing Practice with Empowerment Strategies (KSPES) to increase mothers' self-efficacy to breastfeed (Kupratakul et al. 2010). The result found that 20 per cent of mothers in the experimental group achieved breastfeeding exclusively for six months, whereas no mothers did in the control group (Kupratakul et al. 2010). This trial demonstrated that, with the regular services provided at the hospital, it would be very difficult to increase the rate of mothers who are successful in breastfeeding. However, the KSPES programme is rather complicated and needed extra support from the health care professionals to run it, which might be difficult to apply in the real world situation in the hospital at present. Therefore, the aim of my research was to investigate the possibility of using the package consisting of the 'Breastfeeding Support Tool' and a 'leaflet' as a strategy to facilitate nurses in providing breastfeeding support in the hope that it could help increase the number of Thai mothers who can achieve breastfeeding exclusively for six months.

The research project was divided into two phases: Phase I explored factors influencing mothers' breastfeeding behaviour and their needs for breastfeeding support from the health care professionals. Phase II evaluated the 'Breastfeeding Support Package'. A descriptive qualitative research approach was used for both phases. The results from Phase I led to the development of the package which was used in Phase II of the study. A

purposive sampling technique was used to recruit 17participants into Phase I of the study, while thematic analysis was used to analyse the interview data.

Themes that contribute to women's experience of breastfeeding, which emerged from the analysis, were 'knowledge and attitude toward breastfeeding', 'practicality' and 'support'. Themes that contribute to women's needs of breastfeeding support were 'knowledge', 'attitude' and 'practice'. 'Having commitment to breastfeed' is one of the most important encouraging factors while experiencing difficulty in breastfeeding at an early stage post birth discourages mothers to breastfeed. Support from the health care professionals could be either negative or positive factors for different individuals, depending on the support that they received. Needing more information and practice of breastfeeding support seemed to be the two main issues raised by the participants. In addition, all questions that the participants asked during the interview are considered to be useful in developing the 'Breastfeeding Support Package' to be evaluated in Phase II.

For Phase II of the study, three groups of five participants were recruited. For the first group, face validity of the tool was assessed by five women who contributed to the interview from Phase I, through semi-structured telephone interviews. For the second and the third groups, semi-structured interviews were conducted to investigate postpartum women's and nurses' perceptions of the package based on their experience in using it. Purposive sampling was used to recruit the participants into the study. A general inductive approach was used for the analysis of the data.

The evaluation of the package by postpartum women indicated they found the tool to be very beneficial to them because it contains all the information they needed to know about breastfeeding. Moreover, the tool also serves as a platform for them to communicate their thoughts about factors affecting their breastfeeding, or raise challenges and suggestion for more breastfeeding support. The evaluation of the package by nurses indicated that the tool did benefit them, because it covers all aspects for the mothers and the tool can link to practice. The leaflet was praised as a good source of information for nurses and mothers because it answers mothers' questions regarding breastfeeding. Moreover, using the package gave nurses' an opportunity to think about how to improve their breastfeeding support at the hospital. After merging the data from the three groups of participants, it was found that the

same message was conveyed, which was 'the package benefits them' in different ways.

In evaluating both phases of the study, it became apparent that the key problems in promoting breastfeeding at the hospital include the lack of knowledge and skills of the health care professionals in supporting postpartum women to successfully breastfeed. The present policy of the hospital which does not yet fully follow the 'Ten Steps to Successful Breastfeeding' of WHO, resulted in failure to create a BFHI environment to promote women to breastfeed. Communication barriers that exist between the mothers and healthcare professionals have also made it difficult to provide breastfeeding support according to the needs of the mothers. It is therefore not a surprise that many women, who used the standard service at the hospital, did not achieve initial breastfeeding. Improving services at the hospital in promoting breastfeeding would help encourage mothers to continue to breastfeed after their discharge, or even to achieve six months exclusive breastfeeding.

While acknowledging the limitations linked to the study which was conducted in one hospital with small sample size, the findings do suggest that the package, made up of the tool and leaflet, could break down any communication barriers existing between mothers' needs for breastfeeding support and the nurses who are supposed to supply that support. The package is a medium with which women and nurses could be engaged in a meaningful and guided conversation about breastfeeding. It helps create good relationships between nurses and mothers because the tool focuses on offering important services to the mothers to help them to successfully breastfeed and gain more confidence to breastfeed. Having a leaflet that contains updated basic breastfeeding information that mothers need to know, as well as about things often asked with back-up research references, has given new nurses more confidence in giving support service.

To sum up, the main research findings revealed that intrinsic factors, such as mothers' intention to breastfeed or having difficulty during initial breastfeeding, and extrinsic factors, such as support received from the health care professionals, are significant.

The whole study and the development of the package, made up of the 'Breastfeeding Support Tool' and leaflet, are unique. The project was designed

to help solve the low rate of breastfeeding among Thai women. The tool is easy to use because it is in itself a user-friendly guide for nurses to assess breastfeeding support specific to each individual mother's needs. The tool is also linked to the leaflet which contains essential breastfeeding information and answers for questions often asked by many mothers as well as information on Thai traditional beliefs about breastfeeding. With the limitation of staff and the hospital policy which does not prioritised promoting breastfeeding at present, the package is designed as a simple but powerful and highly applicable means to deal with the real situation at the postpartum ward. The benefit of the package, in decreasing communication barriers between the women and nurses, means better care for breastfeeding support can be planned, specifically for individual Thai women.

The findings of the project will be disseminated to the obstetrics and midwifery subjects and practices, as well as the nursing curriculum. For a researcher, the next step is to examine the reliability of the tool and revise it if there is a need. The project is required to be presented to various governmental organizations in order to obtain funding. This package will then be taken to another level, which is, using it with a larger number of participants at the hospital where this study was conducted, as well as other hospitals in Thailand, so as to examine the success of the mothers who achieved initial breastfeeding and who exclusively breastfed for six months. The package will then be used with mothers living in similar social and cultural contexts, including neighbouring Southeast Asian developing countries, such as Laos, Cambodia and Myanmar. The next step is for me to act as an independent researcher in the near future in the hope that this package could be beneficial mothers in those countries as well. Breastfeeding is the best practice for mothers and babies. This study has shown that the 'Breastfeeding Support Package' can provide a culturally appropriate way to facilitate communication between mothers and nurses to promote breastfeeding in Thailand.

Appendices

Appendix A The 'Ten Steps to Successful Breastfeeding'

(World Health Organization/United Nations Children's Fund 1989; World Health Organization 2006)

1. Have a written breastfeeding policy that is routinely communicated to all health care staff.
2. Train all health care staff in the skills necessary to implement this policy.
3. Inform all pregnant women about the benefits and management of breastfeeding.
4. Help mothers initiate breastfeeding within half an hour of birth.
5. Show mothers how to breastfeed and how to maintain lactation even if they should be separated from their infants.
6. Give newborn infants no food or drink other than breast milk unless medically indicated.
7. Practice 'rooming in' – allowing mothers and infants to remain together – 24 hours a day.
8. Encourage breastfeeding on demand – whenever the baby is hungry.
9. Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.
10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

Appendix B Outcomes of synthesis the literatures

Title	References
Benefits of breastfeeding	There were 21 papers related to the benefits of breastfeeding (Jain et al. 2002; Oliveira & Prell 2004; Renfrew et al. 2004; Der et al. 2006; Hale 2007; Horta et al. 2007; Renfrew et al. 2007; Bilenko et al. 2008; Hoddinott et al. 2008; Kramer et al. 2008; Mead 2008; Stevens et al. 2008; Kramer & Kakuma 2009; Meyers 2009; Shields et al. 2010; Steer et al. 2010; Twells & Newhook 2010; Donaldson-Myles 2011; Groen-Blokhuis et al. 2013; Rennick et al. 2013; Gibbs & Forste 2014).
Factors affecting breastfeeding	There were 53 articles related to factors affecting breastfeeding (Ceriani et al. 2003; Kaewsarn et al. 2003a; Kaewsarn et al. 2003b; McFadden & Toole 2006; Britton et al. 2007; Cakmak & Kuguoglu 2007; Renfrew et al. 2007; Su et al. 2007; Wallis & Harper 2007; Winterburn 2007; Baker & Milligan 2008; Clifford & McIntyre 2008; Dyson et al. 2008; McInnes & Chambers 2008; Pe'rez-Ri'os et al. 2008; Christopher 2009; Gilmour et al. 2009; Grummer-Strawn & Shealy 2009; MacArthur et al. 2009; O'connor et al. 2009; Putthakeo et al. 2009; Racine et al. 2009a; Tohotoa et al. 2009; Abba et al. 2010; Awano & Shimada 2010; Calnen 2010; Dashti et al. 2010; Foss 2010; Brand et al. 2011; Dare & Joseph 2011; Grassley & Eschiti 2011; Laantera et al. 2011; Tangsuksan & Ratinthorn 2011; Choudhry & Wallace 2012; Schmied et al. 2012; Bouras et al. 2013; de Jager et al. 2013; Dennis et al. 2013; Kazue 2013; Liu et al. 2013; Loke & Lai-Kwai 2013; Nickel et al. 2013; Sallam et al. 2013; Tsai 2013; Youngwanichsetha 2013; Zhu et al. 2013; Bai et al. 2014; Cox et al. 2014; de Jager et al. 2014; Raghavan et al. 2014; Suzuki 2014; Zhu et al. 2014; Dachew & Bifftu 2014).
Breastfeeding interventions	There were 46 articles related to breastfeeding interventions (Martens 2002; Guise et al. 2003; Hall-Moran et al. 2006; Pate 2009; Renfrew et al. 2009; Kupratakul et al. 2010; Renfrew et al. 2010; Whalen & Cramton 2010; Imgram et al. 2011; Ward & Byrne 2011; Abdulwadud & Snow 2012; Budzynska et al. 2012; Demirtas 2012; Jaafar et al. 2012; Jolly et al. 2012; Lumbiganon et al. 2012; Moore et al. 2012; Renfrew et al. 2012; Sudfeld et al. 2012; Thomson & Dykes 2012; Zapantis et al. 2012; Bai et al. 2013; Flacking & Dykes 2013; Furman &

Title	References
	Dickinson 2013; Haroon et al. 2013; Ingram 2013; Karp et al. 2013; Maycock et al. 2013; Naohiro et al. 2013; Susiloretni et al. 2013; Tahir & Al-Sadat 2013; Edwards et al. 2013; Hirani & Karmaliani 2013; Kornides & Kitsantas 2013; Mitchell-Box & Braun 2013; Thomson & Crossland 2013; Bevan & Brown 2014; Bich et al. 2014; Bonuck et al. 2014; Brennan 2014; Flax et al. 2014; Howell et al. 2014; Otsuka et al. 2014; Wu et al. 2014; Giles et al. 2014; Skouteris et al. 2014).
Breastfeeding tools	There were 16 papers related to breastfeeding tools (Kelley et al. 1993; Jenson et al. 1994; Leff et al. 1994; De La Mora & Russell 1999; Dennis 2003; Moran et al. 2004; Ryser 2004; Amir et al. 2006; Giles et al. 2007; Johnson et al. 2007; Gregory et al. 2008; Ho & McGrath 2010; Gupta et al. 2012; Ahmed & Ouzzani 2013; Internatonal Baby Food Action Network Asia 2014; Noel-Weiss et al. 2014).

Appendix C Critiquing the literature

Kupratakul J, Taneepanichskul S, Voramongkol N and Phupong V (2010) A randomized controlled trial of knowledge sharing practice with empowerment strategies in pregnant women to improve exclusive breastfeeding during the first six months postpartum. *Journal of Medical Association Thai* 93(9): 1009-1018

Title	Justifications
1. Title of the article Does it convey the precise area of study?	Yes This study is to examine the effects of Knowledge Sharing Practice with Empowerment Strategies (KSPES) on improving 6-month exclusive breastfeeding in postpartum women. The title displays the precise area of the study: Population = first 6-month postpartum women (The researchers did not state clearly about who are their population e.g. only women who delivery at Chulalongkorn Hospital or from other hospitals). Intervention = KSPES Outcome = effects of KSPES on improving 6-month exclusive breastfeeding
2. Abstract Is it a short summary of the study?	Yes The abstract of this study includes background, objectives of the study, research design, intervention, main results and conclusion although they were not separate under different heading. However, the details about participants, data collection and analysis did not mentioned clearly.
3. Literature review Primary or secondary sources? Rationale?	There were 19 studies cited by the author and all studies are related to the study: International = 17 primary sources Thailand = 2 primary sources

Title	Justifications
	There were 9 studies on breastfeeding and 10 studies on promoting breastfeeding.
4. Methodology What are the methods and are they cited?	The researcher uses a randomized controlled trial in the study. Research design is explained quite clearly: The samples were 80 women, 40 in control and 40 in study group from Chulalongkorn Hospital and Theptarin Hospital (The researchers did not stated how many women from each hospital. It was presented that the sample size should be five per cent in the control group and 30 per cent in the study group and having at least 40 women in each group based on their pilot study which they did not mentioned about. The participants were selected from mothers who pregnant more than 32 weeks. Double blind technique was used in allocating their participants in each group. The participants in control group were received routine standard cares which include two times informing about breastfeeding while the participants in study group were received routine standard care + KSPES (based on Gipson's theory). All participants were received routine intra partum and postpartum care. However, no information was given by the researcher on the time span of each intervention. Telephone interview was used to follow up participants' rate of breastfeeding on day 7 and 14, and during month 1, 2, 3, 4, 5 and 6. They also do home visit in cases who had difficulty and need support when they were at home which was good.
5. Results Methods, statistical tests are they explained?	Yes Data was collect by telephone interview on day 7 and 14, and during month 1, 2, 3, 4, 5 and 6. The validity of the questionnaire was confirmed by Test-retest reliability. Chi-square was used to compare categorize data. Mann-Whitney U test was used to compare the continuous variables. T-test was used to compare intra group variable while unpaired t-test was used for inter-group comparison.

Title	Justifications
	The results were clearly presented in both text and tables. They found that after the intervention and follow-up, the rate of breastfeeding on day 14 and during month 1, 2, 4, 5, 6 were significantly higher in the study group than in the control group ($p<0.05$).
6. Discussion and interpretation of result Are they credible?	Yes The researcher discusses the results following setting of the hypotheses. However, they did not provide any reasons to support their findings. They did not explain the reasons for no significant differences in breastfeeding rate between the study and the control group on day 7 and at month 3 as well. The context and the results of the previous studies were presented by comparing different studies in Asian such as Singapore and Hong Kong. Research limitation was mentioned in the study; however, more explanation could be given about participants who lost follow up (11 per cent).
7. Recommendations?	Yes The researchers claimed that this programme (KSPES) can increase the rate of 6-month exclusive breastfeeding. They suggested that post natal support and follow up by means of telephone interview could motivate and encourage mothers' breastfed behaviour. Nevertheless, the researchers did not have any suggestions to the policy makers.

Appendix D Interview guide (Phase I)

Study Title: Thai Women's Breastfeeding Experiences and Support Needs

Phase I: Mothers' experiences of factors influencing their breastfeeding behaviour and mothers' perceptions of the support they require from nurses or other health care professionals to breastfeed their babies

Prior to the interview: The researcher will introduce herself as a PhD student of the University of Southampton. After that, the researcher will ensure that all vital information is given to the participants. For instance, the interview will take approximately 45 minutes and the participants could withdraw at any time during the interview, permission will be obtained for recording the interview and for note-taking during the interview.

Broad Questions:

1. Are you breastfeeding your child at present? If Yes, why? If No, why not?
2. What encourages you to breastfeed?
3. What do you think would hinder you from breastfeeding?
4. In what way do nurses or other health care professionals working at the Antenatal Clinic, delivery room or postpartum ward support you on breastfeeding? How?
5. What is your experience about the support received from nurses or other health care personnel on breastfeeding?
6. What other supports do you feel are essential for you to breastfeed?

Prompt Questions:

- Could you please explain more…?
- Could you give an example of…?
- What make you think that way?

Demographic Questions: age, gravida, educational level, marital status and employment (Will be asked and recorded by the researcher at the end of the interview)

Appendix E Participant Information Sheet (Phase I)

Study Title: Thai Women's Breastfeeding Experiences and Support Needs

Phase I: Mothers' experiences of factors influencing their breastfeeding behaviour and mothers' perceptions of the support they require from nurses or other health care professionals to breastfeed their babies

Researcher: Mrs. Pornpimol Apartsakun

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Ethic number:

I would like to invite you to take part in this study which aims to explore mothers' experiences of factors influencing their breastfeeding behaviour and mothers' perceptions of the support they require from nurses or other health care personnel to breastfeed their babies. Prior to deciding, you need to understand why research is being done and why you were invited to take part. Please take time to read the following information carefully. Talk to others about this study if you wish. If there is anything that is not clear or you would like more information please ask. Take time to decide whether or not you would like to take part.

You do not have to participant in this study unless you wish to. You still receive the same services from health care professionals as a person who does wish to take part. If you decide to take part in this study, I will ask you to sign the consent form before proceeding to the next step which is the interview.

What is the purpose of this study?

This study aims to understand perspectives of mothers on breastfeeding, focusing on factors influencing their breastfeeding behavior and mothers' perceptions of the support they require from nurses or other health care personnel to breastfeed their babies. With valuable data gathered from the participants in the study, the researcher will develop a needs assessment tool which helps nurses provide appropriate breastfeeding support to mothers in order to achieve the goal of 30 per cent exclusive breastfeeding for six months for Thailand as proposed by the Bureau of Health Promotion, 2006.

Why was I invited to join the study?

All mothers visiting obstetricians for their six weeks postnatal check-up at the Family Planning Clinic at Chulalongkorn Memorial Hospital are our potential participants in this important study. You are personally invited to take part because you meet the study's inclusion criteria.

What do I need to do if I decided to take part in the study?

Firstly, you will need to sign a consent form which states that you are willing to take part in the study. Then we will set an appointment for an interview, which will take place at the Family Planning Clinic. You will also be asked for permission for the researcher to record the interview and take notes. During the interview, you will be asked about factors relating to breastfeeding behavior and the required breastfeeding support needs from nurses which are the focal point of the study. The interview will take approximately 45 minutes. Secondly, after a few months, you will receive the tool developed by the researcher by post. You will be asked about the appropriateness of the language use of each item of the tool. The approximate time that you need to spend in giving opinions about the tool is about 30 minutes.

What are the benefits in my taking part?

Your input will help improve our maternity care as well as services of nurses for mothers with newborns at Chulalongkorn Memorial Hospital and possibly at national levels.

Are there any risks involved?

There are minimal risks anticipated as a result of your participation in this study. Nevertheless, it is 45 minutes of your time. If you or your baby gets tired, the interview can be stopped. There will also be a nurse nearby if you need any support.

Will my participation be confidential?

The interview is being carried out under ethical and legal practice with full respect for participants' rights and confidentiality. All information provided will be treated as confidential and there no names would be made public.

What happens if I change my mind?

You are free to withdraw from this study at any time. If you choose to withdraw from this study your personal data will be deleted immediately.

What if there is a problem or I have a complaint?

Any complaints relating to the study can be addressed to:
Martina Prude, Head of the Governance Office, at the Research Governance Office, (The University of Southampton, Building 37, Highfield, Southampton, SO17 1BJ) Tel: +44 (0) 23 8059 5058
E-mail: rgoinfo@soton.ac.uk

Thank you for taking time to read this participant information sheet

Appendix F Parental Consent Form

Study Title: Thai Women's Breastfeeding Experiences and Support Needs:

Phase I: Mothers' experiences of factors influencing their breastfeeding behaviour and mothers' perceptions of the support they require from nurses or other health care professionals to breastfeed their babies

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Ext 592
E-mail: pa10g10@soton.ac.uk.

Study reference:
Ethics reference:

Please initial the box (es) if you agree with the statement(s):

I confirm that I have read and understood the information sheet (insert date/version no.) and have had the opportunity to ask questions about the study. ☐

I understand that my child's participation is on a voluntary basis and she is free to terminate it any time that she wants to. ☐

I agree to the confidentiality policy of my child which was set out in the information sheet. ☐

I agree to allow my child to take part in this research project. ☐

I agree to the use of my child's direct quotes in any presentation of this research (verbal presentation or paper publication). ☐

I agree to audio recording and note taking during the interview of my child. ☐

I agree that transcription of my child interview can be used for the purpose of this study. ☐

Data Protection

I understand that information collected about me during my participation in this study will be stored on a password protected computer and that this information will only be used for the purpose of this study. All files containing any personal data will be made anonymous.

Name of parent (print name)……

Signature of participant……..

Date……

Appendix G Consent Form (Phase I)

Study Title: Thai Women's Breastfeeding Experiences and Support Needs:

Phase I: Mothers' experiences of factors influencing their breastfeeding behaviour and mothers' perceptions of the support they require from nurses or other health care professionals to breastfeed their babies

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Study reference:

Ethics reference:

Please initial the box (es) if you agree with the statement(s):

I confirm that I have read and understood the information sheet (insert date/version no.) and have had the opportunity to ask questions about the study. ☐

I understand that my participation is on a voluntary basis and I am free to terminate it any time that I want to. ☐

I agree to the confidentiality policy which was set out in the information sheet. ☐

I agree to take part in this research project. ☐

I agree to the use of direct quotes in any presentation of this research (verbal presentation or paper publication). ☐

I agree to audio recording and note taking during the interview. ☐

I agree that transcription of my interview can be used for the purpose of this study. ☐

.....	.....	.....
Name of participant (print name)	Signature of participant	Date

.....	.....	.....
Name of researcher (print name)	Signature of researcher	Date

1 Copy to participant

1 Copy for researcher

Appendix H An Example case of opening code (Phase I)

Participant 9 Age: 28 Gravida/Parity: G_1P_2 Delivery method: Caesarean section (C/S due to twins)
Educational level: Bachelor Marital status: married Occupation: Call centre staff at Dusitthani Hotel
Duration of the interview: 40 minutes

Note: Ante Natal Care (ANC), Delivery room (DR), Postpartum (PP), Newborn room (NR)

		Conversation	Opened code
(1)	1	Are you breastfeeding your child at present?	-
(2)	2	No! Actually I did not breastfeed right from the beginning. I actually breastfeed just for the	Not establishing breastfeeding right from beginning
	3	first time and that was the only time. In the beginning a Pilipino friend of my husband came	Receiving support from spouse's friend
	4	and helps us with our babies. She studied nursing but have no child of her own yet. She	Receiving support from spouse's friend with nursing background
	5	asked why our babies cry a lot, and why they eat a lot too. She also told that may be the	Being ask for the reason for baby crying
	6	children have a high level of blood sugar. After some consideration we took them to see and	Being given opinion about the cause of problem of baby crying
	7	consult with the doctor at Children Hospital. The Filipino friend then was mostly talking to	Seeking medical support
	8	the doctor, in English. The doctor at the Children Hospital advised us to join Breastfeeding	Having barrier in communication with health care profession
	9	Clinic so I went right away that day. My babies were a week and a few days old.	Participating actively at Breastfeeding Clinic/ Visiting Breastfeeding Clinic when were over a week old
	10	At Children Hospital, it was really good…perfect…I mean….they helped us in every way and	Being impressed about the service from support received at Children Hospital
	11	were very polite, but the problem is I have twins and I can't just go for one day. My babies	Experiencing difficulty in visiting hospital with twins
	12	have been bottle fed earlier. I have short nipples and I use that thing…..nipple shield…and it	Having been bottle-fed earlier/ Perceiving on having short nipples
	13	falls out…I mean… I can't go for just one day.	Having problem using nipple shield/ Understanding that continuous visit would worth the trouble of getting there
	14	But the problem is I don't have anyone to accompany me….I have twins…I can't take my	Needing support to accompany during visit to the hospital
	15	babies there by myself.	
(1)	16	How about the Pilipino lady who was helping you?	-

		Conversation	Opened code
(2)	17	She was just a visitor visiting for a week. She is a teacher and has to go back to teach. That	Receiving support from spouse's friend only for a short period
	18	was the problem. Since I can't get there, I have to end it there. That was the only day which	Giving up in accessing support
	19	only one of my child breastfeed…just once. They put the milk through a little tube and	Having been able to breastfeed one of the babies only once
	20	dropping it on my nipple, trying hard to help my baby breastfeed. Without help it would be	Receiving professional support to breastfeed
	21	difficult.	Perceiving that breastfeeding would be difficult to achieve without help
(1)	22	Are there any other reasons for using formula milk?	-
(2)	23	Actually my nipples are short too…and my babies have already got used to bottles…	Perceiving barriers to breastfeeding due to having short nipples and having been bottle-fed earlier
	24	it seemed that they don't even know how to suck the milk from my breast.	Understanding that babies have no experience in sucking from nipples
	25	I have wide nipples and their mouths are so tiny. They can't suck. When they can't suck the	Understanding that babies have difficulty sucking wide nipples
	26	milk then they would just turn away and cry.	Perceiving babies' reaction to not being able to suck
(1)	27	When did you first start giving formula milk?	-
(2)	28	Since second day after delivery. My caesarean wound was painful. I walked into the Newborn	Feeling pain from caesarean wound
	29	room and the nurse help me with expressing my milk till my breasts were bruised…no milk	Receiving support with expressing breast milk from nurse
	30	comes out so she asked me to buy a nipple shield which cost 150 baht. But my children did	Having no milk during expressing/ Being advised to buy nipple shield
	31	not suck. When I use it…it would fall off.	Experiencing difficulty in using nipple shield
	32	It didn't work and my babies started crying angrily. When they brought my babies to me I was	Dealing with hungry baby
	33	in a special room which accommodates four people. There was nothing. We did not have	Being admitted to multi bedroom/ Feeling disappointed then tearful
	34	anything. I cried. When my husband had to leave at 8 p.m., I thought to myself, what are we	Feeling worried without accompaniment after visiting time
	35	going to do? My milk did not flow. At night my children were crying really loud. The nurses	Feeling helpless for the hungry baby
	36	also did not give any formula milk. I know that they wanted the babies to be breastfed, but	Struggling with having no milk flow and no formula milk provided
	37	my milk did not flow. The other baby next to my bed also started to cry so we couldn't get	Lacking of sleep due to babies' crying
	38	any sleep. My babies cried because I have no milk. The neighbouring bed baby cried because	Perceiving on having no milk to feed the babies as cause of babies' crying
	39	the mother couldn't breastfeed him, her breasts were engorged and sored.	Knowing that mother at the neighbouring bed also have breastfeeding problem
	40	The room was filled with noise from crying babies. After examination the next day if my	Suffering from noise
	41	children were not yellow then I would have asked for permission to take them home. I didn't	Hoping to take the children home after checking for neonatal hyperbilirubinemia
	42	think I could stand it any longer. It was very difficult being alone. I didn't get any sleep and	Having difficulty taking care of babies alone
	43	that was also bad for my wound.	

Conversation			Opened code
(1)	44	How do you feel about breastfeeding?	-
(2)	45	I am positive about it. I have the intention from the beginning to breastfeed, since the	Having a positive attitude towards breastfeeding
	46	beginning of my pregnancy, and wanted my babies to have breast milk.	Intending to breastfeed since from the outset of pregnancy
	47	Everyone wants their babies to be strong. But with the factors mentioned earlier,	Wanting babies to be strong "Everyone wants their babies to be strong"
	48	I didn't know what to do. I needed to be helped seriously, and I was alone.	Feeling unable to cope with problems/ Needing serious support/ Feeling lonely
(1)	49	How long did you intend to breastfeed your child in the beginning?	-
(2)	50	As long as I could. I heard that you have to do it for six months. If you can't then you can put	Having plan to breastfeed as long as possible/ Knowing about breastfeed for six months
	51	it in bags.	
	52	But the reasons that I couldn't do was because of the factors I told you earlier.	Having knowledge about storing milk/ Perceiving barriers to breastfeeding
(1)	53	What do you think could encourage and support you to breastfeed?	-
(2)	54	Umm….(pause for 3 seconds)..I think people at the hospital could encourage us to	Perceiving that health care personnel could encourage breastfeeding
	55	breastfeed, nurses who took care of us. But the people at home did not encourage me at all.	Specifying on nurses could help encourage breastfeeding/ Receiving no support from family members
	56	I live with my husband, just the two of us. He did not have any opinion. He said if I could then	Perceiving on spouse not taking active role to support breastfeeding
	57	do it. He did not encourage on formula milk either. I just couldn't do it. And we did not have	Perceiving on not being supported to formula feed by spouse/ Accepting self-limitation
	58	any helper. I have twins and how about the house chores.	Lacking helper/ Dealing with multiple tasks
(1)	59	What were the main obstacles for you in not being able to breastfeed your children?	-
(2)	60	Since post-delivery….bringing babies to me on the second day did not help at all.	Realizing that receiving baby on second day was not ideal
	61	My wound was hurting. They should have brought them on the third day or allowed an	Having caesarean wound pain/ Suggesting reuniting with the baby on the 3rd day post-delivery
			Suggesting that her case should be allowed on extension of stay for at least 5 days
	62	extension of my stay at the hospital to be at least five days. But I don't really know, because	Perceiving that the limit of usual length of stay is 3 days
	63	people usually stay in the hospital for three days. If they didn't bring the baby on the second	Wondering about appropriate reuniting day with babies on the second day/ Understanding
	64	day then when should they, because the third day is already the day to leave.	that mothers usually leave from the hospital on the third day post-delivery
(1)	65	Are there any other obstacles that you would like to talk about?	-
(2)	66	My problem is my nipples were not ready. There was just little milk flowing. The nurse	Identifying un-readiness of nipples and having little milk flow as obstacles of breastfeeding
	67	tried expressing them until they were sore, but only little milk came out. May be they were	Perceiving on putting effort but little success
	68	not ready yet. Yes, there was milk coming out, but so little that it didn't even reach the	Perceiving on having little milk flow
	69	bottom of the container.	

Conversation			Opened code
(1)	70	How did the nurses and the doctors help with this problem?	-
(2)	71	The nurses were helping. They helped with massaging and expressing my breast and were	Receiving help on massaging breast and education on expressing milk from nurses
	72	teaching. At night my babies were crying and I had to carry them to get some milk at the	Dealing with the problem by using formula milk instead
	73	counter at 1 a.m. in the morning. I couldn't do it any longer. I was so sleepy and my babies	Feeling extremely exhausted due to lack of sleep and have to cope with baby's cry
	74	were crying, and I was feeling bad for the mother next to me. I told the nurses that my babies	Feeling bad disturbing others
	75	cry a lot and the nurses said OK and they helped with bringing the milk for me.	Seeking help from the nurse in dealing with baby's cry/ Accepting formula milk brought by nurses instead of trying to breastfeed to cope with baby's cry
	76	They brought a cup and taught me how to feed the baby using a cup. But it wasn't my milk.	Learning about cup feeding
	77	It was formula milk. They taught me to observe the way babies feed and told me that they	Being taught observe baby cup feeding and was told that they could wait
	78	can wait. But they won't, they will cry. They told me that if I could express my breast milk the	Understanding that babies don't wait but cry when they are hungry
	79	situation should be ok.	Being informed that being able to express milk was would ease the situation
(1)	80	How did you feel when you saw that your children could drink the milk from the cup?	-
(2)	81	I was surprised to see that my children could drink the milk that way little by little.	Feeling surprise to see that her babies could cup feed
	82	But I hardly have any milk. My breasts were never gorged. They were always soft. When I went	Perceiving on having little breast milk/ Having no breast engorgement
	83	to the children's hospital they were also soft. I also don't know why my breasts were never	Lacking knowledge about breast engorgement
	84	gorged.	
(1)	85	After you took the children home did you have any problem?	-
(2)	86	I have to do house chores. My husband helped but he was slow. They were the work I used to	Having house chores responsibility
	87	do and I have to do them then the children.	Having to deal with multiple tasks
(1)	88	Did your husband help with the children?	-
(2)	89	He helped in preparing milk, washing bottles, and during the night each one of us looks after	Receiving spousal support in preparing milk and caring for the babies at night
	90	each baby. The babies drink a lot of milk, three ounces every two hours.	Perceiving that baby consume 3 ounces every 2 hours
(1)	91	How can you tell that the amount of milk your babies are taking is a lot?	-
(2)	92	We didn't have any experience and there were no adults around. We didn't have anyone	Lacking experienced supporter
	93	except the Filipino friend who stayed with us. All the ideas were from her because she told us	Having just one visitor friend who helped
	94	she had studied nursing. For example, there were things that we didn't really agreed with but	Listening to visitor friend ideas because she told that she had nursing background
	95	didn't know how to respond. She told us that she worked in the babies ward before	Having disagreements with the spouse's friend/ Not knowing how to respond to the disagreement

		Conversation	Opened code
	96	and when they prepare milk for the babies they use normal water not warm water	Disagreeing about water used for prepared formula milk whether it should be normal water or warm
	97	but the water is boiled. She started feeding my babies this way and they are used	Allowing spouse's friend to prepare formula milk for the babies/ Perceiving that baby got used to the milk being prepared using normal water
	98	to it up till today. Before leaving the hospital the nurse told me to feed my babies every four	Being informed about gap of time between feeding by nurse
	99	hours but she feed them every two hours, starting with two ounces then increasing to	Noticing that spouse's friend is feeding with the different time gap that was advise by the nurse
	100	three ounces. I didn't know much, but I felt that the amount was definitely too much.	Lacking knowledge about babies' milk requirement/ Feeling that spouse's friend was definitely over feeding babies
	101	I think it made the babies cry because they might have stomach problems. The night before	Perceiving that over feeding was causing baby's stomach problem
	102	we went to Nonthavej Hospital. The doctor inspected the babies and found that they have	Getting medical support on babies stomach problem
	103	stomach problem and gave some medicine to be given with syringe. I took them to the	Receiving treatment for babies stomach problem
	104	doctor because they did not poop. They would poop every one or two days.	Seeking medical support for baby having delay in excretion
	105	Every time they poop they would poop so much that the poop would over flow the diapers.	Describing of abnormally large quantity of excretion and bad smell of babies' stool
	106	The smell is very bad too. The fart is also loud. When the Filipino friend went back my	Being suggested by experienced friend to use warm water in preparing formula milk
	107	friend came and visit. My friend told me why I didn't prepare the milk using warm water.	Changing the way of preparing milk and making personal adaptation
	108	So I changed. Since then I changed and adapted according to my own idea.	
(1)	109	What did your friend who came to visit advice?	-
(2)	110	The Pilipino friends advise not to use any talc.	Being advised by Pilipino friends not to use talc
	111	My friend advised me to apply Mahahing if babies have stomach problem.	Being advised by another friend that asafoetida can cure babies stomach problem
(1)	112	What did you think of your friend's advice?	-
(2)	113	I believe my friend more, because the Pilipino friend did not have any child of her own before.	Believing more in the advice from experienced friend rather the Pilipino friend who didn't have any child
	114	My friend has the experience and there were many points which I didn't agree with the	Having many points of disagreement with spouse's friend
	115	Pilipino lady. What I still don't know is what we still disagree about, is, how long can bottle	Lacking knowledge on how long mixed formula could be kept
	116	milk stay. The Pilipino friend said eight hours. When she took care of my babies they would	Being informed by spouse's friend that mixed formula milk could be kept for 8 hours
	117	wake up and were fed the left over milk. Other friends, who came to visit, some said two	Witnessing spouse's friend feeding left over milk to the babies
	118	hours and some said four. Up until now I still don't know how long bottle milk can stay.	Being confused about different advices friends gave on how long formula milk could be kept

Conversation			Opened code
	119	So what I am doing now is just throw the left over away.	Deciding to throw the left over milk away
(1)	120 121	What do you think about different advices from so many people including the hospital friends' relatives etc.?	-
(2)	122 123 124 125	I think I can trust the advice from the hospital the most. But I am not a VIP patient. When my mother came for delivery here she was a VIP patient. I am not very pleased with the service here. If you compare the service with Breastfeeding Clinic at Children's Hospital, they were much better.	Perceiving that the advice received from health care professionals can be most trusted Perceiving that you have to be a VIP patient to get good services Feeling disappointed about the services received/ Thinking that the services at breastfeeding clinic at Children's Hospital was much better
(1)	126	When you came for pregnancy check-up did the hospital provide breastfeeding support?	-
(2)	127 128 129 130	Yes, part of their routine steps. They let us watch VDO on the benefit of breast milk and how to breastfeed. For example, how should the baby place their mouth around the nipple etc.? They checked the shape of my nipples. They advised me to exercise by pulling out my nipple after shower so that my nipples would stick out further.	Being shown media related to breastfeeding when came for pregnancy check-up Having learned about latching on from the media shown Having nipples appearance inspection by nurse Being advised by nurse to do nipple pulling exercise to extend the nipples
(1)	131	How did you feel about the advice given?	-
(2)	132 133 134	I follow their advice but my nipples didn't stick out further. They didn't tell me how many times I should pull per day to help extend them. They just told me to try to pull. But I just did it in the beginning and didn't continue.	Following the advice on nipples pulling exercise but didn't achieve the result expected Lacking information on frequency of doing nipple pulling exercise Giving up on doing nipples pulling exercise very early
(1)	135	Why didn't you continue doing it?	-
(2)	136 137	I was just lazy. It hurts when I pull them. It's just my natural instinct to stop doing something when it hurts. There was also no one to encourage me.	Being lazy and pain were the reason for discontinuing nipple pulling exercise Receiving no encouragement in doing nipple pulling exercise
(1)	138	Have you heard anything about breastfeeding with short nipples?	-
(2)	139 140 141	Yes, I've heard the nurses talking about it. It seems to be a problem. But although my nipples are short I thought it shouldn't be much of a problem because I could use breast pump.	Having heard from the conversation of the nurses that short nipples could be problem in breastfeeding Understanding that breast pump could be a solution for mothers with short nipples
(1)	142	Was there any follow up on this problem by the nurses or the doctor?	-
(2)	143	They didn't follow up on this.	Having no follow-up on short nipples problem from health care professional
(1)	144	How about the Delivery room?	-
(2)	145	Nothing. They only performed caesarean. They only showed my baby when they were	Having no support to breastfeeding at DR/ Having caesarean delivery

		Conversation	Opened code
	146	delivered…just a short peek-a-boo…Only one of my babies…I don't know why.	Being shown just one baby during delivery/Lacking mother and baby interaction right after delivery
	147	That time I was shivering. May be because they saw that I was shivering.	Understanding that mothers' condition was the cause of not being able to interact with babies in the DR
(1)	148	How about after delivery?	-
(2)	149	The only person was the night shift nurses. I told them my milk doesn't flow. They tried to	Informing about having no milk flow to night shift nurses
	150	help me. They came 2-3 times…two of them helping, because they saw my babies were	Receiving help from night shift nurses
	151	crying a lot. They helped expressing my breast milk but the milk flow was minimal.	Having minimal success in milk flow although help by nurses in expressing breast milk
	152	We solved the problem by using formula milk in cup….but when I put the cup under my	Using formula milk in cup to solve problem
	153	breast and express the milk …my milk didn't even flow down to the bottom of the cup.	Having little milk when expressing
	154	There was so little. I expressed them in different ways, sometimes wrong, sometimes right…	Lacking knowledge in expressing breast milk by hand
	155	I didn't know how.	
(1)	156	How useful was the teaching on milk expression lesson taught by the nurses?	-
(2)	157	It was useful. At least my babies get to drink something. Having a little is better than	Perceiving that breast milk expressing lesson being taught was useful/ Perceiving value of breast milk being given to the child even though in small amount
	158	nothing. About the breast pump, as planned earlier, I didn't get to use it at all. My friend	Planning to use breast pump being given by a friend
	159	gave me a breast pump, a manual one. I used it, but no milk came out. So I changed it for the	Being unsuccessful in using manual breast pump
	160	one given by another friend which was an electric pump. That one also didn't help much.	Switching from manual breast pump to electric/ Being given electronic breast pump by a friend
	161	I could get less than an ounce. I am not sure whether the problem was with the pumps or not	Having little success with electronic breast pump
	162	because they were rather old. Or it might be just me. It might just be 50/50.	Feeling uncertainty whether the cause of unsuccessful expressing was breast pump or self
(1)	163	How about at Newborn room, what kind of breastfeeding support did you get from there?	-
(2)	164	There the nurses acted like commanders. They told me that if I can't breastfeed my babies	Felling being pushed to do things by nurses "nurses acted like commanders"
	165	then they would not be strong. They were very mean. They told that I should follow	Being told by nurse that my babies will not be strong if the mother can't breastfeed/ Feeling disappointed with the way nurses interacted with her "They were very mean"
	166	their way and should work hard. I thought to myself what I should do. Then they went and	Being instructed to follow nurses' command/ Being stressed and nervous
	167	brought a nipple shield…so I bought it because it may work for my children. But when I tried	Being advised to buy nipple shield to facilitate breastfeeding
	168	it on it always fell off. They tried it for me but when I took it home and did it myself it stuck	Having problem using nipple shield at home
	169	for a while then fell off again. It didn't stick well. One more thing, I also have to find a pillow	Lacking knowledge about using nipple shield

		Conversation	Opened code
	170	to support myself. It wasn't a comfortable thing to do.	Feeling discomfort when using breastfeeding pillow
	171	It irritated my wound during the first 2-3 days at the hospital. They taught me the "football	Experiencing irritation of wound while using breastfeeding pillow/Being taught to hold baby in football holding position by nurse
	172	position", but I couldn't do it. Even when my babies were on my sides It was still painful for	Feeling wound irritation while holding babies in football position
	173	me because the pillow would somehow touch my wound anyways.	Using breastfeeding pillow causes pain because it would somehow touch the cesarean wound
	174	My babies were impatient and crying, and I was also feeling hopeless and tired. My babies are	Feeling that babies were impatient/ Feeling hopeless and tired about breastfeeding
	175	also twins which made it much more difficult to breastfeed. One child was difficult enough	Perceiving that having twins makes it more difficult to breastfeed
	176	and moreover I have to hold to that plastic…it wasn't possible.	Perceiving using nipple shield even make it more difficult in her case
(1)	177	What did you thing about the service to promote breastfeeding from the hospital?	-
(2)	178	I want to tell you frankly that comparing the services here and at Children Hospital, I feel	Comparing the services received between Children Hospital and Chulalongkorn Hospital
	179	that children's Hospital was ideal place that offers sincere help. Many things here I would	Feeling impressed with the services received at Children Hospital
	180	give 50/100.	Feeling disappointed with the services received at Chulalongkorn Hospital
(1)	181	Could you give me more detail about the service at the hospital?	-
(2)	182	I felt that the atmosphere was very serious …it was like a factory. There was no	Feeling that services received at Chulalongkorn Hospital rigid and stressful "very serious" "like a factory"
	183	individual care. There were also no proper equipment to help children for example at the	Perceiving on not receiving one on one care/ Perceiving on lacking breastfeeding support devices
	184	Children's Hospitals there were plastic tubes to create interest for children, they didn't have	Comparing professionalism between the two hospitals in supporting mothers to breastfeed/
	185	it here. It took us a lot of time.	Understanding that lacking of support devices consume more time in solving problem
(1)	186	What other services would you like to see provided by the hospital?	-
(2)	187	For some people, I think they need to go through some courses, but most of the people	Realizing that training courses in breastfeeding is important for some mothers
	188	shouldn't have so many problems. They learn fast. But for me, there should be nurses to give	Perceiving that most mothers don't have much breastfeeding problems
	189	me more serious training. They should try to pump my breast until we achieve the goal.	Wanting to get more serious support till the goal is achieve
	190	Not to scold us because that would give us more stress and feel nervous,	Feeling stress and nervous from the way nurses interact with during the service
	191	and then tell us again to concentrate…you know what I mean…the nurses on the 7th floor	Requiring support from nurses working at postpartum ward
	192	should come and support. I want to see a team of nurses coming and supporting people who	Expecting to receive team working support from nurses in overcoming breastfeeding problem
	193	have problem.	
(1)	194	Have you told the nurses or the doctor anything about this problem that when you were at	-

		Conversation	Opened code
	195	the hospital not able to breastfeed your babies?	
(2)	196	I told. But I was at the hospital only for three days. On the 2nd day they brought me my	Being admitted to the hospital for 3 days/ Reuniting babies with mothers on the 2nd day post-delivery
	197	babies and on the 3rd day at noon I left the hospital. But even if they kept me back and try to	Discharging from the hospital on the third day
	198	help me solve the problem I don't think I could continue. I really wanted to go home.	Believing that longer stay wouldn't help improve the situation relating to support received/ Wanting to go home
	199	At least my husband could help me. After 8 p.m. my husband would come back. Here I felt	Having spouse to provide support at home during the night
	200	like I am alone. At night my babies cry and I was alone and I felt discouraged. The baby of the	Feeling lonely/ Feeling discouraged when dealing with babies alone at night
	201	neighbouring bed also started crying, no breast milk to give. I wanted to go home.	Having to cope with the crying noise of babies in the room/ Witnessing others having no milk flow
	202	May be I did not meet any nurse that could really help me during my stay at the hospital.	Perceiving that there might be no nurses with proper skill helping her
	203	May be that was really the case. I think if there were somebody that could really look after me	Perceiving that for a mother with breastfeeding difficulties to overcome the problem, serious
	204	I might have achieved breastfeeding.	support from professional is needed
(1)	205	Would you like to see other services?	-
(2)	206	There should be appointments to ask us whether we are successful breastfeed or not.	Believing that it's necessary to have a follow-up appointment on breastfeeding
	207	If it was me I would feel that it's worth it if we could achieve three months or six months	Perceiving worthiness of being able to achieve 3 to 6 months breastfeeding
	208	breastfeeding. I didn't have to spend extra money, much more economical. My babies	Perceiving that it is very economical to breastfeed
	209	don't have to suffer stomach problem. I think it's worth. Imagine how much one can of milk	Understanding that breastfeeding is good for babies' digestive system
	210	cost. If that could be achieve it would be worth it. While I was at the hospital they should	Perceiving worthiness of being able to achieve breastfeeding
	211	help me solve the problem before I go home. When it's time to breastfeed I should	Expecting the hospital to help mothers overcome breastfeeding problems before discharging them
	212	have a place to go, and there should be someone to help me. But again, the problem is also	Expecting venue and supporter during feeding
	213	with me 80%. It's also my nipples. They were short. If my nipples were normal like	Blaming self for having short nipples to be the major cause of not achieving breastfeeding
	214	other people it might have not been so difficult. Actually during the pregnancy check-up	Understanding that having normal nipples make it easier for breastfeeding
	215	close to delivery time it would be nice if a mother who has first-hand experience show how	Perceiving that class on how to breastfeed held by experienced mother before delivery would be beneficial
	216	to breastfeed babies. Show us different method so we could clearly see so we can learn	Wanting to see demonstration on different methods breastfeeding babies
	217	because we don't know. For example, the baby should suck from the base of the nipple.	Having knowledge about sucking on areola area

		Conversation	Opened code
	218	If they suck just from the nipple then the milk doesn't really flow.	Understanding the importance of right way of sucking
	219	Because I was alone and my husband wasn't there…. Sometimes it can be quite difficult to	Feeling lonely/ Needing accompaniment
	220	put what we only have watched from VDO into practice on your own. Sometimes we don't	Perceiving that hand-on experience would be more beneficial than watching VDO
	221	even know if certain things were really practical. We want to see the real thing.	Believing that direct experience is more practical way to learn
	222	Each room can have 6-8 mothers. Show us everything we need to know to be able to	Suggesting that 6-8 mothers per class as appropriate number of participants/ Needing practical knowledge
	223	breastfeed. Actually after delivery seem to be better while I was at the hospital. I think it's	Needing breastfeeding support provided at the postpartum ward
	224	better if they teach us just before the delivery. The Last month before delivery.	Suggesting that managing class should be done during the last month of pregnancy
(1)	225	Do you have any more suggestions?	-
(2)	226	Nothing else. They should have before delivery and give good care after delivery.	Perceiving that breastfeeding support is required during both antenatal and post- delivery Perceiving that mothers with breastfeeding problems need serious attention
	227	If someone has problem there should be people coming in to seriously help them overcome	Perceiving that practical timeline for solving problem should be within two days/ Perceiving
	228	the problem within a couple of days. Or if an appointment is needed to be made, then it	that further appointment should be made to follow-up if necessary
	229	should be. After that then the patients need to help themselves. Now it's nearly the time that	Understanding that mothers should also help themselves
	230	I must get back to working. This coming 10th of May. I must try to ask my mother to come	Having to go back to work/ Feeling the necessity of having helper
	231	and help. She is coming with her friend from the north. But I can't be sure now. My mother	Asking grandmother to help with child rearing/ Being uncertainty about the number of helper
	232	alone might not be able to handle.	Feeling that mother alone might not be able to handle twins babies
(1)	233	How did your workplace support breastfeeding?	-
(2)	234	Mostly I saw them using formula milk. When they came back to work they	Understanding that work colleagues mostly formula feed
	235	all stopped breastfeeding. There were only a few. Some used pumps. I heard that they	Understanding that all work colleague stops breastfeeding when they got back to work
	236	would bring their own breast pump and pump their milk in the bathroom I think.	Having heard that some work colleague bring breast pump from home and use the bathroom as s place for expressing milk

Appendix I An example of translation from Thai to English (Phase I)

9. น.ส.อิ๋ม อายุ: 28 ปี G_1P_2 C/S twins ระดับการศึกษา: ปริญญาตรี สถานภาพสมรส: คู่ อาชีพ: พนักงาน call centre โรงแรมดุสิตธานี ระยะเวลาสัมภาษณ์: 40 นาที

Participant 9 Age: 28 Gravida/Parity: G_1P_2 Delivery method: Caesarean section (C/S due to twins) Educational Level: Bachelor
Marital status: married Occupation: Call centre staff at Dusitthani Hotel Duration of the interview: 40 minutes

	ภาษาไทย	English
(1)	ตอนนี้ยังเลี้ยงลูกด้วยนมแม่อยู่รึเปล่าคะ	Are you breastfeeding your child at present?
(2)	ไม่แล้วค่ะ คือเอาจริงๆ ไม่ได้เลี้ยงตั้งแต่แรกแล้วค่ะ ที่จริงๆนะที่ให้เป็นกิจจะลักษณะนะคือ แค่ครั้งเดียวเอง คือตอนแรกมีคนฟิลิปปินส์เพื่อนของสามีมาช่วยเลี้ยง แล้วเค้าเคยเรียนพยาบาลมาก่อน แต่เค้ายังไม่เคยมีลูกนะ เค้าบอกว่าทำไมลูกเราร้องเยอะจัง แล้วก็กินเก่งด้วย เค้าบอกว่าไม่รู้ลูกจะเป็นน้ำตาลในเลือดสูงรึเปล่า เราก็คิดแล้ว ก็เลยเอาลูกทั้งคู่ไปเจอหมอที่โรงพยาบาลเด็ก จะได้คุยกับหมอ คนฟิลิปินส์เค้าก็เป็นคนคุยกับหมอเองเป็นภาษาอังกฤษ ก็เลยแนะนำให้เข้าคลินิกนมแม่ ก็ไปวันนั้นเลย ตอนนั้นเด็กอายุประมาณอาทิตย์กว่า ที่โรงพยาบาลเด็กเค้าดีมาก เพอร์เฟ็คเลย เค้าช่วยเราทุกอย่างเลย แล้วเค้าพูดจาดีมากเลย แต่ปัญหาก็คือเรามีลูกแฝด แล้วเราไปแค่วันเดียวไม่ได้ ลูกเราก็กินนมขวดมาก่อนแล้ว หัวนมเราก็สั้น ใช้ไอ้นั่นช่วย nipple shield ก็หลุด คือไปแค่วันเดียวไม่ได้ แต่ปัญหาคือเราไม่มีคนมาด้วยคือเรามีลูกแฝด แล้วเราจะเอาลูกมายังไง	No! Actually I did not breastfeed right from the beginning. I actually really breastfeed just the first time and that was the only time. In the beginning a Pilipino friend of my husband came and helps us with our babies. She studied nursing but have no child of her own yet. She asked why our babies cry a lot, and why they eat a lot too. She also told that may be the children have a high level of blood sugar. After some consideration we took them to see and consult with the doctor at Children Hospital. The Filipino friend then was mostly talking to the doctor, in English. The doctor at the Children hospital advised us to join Mother's Milk Clinic so I went right away that day. My babies were a week and a few days old. At Children Hospital it was really good…perfect…I mean….they helped us in every way and were very polite, but the problem is I have twins and I can't just go for one day. My babies have been bottle fed earlier. I have short nipples and I use that thing…..nipple shield…and it falls out…I mean… I can't go for just one day. But the problem is I don't have anyone to accompany me….I have twins…I can I

	ภาษาไทย	English
		take my babies there by myself.
(1)	แล้วคนฟิลิปปินที่มาช่วยเลี้ยงล่ะคะ	How about the Pilipino lady who was helping you?
(2)	เค้าแค่มาเยี่ยมมาช่วยแค่อาทิตย์เดียว เค้าเป็นครูก็ต้องกลับไปสอน ก็เลยเป็นปัญหา พอไม่ได้ไปก็เลยจบตั้งแต่ตรงนั้น แค่วันนั้นวันเดียวที่ลูกคนเดียวได้กินนมหนู และก็แค่ period เดียว เค้าเอานมใส่สายเล็กๆ มาหยดหลอกล่อที่หัวนมหนูให้ลูกกินให้ได้ แต่ถ้าไม่มีคนช่วยมันก็ยาก	She was just a visitor visiting for a week. She is a teacher and has to go back to teach. That was the problem. Since I can't get there, I have to end it there. That was the only day which only one of my child breastfeed…just once. They put the milk through a little tube and dropped it on my nipple trying hard to help my baby breastfeed. Without help it would be difficult.
(1)	ที่คุณอิ๋มเล่ามา เหตุผลที่ต้องเลี้ยงลูกนมผสม มีเหตุผลอื่นอีกไหมคะ	Are there any other reasons for using formula milk?
(2)	คือเหมือนกับว่าหัวนมเราสั้นด้วย แล้วลูกก็ติดขวดแล้ว เหมือนลูกดูดนมจากเต้าไม่เป็นด้วยซ้ำ ฐานนมเราก็ใหญ่ ปากเค้าเล็กนิดเดียว ดูดก็ไม่ถึง พอไม่ได้นมก็หันออกอย่างเดียว แล้วก็ร้อง	Actually my nipples are short too…and my babies have already got used to bottles…it seemed that they don't even know how to suck the milk from my breast. I have wide nipples and their mouths are so tiny. They can't suck. When they can't suck the milk then they would just turn away and cry.
(1)	แล้วคุณอิ๋มเริ่มให้นมผสมตั้งแต่เมื่อไหร่คะ	When did you first start giving formula milk?
(2)	คือตั้งแต่วันที่ 1 แล้วนะ คือเรามีแผลผ่าหน้าท้องก็เจ็บด้วย แล้วเราก็เดินไปห้องนม แล้วพยาบาลก็เข้ามาช่วยบีบนวด น้ำนมไม่ออก เค้าก็เลยให้ไปซื้อไอ้นั้นอ่ะ nipple shield ไป 150 บาท แต่ลูกก็ไม่ดูด พอจะเอามาใช้มันก็หลุด แล้วมันใช้ไม่ได้ ลูกมันก็ร้องโวยวายไร้สติ ตอนที่เค้าเอาลูกมาให้นะ คือหนูอยู่ห้องพิเศษ 4 คนนะ คือมันไม่มี	Since second day after delivery. My caesarean wound was painful. I walked into the feeding room and the nurse help me with expressing my milk till my breasts were bruised…no milk comes out so she asked me to buy a nipple shield which cost 150 baht. But my children did not suck. When I use it …it would fall off. It didn't work and my babies started crying angrily. When they brought my babies to me I was in a special room which accommodates four people. There was

	ภาษาไทย	English
	อะไรเลย หนูร้องไห้เลยนะ แล้วพอตอนสองทุ่มหนูก็คิดนะว่าเราจะเอาไงดีนะ นมก็ไม่ออก พอตกดึก ลูกร้องเสียงดัง แล้วพยาบาลเค้าก็ไม่ให้นมผสมนะ คือเรารู้นะว่าเค้าต้องการให้เราให้นมแม่ แต่นมมันไม่ออก แล้วเตียงข้างๆ ก็สลับกันร้อง เตียงข้างๆ ก็เลยไม่ได้นอน ไอ้เราไม่มีนมให้ลูกๆ ก็เลยร้อง ไอ้ฝั่งโน้นคือ นมคัดเป็นก้อนเลย ลูกก็ดูดไม่ได้ ลูกก็ร้องกวนทั้งห้อง หนูคิดนะว่าถ้าพรุ่งนี้ลูกตรวจแล้วตัวไม่เหลืองนะ อยากจะขอกลับบ้านเลย แบบว่าไม่ไหวแล้ว อยู่คนเดียวมันทรมานมาก มันไม่ได้นอนด้วย แล้วแผลเราก็แย่ด้วย	nothing. We did not have anything. I cried. When my husband had to leave at 8 p.m., I thought to myself, what are we going to do? My milk did not flow. At night my children were crying really loud. The nurses also did not give any formula milk. I know that they wanted the babies to be breastfed, but my milk did not flow. The other baby next to my bed also started to cry so we couldn't get any sleep. My babies cried because I have no milk. The neighbouring bed baby cried because the mother couldn't breast feed him, her breasts were gorge and sore. The room was filled with noise from crying babies. After examination the next day if my children were not yellow then I would ask for permission to take them home. I didn't think I could stand it any longer. It was very difficult being alone. I didn't get any sleep and that was also bad for my wound.
(1)	แล้วคุณอิ๋มคิดอย่างไรกับเรื่องเลี้ยงลูกนมแม่คะ	How do you feel about breastfeeding?
(2)	คือเรามีทัศนคติที่ดีนะ เราตั้งใจไว้ตั้งแต่แรกแล้วตอนท้อง แล้วเราก็อยากให้นมแม่ใครๆ ก็อยากให้ลูกแข็งแรง แต่ด้วยปัจจัยพวกนี้ เราก็ไม่รู้จะทำยังไง คือมันต้องช่วยแบบจริงๆเลยนะ เราก็อยู่คนเดียว	I am positive about it. I have the intention from the beginning to breastfeed, since the beginning of my pregnancy, and wanted my babies to have breast milk. Everyone wants their babies to be strong. But with the factors mentioned earlier, I didn't know what to do. I needed to be helped seriously, and I was alone.
(1)	ตอนแรกคุณอิ๋มมีความตั้งใจเลี้ยงลูกด้วยนมแม่นานแค่ไหนคะ	How long did you intend to breastfeed your child in the beginning?
(2)	ก็คิดว่าจนกว่าจะให้ไม่ได้ ได้ยินมาว่าต้องเลี้ยงหกเดือน หรือถ้าไม่ได้ก็ต้องเก็บใส่ถุงไว้ แต่ที่ให้ไม่ได้ก็เพราะอย่างที่เล่าให้ฟัง	As long as I could. I heard that you have to do it for six months. If you can't then you can put it in bags. But the reasons that I couldn't do was because of the factors I told you earlier.

	ภาษาไทย	English
(1)	แล้วคุณอิ๋มคิดว่ามีอะไรบ้างไหมที่ช่วยสนับสนุนให้คุณเลี้ยงลูกด้วยนมแม่	What do you think could encourage and support you to breastfeed?
(2)	ก็ (หยุด 3 วินาที) ที่ทำให้เราอยากเลี้ยงลูกด้วยนมแม่ก็คือคนที่โรงพยาบาลนี่แหละที่ทำ พยาบาลที่คอยดูแลมีส่วนช่วยมากเลย แต่คนที่บ้านนะคือเราอยู่กับสามี 2 คน สามีเราก็ไม่มีความเห็นอะไร คือเค้าบอกว่าให้ได้ก็ควรจะให้ เค้าก็ไม่ได้สนับสนุนให้กินนมกระป๋องนะ แต่คือเรามันไม่ได้ แล้วเราก็ไม่มีคนช่วยด้วย แล้วไหนจะงานบ้านอีก	Umm….(pause for 3 seconds)..I think people at the hospital could encourage us to breastfeed, nurses who took care of us. But the people at home did not encourage me at all. I live with my husband, just the two of us. He did not have any opinion. He said if I could then do it. He did not encourage on formula milk either. I just couldn't do it. And we did not have any helper. I have twins and how about the house chores.
(1)	แล้วอะไรเป็นอุปสรรคสำคัญขัดขวางทำให้คุณอิ๋มเลี้ยงลูกด้วยนมแม่ไม่ได้คะ	What were the main obstacles for you in not being able to breastfeed your children?
(2)	คือเราตั้งแต่หลังคลอดเลยนะ คือเอาลูกมาให้เราวันที่ 2 คือแผลเราก็ยังเจ็บอยู่ มันไม่ช่วยนะ เค้าน่าจะเอามาให้วันที่สามหรือให้นอนซักสามวันหรืออย่างน้อยห้าวัน ไม่แน่ใจนะ แต่เห็นคนอื่นเค้าออยู่โรงพยาบาลกันสามวัน แล้วถ้าไม่เอามาให้วันที่สองก็ไม่รู้เหมือนกันต้องเอามาให้วันไหน เพราะวันที่สามก็ออกจากโรงพยาบาลกลับบ้านแล้ว	Since post-delivery, bringing babies to me on the second day did not help at all. My wound was hurting. They should have brought them on the third day or allowed an extension of my stay at the hospital to be at least five days. But I don't really know, because people usually stay in the hospital for three days. If they didn't bring the baby on the second day they when should they, because the third day is already the day to leave.
(1)	มีอุปสรรคอะไรอยากเล่าให้ฟังอีกไหมคะ	Are there any other obstacles that you would like to talk about?
(2)	คือปัญหาที่เรานะคือ หัวนมเราไม่พร้อม นมเราก็น้อย พยาบาลเค้าก็พยายามเค้นจน	My problem is my nipples were not ready. There was just little milk flowing. The nurse tried expressing them until they were sore, but only little milk came out.

	ภาษาไทย	English
	เขียว แต่มันก็ไม่ได้ออกมากมาย หรือว่ามันยังไม่มาก็ไม่รู้นะ คือบีบได้แต่หยดยังไม่ถึงก้นแก้วเลย	May be they were not ready yet. Yes, there was milk coming out, but so little that it didn't even reach the bottom of the container.
(1)	แล้วพยาบาลหรือหมอได้ช่วยเหลืออย่างไรบ้างคะ	How did the nurses and the doctor help with this problem?
(2)	พยาบาลเค้าก็เข้ามาช่วยนะคือ เข้ามาบีบมาเค้น มาสอน มาบีบให้ ตอนกลางคืนลูกร้อง เราก็ต้องอุ้มลูกไปขอนมผสมจากพยาบาลที่เคาน์เตอร์ ตีหนึ่ง เที่ยงคืน จนเราไม่ไหว เราง่วงมาก ลูกร้อง แล้วก็เกรงใจคนข้างเตียง แล้วบอกเค้าว่า ลูกเราร้องมาก พยาบาลเค้าก็เลยเออๆ เอานมมาให้ เค้าเอาแก้ว แล้วมาสอนให้ลูกกินเข้าปากลูก แต่ก็ไม่ใช่นมเรานะ ก็นมผสมนั่นแหละ เค้าก็สอนให้ดูว่า วิธีการกินนม แล้วก็บอกว่าลูกมันรอได้แต่มันจะไม่รอ มันจะร้อง เค้าก็บอกเราว่า ถ้าเราบีบนมได้มันก็น่าจะโอเคนะ	The nurses were helping. They helped with massaging and expressing my breast and were teaching. At night my babies were crying and I had to carry them to get some milk at the counter at 1 a.m. in the mornings, until I couldn't do it any longer. I was so sleepy and my babies were crying, and I was feeling bad for the mother next to me. I told the nurses that my babies cry a lot and the nurses said OK and they helped with bringing the milk for me. They brought a cup and taught me how to feed the baby using a cup. But it wasn't my milk. It was formula milk. They taught me to observe the way babies feed and told me that they can wait. But they won't, they will cry. They told me that if I could express my breast milk the situation should be ok.
(1)	แล้วพอเราเห็นว่าลูกเรากินจากแก้วได้ เรารู้สึกอย่างไรคะ	How did you feel when you saw that your children could drink the milk from the cup?
(2)	เราก็รู้สึกแปลกใจนะว่าลูกก็กินแบบนี้ได้ ทีละนิดๆ แต่นมเราแทบไม่มีเลย นมเราก็ไม่เคยคัด นมนิ่มๆ ตลอด ตอนไปโรงพยาบาลเด็ก ก็นมนิ่มๆ เนี่ยแหละ ก็ไม่รู้เหมือนกันว่าทำไมนมไม่คัด	I was surprised to see that my children could drink the milk that way little by little. But I hardly have any milk. My breasts were never gorged. They were always soft. When I went to the children's hospital they were also soft. I also don't know why my breasts were never gorged.

	ภาษาไทย	English
(1)	แล้วพอเรากลับไปเลี้ยงลูกที่บ้านเองมีปัญหาอะไรไหมคะเรื่องการเลี้ยงลูก	After you took the children home did you have any problem?
(2)	ก็คือมีงานบ้าน แฟนเราก็ช่วยแต่ก็แบบไม่ทันใจเรา เพราะเราเคยทำมา แล้วเราก็ต้องทำ แล้วไหนจะลูกอีก	I have to do house chores. My husband helped but he was slow. They were the work I used to do and I have to do them then the children.
(1)	แล้วสามีช่วยอะไรเรื่องเลี้ยงลูกบ้างคะ	Did your husband help with the children?
(2)	เค้าก็ช่วยเรื่อง ชงนม ล้างขวดนม แล้วตอนกลางคืน ก็ต้องช่วยอยู่แล้ว เอาลูกคนละคน หนูเอาคน เค้าเอาคน ลูกก็กินเยอะทุกสองชั่วโมงกิน 3 ออนซ์	He helped in preparing milk, washing bottles, and during the night each one of us looks after each baby. The babies drink a lot of milk, three ounces every two hours.
(1)	แล้วคิดอะไรที่บอกว่าลูกกินเยอะ	Can you explain more about 'babies drink a lot of milk'?
(2)	คือเราไม่มีประสบการณ์ แล้วก็ไม่มีผู้ใหญ่อยู่ด้วย ไม่มีใครเลย มีแค่คนฟิลิปปินส์ที่มาอยู่เป็นเพื่อน ทีนี้ไอเดียต่างๆ เค้าเป็นคนคิดหมดเลย เพราะเค้าบอกว่าเค้าเคยเรียนพยาบาล อย่างเช่น ที่เราไม่ค่อยเห็นด้วยนะ แต่ก็ไม่รู้จะทำยังไง เค้าบอกว่าเคยอยู่ห้องเด็กมาก่อน เวลาชงนมเค้าก็ใช้น้ำธรรมดา ไม่ใช้น้ำอุ่น แต่ต้มสุกแล้วนะ เค้าเริ่มให้กินแบบนี้ ลูกเราก็เลยติดกันแบบนี้มาเรื่อยๆ ก่อนออกจากโรงพยาบาล พยาบาลก็บอกให้ลูกกินนมทุกชั่วโมง พอออกไป เค้าให้กินทุก 2 ชั่วโมง เริ่มจาก 2 ออนซ์ แล้วก็เป็น 3 ออนซ์ คือหนูก็ไม่รู้ แต่รู้สึกว่าปริมาณการกินมันเยอะไปแน่ๆ หนูว่าทำให้เด็กเหมือนร้องๆ เหมือนท้องอืด และเมื่อคืนก็ไปโรงพยาบาลนนทเวช ใกล้บ้าน หมอเค้าตรวจ	We didn't have any experience and there were no adults around. We didn't have anyone except the Filipino friend who stayed with us. All the ideas were from her because she told us she had studied nursing. For example, there are things that we didn't really agreed with was but didn't know how to respond. She told us that she worked in the babies ward before and when they prepare milk for the babies they use normal water not warm water but the water is boiled. She started feeding my babies this way and they are used to it up till today. Before leaving the hospital the nurse told me to feed my babies every four hours but she feed them every two hours, starting with two ounces then increasing to three ounces. I didn't know much, but I felt that the amount was definitely too much. I think it

	ภาษาไทย	English
	เค้าก็บอกว่าลูกท้องอืด ให้ยามากินใส่ syringe คือไปหาหมอเพราะว่า ลูกเราไม่ได้ถ่ายทุกวันสองวันถึงจะถ่ายที ตอนถ่ายทีนะระเบิดออกจาก pampers เยอะมาก เหม็นด้วย ตดก็ดัง	made the babies cry because they might have stomach problem. The night before we went to Nonthavej Hospital. The doctor inspected the babies and found that they have stomach problem and gave some medicine to be given with syringe. I took them to the doctor because they did not poop. They would poop every one or two days. Every time they poop they would poop so much that the poop would over flow the diapers. The smell is very bad too. The fart is also loud.
(1)	แล้วยังไงต่อคะ	Please go on.
(2)	คือพอคนฟิลิปปินส์กลับไป ตรงนี้เพื่อนเริ่มมาเยี่ยม เพื่อนก็บอกว่าทำไมชงนมแบบนี้ต้องใช้น้ำอุ่น เราก็เลยเปลี่ยน ที่นี้เราก็เริ่มเปลี่ยนใช้ความคิดเราเองว่าจะเอายังไงดี	When the Filipino friend went back my friend came and visit. My friend told me why I didn't prepare the milk using warm water. So I changed. Since then I changed and adapted according to my own idea.
(1)	เพื่อนที่มาเยี่ยมแนะนำอะไรบ้างคะ	What did your friend who came to visit advice?
(2)	ฟิลิปปินส์บอกว่า ไม่ให้ใช้แป้งเลย เพื่อนบอกว่าลูกท้องอืดให้ใช้มหาหิงค์	The Pilipino friends advise not to use any talc. My friend advised me to apply Mahahing if babies have stomach problem.
(1)	แล้วเรารู้สึกอย่างไรกับคำแนะนำของเพื่อน	What did you think of your friend's advice?
(2)	เราก็เชื่อเพื่อนเรามากกว่านะ เพราะคนฟิลิปปินส์เค้าไม่เคยมีลูก แต่เพื่อนเรามีประสบการณ์ แล้วก็มีหลายเรื่องที่เราไม่เห็นด้วยกับคนฟิลิปปินส์ แล้วที่ตอนนี้ก็ยังไม่รู้ก็ที่ยังเถียงกันคือ เราไม่รู้ว่าชงนมเสร็จแล้วมันอยู่ได้กี่ชั่วโมง ฟิลิปปินส์บอกว่าอยู่ได้	I believe my friend more, because the Pilipino friend did not have any child of her own before. My friend has the experience and there were many points which I didn't agree with the Pilipino lady. What I still don't know is what we still

	ภาษาไทย	English
	8 ชั่วโมง ตอนเค้าเลี้ยง ตื่นมาก็ให้กินต่อกินขวดเดิม เพื่อนมาเยี่ยมบางคนก็บอกว่าอยู่ได้ 2 ชั่วโมงบ้าง 4 ชั่วโมงบ้าง ถึงตอนนี้เราก็ยังไม่รู้นะว่าอยู่ได้กี่ชั่วโมง เราก็เลยเอาแบบว่ากินไม่หมดก็ทิ้งเลยละกัน	disagree about, is, how long can bottle milk stay. The Pilipino friend said eight hours. When she took care of my babies they would wake up and were fed the left over milk. Other friends, who came to visit, some said two hours and some said four. Up until now I still don't know how long bottle milk can stay. So what I am doing now is just throw the left over away.
(1)	คุณอิ๋มคิดอย่างไรบ้างกับคำแนะนำที่ได้รับจากหลายฝ่ายทั้งจากทางโรงพยาบาล เพื่อน ญาติ	What do you think about different advices from so many people including the hospital friends' relatives?
(2)	เราคิดว่าจากทางโรงพยาบาลน่าจะเชื่อถือได้มากที่สุด แต่คือว่าหนูไม่ได้ฝากพิเศษ แม่หนูก็มาคลอดที่นี่ก็ฝากพิเศษ แต่แบบที่หนูไม่ค่อยประทับใจนะ คือถ้าเปรียบเทียบกับบริการที่คลินิกนมแม่ที่โรงพยาบาลเด็กนะ เค้าดีมากเลย	I think I can trust the advice from the hospital the most. But I am not a VIP patient. When my mother came for delivery here she was a VIP patient. I am not very pleased with the service here. If you compare the service with Breastfeeding Clinic at Children Hospital, they were much better.
(1)	แล้วทางโรงพยาบาลตอนที่มาฝากท้องให้การช่วยเหลืออะไรเรื่องเลี้ยงลูกนมแม่บ้างคะ	When you came for pregnancy check-up did the hospital provide breastfeeding support?
(2)	ก็คือเป็น step ตามปกติ ให้ดู VDO เรื่องประโยชน์นมแม่ วิธีให้เช่น ให้กินนมงับตรงไหน เค้าก็เช็คดูว่าหัวนมเราเป็นยังไงบ้าง เค้าก็แนะนำว่า ให้พยายามดึงหลังอาบน้ำนะดึงให้หัวนมมันออก	Yes, part of their routine steps. They let us watch VDO on the benefit of breast milk and how to breastfeed. For example, how should the baby place their mouth around the nipple etc.? They checked the shape of my nipples. They advised me to exercise by pulling out my nipple after shower so that my nipple would stick out further.
(1)	แล้วรู้สึกอย่างไรกับคำแนะนำที่ได้รับ	How did you feel about the advice given?

	ภาษาไทย	English
(2)	เราก็ทำนะแต่มันไม่ออก แต่แบบว่า เค้าก็ไม่ได้บอกนะว่าให้ดึงกี่ครั้ง เค้าบอกให้พยายามดึง แต่เราก็ทำช่วงแค่แรกๆ ทำแต่ไม่ต่อเนื่อง	I follow their advice but my nipple didn't stick out further. They didn't tell me how many times I should pull during the exercise. They just told me to try to pull. But I just did it in the beginning and didn't continue.
(1)	แล้วเพราะอะไรทำให้ไม่ได้ดึงหัวนมต่อเนื่องคะ	Why didn't you continue doing it?
(2)	ก็ขี้เกียจทำ แบบว่าดึงเอามันก็เจ็บ สัญชาติญาณของตัวเองนะพอเราทำแล้วรู้สึกเจ็บเราก็จะหยุดทำ แล้วก็ไม่มีใครมาบังคับเราด้วย	I was just lazy. It hurts when I pull them. It's just my natural instinct to stop doing something when it hurts. There was also no one to encourage me.
(1)	แล้วเคยได้ยินเกี่ยวกับเรื่องหัวนมสั้นกับการให้นมแม่อย่างไรบ้างคะ	Have you heard anything about breastfeeding with short nipples?
(2)	ก็เคยได้ยินนะ เห็นพยาบาลเค้าพูดกันว่าอาจจะมีปัญหา แต่ตอนนั้นคิดว่าถึงหัวนมสั้นก็อาจไม่เป็นไรเพราะจะใช้เครื่องปั๊มนมเอา	Yes, I've heard the nurses talking about it. It seems to be a problem. But although my nipples are short I thought it shouldn't be much of a problem because I could use breast pump.
(1)	แล้วหมอกับพยาบาลได้มีการติดตามเรื่องหัวนมสั้นอย่างไรบ้างคะ	Was there any follow up on this problem by the nurses or the doctor?
(2)	เค้าก็ไม่ได้ติดตามทวงถามอะไรนะ	They didn't follow up on this.
(1)	แล้วที่ห้องคลอดหล่ะคะ	How about the Delivery room?
(2)	ไม่นะ เค้าผ่าอย่างเดียว พอคลอดออกมา เค้าเอามาให้ดู จ๊ะเอ๋แป๊บเดียว คนเดียวด้วย ไม่รู้เพราะอะไร แต่ตอนนั้นคือเราสั่นเยอะด้วย คงอาจเป็นเพราะเราสั่นรึเป่าไม่รู้	Nothing. They only performed caesarean. They only showed my baby when they were delivered…just a short peek-a-boo…only one of my babies…I don't know

	ภาษาไทย	English
		why. That time I was shivering. May be because they saw that I was shivering.
(1)	แล้วหลังคลอดหล่ะคะ	How about after delivery?
(2)	มีแต่พยาบาลตอนดึกที่เราบอกว่าเราไม่มีนม พยาบาลมาเดิน พยายามให้เอานมออกมาให้ได้ เค้าเข้ามาประมาณ 2 คน มา 2-3 ครั้ง ที่ช่วยๆกัน เพราะเค้าเห็นลูกเราร้องไห้มาก เค้ามาบีบแต่นมออกไม่เยอะ ก็แก้ปัญหาโดยเอานมผสมมาใส่แก้ว แต่พอเราเอาแก้วมารองจะบีบ คือน้ำนมหนูออกมายังไม่ถึงก้นถ้วยเลย มันน้อย เราก็บีบผิดมั่งถูกมั่ง เราก็ไม่รู้	The only person was the night shift nurses. I told them my milk doesn't flow. They tried to help me. They came 2-3 times…two of them helping, because they saw my babies were crying a lot. They helped expressing my breast milk but the milk flow was minimal. We solved the problem by using formula milk in cup….but when I put the cup under my breast and express the milk …my milk didn't even flow down to the bottom of the cup. There was so little. I expressed them in different ways, sometimes wrong, sometimes right…I didn't know how.
(1)	พี่พยาบาลมาสอนบีบนมมีประโยชน์อย่างไรคะ	How useful was the teaching on milk expression lesson taught by the nurses?
(2)	ก็มีประโยชน์ อย่างน้อยก็ยังได้กิน กินเล็กกินน้อยก็ยังดี ส่วนที่ปั๊มนมที่คิดไว้ก็ไม่ได้ใช้ คือที่ปั๊มเพื่อนให้มา ตอนแรกเป็นแบบคันโยก เอามาใช้ น้ำนมก็ไม่ออก ก็เลยเปลี่ยนเอาของเพื่อนอีกคนเป็นแบบไฟฟ้า มันก็ไม่ออกอีก ออกไม่ถึงออนซ์ เราก็ไม่รู้ว่าเป็นที่เครื่องปั๊มมีปัญหาหรือเปล่าเพราะมันใช้มาแล้ว หรือเป็นเพราะนมเราก็ไม่รู้ แต่ที่คิดไว้เป็นเพราะนม 50 เครื่อง 50	It was useful. At least my babies get to drink something. Having a little is better than nothing. About the breast pump, as planned earlier, I didn't get to use at all. My friend gave me a breast pump, a manual one. I used it, but no milk came out. So I changed it with the one given by another friend which was an electric pump. That one also didn't help much. I could get less than an ounce. I am not sure whether the problem is with the pumps or not because they were rather old. Or it might be just me. It might just be 50/50.
(1)	แล้วที่ห้องเด็กหล่ะค่ะได้รับการสนับสนุนเรื่องการเลี้ยงลูกด้วยนมแม่อย่างไรบ้าง	How about at babies' room, what kind of breastfeeding support did you get from there?

	ภาษาไทย	English
(2)	คือพยาบาล เค้าจะมาแนว Commander คือเค้าบอกว่า ถ้าคุณให้ลูกคุณกินไม่ได้ ลูกคุณก็จะไม่แข็งแรง เค้าดุมาก เค้าก็บอกว่าทำอย่างนี้ซิคะ คุณต้องตั้งใจนะคะ เราก็คิดว่าทำยังไงดี แล้วเค้าก็ไปเอา nipple shield มา เราก็เลยซื้อเผื่อลูกจะกินได้ แต่พอเราไปใส่เองมันก็หลุด เค้าก็ลองใส่ให้เรานะ แต่พอเอาไปใส่เอง มันก็ได้แต่ว่า แป๊บๆ ก็หลุด มันไม่ค่อยติด แล้วอีกอย่างนึง แล้วเราก็ต้องเอาหมอนมารอง มันไม่ค่อยถนัดจริงๆ มันโดยแผลเรา ช่วงสองสามวันแรกที่อยู่โรงพยาบาล เค้าก็สอนท่าฟุตบอลเรานะ แต่เราทำไม่ได้ เพราะมันต้องเอาหมอนมาโดนแผลอยู่แล้ว ลูกเราก็แบบไม่ทันใจเราก็ท้อ เหนื่อย แล้วลูกเราก็แฝดด้วย ทำให้เราให้ลูกนมแม่ยากขึ้น แค่ลูกคนเดียวเราก็ทำไม่ได้แล้ว เราก็ต้องจับไอ้พลาสติกนั่นอีก มันไม่ได้	There the nurses acted like commanders. They told me that if I can't breastfeed my babies then they would not be strong. They were very mean. They told that I should follow their way and should work hard. I thought to myself what I should do. Then they went and brought a nipple shield…so I bought it because it may work for my children. But when I tried it on it always falls off. They tried it for me but when I took it home and do it myself it sticks for a while then falls off again. It didn't stick well. One more thing,I also have to find a pillow to support myself. It wasn't a comfortable thing to do. It irritated my wound during the first 2-3 days at the hospital. They taught me the "football position", but I couldn't do it. Even when my babies were on my sides It was still painful for me because the pillow would somehow touch my wound anyways. My babies were impatient and crying, and I was also feeling hopeless and tired. My babies are also twins which made it much more difficult to breastfeed. One child was difficult enough and moreover I have to hold to that plastic…it wasn't possible.
(1)	แล้วคุณอิ๋มรู้สึกอย่างไรกับบริการส่งเสริมเรื่องนมแม่ที่ได้รับจากโรงพยาบาล	What did you thing about the service to promote breastfeeding from the hospital?
(2)	หนูขอบอกตรงๆ นะ Compare ระหว่างที่นี่กับโรงพยาบาลเด็กนะ เค้า perfect มากในการที่จะช่วยเราอย่างจริงจัง หลายอย่าง ถ้าเต็มร้อยให้ 50	I want to tell you frankly that comparing the services here and at Children Hospital, I feel that Children Hospital was ideal place that offers sincere help. Many things here I would give 50/100.
(1)	ที่โรงพยาบาลบริการเป็นอย่างไรคะเล่ารายละเอียดให้ฟังหน่อย	Could you give me more detail about the service at the hospital?

	ภาษาไทย	English
(2)	รู้สึกเหมือนว่า เครียดๆ นะ ทำเป็นแบบโรงงานน่ะ มันไม่มีคนมาดูเราคนต่อคน แล้วอุปกรณ์ที่จะช่วยเช่น ที่โรงพยาบาลเด็กมีสายพลาสติกเอาไว้หลอกล่อ ก็ไม่มี มันต้องใช้เวลา	I felt that the atmosphere was a very serious …it was like a factory. There was no individual care. There were also no proper equipment to help children; for example at the Children Hospital there was plastic strings to distract children…they didn't have it here. It took us a lot of time.
(1)	แล้วคุณอิ๋มต้องการบริการอะไรเพิ่มเติมคะ	What other services would you like to see provided by the hospital?
(2)	คือสำหรับบางคนนะต้องเข้า Course เลย แต่คนส่วนใหญ่ก็อาจไม่มีปัญหามาก สอนแป๊บๆ เค้าได้แล้ว แต่อย่างเรามันน่าจะมีพยาบาลมารุมเราเลยนะ มาปั๊มเราให้มันได้ ไม่ใช่ว่าดุๆ ทำให้เราเครียด เกร็ง แล้วมาว่าเราว่าให้ตั้งใจ อะไรอย่างนี้ ส่วนพยาบาลชั้น 7 ก็ต้องมาคอย support คือ เหมือนอยากให้มีพยาบาลมาเป็นทีม เลย มาจริงๆ คนที่มีปัญหาต้องการเพิ่มเติม	For some people, I think they need to go through some courses, but most of the people shouldn't have so many problems. They learn fast. But for me, there should be nurses to give me more serious training. They should try to pump my breast until we achieve the goal. Not to scold us because that would give us more stress and feel nervous, and then tell us again to concentrate…you know what I mean…The nurses on the 7th floor should come and support. I want to see a team of nurses coming and supporting people who have problem.
(1)	คุณอิ๋มเคยบอกพยาบาลหรือหมออย่างไรบ้างคะ ตอนที่นอนอยู่ที่โรงพยาบาลแล้วเรามีปัญหาว่าเราไม่สามารถให้นมลูกได้	Have you told the nurses or the doctor anything about this problem that when you were at the hospital not able to breastfeed your babies?
(2)	ก็บอกนะ แต่เราอยู่โรงพยาบาลแค่สามวัน วันที่สองเอาลูกมาให้ วันที่สามตอนเที่ยงก็กลับบ้าน แต่ถึงให้เราอยู่ต่อแก้ปัญหานะ เราก็คงไม่ไหว อยากกลับบ้าน อย่างน้อยแฟนเราก็ช่วย เพราะหลังสองทุ่มแฟนก็ต้องกลับ เราก็เหมือนอยู่คนเดียว กลางคืนลูกก็ร้องเราอยู่คนเดียวก็จิตตก เตียงข้างๆ ก็ร้อง นมไม่ออก ก็อยากกลับบ้านแล้วหล่ะ แล้วตอนที่เราอยู่โรงพยาบาล เราก็ไม่รู้นะ เราอาจไม่เจอพยาบาลที่เค้าจะช่วยเราได้	I told. But I was at the hospital only for three days. On the 2nd day they brought me my babies and on the 3rd day at noon I left the hospital. But even if they kept me back and try to help me solve the problem I don't think I could continue. I really wanted to go home. At least my husband could help me. After 8 p.m. my husband would come back. Here I felt like I am alone. At night my babies cry and I was alone and I felt discouraged. The baby of the neighbouring bed also started

	ภาษาไทย	English
	อาจจะเป็นไปได้จริงๆ นะ หนูว่าถ้ามีคนมาดูเราจริงๆ วันนี้หนูอาจให้นมแม่ได้ก็ได้	crying. No breast milk to give. I wanted to go home. May be I did not meet any nurse that could really help me during my stay at the hospital. May be that was really the case. I think if there were somebody that could really look after me I might have achieved breastfeeding.
(1)	แล้วต้องการบริการใดเพิ่มอีกไหมคะ	Would you like to see other services?
(2)	ก็น่าจะมีนัดนะ ถามว่าให้นมแม่ได้จริงรึเปล่า คือถ้าเกิดเป็นหนูนะ ถ้าให้ลูกกินนมได้สามเดือนหกเดือน หนูว่ามันคุ้มนะที่จะกลับมาตามนัด ประหยัดเงินมากเลยนะ แล้วลูกก็ไม่ต้องท้องอืดด้วย หนูว่าคุ้มนะ นมกระป๋องนึงเท่าไหร่ ถ้าทำได้น่าจะคุ้ม ตอนที่เราอยู่โรงพยาบาลน่าจะแก้ให้เสร็จก่อนเรากลับบ้าน ถึงเวลาให้นม ก็ต้องให้เราไปตรงนั้น ตอนที่เราไปให้นมก็ต้องมีคนช่วย แต่ก็คือเราก็มีปัญหาที่ตัวเราด้วย 80 เปอร์เซ็นต์ มันอยู่ที่หัวนมหนูด้วยหล่ะคือ หัวนมเราสั้น ถ้าหัวนมหนูปกติเหมือนคนอื่นอาจจะไม่ยากก็ได้ จริงๆ อยากให้ตั้งแต่ตอนฝากท้องใกล้ๆ น่าจะมีคนที่เป็นแม่จริงๆ มาให้ดูว่าเค้าดูดนมกันยังไง วิธีไหนให้เห็นจริงจังไปเลย เราจะได้รู้วิธี เพราะบางทีเราก็ยังไม่รู้ เช่น ลูกต้องงับถึงลานนม จะดูดอยู่ที่หัวนมจั๊บ ๆ มันก็ไม่ได้น้ำนม เพราะเราอยู่ตัวคนเดียว ไม่ได้อยู่กับพ่อแม่ด้วย บางทีดูแต่ VDO อาจไม่สามารถทำได้จริง แล้วก็ไม่รู้จะทำได้จริงรึเปล่า คืออยากเห็นของจริง ห้องนึงประมาณ 6-8 คน ทุกอย่างเลยที่จะให้นมมันออก คือจริงๆ สอนหลังคลอดน่าจะดีกว่า ตอนที่อยู่ที่โรงพยาบาลคิดว่าสอนตอนฝากท้องใกล้ๆ คลอดก็จะดี เดือนสุดท้ายก่อนคลอด	There should be appointments to ask us whether we are successful breastfeed or not. If it was me I would feel that it's worth it if we could achieve three months or six months breastfeeding. I didn't have to spend extra money, much more economical. My babies don't have to suffer stomach problem. I think it's worth it. Imagine how much one can of milk cost. If that could be achieve it would be worth it. While I was at the hospital they should help me solve the problem before I go home. When it's time to breastfeed I should have a place to go, and there should be someone to help me. But again, the problem is also with me 80%. It's also my nipples. They were short. If my nipples were normal like other people it might have not been so difficult. Actually during the pregnancy check up close to delivery time it would be nice if a mother who has first-hand experience show how to breastfeed babies. Show us different method so we could clearly see so we can learn because we don't know. For example, the baby should suck from the base of the nipple. If they suck just from the nipple then the milk doesn't really flow. Because I was alone and my husband wasn't there. Sometimes it can be quite difficult to put what we only have watched from VDO into practice on your own. Sometimes we don't even know if certain things were

	ภาษาไทย	English
		really practical. We want to see the real thing. Each room can have 6-8 mothers. Show us everything we need to know to be able to breastfeed. Actually after delivery seem to be better while I was at the hospital. I think it's better if they teach us just before the caesarean delivery. The last month before delivery.
(1)	มีอะไรอยากแนะนำเพิ่มเติมอีกไหมคะ	Do you have any more suggestions?
(2)	ก็ไม่มีแล้ว คือก่อนคลอดน่าจะมี แล้วใส่ใจช่วงหลังคลอด ถ้ามีปัญหาน่าจะเข้ามาพิเศษจริงจัง แก้ปัญหาให้ได้ภายในวันสองวันหรือจะนัดให้มาก็ว่าไปก็น่าจะโอเคละ หลังจากนั้นก็คงต้องช่วยเหลือตัวเองแล้ว ตอนนี้ใกล้จะกลับไปทำงานแล้ว 10 พฤษภาคมนี้ ก็ต้องรอจิกแม่ให้มาเลี้ยงให้ได้ แม่เค้าจะมาช่วยกับเพื่อนแม่อีกคนมาจากทางเหนือ แต่เราก็ไม่กล้าฟันธงตอนนี้ แม่คนเดียวก็อาจจะเลี้ยงไม่ไหว	Nothing else. They should have before delivery. And give good care after delivery. If someone has problem there should be people coming in to seriously help them overcome the problem within a couple of days. Or if an appointment is needed to be made, then it should be. After that then the patients need to help themselves. Now it's nearly the time that I must get back to working. This coming 10th of May. I must try to ask my mother to come and help. She is coming with her friend from the north. But I can't be sure now. My mother alone might not be able to handle.
(1)	แล้วที่ทำงานเค้าสนับสนุนเรื่องการเลี้ยงลูกด้วยนมแม่อย่างไรบ้าง	How did your work place support breast feeding?
(2)	ก็ส่วนใหญ่ที่เห็นนะจะเลี้ยงนมกระป๋อง พอมาทำงานก็เห็นเลิกให้นมกัน มีส่วนน้อยปั๊มนมบ้าง ได้ยินว่าเค้าเอาเครื่องปั๊มนมของเค้ามาเองแล้วก็ไปปั๊มที่ห้องน้ำหรือไงประมาณนั้น	Mostly I saw them using formula milk. When they came back to work they all stopped breastfeeding. There were only a few. Some use pump. I heard that they would bring their own breast pump and pump their milk in the bathroom I think.

Appendix J Approval document from University of Southampton (Phase I)

UNIVERSITY OF Southampton

Mrs Pornpimol Apartsakun
School of Health Sciences
University of Southampton
University Road
Highfield
Southampton
SO17 1BJ

RGO Ref: 8450

26 January 2012

Dear Mrs Apartsakun

Project Title **An Exploration of Thai Women's Breastfeeding Experiences and Support Mechanisms**

This is to confirm the University of Southampton is prepared to act as Research Sponsor for this study, and the work detailed in the protocol/study outline will be covered by the University of Southampton insurance programme.

As the sponsor's representative for the University this office is tasked with:

1. Ensuring the researcher has obtained the necessary approvals for the study
2. Monitoring the conduct of the study
3. Registering and resolving any complaints arising from the study

As the researcher you are responsible for the conduct of the study and you are expected to:

1. Ensure the study is conducted as described in the protocol/study outline approved by this office
2. Advise this office of any change to the protocol, methodology, study documents, research team, participant numbers or start/end date of the study
3. Report to this office as soon as possible any concern, complaint or adverse event arising from the study

Failure to do any of the above may invalidate the insurance agreement and/or affect sponsorship of your study i.e. suspension or even withdrawal.

On receipt of this letter you may commence your research but please be aware other approvals may be required by the host organisation if your research takes place outside the University. It is your responsibility to check with the host organisation and obtain the appropriate approvals before recruitment is underway in that location.

May I take this opportunity to wish you every success for your research.

Yours sincerely

Dr Martina Prude
Head of Research Governance

Tel: 023 8059 5058
email: rgoinfo@soton.ac.uk

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Appendix K Certificate of Approval from King Chulalongkorn Memorial Hospital

COA No. 162/2012
IRB No. 044/55

INSTITUTIONAL REVIEW BOARD
Faculty of Medicine, Chulalongkorn University
1873 Rama 4 Road, Patumwan, Bangkok 10330, Thailand, Tel 662-256-4455 ext 14, 15

Certificate of Approval

The Institutional Review Board of the Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand, has approved the following study which is to be carried out in compliance with the International guidelines for human research protection as Declaration of Helsinki, The Belmont Report, CIOMS Guideline and International Conference on Harmonization in Good Clinical Practice (ICH-GCP)

Study Title : An Exploration of Thai Women's Breastfeeding Experiences and Support Mechanisms
Study Code : -
Principal Investigator : Mrs. Pornpimol Apartsakun
Study Center : The Thai Red Cross College of Nursing.
Review Method : Expedited
Continuing Report : At least once annually or submit the final report if finished.
Document Reviewed :

1. Research Proposal Version 1.0 Dated 27 February 2012
2. Protocol Synopsis Version 1.0 Dated 27 February 2012
3. Information sheet for research participant (Phase 1) Version 1.0 Dated 27 February 2012
4. Information sheet for research participant (Phase 2a) Version 1.0 Dated 27 February 2012
5. Information sheet for research participant (Phase 2b) Version 1.0 Dated 27 February 2012
6. Informed Consent Form for legal guardian Version 1.0 Dated 27 February 2012
7. Consent Form Version 1.0 Dated 27 February 2012
8. Interview Schedule (Phase 1) Version 1.0 Dated 27 February 2012
9. Interview Schedule (Phase 2a) Version 1.0 Dated 27 February 2012
10. Needs Assessment Tool (An Example) Version 1.0 Dated 27 February 2012

Signature:.....
(Emeritus Professor Tada Sueblinvong MD)
Chairperson
The Institutional Review Board

Signature:.....
(Assistant Professor Apichai Vasuratna MD)
Member and Assistant Secretary
The Institutional Review Board

Date of Approval : March 8, 2012
Approval Expire Date : March 7, 2013

Approval granted is subject to the following conditions: (see back of this Certificate)

Appendix L 'Breastfeeding Support Tool'

Item	Yes	No	Unsure	Nursing Care
1. Are you considering breastfeeding your baby?				If 'yes' continue question 2 If 'no' go to question 33
2. Do you know the benefits of breastfeeding? (If yes, what are they?)				See section 'General knowledge about breastfeeding'
3. Do you know how long you should breastfeed your babies?				
4. Do you think feeding both formula milk and breast milk is acceptable?				
5. Do you think you have sufficient breast milk for your baby?				See section 'Lactogenesis'
6. Do you know what you could do to promote enough breast milk to feed your baby?				
7. Are you aware that milk flow is sometime delayed?				
8. Do you think mothers who are overweight; have breast augmentation or those with larger or smaller breasts tend to have enough breast milk?				
9. Do you believe that certain herbs, foods, drugs, and drinking warm water could help stimulate breast milk production?				See section 'Galactogogues'
10. Do you know when you should start feeding other foods and drinks to your baby (or weaning breastfeeding)? (e.g. water, banana)				See section 'Feeding other foods and weaning BF'

Item	Yes	No	Unsure	Nursing Care
11. Can you tell that your baby is having enough breast milk?				See section 'Baby's requirements and evaluating baby having sufficient breast milk'
12. Do you know if it is necessary to wake the babies up from sleep to feed?				
13. Does your baby have difficulty latching on?				'Help practice proper latching on and breastfeeding position'
14. Do you have short, inverted, or cracked nipples?				
15. Do you know about breast hygiene?				
16. Have you ever heard about nipples shield?				See section 'Using a nipples shield'
17. Do you know when and how to use a nipple shield?				
18. Do you plan to continue breastfeeding when you return to work?				See section 'Preparing to breastfeed before returning to work'
19. Do you think that you can exclusively breastfeeding for 6 months?				
20. Do you know how to sustain breast milk supply to feed your baby when you return to work?				
21. Do you know how to prepare yourself before returning to work so that you can continue breastfeed your baby?				
22. Are you able to express breast milk by hand?				'Help practice express breast milk by hand & see section 'Using breast pumps'
23. Are you aware of using breast pumps?				

Item	Yes	No	Unsure	Nursing Care
24. Do you have any difficulty in breastfeeding?				Go through each section that women require
25. Do you feel being pressured or stressed about breastfeeding?				Have a discussing with women
26. Do you have confidence to breastfeed your baby? (ask which part of services do you want nurses to help)				Go through each section that women require
27. Does your baby, or do you have any post-delivery illness which could interrupt breastfeeding?				Refer for further support
28. Do you still need breastfeeding support from nurses or doctors?				
29. Do you know where to get breastfeeding information and support after being discharged from the hospital?				Provide leaflets & See section 'Other importance issues'
30. Would you like more information regarding breastfeeding, self-care, or caring your baby? (e.g. using drugs, or contraceptive methods)				Go to each section & See section 'Other importance issues'
31. Do you have anyone to help you after you are discharged from the hospital?				Discussing BF either if family not support
32. Does the person looking after you e.g. your partner, mothers-in-law, mother or a person who you live with support breastfeeding?				
33. If you already decide not to breastfeed, would you like to receive more information regarding formula milk?				See section 'Formula feeding'

Appendix M Leaflets for nurses

1. General knowledge about breastfeeding

- The World Health Organization (WHO) has strongly recommended that mothers exclusively breastfeed their children for at least six months and continue breastfeeding along with providing additional nutritional supplements for two years or beyond (World Health Organization 2010b).
- 'Breast milk' is known to be the best food for babies (World Health Organization 2010b).
- Formula milk is not and should not be used as a substitute for breast milk (World Health Organization 2008).
- Formula milk is not harm free; a higher possibility of being allergic to cow-milk protein and milk contamination are some of the disadvantages (Riordan & Smith 2010).
- Benefits of six months exclusive breastfeeding are;
  - Babies 'getting strong' or 'not getting sick easily';

Supportive information: helping to prevent both respiratory tract and gastrointestinal tract infections could be claimed as short term benefits to six months exclusive breastfed babies (Hale 2007; Kramer & Kakuma 2009; Meyers 2009).

- 'Promoting warmth and love' and 'creating a bond between mothers and the babies';

Supportive information: the bonding and attachment between mothers and babies will have an impact on their future emotions and personality (Bowlby 2005).

- Being 'very economical'; breastfed mothers could save about 80 pounds per month or nearly 1000 pounds per year (Thai Breastfeeding Organization 2012).
- Help reduce the risk of postpartum haemorrhage (Hoddinott et al. 2008; Ministry of Public Health and Ministry of Social Development and Human Security Thailand 2008).

2. Lactogenesis

- Most mothers do have sufficient breast milk for their babies or even twin babies (Riordan & Smith 2010).
- Regular sucking at the breasts is the key to achieve having a sufficient supply of breast milk (including feeding at night) (World Health Organization & UNICEF n.d.).
- Misunderstandings about having insufficient breast milk;
  - Having breast engorgement = having sufficient breast milk

(In fact, breast engorgement can naturally occur when a woman's body is initially producing breast milk, however once breastfeeding is well established, the engorgement is less common (Riordan & Smith 2010).

  - Not having copious breast milk during the first few days post-delivery = having insufficient breast milk

(In fact, the average breast milk flow starts on the third or fourth day post-delivery, but some mothers may experience delay of lactogenesis up to or over eight days postpartum due to various causes (Riordan 2010a).

  - Conditions that could delay breast milk production are; first time mothers, mothers during post C/S delivery or mothers undergoing stress (Riordan 2010a).
  - Having smaller or larger breast does not affect breast milk production (Riordan 2010a).

3. Galactogogues

- 'Galactogogues', are substances found in certain kinds of herb, food, and drugs which help promote breast milk production (Powers 2010).
- Facts related to traditional galactogogues are;
  - Ginger and banana blossom;

Supportive information: this traditional belief is not consistent with the study which found that there was no differences in the starting time of lactation between mothers who take 40 cc of ginger drink every eight hours with those who did not (Srisuwaphan 2013).

  - Taking warm drinks before breastfeeding and avoiding drinking cool drinks;

Supportive information; it was found that breastfeeding mothers seem to be more often thirsty than non-breastfeeding mothers, particularly when it is closer to baby's feeding time (World Health Organization & UNICEF n.d.). On

the one hand there is no evidence that supports whether dinking cool or warm drink has any effect on breast milk production. On the other hand, having sufficient fluid intake is necessary for breastfeeding mothers (World Health Organization & UNICEF n.d.).

- 'Motilium' which has the scientific name of Domperidone has been used for help stimulate breast milk production;

Supportive information; Metoclopramide and Domperidone are drugs commonly used to help stimulate breast milk production in many countries (Powers 2010). Although both drugs are safe for stimulating lactation, metoclopramide is known to have some side effects, such as dizziness and nausea whereas domperidone does not (Powers 2010).

4. Feeding other foods and weaning breastfeeding

- The World Health Organization (WHO) has strongly recommended that mothers exclusively breastfeed their children for at least six months and continue breastfeeding along with providing additional nutritional supplements for two years or beyond (World Health Organization 2010b).
- Breast milk is the main food during the first year (Thai Breastfeeding Organization 2008).
- Weaning off breastfeeding could be achieved by reducing breastfeeding at a rate of one meal within three days; therefore the process of weaning could be completed within two weeks with minimal risks of pain from breast engorgement (Thai Breastfeeding Organization 2008).
- Observing baby's interest in the choice of food at an average age of six months; however do not worry if the baby refuses the food. Try feeding the food again in about two weeks (Thai Breastfeeding Organization 2008).
- Supplement foods could start at six months, due to the baby's digestive system is better developed (Thai Breastfeeding Organization 2008).
- Start with one kind of food, about two to three teaspoons per feeding; for example egg yolk, liver and soup (Thai Breastfeeding Organization 2008).

5. Baby's requirements and evaluating baby having sufficient breast milk (World Health Organization & UNICEF n.d.)

- Frequency of feeding;

- Feeding on demand or every three to four hours during the first four weeks after birth, and five to six times per day in the later stage.

- Babies should be woken to breastfeed if they sleep longer than the expected feeding time.

➢ Evaluating babies for having sufficient breast milk;

- Two reliable signs which may indicate that babies are not getting sufficient breast milk are; babies weighting less than their birth weight within two weeks postpartum or having a weight gain less than 500 grams a month. Another indicator is that their urine is a dark yellow colour and has strong smell due to dehydration, and the baby is urinating less than six times a day.

➢ Misunderstanding that babies crying after breastfeeding = they are still hungry

- In fact, babies falling asleep do not only mean that they had enough milk and babies crying do not necessarily mean they are still hungry. Discomfort from wet diapers, extreme temperature, or simply having a bad day could be some of the causes.

6. Proper latching on and breastfeeding position (Riordan & Hoover 2010)

➢ Help in positioning/latching on by nurses, particularly with first time mothers having a delay of milk flow, or for babies having improper sucking practice, could help prevent mothers from having cracked nipples.

➢ Although there are many types of positioning which are considered appropriate for mothers to practice, the cradle or the classic positioning seems to be the most commonly used position and it is also commonly used for carrying babies.

➢ Some mothers may find the football or clutch holding position beneficial because it can help avoid contact with the Caesarean wound (Riordan & Hoover 2010). This issue suggests the importance of the health care professionals informing mothers and practicing these positions, and to observe what position might work best for each mother.

➢ Observing proper latching on; baby's mouth is well sealed onto the areola area; if not it might cause nipples pain, or that nipples become sore and cracked.

➢ Nipple that are sore or cracked: reassure mothers that such conditions are temporary and will improve; breast cream could be used in moisturise nipples.

- Nipples hygiene; express a small drop of breast milk on nipples after a bath.

7. Using a nipples shield

- Although positioning and latching on are important for success in breastfeeding, mothers who have difficulty breastfeeding directly from nipples tend to give up breastfeeding during the early postnatal period. Health care professionals should demonstrate to mothers how to use nipple shields correctly, as well as have the opportunity to practice using them before being discharged from the hospital (Walker 2010).
- A change of breastfeeding position and using thinner nipple shields could be effective in helping mothers with short nipples or mothers who are not able to established breastfeeding (Riordan & Wambach 2010).
- Some problem might be occur when using a nipples shield, such as the complaint that 'it falls off' and 'it didn't stick well'; a small amount of water should be applied before putting it on to help grip the device to adhere to the breast (Walker 2010).

8. Preparing to breastfeed before returning to work (Rojjanasrirat & Wambach 2010)

- Mothers could start expressing breast milk during the second month.
- A few weeks prior to returning to work, mothers should have acquired skills in expressing their milk (hand or breast pumps), building a stock of breast milk, preparing and feeding breast milk from a bottle.
- Not to introduce the pacifier before breastfeeding is well established.
- Breastfeed baby before going out to and returning from work.
- Expressing breast milk two to three times while at the workplace is required to maintain an adequate breast milk supply (takes a total of less than an hour).
- Wash hands before expression and use a clean capped glass or plastic container (usually could be bought from department store and they usually comes with instruction).
- Expressed breast milk should be kept in a refrigerator (less than six to eight hours prior to refrigeration is safe).

- One bag of breast milk should contain approximately the same amount of milk per feeding for the baby.
- Expiration of the breast milk
  - In normal temperature: four to six hours
  - Breast milk kept in refrigerator: within eight days (store in the inner section or the coolest part of the refrigerator). Breast milk in the container can be store with other foods.
  - In a normal freezer: two weeks
  - In a compartment refrigerator (two doors refrigerator): three months
  - In a deep-freezer: six months
  - Thaw breast milk (unfreeze): use within 24 hours
  - Label the container and use the oldest first
  - Do not refreeze thawed milk
- Preparing breast milk (Thai Breastfeeding Organization 2013)
  - The bags of breast milk to be used the next day should be moved from the freezer, at night, to thaw in the refrigerator for use for tomorrow (depending on how often the feeding is while a mother is not at home).
  - Place the bag in room temperature before feeding time (if the fat is still separated from other part then it could be warmed).
  - Breast milk could be warmed in warm water, not in a microwave or hot water (it reduces vitamins and antibodies; microwave could make breast milk too hot for feeding).
  - There is no harm in feeding cool breast milk (if the baby does not refuse).
  - Leaflets on how to continue breastfeeding should be provided to the participants before being discharged from the hospital.

9. Express breast milk by hand (World Health Organization & UNICEF n.d.)

- Being able to express breast milk by hand is a very useful skill for mothers due to its convenience.
- The health care professionals should demonstrate how to do hand expression on the first or second day postnatal due to the fact that it is more difficult to express when the breasts are still engorged.
- Mothers should practice it on their own; expression by others could cause pain.

- Each hand expression should take approximately 20 to 30 minutes, particularly in the first few days post-delivery.
- Mothers should wash their hands and prepare clean bottles or bags.
- Press and release on mothers' areola area.

10. Using breast pumps (Walker 2010)

- Make available of samples of different types of breast pumps and demonstrate on how to use them, could support breast milk expression and prolong breastfeeding, particularly for working mothers.
- The frequency of expression should be in consistent with breastfeeding the baby (approximately every three hours).
- Advantages and disadvantaged of different ways of expressing breast milk are;
  - Electric breast pump seems to be most effective but the budget and convenience of mothers should also be considered.
  - Conical breast pump (rubber bulb pumps) works quite well to help release breast milk when breasts are full early post-delivery, but it is not an appropriate breast pump to use, due to the possibility of contamination from the rubber parts it contains.
  - Hand expressing is very practical for many mothers due to its simplicity and lower contamination risks when hands are well washed and cleaned.

11. Formula feeding

- Formula milk is not a substitute for breast milk; therefore formula milk should not be used as a substitute for breast milk (World Health Organization 2008).
- Formula milk is not harm free; there is a higher possibility of the recipient being allergic to cow-milk protein and milk contamination are some disadvantages (Riordan & Smith 2010).
- Mothers should also know that many countries around the world are concerned about the negative side of formula milk (Thai Breastfeeding Organization 2007). The International Code of Marketing of Breast Milk Substitutes is strictly followed in many countries. The aim of this law is to protect babies' rights in avoiding being harmed by breast milk substitutes (World Health Organization 2008).

- Mothers who desire to formula feed should choose the specific formula for the baby.

12. Discussing with women

- Mothers' psychological factors affecting breast milk production may include lack of confidence, worry or stress, dislike of breastfeeding, and general tiredness (Riordan & Hoover 2010).
- Mothers should receive maximum essential information to guide breastfeeding, as well as convince their spouse and other family members that breastfeeding is best for babies (World Health Organization 2011).
- Talk to family members who have significant roles in looking after mothers and their babies especially spouse, grandmothers, and mothers-in-law about the importance of their role in supporting the mother and her baby, so that they could positively support breastfeeding. Do not forget to involve other family members who are carers to the mother (Gagnon & Sandall 2011).
- Referring mothers for further support is a step to successful breastfeeding (World Health Organization 2010b).

13. Other important issues

- Make sure leaflets about breastfeeding are available at the postpartum ward and they are given to the mothers before they are discharged from the hospital.
- Give the hospital contact number to the mothers for the future contact, should they have any queries regarding breastfeeding.
- Make known the professional webpage in relations to breastfeeding, such as the Thai Breastfeeding Organization web address.
- Advice on using contraceptive methods (Kennedy 2010);
  - Non-hormonal methods, such as condoms, or intrauterine devices (IUDs) are the safest choice for mothers during lactation
  - Progestin-only methods, such as minipill, injectables, or implants may increase breast milk supply
  - Combined oral contraceptives may reduce breast milk supply
- Consultation with doctor is required prior to taking any drugs during lactation.
- Demonstrate bathing a baby if required.

Appendix N Interview guide for participants who contributed to the interview in Phase I of the study

Study Title: Thai Women's Breastfeeding Experiences and Support Needs

Phase II: Evaluating the 'Breastfeeding Support Package' an initial review of nurses' and mothers' experiences of using the 'Breastfeeding Support Package'

Prior to the interview: The researcher will introduce herself as a PhD student of the University of Southampton. After that, the researcher will ensure that all the important information is given to the participants. For instance, time of the telephone interview will take approximately 15 minutes, participants are allowed to withdraw at any time during the interview, prior to record and note taking the interview, the researcher will ask for verbal permission as well as A 'token of appreciation', of a childrearing hand-book or a children story book in Thai will be sent to the participants who completed the interview.

Broad Questions:

1. If there are any questions that you think are not clear and need to be changed (please specify) (The researcher then start asking questions in the 'Breastfeeding Support Tool' from question 1 to 33 accordingly).
2. Are there any other relevant questions in relation to breastfeeding that you think should be included in the 'Breastfeeding Support Tool'? (Please specify).
3. Based on your experiences of breastfeeding your baby, do you think the 'Breastfeeding Support Tool' is a useful tool for breastfeeding mothers? (If yes, why?/ If no, why not?)
4. Other suggestions or comments.

In order to obtain better understanding, the researcher will prepare prompt open-ended questions to support the interview as follow:
- Could you please explain more…?
- Could you give an example of…?
- What makes you think that way?

Appendix O Interview guide for postpartum women

Study Title: Thai Women's Breastfeeding Experiences and Support Needs

Phase II: Evaluating the 'Breastfeeding Support Package' an initial review of nurses' and mothers' experiences of using the 'Breastfeeding Support Package'

Prior to the interview: The researcher will introduce herself as a PhD student of the University of Southampton. After that, the researcher will ensure that all vital information is given to the participants. For instance, the interview will take approximately 30 minutes and the participants could withdraw at any time during the interview, permission will be obtained for recording the interview and for note taking during the interview.

Broad Questions:

1. What is your experience about using the 'Breastfeeding Support Tool' on support related to breastfeeding that you received from nurses or other health care professionals at the postpartum ward?
2. In your experience how does the use of the 'Breastfeeding Support Tool' benefit you in breastfeeding?
3. What are factors which influence your decision to continue breastfeeding; do you plan to continue breastfeeding? If yes, how much longer?
4. What else could nurses do to support you to achieve six months' exclusive breastfeeding?

In order to obtain better understanding, the researcher will prepare prompt open-ended questions to support the interview as follow:

- Could you please explain more…?
- Could you give an example of…? and
- What makes you think that way?

Appendix P Interview guide for nurses who used the tool

Study Title: Thai Women's Breastfeeding Experiences and Support Needs

Phase II: Evaluating the 'Breastfeeding Support Package' an initial review of nurses' and mothers' experiences of using the 'Breastfeeding Support Package'

Prior to the interview: The researcher will introduce herself as a PhD student of the University of Southampton. After that, the researcher will ensure that all vital information is given to the participants. For instance, the interview will take approximately 45 minutes and the participants could withdraw at any time during the interview, permission will be obtained for recording the interview and for note taking during the interview.

Broad Questions:

1. How many times did you use the 'Breastfeeding Support Tool' with postpartum women and why?
2. What are the strengths or weaknesses of the 'Breastfeeding Support Tool'?
3. Could you describe your experience in using the 'Breastfeeding Support Tool' to provide breastfeeding support to the postpartum women admitted to the postpartum ward?
4. According to your experience, how does the 'Breastfeeding Support Tool' benefit you?
5. Which other aspects you think are important and want to add in the 'Breastfeeding Support Tool' to help it to be more complete?
6. What else could be done to help support postpartum women to achieve six months' exclusive breastfeeding?

In order to obtain better understanding, the researcher will prepare prompt open-ended questions to support the interview as follow:
- Could you please explain more…?
- Could you give an example of…?
- What makes you think that way?

Appendix Q Participant Information Sheet (PIS) for postpartum women

Study Title: Thai Women's Breastfeeding Experiences and Support Needs

Phase II: Evaluating the 'Breastfeeding Support Package' an initial review of nurses' and mothers' experiences of using the 'Breastfeeding Support Package'

Researcher: Mrs. Pornpimol Apartsakun

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Thailand 10330
Direct Telephone No. +66 (0) 2256 4092,
Ext 592
E-mail:pa10g10@soton.ac.uk

Ethic number

I would like to invite you to take part in this study which aims to explore mothers' experiences of using the 'Breastfeeding Support Tool' to facilitate the identification of your needs for breastfeeding support as well as your perceptions of the breastfeeding support provided by nurses or other health care professionals as a result of completing the tool. Prior to deciding, you need to understand why research is being done and why you were invited to take part. Please take time to read the following information carefully. Talk to others about this study if you wish. If there is anything that is not clear or you would like more information please ask. Take time to decide whether or not you would like to take part.

You do not have to participant in this study unless you wish to. You still receive the same services from health care professionals as a person who does wish to take part. If you decide to take part in this study, I will ask you to sign the consent form before proceeding to the next step which is the interview.

What is the purpose of this study?

This study aims to understand mothers' perspectives about experiences of using the 'Breastfeeding Support Tool' to facilitate the identification of your needs to support breastfeeding provided by nurses and/or other health care professionals. With valuable data gathered from the participants in the study, the researcher could then attempts to help nurses working at the hospital easily providing appropriate support to mothers to breastfeed.

Why was I invited to join the study?

All mothers who are admitted at postpartum ward at Chulalongkorn Memorial Hospital are our potential participants in this important study. You are personally invited to take part because you meet the study's inclusion criteria.

What do I need to do if I decided to take part in the study?

First you will need to sign a consent form which states that you are willing to take part in the study. Then an interview will take place at your bedside. You will also be asked for permission for the researcher to have the interview recorded and notes taken. During the interview, you will be asked about the experiences in using the 'Breastfeeding Support Tool' to facilitate the identification of your needs for breastfeeding support. The interview will take approximately 30 minutes.

What are the benefits in my taking part?

Your input will help improve our maternity care as well as services of nurses for mothers with newborns at Chulalongkorn Memorial Hospital and possibly at national levels.

Are there any risks involved?

There are minimal risks anticipated as a result of your participation in this study. Nevertheless, it is 30 minutes of your time. If you or your baby gets tired, the interview can be stopped. There will be a nurse around if you need any support during the interview. Nurses also could refer you to the Breastfeeding Clinic if further breastfeeding support is needed.

Will my participation be confidential?

The interview is being carried out under ethical and legal practice with full respect for participants' rights and confidentiality. All information provided will be treated as confidential and there no names would be made public.

What happens if I change my mind?

You are free to withdraw from this study at any time. Choosing to withdraw from the study will not have affect care and services you receive from the health care professionals. Your personal data will be deleted immediately after withdrawal.

What if there is a problem or I have a complaint?

Any complaints relating to the study can be addressed to:
Martina Prude, Head of the Governance Office, at the Research Governance Office, (The University of Southampton, Building 37, Highfield, Southampton, SO17 1BJ) Tel: +44 (0) 23 8059 5058
E-mail: rgoinfo@soton.ac.uk

Thank you for taking time to read

Appendix R Consent Form for postpartum women

Study Title: Thai Women's Breastfeeding Experiences and Support Needs

Phase II: Evaluating the 'Breastfeeding Support Package' an initial review of nurses' and mothers' experiences of using the 'Breastfeeding Support Package'

Researcher: Mrs. Pornpimol Apartsakun

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Researcher Thailand contact details:
Mrs. Pornpimol Apartsakun
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Pathumwan, Bangkok
Thailand 10330
Direct Telephone No. +66 (0) 2256 4092,
Ext 592
E-mail: pa10g10@soton.ac.uk.

Study reference:

Ethics reference:

Please initial the box (es) if you agree with the statement(s):

I confirm that I have read and understood the information sheet (insert date/version no.) and have had the opportunity to ask questions about the study. ☐

I understand that my participation is on a voluntary basis and I am free to terminate it any time that I want to. ☐

I agree to the confidentiality policy which was set out in the information sheet. ☐

I agree to take part in this research project. ☐

I agree to the use of direct quotes in any presentation of this research (verbal presentation or paper publication). ☐

I agree to audio recording and note taking during the interview. ☐

I agree that transcription of my interview can be used for the purpose of this study. ☐

Data Protection

I understand that information collected about me during my participation in this study will be stored on a password protected computer and that this information will only be used for the purpose of this study. All files containing any personal data will be made anonymous.

Name of participant (print name)……

Signature of participant……..

Date……

Appendix S Parental Consent Form

Study Title: Thai Women's Breastfeeding Experiences and Support Needs

Phase II: Evaluating the 'Breastfeeding Support Package' an initial review of nurses' and mothers' experiences of using the 'Breastfeeding Support Package'

Researcher UK contact details:
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1873 Rama IV Road,
Pathumwan, Bangkok
Thailand 10330
Direct Telephone No. +66 (0) 2256 4092,
Ext 592
E-mail: pa10g10@soton.ac.uk.

Study reference:

Ethics reference:

Please initial the box (es) if you agree with the statement(s):

I confirm that I have read and understood the information sheet (insert date/version no.) and have had the opportunity to ask questions about the study. ☐

I understand that my child's participation is on a voluntary basis and she is free to terminate it any time that she wants to. ☐

I agree to the confidentiality policy of my child which was set out in the information sheet. ☐

I agree to allow my child to take part in this research project. ☐

I agree to the use of my child's direct quotes in any presentation of this research (verbal presentation or paper publication). ☐

I agree to audio recording and note taking during the interview of my child. ☐

I agree that transcription of my child interview can be used for the purpose of this study. ☐

Data Protection

I understand that information collected about me during my participation in this study will be stored on a password protected computer and that this information will only be used for the purpose of this study. All files containing any personal data will be made anonymous.

Name of parent (print name)……

Signature of participant……..

Date……

Appendix T Participant Information Sheet (PIS) for nurses who used the tool

Study Title: Thai Women's Breastfeeding Experiences and Support Needs

Phase II: Evaluating the 'Breastfeeding Support Package' an initial review of nurses' and mothers' experiences of using the 'Breastfeeding Support Package'

Researcher: Mrs. Pornpimol Apartsakun

Researcher UK contact details:
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Thailand 10330
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Ext 592
E-mail: pa10g10@soton.ac.uk.

Ethic number

I would like to invite you to take part in this study which aims to explore nurses' experiences of using the 'Breastfeeding Support Package' in providing breastfeeding support to the postpartum women admitted to the postpartum ward. Prior to deciding, you need to understand why this research is being done and why you were invited to take part. Please take time to read the following information carefully. Talk to others about this study if you wish. If there is anything that is not clear or you would like more information please ask. Take time to decide whether or not you would like to take part.

You do not have to participant in this study unless you wish to. If you decide to take part in this study, I will ask you to sign the consent form before proceeding to the next step which is the interview.

What is the purpose of this study?

This study aims to understand nurses' experiences of using the package in providing breastfeeding support to postpartum women admitted to the postpartum ward. With valuable data gathered from the nurses working at the postpartum ward, the researcher could then attempts to evaluate and develop the 'Breastfeeding Support Tool' to be used by nurses in hope that it could help nurses working at the hospital to be able to easily provide appropriate support to mothers to breastfeed.

Why was I invited to join the study?

All nurses working at the postpartum wards whether standard, two beds or single beds wards are our potential participants in this important study. You are personally invited to take part because you meet the study's inclusion criteria.

What do I need to do if I decided to take part in the study?

First you will need to sign a consent form which states that you are willing to take part in the study. Then an interview will be set at your convenience time at your ward. You will also be asked for permission for the researcher to have the interview recorded and notes taken. During the interview, you will be asked about the experiences in 'Breastfeeding Support Package' in providing breastfeeding support to the postpartum women admitted to the postpartum ward. The interview will take approximately 45 minutes.

What are the benefits in my taking part?

Your input will help improve our maternity care as well as services of nurses for mothers with newborns at Chulalongkorn Memorial Hospital and possibly at national levels.

Are there any risks involved?

There are minimal risks anticipated as a result of your participation in this study. Nevertheless, it is 45 minutes of your time. If you get tired, the interview can be stopped.

Will my participation be confidential?

The interview is being carried out under ethical and legal practice with full respect for participants' rights and confidentiality. All information provided will be treated as confidential and there no names would be made public.

What happens if I change my mind?

You are free to withdraw from this study at any time. If you choose to withdraw from this study your personal data will be deleted immediately.

What if there is a problem or I have a complaint?

Any complaints relating to the study can be addressed to:
Martina Prude, Head of the Governance Office, at the Research Governance Office, (The University of Southampton, Building 37, Highfield, Southampton, SO17 1BJ) Tel: +44 (0) 23 8059 5058
E-mail: rgoinfo@soton.ac.uk

Thank you for taking time to read

Appendix U Consent Form for nurses who used the tool

Study Title: Thai Women's Breastfeeding Experiences and Support Needs

Phase II: Evaluating the 'Breastfeeding Support Package' an initial review of nurses' and mothers' experiences of using the 'Breastfeeding Support Package'

Researcher: Mrs. Pornpimol Apartsakun

Researcher UK contact details:
Mrs. Pornpimol Apartsakun
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Direct Telephone No
+44 (0) 2380595278
E-mail: pa10g10@soton.ac.uk

Researcher Thailand contact details:
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The Thai Red Cross College of Nursing
1873 Rama IV Road,
Pathumwan, Bangkok
Thailand 10330
Direct Telephone No. +66 (0) 2256 4092,
Ext 592
E-mail: pa10g10@soton.ac.uk.

Study reference:

Ethics reference:

Please initial the box (es) if you agree with the statement(s):

I confirm that I have read and understood the information sheet (insert date/version no.) and have had the opportunity to ask questions about the study. ☐

I understand that my participation is on a voluntary basis and I am free to terminate it any time that I want to. ☐

I agree to the confidentiality policy which was set out in the information sheet. ☐

I agree to take part in this research project. ☐

I agree to the use of direct quotes in any presentation of this research (verbal presentation or paper publication). ☐

I agree to audio recording and note taking during the interview. ☐

I agree that transcription of my interview can be used for the purpose of this study. ☐

Data Protection

I understand that information collected about me during my participation in this study will be stored on a password protected computer and that this information will only be used for the purpose of this study. All files containing any personal data will be made anonymous.

Name of participant (print name)……

Signature of participant……..

Date……

Appendix V Example cases of opening code (Phase II)

1. Bee (Nurse from uncomplicated ward)

Conversation			Opened code
(1)	1	Bee, how many cases have you used the tool with?	-
(2)	2	I used it with 4 cases	Using the tool with 4 postpartum women
(1)	3	How much time did each case take?	-
(2)	4 5 6 7 8 9 10 11 12 13	I think it depends on the knowledge of the mothers. Some people read it and could easily understand it. It is useful for mothers who have tried to breastfeed before but were unsuccessful. Those that could breastfeed for only two or three months then returned to work. These mothers would have a certain level of understanding. But for the new mothers, it should be explained right from the basic, so it took longer for them. Each case would take at least 25 minutes, but first time mothers would take at least 40 minutes because I have to explain to them, for example how milk is produced in their body, the use of nipple shield. In some case I would hear comments like "I know that already, this is how you do it…right?"	The tool would benefit mothers who had unsuccessful breastfeeding experience. Taking about 25-40 minutes in using the tool Spending longer time with new mothers
(1)	14 15	Could you please share your thoughts about the strength and weakness of this tool.	-
(2)	16	The weakness is that it seems to be jumping back and forth is some topic.	Experience having to jump back and forth on certain topic while using the tool
(1)	17	Do you have any suggestion for it?	-
(2)	18 19	I would like to be briefed. The nurses should be briefed about the tool before they use it, so they don't have to jump around and be able to	Requesting to be briefed about the tool and the leaflet before using them

Conversation			Opened code
	20	answer the patients right away. Have a leaflet and summarize the	
	21	information for us so we could answer the patients right away. For	
	22	example, arrange a course for nurses on the use of leaflets etc., when	
	23	knowledge of the nurses increase, they would be able to answer the	
	24	patients without having to look at the points in the leaflets. Another thing	
	25	is the language. If the nurses read for the patients, the language would	Containing too academic language
	26	sound very academic. Some questions are still hard to understand.	
(1)	27	Could you please give some example?	-
(2)	28	For example, the topic of block nursing service. Some part refers back to	Having difficulty understand “block of nursing care”
	29	another part. In my case I understand because I have been trained in	
	30	breastfeeding but some haven’t and they might get confused. If used by	
	31	nurses who haven’t been trained the patient would feel annoyed that she	
	32	has to turn back the page and read all the time. The nurses that have been	Suggesting that trained nurses should be the one using the tool
	33	trained should be fine. Some of them are. May be you could specifically	
	34	indicate to be handled by breastfeeding trained nurses.	
(1)	35	How many postpartum nurses are trained and not trained in breastfeeding?	-
(2)	36	They attend 3 days and 5 days external workshop and some have already	Less than half of the nurses are trained in breastfeeding support
	37	received training from Sriracha. Some haven’t been trained yet. Only Sa,	in overall
	38	Tok, Toy, including me, the department of gynaecology and midwifery	
	39	would be how much. Imagine, if at my department we have three people	
	40	who are trained and two untrained. Ok. It’s more than half. But at the	
	41	normal ward, only Toy who has been trained. If you put the two sections	
	42	together then less than the number of nurses trained in breastfeeding	
	43	support would be less than 50 per cent. This is just ANC and PP. I haven’t	
	44	included delivery room.	

Conversation			Opened code
(1)	45 46	You mentioned about language which sounds very academic in the tool, could you explain more on this point?	-
(2)	47 48 49 50 51 52 53 54 55 56 57 58 59 60	Like, when I talk to the patients, I have to do some changes. If I read it to them they may not understand. For example, the sentence that says…item 4 Do you think feeding both formula milk and breast milk is acceptable? They may not understand. I am not sure whether the mother was unconscious or not…so I would put it like…Is feeding the baby breast milk along with formula milk ok according to your opinion? It should be simple spoken language that conveys the meaning of the questions in the tool. The item 8 is 'Do you think mothers who are overweight; have breast augmentation or those with larger or smaller breasts tend to have enough breast milk?' I would say…Do you think that the size of big and small mother can affect breastfeeding or not? Because in education, for example, a mother who finished only 6th grade and had 4 children before, have already had experience in breast feeding. While some people who completed only grade 9 are first time mothers.	Some mothers have difficulty in understanding some question (questions 4 and 8) Suggesting to use simple spoken language Educational level affect mothers' understanding
(1)	61 62	You mean, the language of the tool should be adjusted to be more of spoken language.	-
(2)	63 64 65 66	Yes, and I also wanted to say that education can affect one's cognitive ability. You can sometimes spend a lot of time trying to explain things but they never understand. For example, after teaching mothers who completed only grade 6 or grade 9 they might still not fully understand.	Indicating that mothers with low education can have difficulty understanding the language
(1)	67	Are there any other weak points you see?	-
(2)	68 69	Actually an assessment tool doesn't take a long time to do, but it the teaching process. If the patient doesn't understand certain area then we	Taking only 5 minutes to complete the tool while spending long time in explaining the details to the mothers.

Conversation			Opened code
	70 71 72 73	should use the prepared leaflets to teach them. If it's just doing the tool alone and not include the nursing care, it should take only 5 minutes to complete. But if it's a first time mothers the nurse has to go into more details, such as details on how to hold a baby etc.	
(1)	74	How about number of questions. Do you think 33 questions are too much?	-
(2)	75	I don't think it's too much.	Having 33 questions is not too long
(1)	76	How about the three-level scale, of yes, no, and not sure?	-
(2)	77	It's good. It's very straight forward.	Having 3 scales is good
(1)	78	What are the strong points of this tool?	-
(2)	79 80 81 82	The strong point is that it can easily be part of the nursing care routine. It seems to implement what we do. Where the patient doesn't understand the tool would have references to certain section earlier and eventually they would.	The tool could easily be used for implementing nursing care Containing references which help mothers to have a better understanding
(1)	83 84	On the topic of nursing care there are both positive point and negative points.	-
(2)	85 86 87 88 89 90	That's right. For those who are OK, have been trained, they would be able to handle. Some people who haven't been trained may have to turn the pages back and forth. What I was telling you is that, to select a group of nurses who have been trained, etc. For those who haven't been trained you should brief them on leaflets more, or let them know that certain part they might have to refer back and forth.	Difficult to understand "block of nursing care" by untrained nurses Info in the leaflet should be briefed for untrained nurses
(1)	91	Are there anymore strong points?	-
(2)	92 93 94	I think it covers the topic of breastfeeding well. But it doesn't contain information on massage the breasts to stimulate milk flow. It should also contain information on massage to stimulate milk flow besides medicines.	Topics in the tool are well-covered Suggest to include topic of breast massage and drugs into the tool

		Conversation	Opened code
	95	Massages give the best result when it comes to stimulating milk flow. What	
	96	I felt, should have been in this tool is the presentation in points. Too many	The tool is too wordy
	97	letters then the conversation wouldn't flow so well. It should be number (1)	Suggesting adjustment in the style of the tool
	98	answer yes, no or not sure etc. If the mother's answer not sure then they	
	99	could refer to so and so question etc. So they could finish it one by one.	
	100	Sometime this can look very confusing.	
	101	For example item 1..... ☐ Yes	
	102	☐ No } for those answering no or not	
	103	☐ Unsure } sure/ Training required.....	
(1)	104	Do you think this layout should improve?	-
(2)	105	May be this way is good, have a round or circle check box. Then line up the	Suggest to add more details in "block of nursing care"
	106	yes, no and not sure below each other then be low it you could mention	
	107	"for those answering no or not sure/Training required…..	
(1)	108	Don't you think that would make it too long?	-
(2)	109	Yes, I think it's quite long, too long. I don't know. This is just a suggestion	Suggesting to put 'unsure' at the last choice
	110	for you. Or you might already have yes, no and not sure on the same line,	
	111	just make sure that not sure is the last choice. Try it.	
(1)	112	Are there anymore suggestions?	-
(2)	113	I think it is already ok, apart from the language which should be simple	Contain too academic language
	114	spoken language, such as Did you know that after you left the hospital	Some women find it difficult understanding question 29
	115	where you can continue to find breastfeeding support. The language that	
	116	you use here is like for those who graduated from a university with a	
	117	bachelor or master's degree. If they are no problem, they would	
	118	understand. But for those who only completed grade 3, 6, 4 or vocational	
	119	certificate, they would just sit blank for a while then I have to reread the	

Conversation			Opened code
	120	question for them again.	
(1)	121	How was your experience in using the tool?	-
(2)	122 123 124 125 126 127 128 129	Ummm (pause 3 sec)…there were some parts that I was not familiar with such as ginger tea and the reference that there is no proof that they help stimulate breast milk. I am not familiar with that at all. I have always thought that if you drink a lot of ginger drink, it will help stimulate your milk flow. But there are credible references which show that drinking a lot of water helps stimulate milk flow. Using your form could change the mindset of the nurses. They could gain new knowledge from this. It's also good that it's put in steps	Help nurses change their mindset Help nurses gain new knowledge
(1)	130	What do mean when you say it's good that it's put in steps?	-
(2)	131 132	For example, after the assessment, if mothers say they don't understand then you go back to teach them again and again.	Help nurses to re-explain things not understood
(1)	133	Do you think this tool is useful?	-
(2)	134 135	Yes, it does. It's a good source of information for both the nurses and patients.	Being a good source of info for nurses and mothers
(1)	136	Do you think this tool could really be put to use in the hospital?	-
(2)	137	Yes it could. You have to make a little adjustment. I think it should be OK.	Suggesting it can really be use at the hospital after making minor adjustments
(1)	138 139	Are there any other important thing that should also be included in the tool to make it more complete?	-
(2)	140 141	Just the massage to stimulate milk flow, warm press. The rest are well covered.	Suggesting to include breast massage and warm press in the tool
(1)	142 143	Do you think there are other services that nurses cold give to help promote exclusive 6 months breastfeeding?	-

		Conversation	Opened code
(2)	144 145 146 147 148	I think there should be training while they are at and after they left the hospital. That includes during ANC, when they come for delivery, post-delivery, and after the discharge. There should be a source that we can refer them to. For example, teenage mothers usually have low commitment; some of them just only want formula feed.	Training at ANC, DR, PP and after discharge from the hospital is important for success in breastfeeding
(1)	149 150	Where do you think breastfeeding be stress more, during ANC or postpartum?	-
(2)	151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168	I think during ANC then postpartum. You should ask whether the mother the mothers have good determination to breastfeed or not. This is a national issue. We should let them see that breast milk is really important. They should know that the decision is made before ANC, not during ANC. They should have the will before coming not to wait for the nurses to tell them that it's good then decided to breastfeed. I believe each one already have their own intention from the beginning. But it is also important during ANC because the period covers 9 months and they may change their mind. If you are trying to convince someone to change from bottle feeding to breastfeeding 3-4 days after delivery then I think it's impossible. It should be someone who has the determination right from the beginning. At a private hospital babies are given to the mother to look after within 24 hours and nurses are not allowed to give bottle milk. Western countries also have this type of regulation. If mother doesn't allow bottle feed for their baby they would be given a consent form. There will also be notice for doctors and nurses that these particular mothers intend to only breastfeed her baby. Even though they may face many problems, they usually will try very hard to breastfeed. When the babies cry, you don't	Services of the hospital should promote breastfeeding more especially at ANC and PP Feeling that breastfeeding is national issue Believing that women have made their breastfeeding decision during pregnancy Giving example of Baby's Friendly Hospital Lacking knowledge about expressing and storing breast milk by some mothers

	Conversation		Opened code
	169	have to be too sensitive and try to stop it. It better to let them cry.	
	170	Grandparents also like to shove bottles in their mouth. When you go home	
	171	sometime you don't have much choice. Grandparents' likes to bottle feed	
	172	the baby because babies sleep longer. They may not care much. Some told	
	173	that they didn't know that they can express and store milk when they go	
	174	back to work. On other things I don't have anything else.	

2. Naam (Nurse from private word)

Conversation			Opened code
(1)	1	With how many patients did you use the tool?	-
(2)	2	Six	Using the tool with 6 women
(1)	3	Could you comment on the strong point and the weak point of the tool?	-
(2)	4 5 6	The strong point of the tool is that it helps us to assess the patients in a more well-rounded way and also helps us to remember what conversation we had with the patient.	Help assessment to be more well-rounded/ Help remind the conversation
(1)	7 8	For each patient, approximately how much time did you use for the interview?	-
(2)	9 10 11 12 13 14 15	It depends on the level, 15-20 minutes, depending on the time I take to get my information across, depending on how much they ask the information from me case by case, their knowledge, basic understanding and their eagerness. Some patients who have high intention to breastfeed usually have more knowledge so I don't have to explain much to them. But in some case who has no knowledge about the benefit, the length of time to give, or how to do, then I had to take longer time to talk with.	Take 15-20 minutes in using the tool depending on women's basic knowledge
(1)	16 17	Amongst the 6 patients that you interview which type of patient do you find more, those who knows more or less?	-
(2)	18 19	Most of the patients have the knowledge. There was only one case that has little knowledge. There were four for G1 and two for G2.	4 first time mothers and 2 second time mothers
(1)	20 21	Were there any differences amongst these two group between first time pregnancy and not first?	-
(2)	22	No difference. The G2s who had a long gab between the first pregnancies	No differences between knowledge among first time and second

Conversation			Opened code
	23 24	tends to forget things. Their knowledge about breast milk is not so good. I needed to talk to them.	time mothers
(1)	25	How about the weak point of this tool?	-
(2)	26 27 28	If the form is used without prior review one might find the questions to be repetitive, such as question on the intention to breast feed and how long do you intend to breastfeed.	Questions could seem repetitive without prior review
(1)	29	Could you please explain each one for me?	-
(2)	30 31 32 33 34 35	For example the first question, on the intention to breastfeed… If we have read it before then we would know that we have to ask, “How long do you intend to breastfeed and do you know the benefit of breast milk?” If question one could be replace by “If you plan to breastfeed your baby, how long do you intend to do so?” Some patients have their own trend. We have to go to the second page to see.	The order of the questions is not well-arranged (q1 and 3)
(1)	36	Do you have any suggestion to improve?	-
(2)	37 38 39	To put it in order for example, 1st, the intention for breastfeeding followed by the length of time intended to breastfeed and then the benefit of breast feeding would make it ok.	Suggest to re-order questions (q1,3,2)
(1)	40	Are there any other questions you think should be shuffled?	-
(2)	41 42 43 44 45 46 47	I thought earlier that putting food supplements last might be better. It’s like you have finish talking the main point then move to talking about the food supplements might be better. Like do you know when you should give food supplement to your baby? It’s better if you put it late, after collecting milk makes more sense. The first point is the intension, followed by what should they do when they return home such as expressing and storing milk then the supplements. This will help them not to be confused,	Suggest to re-order questions (q10 move to q24)

Conversation			Opened code
	48	jumping back and forth.	
(1)	49	You mean put it in an order?	-
(2)	50	Yes, yes, put it according to the baby's development.	Feeling that the tool should be put in order
(1)	51	Was there any problem using the tool?	-
(2)	52 53 54 55 56	There wasn't any. I thought that if you line it up in series it would be smoother. If you have read it before there would be no problem in asking the questions. We can make a note to indicate which page it's on and put a check. But if it's in order it would be a better guide and less confuse jumping around.	Not having problem using the tool
(1)	57	How about the language used in the form?	-
(2)	58 59	Actually the language used is easy to understand. When asked, the patient would then know what you are asking for. You don't need to explain	Language used is easy to understand
(1)	60	So there is no need for more explanation.	-
(2)	61	yeah, no need. It's good.	Language used is good
(1)	62	What about the use of the word 'Kun (you)' in the question, is it ok?	-
(2)	63	The word has a soft tone. 'Kun (you)' or 'Kunmae (mother)' is fine.	Word used is polite
(1)	64	How about the 3 levels scales?	-
(2)	65 66 67 68	I think it's ok. It doesn't have to be too detailed. It's good that it has a place for "not sure" because sometimes they patients might not understand. It's better than just "yes" or "no". If you want to include the levels of yes and no then it will be too much. It's good this way.	Using 3 scales is good
(1)	69	Do you have problem with any question?	-
(2)	70 71 72	Open to read the question. Paused for about (1)5 sec……..,no. In the beginning I wasn't sure about something, but now no. May be it was just in the beginning when I started. It's fine.	Having problem using the tool at the beginning

Conversation			Opened code
(1)	73	After how many cases did you start to feel easier using the tool?	-
(2)	74 75 76	When I started doing the third case. Feeling easy for me refers to having a clearer understanding about the content, asking the questions more easily etc. and knowing what the scope of the questions are.	Feeling comfortable to use the tool after 2 cases
(1)	77	During this stage did you still feel you have to jump back and forth?	-
(2)	78 49 80 81 82 83 84 85 86 87 88 89 90 91	No I didn't feel I have to jump back and forth. I know where I can get the information, the information in inside. But the information is brief. Some people may want to ask more in-depth questions. When giving information to others, one has to study and know the details, for example, some people want to know if there are researches that back up the information given on the benefits of breast milk etc. For example, what the proven benefits of breast milk are over formula and what are those proves?, such as researches at graduate, post-graduate level. I have to tell them about a researches which compares between feeding breast milk for four months and six months which indicate 43 per cent differences between the two to help convince them the benefit of and promote breast milk. If I have any knowledge I would just mention it. For example, in some cases which they demand a lot of information, it's not just the basic information that they want. They have already read some of this information from the internet.	Experience some mothers need information with back up researches
(1)	92	How many participants were in this category among the six?	-
(2)	93 94 95 96 97	About three. The special case patients usually have less knowledge about this, just like what I have said. We have a case of poor knowledge and the other five have pretty good knowledge. Among the ones with good knowledge they have rather comprehensive information. How then we could encourage them to breast feed if not provide them with further in-	Experience some mothers want in-depth information while some want basic.

		Conversation	Opened code
	98 99 100 101 102	depth information. For cases with just basic knowledge we didn't have to provide them with in-depth knowledge on the benefit of breast milk. Some just want important basic information, such as it has the antibody, complete nutritional value, help prevent postpartum haemorrhage etc. Some people want to know more. It assures them the benefit.	
(1)	103	Should this information also to be included in the leaflets?	-
(2)	104 105	Yes…yes. These should be added. It will help the patients who needs in-depth information to encourage them to breastfeed	Suggesting to add in-depth info into the leaflet
(1)	106 107	Do you think this form is too simple for mothers who have a lot of knowledge?	-
(2)	108 109 110 111	Um…..Like this is fine, because what I have seen in researches related to breast milk, they are similar. The topics are also similar, no difference. It's just the details which need to be more in-depth. The topics are well covered.	Feeling that he tool is easy to use for mothers with both high and little knowledge about breastfeeding Topics are well-covered
(1)	112	Please, tell me about your experience in using the tool.	-
(2)	113 114 115 116 117 118 119	One of the good things is that it helps us remember the details of the conversation I had with the patient. Sometime we tend to forget that they might have not had any support when they are discharged from the hospital. Sometime we forget they have some problem. Sometime we only know that they have the intention to breastfeed but besides that we might forget to ask if they have any difficulties with breastfeeding or if they are under any pressure etc.	Help reminding to assess mother's problems
(1)	120	Were there any participants under stress?	-
(2)	121 122	Yes there were. Some did not get the amount of milk flow they expected to be enough to feed their baby hourly. They didn't understand why	Experience some women are under pressure from not having good milk flow

Conversation			Opened code
	123 124 125 126 127 128	something that seems simple is getting more and more difficult. So they would have the stress because there were uncertain whether they would be successfully in breastfeeding their babies. Some have other family members which have good milk flow and they would hear people talking 'how come she doesn't have good milk flow?' This is the kind of thing she would hear so she was feeling bad.	
(1)	129	Was this tool beneficial to the service you are providing for the patients?	-
(2)	130 131 132 133 134 135	It helps me improve the assessment of my patients in breastfeeding. The assessment is better rounded. With the leaflets it helps equip me with all the information I need. For example, some new nurses who are second year nurses may have limited knowledge about breast feeding, might have studied, but do not fully understand how to make the conversation. This information can then help them.	Help improve assessment to better rounded Info in the leaflet is well-covered Info in the leaflet could be used by new nurses in providing info to women
(1)	136	You mean help in the area that they really need?	-
(2)	137 138	Yes. Sometime we spend little time with them and they may not have yet share specifically what are their needs	Experience that mothers are not able to share their real needs under limited time
(1)	139	In reality, do you think this tool can be put to use?	-
(2)	140 141	The benefit of it is,..it can help assess whether the mothers can successfully breastfeed.	Help assess the successfulness of breastfeeding
(1)	142	How many nurses are working with you?	-
(2)	143	Five	There are 5 nurses
(1)	144 145	And how many are trainees? You have mentioned that this tool would be good for the new nurses. How many of your nurses are new?	-
(2)	146	Four are new and only one has training on breastfeeding support.	Having 1 trained nurse
(1)	147	Why only one nurse is trained on breast feeding support?	-

		Conversation	Opened code
(2)	148 149 150 151 152 153 154 155 156 157	In fact, you can't even call it a formal training because it was only a one-day thing. The proper one has to be 4-5 days. Actually I went for a different training and I had some training with a person who was formally trained on breastfeeding. There has been a plan for this training, but it has already been two years and it still did not happen. Ms. Oii, who worked on the 6th floor said that she will reorganize this training-breast milk again but I am not sure when. She is now writing up about the project. It seems it's a training on evaluation using Latch Score and use it when turning each nursing shift, such as holding position, nipple condition, these sorts of things. Evaluate to see if each mother can do all these things.	Received training from the trainees Having a training project on using LATCH score
(1)	158	Have you ever use latch score evaluation before?	-
(2)	159 160 161	No, I haven't really. But I know what it is because I have worked in the breastfeeding clinic before and that's what they use there. Yes, I actually did, but not much.	Having little experience using LATCH score
(1)	162 163	Besides was you have mentioned, could you think of any important point that might be missing and should be added in this tool?	-
(2)	164 165 166 167 168 169 170 171 172	This tool only focuses on what the mothers have to say, but doesn't include the practical knowledge such as holding position. It is a basic evaluation of their needs and how confident they are. It just what I feel. When it comes to the reality whether they can put them into action we then would need a different tool such as Latch score along with this, to ensure that after the knowledge part has be evaluated and supported, they can really put breastfeeding into practice and evaluate their success. This tool can't evaluate the success of breastfeeding but it can assess the confidence level, knowledge and attitude about breastfeeding. It can't	Help assess mothers' real needs, knowledge, and confident but not skill

Conversation			Opened code
	173	evaluate their skill.	
(1)	174	So you think that the practical aspect could be included in the tool.	-
(2)	175	Yes.	Suggesting to add practical aspect in the tool
(1)	176	Is there anything other topics that you would like to add?	-
(2)	177	No, that's it.	Having no other topics to add
(1)	178 179	Generally do you think you have to look up for much information personally to answer the patients using the tool?	-
(2)	180 181	Not much. For instance, if there are many benefits of breast milk, I would just choose a few important ones for both the mother and child.	Using personal info when providing info to the mothers
(1)	182	How about leaflets that you told should contain researches findings?	-
(2)	183	Information is just basic. It should also include results of researches.	Suggest to include research back up info into the leaflet
(1)	184 185 186	Generally, if the nurses studied the leaflets do you think they could provide sufficient information to the mothers if they didn't uses their personal sources?	-
(2)	187 188	Yes, they could generally. It's just only a few who want in-depth information.	Experiencing not needing much personal info Experience only some mothers want in-depth info
(1)	189 190	In conclusion you think that this tool can assess knowledge and vision of mothers regarding breastfeeding but not the practical part?	-
(2)	191 192 193	Yes, it can. But not on what is being practiced because follow up is necessary. You are only with them for a short time but the reality is we need to know if they are really practicing.	Helping to assess knowledge and attitude toward breastfeeding but not practice
(1)	194	As a nurse, how do you think you could contribute to their success?	-
(2)	195 196 197	Mostly it's all about following up. After we have given them the knowledge and understanding and practical skills then we need to follow up while they are at the hospital, after 4 hours, to see whether they can do it by	Early Follow-up is necessary to be successful in breastfeeding

Conversation			Opened code
	198 199 200	themselves. Not on the 2nd day or 3rd day. We should follow up right away. Every day, every shift, at least every 8 hours because the beginning part is very important and could indicate whether would be successful or not.	
(1)	201 202	What is the overall picture of the six cases that you used the tool with regarding their determination to breastfeed?	-
(2)	203 204	Everyone who got the information has determination to breastfeed for at least 6 months to 1 year, depending on how far they can go.	Having intention to breastfeed between 6 months to 1 year
(1)	205	What kind of jobs do they do?	-
(2)	206 207 208 209 210	They all have a job. They know that they should express and store milk. They know how to store breast milk. They all have prepared their breast pump. Those who know will prepare. Those who read will prepare. All of them. But I still think they should begin with expressing with their hands. Using pump alone can't get all of it out.	All participants have good knowledge and were well-prepared
(1)	211	What kind of pump do most mothers use…manual or electric?	-
(2)	212 213 214	Depending on their income level. Those with more income would use electric ones. There are two types, for single breast and both. Some of them bought and brought them along, really excellent.	The participants know about breast pumps
(1)	215	Is there anything that you would like to add?	-
(2)	216 217 218 219	There are patients at special ward who are usually well informed; we just only need to provide them more information to give them the confidence they need. I don't only inform the mother but also her relatives. The relatives are important part in this.	Perceived that mothers at special ward generally have knowledge about breastfeeding Women's relatives are important
(1)	220	When you use the tool were the relatives also present?	-
(2)	221 222	Yes, they were. The benefit is that the relatives also learn, because they are the ones who will support the mother. They can help reinforce.	Help relatives learn about breastfeeding Relatives are important provider of breastfeeding support at

Conversation			Opened code
	223 224 225	After discharged they also should have the knowledge because they are the ones who will continue to support, such as information about the benefit of breast milk etc.	home
(1)	226	How was the response of the relatives?	-
(2)	227 228 229 230 231 232 233 234 235	There were hundreds of really! They never knew about this. Some relatives thought the baby would cry a lot, but after they were informed about the benefits, and how formula milk can't replace its value they would all then understand the importance of breast milk. They would then support breast milk. The relatives are extremely important especially with the special ward patients. If the relatives are not supportive when we return to see the mother we would often see them asking for formula milk. It is because they can highly influence, not only the mother. Mothers needed support as well. That's also a positive point.	Received positive feedback from relatives after providing breastfeeding info Observing relatives who do not support breastfeeding would ask for formula milk Help relatives gain knowledge about breastfeeding
(1)	236 237 238	I see. Are there any other services that you see nurses and health professionals could do to help mothers to be successful in exclusive breastfeeding for 6 months?	-
(2)	239 240 241 242 243 244	The difficulty is, we have a breastfeeding clinic which doesn't really work. We should have someone there for people to consult with, people should be able to revisit the place, or it should be able to convince to the people to use the service there. Appointment should be made not only the time when the mothers have problem and when they come there is no room to accommodate them.	Having a breastfeeding Clinic which doesn't really work Requesting for a breastfeeding consultant and a venue
(1)	245	I think there is a room here for breastfeeding clinic.	-
(2)	246 247	There is a room but it's hardly being used. Before it was used as a breastfeeding clinic, it used to run with sor-por-sor-kor budget, so there	Having no venue for mothers to consult at the ward

Conversation			Opened code
	248 249 250	was sufficient fund. There is a regular nurse who sits there. Now it's on the 5th floor, they are making a project to increase breastfeeding and prevent breast engorgement, that's why there is a room. It's just for them.	
(1)	251	Can we send our patients there?	-
(2)	252 253	Yes, you could but they don't formally serve us. But if we have a patient we could send. Before, we used to send our patients there, difficult cases.	Experiencing the services of breastfeeding is limited
(1)	254	Having only a room may not be sufficient.	-
(2)	255 256 257 258	Yes, there should also be staff…there should also be someone there. What they are doing is just putting someone there for a short time….she is not there all day. How could our patients consult with them then? Yes, there is a breast milk clinic which is not very successful.	Suggest to have a full time staff working at the breastfeeding Clinic
(1)	259 260	What you are trying to say is, you want the breastfeeding Clinic to work ….because….?	-
(2)	261 262 263	I mean there should regularly be someone there, someone with knowledge and capacity who could really help these people. Not just giving consultation but also helping them solve their problem.	Suggest to have experienced staff who can really help
(1)	264	Do you think nurses can do this?	-
(2)	265 266 267 268 269 270	Yes, but if they also get the training it would be good. It could be our permanent nurse. There are things if without hand-on experience then would be difficult to put into practice. In my own experience, for example, a mother with white pimples on the nipples. The doctor said its puss and the patient should take medication. But from my training it isn't. It's only blocked milk duct. A simple pick and milk would pour.	Feeling it would be difficult for nurses without experience or training to help solve problems Experiencing contradictory ideas between nurse and doctor
(1)	271	What did you do then?	-
(2)	272	I just used a needle and gave it a tiny pick. I heard this in the training.	Helping in solving problem about milk block

		Conversation	Opened code
	273 274 275 276	They also show the illustration. They looked exactly the same. I just used a needle and gave it a little poke. It's not puss. It bulges out and it looked quite clear. With a little poke the milk would shoot out and the patient would quickly feel no pain.	
(1)	277	I see.	-
(2)	278 279 280 281 282 283 284	Those who had breastfeeding experience would know this but those who haven't had wouldn't know. They would agree, if the doctor says its puss then they would think it puss and they would not let the baby breastfeed. In this case the opportunity is lost. It is an actual case of one of the patient who has already returned home. After about a month she had a problem and wanted to have a consultation with us. What if there isn't a clinic. She called the building where she was.	Feeling that nurses with experience would know about milk block problem while un-experience wouldn't Experience a woman unable to consult due to there was no clinic at the hospital
(1)	285	In the service do you hand out leaflets or give training?	-
(2)	286	We show video about breastfeeding.	Showing VDO about breastfeeding
(1)	287	What is in the video?	-
(2)	288 289	It is about breastfeeding but very basic knowledge. It shows how breast milk is made in mother's body. How it oxytocin is made?	VDO contains basic info about lactogenesis
(1)	290	Is this service for every patients, or given at individual request?	-
(2)	291 292 293 294 295 296	The videos are shown in the room during mother's free time. We put it on before initial breastfeeding for them to have a good understanding about breast milk. There are two videos, one is about breastfeeding and the other is on baby care. The infant ward brought it for us so the mother can see both….the baby care one contains topics like cord care, baby bath, baby wrapping etc.	Showing VDO in women's room before initial breastfeed VDO contains info about breastfeeding and babies' care
(1)	297	Are these available in every patient's room?	-

Conversation			Opened code
(2)	298 299	We show them to every room. We use just one set. We just take it around. Anyone who would like to have a copy, we would make for them.	Having 1 set of VDO but providing copies upon mothers' demand
(1)	300	Is there any other suggestion?	-
(2)	301 302 303 304 305 306 307 308 309	Yes, we do have some problem with doctors regarding breast milk. Now they are working on preventing babies from weight loss or losing weight lower than the level that they set. Whenever a baby's weight goes pass this level they would give formula along with breast milk. They follow the weight each day; for example, if the weight gets lower than 10 per cent of the actual weight. This…what the problem is now. The doctor doesn't allow the baby's weight to drop 10 percent of its actual weight in a day. Therefore even if a mother has excellent milk flow, if her baby's weight dropped below the set level that day, the baby would still be formula fed.	Doctors will offer formula milk for babies who had over 10% weight loss
(1)	310	How long has this practice been going on?	-
(2)	311	Not very long, about 6 months.	Since 6 months
(1)	312	Who is the one who indicates that the baby weight is below the level?	-
(2)	313 314 315 316 317 318 319 320 321	The new-born room. We have a special new-born room on the 5th floor. The nurse there would weigh the baby and the doctor would come and check every morning. The doctor would come and check baby's' health every morning and they would read the report. They said that if the baby loses a significant amount of weight there is an increased tendency they will develop jaundice. According to their study of the trend of risk they would definitely add the formula feed. This is also one of the obstacles hindering exclusive breastfeeding. The second is that we do not let babies drink from a cup…the doctors also will not take any responsibility if the baby aspirate.	Doctors prioritize on preventing jaundice in babies Doctors disagree cup feeding

Conversation			Opened code
(1)	322	So it seems that they do not support cup feeding.	-
(2)	323	Yes, they do not allow cup feeding. They are not OK with it.	Doctors do not support cup feeding
(1)	324	How about expressed breast milk in a bottle?	-
(2)	325 326	Breast milk in bottles is fine. Normally they do not want the baby to have it in bottle because they do not want babies getting used to pacifier.	Bottle feeding could cause nipple confusion
(1)	327	What's your opinion about this issue?	-
(2)	328 329 330 331 332 333 334	I don't have any strong opinion about that even though I don't really agree with what the doctor said, because of the babies are used to the bottles then it's really difficult to breastfeed again. We have to start training them right from the beginning again...because the babies have already developed their sucking style for the bottle which include biting. If they change to breastfeeding they would continue to bite and would make it extremely difficult to breastfeed.	Disagreeing about bottle feeding Felling concerned about difficulty to train babies to breastfeed after bottle fed
(1)	335	And are you ok with breast milk from bottles?	-
(2)	336 337 338 339 340 341 342 343 344 345 346	The negative point of breast milk in bottles is that after a while the production decreases because your breasts are not properly stimulated. Some mothers run out of milk in just a month. What a waste. Those with good milk flow would last longer. The babies who drink mother's milk from bottles are usually the ones having a lot of difficulties sucking from breasts, we would then train them. For example for mothers who have invert nipples and have tried the equipment to help but didn't work, we then would have to teach them to express by hand. We would recommend them to hand express rather than using breast pump. The pumps only suck without other form of stimulation to the breast. We would teach them how to massage, showing them good spots to massage which would help	Witnessing mothers who give breast milk in bottle run out of breast milk quickly Recommending hand expressing rather than using breast pumps Believing that breast massage could help stimulate milk flow

		Conversation	Opened code
	347 348	to stimulate milk flow. We would advise them how many time they should massage to best stimulate to help the milk flow last longer.	
(1)	349	Do you have any recommendation on other topic such as the leaflets?	-
(2)	350 351 352 353 354 355 356 357 358 359 360	Besides motilium that is used to stimulate breast milk there are also other herbs also. More things should be mention because there are many way you can do stimulate breast milk. They mentioned that it could be as good as motilium, up to 10% increase. This is what I have heard from obstetrics and gynaecology doctors. I am not sure about the research results on these herbs. But they said they are as good as motilium. But sometime just one tablet of motilium would give a good result for some mothers. It might also have to do with mother's psychological condition. A mother told me that she just took one tablet and she got a good milk flow. I told her that's amazing. I felt that it might have to do with the level of stress she was having. On other issues I don't think I have any more to say.	Believing that drugs, herbs, mothers' psychological condition effect on breast milk production

3. Participant 16 (participant who contributed the interview from Phase I)

Conversation			Opened code
(1)	1	Regarding what we have discussed earlier on breastfeeding, now the tool is completed, and ready to be used with postpartum women. What I would like to do is to ask you to share your opinion whether the questions in the tool is easy to understand or if there is anything that you are not sure with or think that could be changed to improve the tool for the betterment of understanding. Your interview will be approximately 10 minutes. I will begin to read the questions in the tool one at a time. Please let me know if you have any difficulty understanding any question and suggest how they might be improved. Question 1 Are you considering breastfeeding your baby?	-
(2)	2	Yes, good.	Having good understanding of question 1
(1)	3 4	Question 2 Do you know the benefits of breastfeeding? (If Yes, what are they?)	
(2)	5	Yes, fine.	Having good understanding of question 2
(1)	6	Question 3 Do you know how long you should breastfeed your babies?	
(2)	7	Yes, it's ok.	Having good understanding of question 3
(1)	8 9	Question 4 Do you think feeding both formula milk and breast milk is acceptable?	
(2)	10 11 12 13	On question 4 you could also mention the time span, for example, after 3 months, because some people might only have breast milk only during early postpartum. Approximately how many months we can use formula milk along with breast milk. For example, some people have to go back to	Not clearly understanding q4 Suggesting to include time span before starting to use formula milk along with breast milk (into question 4)

Conversation			Opened code
	14 15 16	work. I see. Question 5 Do you think you have sufficient breast milk for your baby?	
(2)	17	Yes, good.	Having good understanding of question 5
(1)	18 19	Question 6 Do you know what you could do to promote enough breast milk to feed your baby?	
(2)	20	Yes, good.	Having good understanding of question 6
(1)	21	Question 7 Are you aware that milk flow is sometime delayed?	
(2)	22	Yes, good.	Having good understanding of question 7
(1)	23 24 25	Question 8 Do you think mothers who are overweight; have breast augmentation or those with larger or smaller breasts tend to have enough breast milk?	
(2)	26	Yes, fine.	Having good understanding of question 8
(1)	27 28	Question 9 Do you believe that certain herbs, foods, drugs, and drinking warm water could help stimulate breast milk production?	
(2)	29	Yes, fine.	Having good understanding of question 9
(1)	30 31	Question 10 Do you know when you should start feeding other foods and drinks to your baby (or weaning breastfeeding)? (e.g. water, banana)	
(2)	32	Yes, fine.	Having good understanding of question 10
(1)	33	Question 11 Can you tell that your baby is having enough breast milk?	
(2)	34	Yes, it's ok.	Having good understanding of question 11
(1)	35 36	Question 12 Do you know if it is necessary to wake the babies up from sleep to feed?	
(2)	37	Yes, it's ok.	Having good understanding of question 12
(1)	38	Question 13 Does your baby has difficulty latching on?	

Conversation			Opened code
(2)	39	Yes, it's ok.	Having good understanding of question 13
(1)	40	Question 14 Do you have short, inverted, or cracked nipples?	
(2)	41	Yes, fine.	Having good understanding of question 14
(1)	42	Question 15 Do you know about breast hygiene?	
(2)	43	Yes, fine.	Having good understanding of question 15
(1)	44	Question 16 Have you ever heard about nipples shield?	
(2)	45	Yes, fine.	Having good understanding of question 16
(1)	46	Question 17 Do you know when and how to use a nipple shield?	
(2)	47	Yes, fine.	Having good understanding of question 17
(1)	48 49	Question 18 Do you plan to continue breastfeeding when you return to work?	
(2)	50	Yes, fine.	Having good understanding of question 18
(1)	51 52	Question 19 Do you think that you can exclusively breastfeeding for 6 months?	
(2)	53	Yes, fine.	Having good understanding of question 19
(1)	54 55	Question 20 Do you know how to sustain breast milk supply to feed your baby when you return to work?	
(2)	56	Yes, it's ok.	Having good understanding of question 20
(1)	57 58	Question 21 Do you know how to prepare yourself before returning to work so that you can continue breastfeed your baby?	
(2)	59	Yes, it's ok.	Having good understanding of question 21
(1)	60	Question 22 Are you able to express breast milk by hand?	
(2)	61	Yes, it's ok.	Having good understanding of question 22
(1)	62	Question 23 Are you aware of using breast pumps?	
(2)	63	Yes, it's ok.	Having good understanding of question 23

Conversation			Opened code
(1)	64	Question 24 Do you have any difficulty in breastfeeding?	
(2)	65	Yes, it's ok.	Having good understanding of question 24
(1)	66	Question 25 Do you feel being pressured or stressed about breastfeeding?	
(2)	67	Yes, it's ok.	Having good understanding of question 25
(1)	68	Question 26 Do you have confidence to breastfeed your baby?	
(2)	69	Yes, it's ok.	Having good understanding of question 26
(1)	70 71	Question 27 Does your baby, or do you have any post-delivery illness which could interrupt breastfeeding?	
(2)	72	Yes, it's ok.	Having good understanding of question 27
(1)	73 74	Question 28 Do you still need breastfeeding support from nurses or doctors?	
(2)	75	Yes, fine.	Having good understanding of question 28
(1)	76 77	Question 29 Do you know where to get breastfeeding information and support after being discharged from the hospital?	
(2)	78	Yes, fine.	Having good understanding of question 29
(1)	79 80	Question 30 Would you like more information regarding breastfeeding, self-care, or caring your baby? (e.g. using drugs, or contraceptive methods)	
(2)	81 82	Question 30 is too difficult and there are many points asked in the same question. It should be separated, one issue at a time.	Having more than one point in question 30 Suggesting that each question should not contain multiple ideas
(1)	83 84	Question 31 Do you have anyone to help you after you are discharged from the hospital?	-
(2)	85	Yes, it's ok.	Having good understanding of question 31
(1)	86 87	Question 32 Does the person looking after you e.g. your partner, mothers in law, mother or a person who you live with support breastfeeding?	

		Conversation	Opened code
(2)	88	Yes, it's ok.	Having good understanding of question 32
(1)	89 90	Question 33 If you already decide not to breastfeed, would you like to receive more information regarding formula milk?	
(2)	91 92	This is very good….shouldn't be missed…because I don't have milk. You should have this question.	Question 33 is a very good question and shouldn't be missed out
(1)	93	Mrs. Tuk, are there any other questions that is still not clear to you?	-
(2)	94	No there isn't any. They are fine.	Indicating that there is no other unclear questions
(1)	95 96	After having the experience in looking after you baby, are there any points which you think are important and should be included in the tool?	-
(2)	97 98 99 100 101 102 103 104	The question regarding the problem with breast feeding…like, I think there is a question regarding formula feeding along with breastfeeding, for example babies usually get constipation if they are formula fed. Now when one doesn't have enough milk and must use formula milk along. Babies excreting system might have problem. This should be added…Whether they know that breastfeeding along with formula feeding can cause excreting problem. The baby might have constipation. Breast milk is digested. Formula milk is difficult to digest.	Concerned about disadvantage of formula milk to babies' excretion system
(1)	105	Yes. Besides this is there any other thing that you would like to add?	-
(2)	106	It is well covered.	Information in the tool is well-covered
(1)	107 108	Do you think using this tool with postpartum women would be beneficial to them?	-
(2)	109 110 111 112	Yes, I think it would. It would benefit a lot especially for the first-time mums who look after their baby by themselves. They should have lots of information, should have lots of knowledge. I want the nurses to give them advice so they have fewer problems after delivery. It should help a lot.	Perceiving that the tool would provide lots of info which benefit postpartum women especially for 1st time mothers

Conversation			Opened code
	113		
(1)	114	Is there any other suggestions?	-
(2)	115 116	I have nothing more. The service is good. They tell us everything, help us in every way	Services received at the hospital was good

4. Ying (postpartum women)

Conversation			Opened code
(1)	1	How long do you plan to breastfeed your baby?	-
(2)	2	About a year. I have no other obligation.	Having plan to breastfeed for 1 year
(1)	3 4	What you are saying is you just stay home and only look after your baby and don't have to work?	-
(2)	5	That's right. We have a family business. We sell lime in Rachaburi Province.	Having family business
(1)	6 7	I see. I understand that the nurse has already given you the breastfeeding support tool, could you please share your opinion about it.	-
(2)	8 9 10	In my opinion, I felt that I have gained more knowledge from it, because normally I am not really serious about reading stuffs or preparing myself for things. After talking to the nurses, I learned more.	Obtaining more knowledge about breastfeeding
(1)	11	Could you share something that you have learned?	-
(2)	12 13 14 15 16 17	For example, about food that helps stimulate breast milk. I knew a few, but there were many more that I did not know. The thing about waking up the baby, I didn't know about that. I got to talk about the difficulties I went through. I also didn't know about nipple hygiene, hand expressing, storing breast milk and also when to begin pumping, I think that information is useful.	Information received is useful
(1)	18 19	What is your opinion about using this tool to help nurses provide breastfeeding services?	-
(2)	20 21 22	For example, if we have any question in mind, they would then answer us more accurately, according to our need. There were things I never thought of which were new knowledge to me. If we don't know about something we	Questions is corresponds directly to mother's needs Gaining new knowledge Being able to openly ask questions

Conversation			Opened code
	23 24 25	could just ask. If there was no tool guide then I would find it more difficult to ask and get engaged a conversation. My head could be just blank, don't know what to talk about.	Help make easier in asking questions
(1)	26 27 28	You mentioned earlier that you plan to breastfeed for a year. After you received the services from the nurse here, were you encouraged to try to breastfeed even longer?	-
(2)	29 30 31	No, I already have plan from the beginning that it would be for a year. I think one year is already quite long, so I don't think that I would go further than that. I planned to do some work later.	Decided to breastfeed for 1 year
(1)	32 33	It is really wonderful to be able to fully look after your baby for a year. What kind of work did you plan to do?	-
(2)	34 35 36 37 38	A business. I don't have to be at work all the time. I only have to go to work for one to three hours a day in the first 6 months…something like that. Even if I don't go it would be fine. I own the business and in our family we don't have many young children, but I thought of taking a year off before I begin to do something.	Having own business and the family is supportive about breastfeeding
(1)	39 40	It seems that from what you have mentioned, you are breastfeeding because you have the time to do so.	-
(2)	41 42 43 44 45 46	That's part of it. I also want my baby to have breast milk. From what I know and understand from the media, is it's healthier for the child. Second, it helps create bond between me and my child. Observing others I could see that my baby and I have a stronger bond. I could also see this from people close to me too. My sister-in-law has a very close bond with her baby. She breastfed him for three to four years.	Perceiving benefits of breastfeeding Having indirect experience about breastfeeding from family members
(1)	47	Do you think there are other services that health care professionals could	-

Conversation			Opened code
	48	give to help support you to be successful in breastfeeding?	
(2)	49	If there should be any, it would be that… in the beginning I was having	Needing cares and advices at early postnatal stage
	50	many problems because I have no experience and wanted to receive	
	51	regular care, such as being given advice. I usually have to help myself in	
	52	the first place, for example, I was trying to have my baby latch on and I	
	53	just couldn't do it. I didn't know what the problem was. Sometimes my	
	54	baby stomach felt very hard. I was new. And the nurses gave me different	Received inconsistent answers from nurses
	55	answers.	
(1)	56	Could you give an example?	-
(2)	57	For example, I wasn't sure whether you need a warm press while massing	Received controversial advices and practices from nurses in
	58	your breast. Some nurses said that if you warm press your breasts it would	breast massage and latching on
	59	make your skin dry. The ways I was taught to massage were also different.	
	60	The way to latch-on was also different. Some told me to use the index and	
	61	middle finger to hold my breast, some told me just to guide with hand. On	
	62	breast massage, some told me to squeeze while other told me to just	
	63	press. So, which one is the proper one then. There should have been a	Needing clear answers from staffs working at the clinic
	64	clinic where we can get proper answer. I do understand that some people	
	65	might have answers according to what was working in their experience. But	
	66	as a new mother, I would want to know the best answer. They don't have	
	67	to come to me; I can go to see them. In reality this way would give us	
	68	clearer answer. If there were a centre then I can be sure that I will get	
	69	proper answers. My baby has a different feeding time from other babies. If	
	70	there were such a centre so I can just walk there and consult, and get the	
	71	answers which I can feel more confident.	

Conversation			Opened code
(1)	72	Beside these are there any more services that you would like to see?	-
(2)	73	In my opinion, I want to see more support given to the mothers. I still feel	Received limited breastfeeding support at the hospital
	74	that what we received was too little. It seems that the breastfeeding	
	75	support nurses are the ones who always encouraged us to stimulate our	Received inconsistent advices from nurses on stimulating to the
	76	breasts and continually keep telling us to continue. But other nurses were	breasts
	77	less serious about it, and would ask us to stimulate just for 10-20	
	78	minutes, and that's it. Then they would bring a bottle and tell us "Express	
	79	milk for the baby or else the baby won't get any milk. Do you	
	80	understand?". There was no breast milk clinic. If there is one then we could	
	81	go there. The last nurse that check on me told me to continue to stimulate	
	82	a little more before taking a break. Then told me to let the baby suck to	
	83	stimulate my breast. I think she had breastfeeding experience, something	
	84	like that. I was feeling quite stressful then because I still couldn't get my	Having stress for not having milk flow
	85	milk flowing. Sometime I would hear encouraging comments such as, don't	
	86	worry, it will come eventually. Each one has their own duty. I also don't	
	87	want to make them upset. It would be good if there is someone who I can	Needing staffs who one can consult with
	88	really consult with so I can feel more relaxed.	
(1)	89	Were you in stress?	-
(2)	90	Yes, I was. Because I couldn't get my milk flowing. There should have been	Needing someone to consult with
	91	someone for me to consult. When I got more relaxed my milk started	
	92	flowing a little bit. That's all I want to say.	

Appendix W Example cases of translation from Thai to English (Phase II)

1. Bee (Nurse from uncomplicated ward)

	Thai	English
(1)	พี่บีได้ใช้แบบประเมินกับคุณแม่หลังคลอดกี่คนแล้วคะ	Bee, how many cases have you used the tool with?
(2)	ใช้ไป 4 case แล้ว	I used it with 4 cases
(1)	แต่ละ case ใช้เวลานานแค่ไหนคะ	How much time did each case take?
(2)	คือ มันขึ้นอยู่กับระดับการศึกษาของคุณแม่ด้วยนะพี่ว่า คือบางคนดูแล้วก็เข้าใจปุ๊บมันก็ไม่ยาก ไอ้ที่ใช้ได้ดีก็พวกแม่ที่เคยเลี้ยงลูกแล้ว แต่อาจเลี้ยงไม่สำเร็จ เลี้ยงได้แค่เดือนสองเดือนก็ต้องไปทำงานคือเค้าก็มีความเข้าใจบ้าง แต่แม่เคสใหม่ก็ต้องมาอธิบายตั้งแต่แรกก็จะใช้เวลานานกว่า แต่ก็ใช้เวลาประมาณ 25 นาที up แต่ละเคส แต่แม่ท้องแรกก็มากกว่า 40 นาที เพราะว่าต้องมาบอกเค้าเช่น การสร้างนม การใช้ nipple shield บางเคส ก็อ๋อ หนูรู้แล้วทำอย่างงี้ถูกไหม	I think it depends on the knowledge of the mothers. Some people read it and could easily understand it. It is useful for mothers who have tried to breastfeed before but were unsuccessful. Those that could breastfeed for only two or three months then returned to work. These mothers would have a certain level of understanding. But for the new mothers, it should be explained right from the basic, so it took longer for them. Each case would take at least 25 minutes, but first time mothers would take at least 40 minutes because I have to explain to them, for example how milk is produced in their body, the use of nipple shield. In some case I would hear comments like “I know that already, this is how you do it…right?”
(1)	แล้วพี่บีคิดว่า แบบประเมินนี้จุดแข็งจุดอ่อนอย่างไรบ้างคะ	Could you please share your thoughts about the strength and weakness of this tool.

	Thai	English
(2)	จุดอ่อนคือ บางทีมันต้องย้อนไปย้อนมา เช่น ตอบข้อนี้ให้ย้อนไปอ่านเรื่องนี้ ถ้าแม่ไม่เข้าใจ	The weakness is that it seems to be jumping back and forth is some topic.
(1)	แล้วพี่บีคิดว่ามีข้อเสนอแนะอย่างไรคะ	Do you have any suggestion for it?
(2)	ก็คือ อยากให้มน Brief ให้ฟัง เอาแบบประเมินมา Brief ให้พยาบาลฟังก่อน เค้าจะได้ไม่ต้องย้อนไปย้อนมา จะได้สามารถตอบคนไข้ไปได้เลย คือ Leaflet อยากให้มาสรุปให้ฟังเลย เวลาตอบคนไข้จะได้ตอบได้เลย เช่น จัดคอร์สสำหรับพยาบาลที่จะใช้ leaflet คือเมื่อพยาบาลมีความรู้ เวลาเค้าอธิบายก็สามารถบอกได้เลยว่าต้องย้อนไปดูข้อนี้ข้อนั้น แล้วอีกอย่างนึ่ง เรื่องภาษา ถ้าพยาบาลอ่านให้คนไข้ฟัง มันแบบเป็นภาษาวิชาการ คำถามบางคำถามยังมึน ๆ อยู่	I would like to be briefed. The nurses should be briefed about the tool before they use it, so they don't have to jump around and be able to answer the patients right away. Have a leaflet and summarize the information for us so we could answer the patients right away. For example, arrange a course for nurses on the use of leaflets etc., when knowledge of the nurses increase, they would be able to answer the patients without having to look at the points in the leaflets. Another thing is the language. If the nurses read for the patients, the language would sound very academic. Some questions are still hard to understand.
(1)	ยกตัวอย่างให้ฟังหน่อยได้ไหมคะ	Could you please give some example?
(2)	เช่นหัวข้อ block การให้การพยาบาล เช่น หากมีให้พิจารณาส่งต่อ อันนี้หมายความว่าอย่างไร หรือบางอันให้ย้อนไปเรื่องนี้ๆ คือ อย่างที่เคยอบรมนมแม่แล้วพี่ก็รู้ แต่บางคนไม่มีความรู้เค้าก็อาจจะงง ๆ ถ้าเป็นพยาบาลที่ไม่ได้อบรมเป็นคนไข้เค้าต้องย้อนกลับมาอ่าน เค้าจะรำคาญ แต่พยาบาลที่เคยอบรมก็ไม่เป็นไร คือบางคนอาจจะใช่ มนอาจต้องเจาะไปว่าเป็นกลุ่มพยาบาลที่เคยอบรมการเลี้ยงลูกด้วยนมแม่แล้ว	For example, the topic of block nursing service. Some part refers back to another part. In my case I understand because I have been trained in breastfeeding but some haven't and they might get confused. If used by nurses who haven't been trained the patient would feel annoyed that she has to turn back the page and read all the time. The nurses that have been trained should be fine. Some of them are. May be you could specifically indicate to be handled by breastfeeding trained nurses.

	Thai	English
(1)	คือ พยาบาลที่หน่วยหลังคลอดได้รับการอบรมนมแม่มากน้อยแค่ไหนคะ	How many postpartum nurses are trained and not trained in breastfeeding?
(2)	คือมี workshop ข้างนอก 3 วัน 5 วันบ้าง แต่บางทีบางคนก็อาจได้มาจากศรีราชาแล้ว บางคนก็ยังไม่ได้ส่ง ก็มีแต่ที่พี่ษา พี่ต๊อก ต้อย แล้วถ้ารวมทั้งหมดแผนกสูติหล่ะ คิดดูซิ ถ้าฝั่งพี่มีคนอบรม 2 คน มันก็เกินครึ่ง แต่ฝั่ง normal ก็มีต้อยคนเดียวที่อบรมพอมา รวมกันในภาพรวมสูตินะก็ไม่ถึง 50 เปอร์เซ็นต์ที่ยังไม่ได้อบรม เฉพาะ ANC กับ PP นะ ไม่รวมห้องคลอด	They attend 3 days and 5 days external workshop and some have already received training from Sriracha. Some haven't been trained yet. Only Sa, Tok, Toy, including me, the department of gynaecology and midwifery would be how much. Imagine, if at my department we have three people who are trained and two untrained. Ok. It's more than half. But at the normal ward, only Toy who has been trained. If you put the two sections together then less than the number of nurses trained in breastfeeding support would be less than 50%. This is just ANC and PP. I haven't included delivery room.
(1)	ที่พี่บีพูดเกี่ยวกับภาษาวิชาการช่วยอธิบายให้ฟังหน่อยได้ไหมคะ	You mentioned about language which sounds very academic in the tool, could you explain more on this point?
(2)	คือ เหมือนกับว่าตอนพี่พูดกับคนไข้ พี่ต้องแปลงคือ อ่านให้เค้าฟังเค้าอาจจะยังไม่เข้าใจ เช่นว่า การเลี้ยงลูกด้วยนมแม่กับนมผสมเป็นเรื่องธรรมดาที่ยอมรับได้ เค้าก็จะงง ก็ไม่แน่ใจนะ ว่าเป็นเพราะว่าแม่เพิ่งฟื้นรึเปล่านะ พี่ก็จะพูดว่า ระหว่างนมผสมกับนมแม่เลี้ยงคู่กันไปแม่ OK ไหม มันน่าจะเป็นภาษาพูดที่เราถอดมาที่ยังคงความหมายเหมือนใน questionnaire อยู่ แต่ถ้าพูดว่า คุณคิดว่ามารดาที่มีขนาดเต้านมใหญ่จะมีผลต่อการสร้างน้ำนม เราก็จะพูดว่า แม่คิดว่าขนาดของแม่ตัวเล็ก ตัวใหญ่ แม่คิดว่ามีผลต่อการเลี้ยงลูกด้วยนมแม่ไหม เพราะว่าการศึกษา เช่น จบ ป. 6 เคยมีลูกมาเคยมีลูกมา 4 คน แต่บางคนจบ ม. 3 ก็เป็นท้องแรกก็มี	Like, when I talk to the patients, I have to do some changes. If I read it to them they may not understand. For example, the sentence that says…item 4 Do you think feeding both formula milk and breast milk is acceptable? They may not understand. I am not sure whether the mother was unconscious or not…so I would put it like…Is feeding the baby breast milk along with formula milk ok according to your opinion? It should be simple spoken language that conveys the meaning of the questions in the tool. The item 8 is Do you think mothers who are overweight; have breast augmentation or those with larger or smaller breasts tend to have enough breast milk? I would say…Do you think that the size of big and small mother can affect breastfeeding or not? Because in education, for example, a mother who finished only 6th grade and

	Thai	English
		had 4 children before, have already had experience in breast feeding. While some people who completed only grade 9 are first time mothers.
(1)	คือพี่บีหมายความว่า ควรปรับภาษาในแบบประเมินให้เป็นภาษาพูดมากขึ้นใช่ไหมคะ	You mean, the language of the tool should be adjusted to be more of spoken language.
(2)	ใช่ และก็จะบอกว่า การศึกษาบางทีมันก็มีผลต่อการรับรู้ บางทีอธิบายแทบตายก็แบบไม่เข้าใจ เช่น จบ ป. 6 หรือ ม. 3 สอนแล้วเค้าอาจจะยังงงๆ	Yes, and I also wanted to say that education can affect one's cognitive ability. You can sometimes spend a lot of time trying to explain things but they never understand. For example, after teaching mothers who completed only grade 6 or grade 9 they might still not fully understand.
(1)	ค่ะ แล้วมีจุดอ่อนอย่างอื่นอีกไหมคะ	Are there any other weak points you see?
(2)	จริง ๆ แบบประเมินมันใช้เวลาทำไม่นานหรอกนะ แต่มันจะมาอยู่ process ของการสอน ว่าคนไข้ไม่เข้าใจตรงนี้ เราต้องเอาตรง leaflet เข้าไปสอนเค้า ถ้าใช้อย่างเดียวไม่รวม nursing care นะ 5 นาทีก็เสร็จ แต่ถ้าเป็นแม่ท้องใหม่นะ พยาบาลก็ต้องมาบอกรายละเอียดว่า อุ้มอย่างนี้นะคะ ถืออย่างนี้นะคะ	Actually an assessment tool doesn't take a long time to do, but it the teaching process. If the patient doesn't understand certain area then we should use the prepared leaflets to teach them. If it's just doing the tool alone and not include the nursing care, it should take only 5 minutes to complete. But if it's a first time mothers the nurse has to go into more details, such as details on how to hold a baby etc.
(1)	แล้วจำนวนข้อ 33 ข้อ นี่เยอะไปมั้ยคะ	How about number of questions. Do you think 33 questions are too much?
(2)	พี่ว่าไม่เยอะนะ	I don't think it's too much.
(1)	แล้ว 3 scale ใช่ ไม่ใช่ ไม่แน่ใจ ใช้สะดวกไหมคะ	How about the three-level scale, of yes, no, and not sure?

	Thai	English
(2)	ก็ดีนะ ฟันโธ๊ะไปเลยว่า ใช่หรือไม่ หรือไม่แน่ใจ	It's good. It's very straight forward.
(1)	แล้วแบบประเมินมีจุดแข็งอะไรไหมคะ	What are the strong points of this tool?
(2)	จุดแข็งก็คือมันสามารถใส่ nursing case ไปได้เลยนะขณะสอบถาม ก็เหมือนกับว่ามัน implement ได้เลย ถ้าคนไข้ไม่เข้าใจตรงไหน แบบประเมินบอกให้ย้อนไปตรงนี้นะก็คนไข้ก็จะเข้าใจในที่สุด คือได้ย้อนไปมันจะเหมือนกับว่าเป็น loop อันนี้ไม่เข้าใจไปทางนี้นะ ก็โอเคนะ เหมือนกับเป็นการ reassess	The strong point is that it can easily be part of the nursing care routine. It seems to implement what we do. Where the patient doesn't understand the tool would have references to certain section earlier and eventually they would.
(1)	คือตรงช่องให้การพยาบาลมันก็มีทั้งข้อดีและข้อด้อยใช่ไหมคะ	On the topic of nursing care there are both positive point and negative points.
(2)	ใช่ถูกต้อง คือคนที่เค้าโอเค เคยอบรมเค้าก็ใช้ได้ บางคนไม่เคยอบรมเค้าอาจต้องเปิดกลับไปกลับมา ก็ที่พี่บอกคือ มนต้องเลือกกลุ่มพยาบาลที่เค้าเคยอบรมอะไรอย่างนี้ คนที่ไม่ได้รับการอบรม ก็อาจต้อง brief leaflet ให้มากกว่านี้ หรืออาจบอกก่อนว่ามันต้องมีการเปิดไปเปิดมานะ	That's right. For those who are OK, have been trained, they would be able to handle. Some people who haven't been trained may have to turn the pages back and forth. What I was telling you is that, to select a group of nurses who have been trained, etc. For those who haven't been trained you should brief them on leaflets more, or let them know that certain part they might have to refer back and forth.
(1)	มีจุดแข็งอย่างอื่นอีกไหมคะ	Are there anymore strong points?
(2)	พี่ว่ามันค่อนข้างครอบคลุมเนื้อหาที่มีผลต่อการเลี้ยงลูกด้วยนมแม่นะ แต่เออมันไม่มีเรื่องการนวดกระตุ้นใช่ไหม วิธีการนวดกระตุ้นมนก็ควรจะมี นอกจากเรื่องของยา การ	I think it covers the topic of breastfeeding well. But it doesn't contain information on massage the breasts to stimulate milk flow. It should also contain information on massage to stimulate milk flow besides medicines.

	Thai	English
	นวดกระตุ้นให้น้ำนมมามากที่สุด ที่น่าจะมีอยู่ในแบบประเมิน คือ จริงๆ พี่ว่า มันอาจจะเป็นแต่ละข้อคือ ตัวหนังสือแบบมนมันอาจจะแบบพืดไปหมด มันจะเป็นแต่ละข้อ เช่น ข้อ แล้วก็ตอบ ใช่ ไม่ใช่ ไม่แน่ใจ แล้วถ้ามารดาตอบว่าไม่เข้าใจ ก็ให้ย้อนไปข้อไหน ๆ ให้เสร็จเป็นข้อ ๆ คือบางทีมันดูเหมือนลานตา อาจเป็น ☐ ก็ได้ ○ ก็ได้ เช่น ข้อ โจทย์ 1 ☐ ใช่ ☐ ไม่ใช่ ☐ ไม่แน่ใจ หากมารดาตอบ ไม่ใช่ หรือไม่แน่ใจ กรุณาให้ความรู้ในเรื่อง.....	Massages give the best result when it comes to stimulating milk flow. What I felt, should have been in this tool is the presentation in points. Too many letters then the conversation wouldn't flow so well. It should be number (1) answer yes, no or not sure etc. If the mother's answer not sure then they could refer to so and so question etc. So they could finish it one by one. Sometime this can look very confusing. May be this way is good, have a square or circle check box. For example item 1..... ☐ Yes ☐ No } for those answering no or not ☐ Unsure } sure/ Training required.....
(1)	แล้วแบบประเมินมันก็จะยาวนะคะ	Don't you think that would make it too long?
(2)	ใช่ มันก็จะยาวนะ ยาวเกินไป ก็ไม่รู้นะ อันนี้ก็บอกให้ไปคิดเอานะ หรืออีกย่างมนอาจจะมี มันน่าจะเป็นใช่ ไม่ใช่ ไม่แน่ใจ นะ เอาไม่แน่ใจ ข้างหลัง ลองดูนะ	Yes, I think it's quite long, too long. I don't know. This is just a suggestion for you or you might already have yes, no and not sure on the same line, just make sure that not sure is the last choice. Try it.
(1)	ค่ะ แล้วมี comment อย่างอื่นอีกไหมคะ	Are there anymore suggestions?
(2)	ก็พี่ว่าก็โอเคแล้วนะ นอกจากเรื่องภาษาต้องใช้แบบที่คนไข้ เช่น แม่ทราบไหมว่า เมื่อออกโรงพยาบาลไปแล้ว เราจะมีแหล่งสนับสนุนเรื่องนมแม่ให้ไปที่ไหนได้ คือ ใช้ที่มันเป็นคำพูด เหมือนถ้าคนไข้ปริญญาตรี ปริญญาโท อย่างงี้ไม่มีปัญหา เค้าเข้าใจ แต่ถ้าเป็น ป. 4 ป.6 ม.3 ปวช. อะไรอย่างงี้ ต่ำลงมา เค้าอาจจะนั่งนิ่งไปซักพัก พี่ก็ต้องเดี๋ยวอ่านให้	I think it is already ok, apart from the language which should be simple spoken language, such as Did you know that after you left the hospital where you can continue to find breastfeeding support. The language that you use here is like for those who graduated from a university with a bachelor or master degree. If they are no problem, they would understand. But for those

	Thai	English
	ฟังใหม่นะคะ หรือบางทีเค้าอาจสมองขาดออกซิเจนหลังคลอดอะไรอย่างงี้	only completed grade 3, 6, 4 or vocational certificate, they would just sit blank for a while then I have to reread the question for them again.
(1)	แล้วประสบการณ์ใช้แบบประเมินของพี่บีเป็นอย่างไรบ้างคะ	How was your experience in using the tool?
(2)	อือ มันก็จะมีบางส่วนที่เรายังไม่เคยรู้มาก่อน เช่น น้ำขิง การ reference ว่าน้ำขิงไม่ได้ช่วยกระตุ้นน้ำนม คือเราไม่เคยรู้มาก่อน เราคิดว่าดื่มน้ำขิงเยอะๆ มันช่วยกระตุ้นน้ำนม แต่เราไม่เคยรู้มาก่อนว่า ประเด็นมันอยู่ที่ดื่มน้ำให้มากมากกว่า คือของมนมันมี reference ที่น่าเชื่อถือ ก็คือพอมาใช้ของมนมันจะมีผลต่อ mindset เค้าก็จะเปลี่ยนนะ ก็สำหรับพยาบาลเค้าก็ได้ความรู้ใหม่ๆ เพิ่มเติมจากที่เค้ารู้อยู่เก่า แล้วมันก็บอกเป็น step ดีนะ	Um...(pause 3 sec)…there were some parts that I was not familiar with such as ginger tea and the reference that there is no proof that they help stimulate breast milk. I am not familiar with that at all. I have always thought that if you drink a lot of ginger drink, it will help stimulate your milk flow. But there are credible references which show that drinking a lot of water helps stimulate milk flow. Using your form could change the mindset of the nurses. They could gain new knowledge from this. It's also good that it's put in steps
(1)	ที่ว่ามันเป็น step ดี หมายความว่าอย่างไรคะ	What do mean when you say it's good that it's put in steps?
(2)	คือ อย่างเช่น พอประเมินไป แม่บอกยังไม่เข้าใจ ก็ให้กลับไปสอนเรื่องนั้นๆ ซ้ำ	For example, after the assessment, if mothers say they don't understand then you go back to teach them again and again.
(1)	แล้วพี่บีว่าแบบประเมินนี้มีประโยชน์ไหมคะ	Do you think this tool is useful?
(2)	ก็มีนะ มีประโยชน์ในการให้ข้อมูลทั้งตัวพยาบาลและตัวคนไข้	Yes, it does. It's a good source of information for both the nurses and patients.
(1)	แล้วพี่บีคิดว่า แบบประเมินนี้มันจะใช้ได้จริงกับแม่ๆ ไหมคะ	Do you think this tool could really be put to use in the hospital?

	Thai	English
(2)	ก็ใช้ได้นะ ก็คือต้องปรับนิดหน่อย พี่ก็ว่าน่าจะโอเคนะ	Yes it could. You have to make a little adjustment. I think it should be OK.
(1)	แล้วพี่บีคิดว่ามีประเด็นสำคัญอื่นๆ ที่ต้องเพิ่มเติมให้แบบประเมินครบถ้วนยิ่งขึ้นไหมคะ	Are there any other important thing that should also be included in the tool to make it more complete?
(2)	ก็มีแต่เรื่อง นวดกระตุ้น warm compress นอกนั้นก็น่าจะ cover แล้วนะ	Just the massage to stimulate milk flow, warm press. The rest are well covered.
(1)	แล้วพี่บีคิดว่ามันบริการอะไรอื่นๆ อีกไหมคะ ที่บุคลากรทางการแพทย์สามารถช่วยให้แม่เลี้ยงลูกด้วยนมอย่างเดียวได้ 6 เดือน	Do you think there are other services that nurses cold give to help promote exclusive 6 months breastfeeding?
(2)	พี่คิดว่าควรจะมีสอนก่อน ขณะและก็หลังอยู่โรงพยาบาลนะคือ ตอน ANC แล้วตอนมาคลอด หลังคลอด แล้วก็ตอนกลับบ้านไป มันน่าจะมีแหล่งส่งต่อ เพราะอย่างแม่วัยรุ่นก็อาจจะไม่ทนแล้วนะ อาจจะอยากเลี้ยงนมผสมอย่างเดียวเลย	I think there should be training while they are at and after they left the hospital. That includes during ANC, when they come for delivery, post-delivery, and after the discharge. There should be a source that we can refer them to. For example, teenage mothers usually have low commitment; some of them just only want formula feed.
(1)	แล้วพี่บีคิดว่าที่ ANC หรือหลังคลอดที่ควรเน้นเรื่องนมแม่คะ	Where do you think breastfeeding be stress more, during ANC or postpartum?
(2)	คิดว่า ANC แล้วมาตอนหลังคลอด คือมันต้องถามว่าคุณแม่มีความตั้งใจ คือมันต้องเป็นเรื่องระดับชาติ คือต้องให้เค้าเห็นว่า การเลี้ยงลูกด้วยนมแม่มันสำคัญจริงๆ ให้ตระหนักนะว่าถ้ามีความตั้งใจแล้วถึงตอนไหนก็ต้องตั้งใจ ไม่ใช่ว่าจะมาเปลี่ยนเค้าตอนมา ANC มันต้องเปลี่ยนมาก่อนหน้าแล้ว ไม่ใช่มาให้พยาบาลบอกว่า เลี้ยงนมแม่ซินะมันดีแล้วฉันต้องเลี้ยงคือ เค้าต้องมีความตั้งใจส่วนตัวอยู่แล้ว แต่ช่วง ANC มันก็สำคัญ	I think during ANC then postpartum. You should ask whether the mother the mothers have good determination to breastfeed or not. This is a national issue. We should let them see that breast milk is really important. They should know that the decision is made before ANC, not during ANC. They should have the will before coming not to wait for the nurses to tell them that it's good then decided to breastfeed. I believe each one already have their

	Thai	English
	เพราะเป็นเวลาตั้งหลายเดือนก็อาจเปลี่ยนความตั้งใจแนวคิดเค้าได้ แต่ถ้าจะให้เปลี่ยนภายใน 3-4 วันจะให้เปลี่ยนจากเลี้ยงนมผสมมาเป็นนมแม่ ด้วยนมแม่ พี่ว่ามัน impossible นะ คือมันต้องให้คนไข้เค้าอยากเลี้ยงลูกด้วยนมแม่ตั้งแต่ต้น เคยเห็นคนไข้เอกชนนะคือถ้าหลังคลอดภายใน 24 ชั่วโมง กรุณาส่งลูกให้แม่เลี้ยงเลยนะ ห้ามให้นมขวด ถ้าเป็นฝรั่งนะก็จะมี แล้วถ้าไม่อนุญาตให้เลี้ยงนมผสมนะ เค้าจะมีเป็น consent form เลยนะ จะมีเป็น notice ให้หมอหรือพยาบาลเลยนะว่าเค้าตั้งใจลูกด้วยนมแม่ คือ ถึงเค้าจะมีปัญหาอะไรคือ เค้าจะพยายามอย่างมากที่จะเลี้ยงลูกด้วยนมแม่ ถ้าลูกร้องไม่จำเป็นต้องโอ๋ เค้าจะรับได้มากกว่า แล้วปู่ย่าก็เรานมขวดยัดปาก คือถ้ากลับบ้านไปมันไม่มีตัวช่วย ปู่ ย่า ตา ยาย เค้าก็อาจอยากให้นมขวดจะได้ลูกหลับนาน เค้าอาจไม่ใส่ใจ บางคนก็มีนะเค้าบอกไม่เคยรู้เลยนะว่าไปทำงานก็บีบนมเก็บได้นะคะ อย่างอื่นก็ไม่มีอะไรแล้ว	own intention from the beginning. But it is also important during ANC because the period covers 9 months and they may change their mind. If you are trying to convince someone to change from bottle feeding to breastfeeding 3-4 days after delivery then I think it's impossible. It should be someone who has the determination right from the beginning. At a private hospital babies are given to the mother to look after within 24 hours and nurses are not allowed to give bottle milk. Western countries also have this type of regulation. If mother doesn't allow bottle feed for their baby they would be given a consent form. There will also be notice for doctors and nurses that these particular mothers intend to only breastfeed her baby. Even though they may face many problems, they usually will try very hard to breastfeed. When the babies cry, you don't have to be too sensitive and try to stop it. It better to let them cry. Grandparents also like to shove bottles in their mouth. When you go home sometime you don't have much choice. Grandparents' likes to bottle feed the baby because babies sleep longer. They may not care much. Some told that they didn't know that they can express and store milk when they go back to work. On other things I don't have anything else.

2. Nuam (nurse from private ward)

	Thai	English
(1)	คุณน้ำใช้แบบประเมินกับคนไข้ไปกี่คนแล้วค่ะ	With how many patients did you use the tool?
(2)	6 คนค่ะ	Six
(1)	แล้วแบบประเมินที่ใช้มันมีจุดแข็งหรือจุดอ่อนอย่างไรบ้างคะ	Could you comment on the strong point and the weak point of the tool?
(2)	จุดแข็งคือมันทำให้เราประเมินคนไข้ได้รอบด้านมากขึ้น และก็เป็นเครื่องมือที่ทำให้เราไม่ลืมข้อมูลบางส่วนที่เราต้องคุยกับคนไข้จะได้ไม่ลืมไป	The strong point of the tool is that it helps us to assess the patients in a more well-rounded way and also helps us to remember what conversation we had with the patient.
(1)	แล้วแต่ละคน น้ำใช้เวลาใช้แบบประเมินคนละประมาณเท่าไหร่	For each patient, approximately how much time did you use for the interview?
(2)	แล้วแต่ระดับนะ 15-30 นาทีแล้วแต่คนไข้ว่าต้องการข้อมูลมากน้อยขนาดไหน เวลาที่เราให้เค้าก็ตามที่เค้าถามเฉพาะแต่ละเคส ตามความเข้าใจพื้นฐาน ความตั้งใจของเค้า ก็อย่างคนที่มีตั้งใจมากเค้าจะศึกษามาค่อนข้างมากก็ไม่ต้องพูดมากก็เข้าใจ แต่บางคนบาง case ที่ยังไม่รู้เลย ประโยชน์หรือให้นานเท่าไหร่ ต้องทำอย่างไรบ้างก็ต้องใช้เวลาคุยนานนิดนึง	It depends on the level, 15-20 minutes, depending on the time I take to get my information across, depending on how much they ask the information from me case by case, their knowledge, basic understanding and their eagerness. Some patients who have high intention to breastfeed usually have more knowledge so I don't have to explain much to them. But in some case who has no knowledge about the benefit, the length of time to give, or how to do, then I had to take longer time to talk with.

	Thai	English
(1)	แล้วใน 6 case คนไข้แบบไหนเยอะกว่ากันคะระหว่าง รู้เยอะหรือรู้น้อย	Amongst the 6 patients that you interview which type of patient do you find more, those who knows more or less?
(2)	ก็รู้เยอะนะ เพราะคนไข้เป็นพิเศษ คือ รู้น้อยมีแค่ case เดียว G1 มี 4 คน G2 มี คน 2	Most of the patients have the knowledge. There was only one case that has little knowledge. There were four for G1 and two for G2.
(1)	แล้ว 2 กลุ่มนี้แตกต่างกันไหมคะ ระหว่างท้องแรกกับท้องหลัง	Were there any differences amongst these two group between first time pregnancy and not first?
(2)	ก็ไม่แตกต่างกัน ก็คือ คนที่เป็น G2 แต่ลูกคนแรกนานมากแล้วเค้าก็ลืมเหมือนกัน ความรู้เรื่องนมแม่ก็อาจไม่ดีนักก็ต้องเรียกมาคุย	No difference. The G2s who had a long gab between the first pregnancies tends to forget things. Their knowledge about breast milk is not so good. I needed to talk to them.
(1)	แล้วจุดอ่อนของแบบประเมินนี้หละค่ะ	How about the weak point of this tool?
(2)	ถ้าถามโดยไม่ได้อ่านข้อมูลมาก่อน แล้วมาไล่ถาม มันจะซ้ำซ้อนกลับไปกลับมาอย่างเช่น ความตั้งใจเลี้ยงลูกด้วยนมแม่ แล้วตั้งใจจะเลี้ยงนานเท่าไหร่	If the form is used without prior review one might find the questions to be repetitive, such as question on the intention to breast feed and how long do you intend to breastfeed.
(1)	คืออย่างไรนะน้ำ เอาทีละข้อไหม	Could you please explain each one for me?
(2)	อย่างข้อ 1 ตั้งใจเลี้ยงลูกด้วยนมแม่ ถ้าสมมุติเราอ่านมาก่อนเราก็จะรู้ว่า จะต้องถามว่าตั้งใจจะเลี้ยงลูกด้วยนมแม่นานเท่าไหรค่ะ แล้วรู้ไหมประโยชน์ คือ ถ้าอย่างสลับกันข้อ 1 ตั้งใจจะเลี้ยงนานเท่าไหร่ คือบางคนเค้ามี trend ของเค้าอยู่แล้ว เราก็ต้องมาเปิดหน้า 2 ถึงจะเจอ	For example the first question, on the intention to breastfeed. If we have read it before then we would know that we have to ask, “How long do you intend to breastfeed and do you know the benefit of breast milk?” If question 1 could be replace by “If you plan to breastfeed your baby, how long do you intend to do so?” Some patients have their own trend. We have to go to the second page to

	Thai	English
		see.
(1)	แล้วน้ำแนะนำว่าให้ทำอย่างไรดีคะ	Do you have any suggestion to improve?
(2)	ก็คือ มันเรียงลงมา เช่น ความตั้งใจเลี้ยงลูกด้วยนมแม่ แล้วตามด้วยจะเลี้ยงนานเท่าไหร่ แล้วต่อด้วยประโยชน์แล้วค่อยเรื่องเลี้ยง แล้วก็โอเค	To put it in order for example, first, the intention for breastfeeding followed by the length of time intended to breastfeed and then the benefit of breast feeding would make it ok.
(1)	ค่ะ แล้วน้ำคิดว่ามีข้อไหนอีกไหมค่ะ ที่น่าจะสลับ	Are there any other questions you think should be shuffled?
(2)	คือ ตอนแรกคิดว่า จะเอาเรื่องอาหารเสริมไว้ที่หลังดีไหม เหมือนว่าเราคุยกันเรียบร้อยหมด แล้วค่อยคุยเรื่องอาหารเสริมดีไหม คือคุณแม่รู้ไหมว่าควรให้อาหารเสริมเมื่อไหร่ คือน่าจะไว้ช่วงหลังๆ หลังเก็บน้ำนม เหมือนกับเป็น sense เรื่องแรกความตั้งใจ แล้วก็ตามไปว่าต้องทำอะไรบ้างเมื่อกลับบ้าน เช่น บีบนม เก็บนม แล้วก็ค่อยเรื่องอาหารเสริมก็ช่วงเหลือๆ เค้าจะได้ไม่งง กลับไปกลับมา	I thought earlier that putting food supplements last might be better. It's like you have finish talking the main point then move to talking about the food supplements might be better. Like do you know when you should give food supplement to your baby? It's better if you put it late, after collecting milk makes more sense. The first point is the intension, followed by what should they do when they return home such as expressing and storing milk then the supplements. This will help them not to be confused, jumping back and forth.
(1)	เหมือนกับว่าตามอายุเด็กรึเปล่าค่ะ	You mean put it in an order?
(2)	ใช่ๆ ตามอายุเด็ก	Yes, put it according to the baby's development.
(1)	แล้วน้ำเอาแบบประเมินไปใช้แล้วพบปัญหาอะไรรึเปล่าค่ะ	Was there any problem using the tool?

	Thai	English
(2)	ไม่มีนะ แค่คิดว่ามันเรียงเป็น series จะทำให้เร็วกว่า smooth กว่า แต่ถ้าอ่านมาแล้วเราก็ถามได้ แล้วค่อยมาตอบมาติ๊กทีหลัง เราก็จะรู้ว่าที่ถามไป มันอยู่หน้าไหน แล้วก็มาติ๊กได้ แต่ถ้ามันเรียงไปเลย มันก็จะช่วยไกด์ดีขึ้น มันจะได้ไม่งง ถามกลับไปกลับมา	There wasn't any. I thought that if you line it up in series it would be smoother. If you have read it before there would be no problem in asking the questions. We can make a note to indicate which page it's on and put a check. But if it's in order it would be a better guide and less confuse jumping around.
(1)	แล้วเรื่องภาษาในแบบประเมินหล่ะค่ะ	How about the language used in the form?
(2)	จริงๆ แล้วภาษาเป็นภาษาเข้าใจง่ายนะ เวลาถามกับคนไข้ คนไข้ก็จะรู้ว่า ถามว่าอะไร ไม่ต้องมาแปลอีก	Actually the language used is easy to understand. When asked, the patient would then know what you are asking for. You don't need to explain.
(1)	ไม่ต้องมาแปลอีกใช่ไหมคะ	So there is no need for more explanation.
(2)	อือ ไม่ต้องแปลอีก ใช้ได้เลย	yeah, no need. It's good.
(1)	แล้วที่ถามว่า มันโอเคไหมคะ 'คุณ'	What about the use of the word 'Kun (you)' in the question, is it ok?
(2)	ได้นะมันเป็นคำที่ soft นะ คุณหรือคุณแม่แล้วแต่ ได้ทั้งสองแบบ	The word has a soft tone. 'Kun (you)' or 'Kunmae (mother)' is fine.
(1)	แล้ว scale 3 scale หล่ะคะ	How about the 3 levels scales?
(2)	ก็ถือว่าโอเคนะ ก็ไม่ต้อง rate มากไป คือ ดีนะคือ มันมีช่องไม่แน่ใจ เพราะบางทีคนไข้ไม่เข้าใจ ดีกว่าที่จะ scale แค่ ใช่ ไม่ใช่ ถ้าจะเอา scale มากน้อยแค่ไหนเดี๋ยวก็จะเยอะ	I think it's ok. It doesn't have to be too detailed. It's good that it has a place for "not sure" because sometimes they patients might not understand. It's better than just "yes" or "no". If you want to include the levels of yes and no

	Thai	English
	เกินไป แบบนี้ดีแล้ว	then it will be too much. It's good this way.
(1)	มีข้อคำถามไหนที่มีปัญหาไหมคะ	Do you have problem with any question?
(2)	เปิดอ่าน หยุด 15 วินาที ตอนแรกเหมือนติดใจอะไรบางอย่าง อาจจะเป็นช่วงแรกไหม ที่ถาม แต่ก็ไม่มีอะไรแระ	Open to read the question. Paused for about 15 sec...,no. In the beginning I wasn't sure about something, but now no. May be it was just in the beginning when I started. It's fine.
(1)	แล้วน้ำตอนใช้แบบประเมินซัก case ที่เท่าไหร่ รู้สึกสบายขึ้น	After how many cases did you start to feel easier using the tool?
(2)	ตอนเริ่ม case ที่ 3 ที่เข้าใจในข้อมูลแล้ว ถามได้ง่ายนะ สบาย หมายถึงว่า มีความเข้าใจว่ากรอบคำถามมันมีอะไรบ้าง	When I started doing the third case. Feeling easy for me refers to having a clearer understanding about the content, asking the questions more easily etc. and knowing what the scope of the questions are.
(1)	แล้วช่องนี้หละมันย้อนไปย้อนมาไหม	During this stage did you still feel you have to jump back and forth?
(2)	ไม่นะ ไม่ย้อนไปย้อนมา มันเป็นตัวบอกให้เรารู้ว่าจะไปหาข้อมูลตรงไหน มีอยู่ในข้อมูลที่ไว้ให้ แต่ว่าข้อมูลที่ไว้ในมันเป็นสั้น ๆ บางคนอาจจะถามลึกกว่านี้นิดนึง เวลาให้ข้อมูลคนให้ก็ต้องค้นคว้าความรู้เพิ่ม อย่างเช่น บางคนอยากได้ระดับเลยว่า งานวิจัยบอกมาว่ามันดียังไง เช่น นมแม่ที่เค้าพิสูจน์มาแล้วมันดีกว่านมผสมตรงไหน แล้วพิสูจน์ออกมาคุณมีอะไรพิสูจน์มาบ้าง อย่างเช่น งานวิจัย ปริญญาโท ปริญญาเอก เราก็ต้องบอกว่างานวิจัยเค้าศึกษามาเมื่อสี่เดือนหกเดือนว่าเลี้ยงนมแม่ฉลาดกว่า 43% ประโยชน์ที่มันสำคัญที่ทำให้เค้าต้องมีการส่งเสริมการเลี้ยงลูกด้วยนมแม่ คือ มีข้อมูล	No I didn't feel I have to jump back and forth. I know where I can get the information, the information in inside. But the information is brief. Some people may want to ask more in-depth questions. When giving information to others, one have to study and know the details, for example, some people want to know if there are researches that back up the information given on the benefit of breast milk etc. For example what the proven benefits of breast milk are over formula and what are those proves?, such as researches at graduate, post-graduate level. I have to tell them about a researches which compares between feeding breast milk for four months and six months which indicate 43

	Thai	English
	ส่วนตัว เราก็ต้องพูดไปเลย อย่างบาง case ที่ต้องการข้อมูลมากๆ เค้าไม่ต้องการแค่ข้อมูลพื้นฐานเพราะเค้าอ่านมาให้จากเน็ตมาบ้าง	per cent differences between the two to help convince them the benefit of and promote breast milk. If I have any knowledge I would just mention it. For example, in some cases which they demand a lot of information, it's not just the basic information that they want. They have already read some of this information from the internet.
(1)	แล้วมีเคสแบบนี้ซักกี่คนในหกคน	How many participants were in this category among the six?
(2)	มีประมาณ 3 คน เพราะอย่างที่บอกว่า คนไข้พิเศษจะเป็นคนไข้ที่ค่อนข้างมีความรู้หน่อย มีที่ไม่ค่อยมีความรู้ประมาณ 1 case เองนอกนั้นจะค่อนข้างศึกษาความรู้มาเองใน 5 caseก็มี 1 case ที่ศึกษามาค่อนข้างลึก รู้ข้อมูลมาหมดแระ ก็ต้องทำไงจะให้เลี้ยง ก็ต้องให้ข้อมูลที่ลึกขึ้น แต่สำหรับกรณีบางคนที่ศึกษามาบ้าง ไม่จำเป็นต้องรู้ลึก ว่านมแม่มีประโยชน์หนึ่งสองสามสี่ห้า ว่ามีภูมิคุ้มกันสารอาหารครบถ้วน ป้องกันไม่ให้แม่ตกเลือด บางคนก็อยากรู้แค่นี้ บางคนก็อยากรู้สึกมากขึ้น มันเสริมให้เค้ามั่นใจมากขึ้นว่ามันแน่นอน	About three. The special case patients usually have less knowledge about this, just like what I have said. We have a case of poor knowledge and the other five have pretty good knowledge. Among the ones with good knowledge they have rather comprehensive information. How then we could encourage them to breast feed if not provide them with further in-depth information. For cases with just basic knowledge we didn't have to provide them with in-depth knowledge on the benefit of breast milk. Some just want important basic information, such as it has the antibody, complete nutritional value, help prevent postpartum haemorrhage etc. Some people want to know more. It assures them the benefit.
(1)	อันนี้คือ ข้อมูลที่น่าจะเพิ่มใน Leaflets ใช่ไหมคะ	Should this information also to be included in the leaflets?
(2)	ใช่ๆ ให้มีเสริมมา จะได้ช่วยในกรณีที่คนไข้ต้องการความรู้ที่มันแน่นเพื่อเสริมเค้า	Yes…yes. These should be added. It will help the patients who needs in-depth information to encourage them to breastfeed.
(1)	แล้วถ้าสำหรับคนที่มีความรู้เยอะๆ แบบประเมินนี้มันง่ายเกินไปรึเปล่าค่ะ	Do you think this form is too simple for mothers who have a lot of knowledge?

	Thai	English
(2)	คือแบบนี้ใช้ได้นะ เพราะอย่างที่เค้าศึกษามาประโยชน์ของนมแม่ มันก็แบบนี้แหละ หัวข้อมันก็เหมือนกัน ไม่แตกต่าง เพียงแต่ว่า รายละเอียดต้องลงลึกนิดนึง หัวข้อมันก็ครบละ	Um…..Like this is fine, because what I have seen in researches related to breast milk, they are similar. The topics are also similar, no difference. It's just the details which need to be more in-depth. The topics are well covered.
(1)	แล้วประสบการณ์ที่น้ำนำแบบประเมินไปใช้กับคนไข้เป็นอย่างไรบ้าง	Please, tell me about your experience in using the tool.
(2)	อันนึงดีคือว่า ทำให้เราไม่ลืมข้อมูลบางส่วนที่เราต้องคุยกับคนไข้เค้าเช่น บางทีเราจะลืมเรื่องกลับบ้านไปจะมีคนช่วยเค้าเลี้ยงรึเปล่า บางทีก็ลืมไปว่าเค้ามีปัญหาไหม หรือบางทีก็นอกจากความตั้งใจแล้ว บางทีเราก็ลืมถามว่า คุณแม่เครียดไหม เลี้ยงนมแม่มีความกดดันอะไรบ้าง	One of the good things is that it helps us remember the details of the conversation I had with the patient. Sometime we tend to forget that they might have not had any support when they are discharged from the hospital. Sometime we forget they have some problem. Sometime we only know that they have the intention to breastfeed but besides that we might forget to ask if they have any difficulties with breastfeeding or if they are under any pressure etc.
(1)	แล้วมีแม่เครียดบ้างไหมคะ	Were there any participants under stress?
(2)	ก็มีบ้างคือน้ำนมมันไม่ได้ trend อย่างที่เค้าคิดว่าให้กินทุกชั่วโมง เค้าก็เลยไม่เข้าใจว่าเหมือนมันง่ายทำไมมันยากขึ้น เค้าก็เลยกดดันว่าแล้วเค้าจะเลี้ยงได้ไหมเนี่ย เหมือนบางคนเค้ามีพ่อแม่พี่น้อง เค้ามีน้ำนมเยอะ แต่ลูกน้ำนมไม่เยอะคือ รอบข้างพูดให้ฟังก็เลยรู้สึกตัวเค้า	Yes there were. Some did not get the amount of milk flow they expected to be enough to feed their baby hourly. They didn't understand why something that seems simple is getting more and more difficult. So they would have the stress because there were uncertain whether they would be successfully in breastfeeding their babies. Some have other family members which have good milk flow and they would hear people talking 'how come she doesn't have good milk flow?' This is the kind of thing she would hear so she was feeling bad.

	Thai	English
(1)	แล้วแบบประเมินวันนี้มีประโยชน์กับการให้บริการของน้ำไหมคะ	Was this tool beneficial to the service you are providing for the patients?
(2)	ก็ทำให้เป็นแนวทางที่ทำให้เกิดการประเมินการเลี้ยงลูกด้วยนมแม่ดีมากขึ้น ได้รอบด้านมากขึ้น พร้อมกับมี Leaflet ไปด้วยก็จะช่วยให้มีข้อมูลครบถ้วน อย่างเช่น น้องพยาบาลใหม่ๆ หรือเพิ่งจบมาสองปี ที่ยังไม่เข้าใจเรื่องนมแม่หรืออ่านมาก็ยังไม่ค่อยเข้าใจ ว่าถ้าเกิดเค้าถามแล้วจะคุยกับเค้ายังไง ก็ช่วยเสริมเค้าให้มีข้อมูลตรงนี้ได้	It helps me improve the assessment of my patients in breastfeeding. The assessment is better rounded. With the leaflets it helps equip me with all the information I need. For example, some new nurses who are second year nurses may have limited knowledge about breast feeding, might have studied but do not fully understand how to make the conversation, this information can then help them.
(1)	คือว่าได้ตรงจุดที่เค้าต้องการ	You mean help in the area that they really need?
(2)	ใช่ บางทีเราไปอยู่กับเค้าน้อย เค้าอาจไม่ได้บอกตรงจุดเค้าต้องการ	Yes. Sometime we spend little time with them and they may not have yet share specifically what are their needs
(1)	แล้วน้ำคิดว่ามันจะสามารถเอามาใช้ได้จริงรึเปล่า	In reality, do you think this tool can be put to use?
(2)	ประโยชน์คือ ใช้ได้ในการประเมินว่าเค้าจะเลี้ยงนมแม่ได้ไหม	The benefit of it is, it can help assess whether the mothers can successfully breastfeed.
(1)	Nurse ของน้ำมีกี่คน	How many nurses are working with you?
(2)	5 คน	Five

	Thai	English
(1)	แล้วมีคนอบรมกี่คน น้ำบอกเราว่ามันจะดีมากสำหรับพยาบาลใหม่ ใน 5 คนมีพยาบาลใหม่กี่คน	And how many are trainees? You have mentioned that this tool would be good for the new nurses. How many of your nurses are new?
(2)	มี 4 คน New ใหม่ๆ เลยด้วยนะ มีคนอบรมนมแม่คนเดียว	Four are new and only one has training on breastfeeding support.
(1)	ที่มีอบรมนมแม่คนเดียวเป็นเพราะอะไร	Why only one nurse is trained on breast feeding support?
(2)	จริงๆ ไม่ใช่อบรมด้วยซ้ำ เพราะไปวันเดียว อบรมจริงๆ มันต้องเป็น 4,5 วันด้วยซ้ำ คือเราไปประชุมเฉยๆ วันเดียว แล้วก็ไปศึกษานมแม่กับคนที่เค้าเคยอบรมนมแม่มาแล้ว คือมันมีโครงการอยู่นะ แต่มันผ่านมา 2 ปีแล้ว พี่อ้อยที่อยู่ชั้น 6 เค้าว่าจะให้มีอบรมนมแม่ใหม่อีกที แต่ไม่แน่ใจว่าเมื่อไหร่ พี่เค้ากำลังเขียนโครงการอยู่ไง เหมือนอบรมการประเมินโดยใช้ Latch score มาเป็นตัวแบบประเมินและก็ใช้ในการส่งเวร ว่าท่าอุ้ม หัวนมได้ไหม อะไรอย่างนี้ ประเมินว่าแต่ละเวรเค้าทำได้ไหม	In fact, you can't even call it a formal training because it was only a one-day thing. The proper one has to be 4-5 days. Actually I went for a different training and I had some training with a person who was formally trained on breastfeeding. There has been a plan for this training, but it has already been two years and it still did not happen. Ms. Oii, who worked on the 6th floor said that she will reorganize this training-breast milk again but I am not sure when. She is now writing up about the project. It seems it's training on evaluation using Latch Score and uses it when turning each nursing shift, such as holding position, nipple condition, and these sorts of things. Evaluate to see if each mother can do all these things.
(1)	แล้วน้ำเคยใช้ latch score มาก่อนบ้างไหม	Have you ever use latch score evaluation before?
(2)	ก็ไม่เคยใช้ แต่รู้จัก เพราะเราเคยอยู่คลินิกนมแม่แล้วเราก็ใช้แบบนี้ไง ก็คือ เคยใช้ แต่น้อย	No, I haven't really. But I know what it is because I have worked in the breastfeeding clinic before and that's what they use there. Yes, I actually did, but not much.

	Thai	English
(1)	แล้วนอกจากนี้ น้ำว่ามันมีประเด็นสำคัญอะไรที่น้ำคิดว่าควรจะเพิ่มเติมที่ขาดไป	Besides was you have mentioned, could you think of any important point that might be missing and should be added in this tool?
(2)	อันนี้มันเป็นการประเมินโดยถามจากคุณแม่ แต่ไม่มีข้อมูลบันทึกเกี่ยวกับสภาพความเป็นจริงว่าเป็นอย่างไรบ้าง เช่น ท่าอุ้ม คือ อันนี้เหมือนเป็นการประเมินพื้นฐานว่าต้องการอะไรมีความมั่นใจอะไรมากน้อยขนาดไหน ในความรู้สึกนะ แต่ถ้าเกิดเป็นตอนที่เค้าจะเลี้ยงว่าจะเลี้ยงได้ไหมที่เป็นจริง มันต้องมีเครื่องมือตัวอื่นมาร่วมด้วย อย่างเช่น latch score มาร่วมด้วย เพื่อเสริมให้ว่า หลังจากที่ประเมินความรู้ ให้ความรู้เค้าไปแล้ว เค้าสามารถ ให้นมแม่ได้ไหมเค้าสามารถสำเร็จไหม อันนี้คือประเมินความสำเร็จของนมแม่ไม่ได้ แต่เราประเมินความมั่นใจ ความรู้ได้ประเมินทัศนคติได้ แต่ยังประเมินทักษะเค้าไม่ได้	This tool only focus on what the mothers have to say, but doesn't include the practical knowledge such as holding position. It is a basic evaluation of their needs and how confident they are. It just what I feel. When it comes to the reality whether they can put them into action we then would need a different tool such as Latch score along with this, to ensure that after the knowledge part has be evaluated and supported, they can really put breastfeeding into practice and evaluate their success. This tool can't evaluate the success of breastfeeding but it can evaluate the confidence level, knowledge and attitude about breastfeeding. It can't evaluate their skill.
(1)	ซึ่งน้ำแนะนำอีกประเด็นก็น่าจะเป็น ประเมินปฏิบัติใช่ไหมคะ	So you think that the practical aspect could be included in the tool.
(2)	ใช่	Yes.
(1)	แล้วน้ำมีหัวข้ออย่างอื่นอีกไหมค่ะ	Is there anything other topics that you would like to add?
(2)	ไม่แล้วนะ	No, that's it.
(1)	น้ำต้องใช้ information ที่มีส่วนตัวอีกมากไหมในการตอบคำถามคนไข้ โดยรวมแล้ว	Generally do you think you have to look up for much information personally to answer the patients using the tool?

	Thai	English
(2)	ไม่มากนักหรอก ถ้าประโยชน์นมแม่มันมีหลายข้อ เราก็เลือกมาเฉพาะอันสำคัญเท่านั้นเอง สำหรับแม่สำหรับลูก	Not much. For instance, if there are many benefits of breast milk, I would just choose a few important ones for both the mother and child.
(1)	แล้ว Leaflet ที่น้ำบอกว่ามันน่าจะมีเรื่องวิจัยเพิ่มเติมหล่ะค่ะ	How about leaflets that you told should contain researches findings?
(2)	มันก็แค่เริ่มต้น เรื่องประโยชน์ที่น่าจะมี research เพิ่ม	Information is just basic. It should also include results of researches.
(1)	แล้วโดยรวมแล้วถ้าพยาบาลอ่าน Leaflets แล้วก็น่าจะให้ข้อมูลกับคนไข้ได้ใช่ไหมคะ โดยไม่ต้องอาศัยความรู้ส่วนตัวอีก	Generally, if the nurses studied the leaflets do you think they could provide sufficient information to the mothers if they didn't uses their personal sources?
(2)	ได้ ไม่ต้องใช้ข้อมูลส่วนตัวก็ได้ มีเฉพาะบางคนที่เค้าต้องการข้อมูลเชิงลึกเท่านั้นแหละ	Yes, they could generally. It's just only a few who want in-depth information.
(1)	สรุปแล้วน้ำคิดว่า แบบประเมินนี้สามารถประเมินความรู้ และทัศนคติ เรื่องนมแม่ได้ แต่มีปัญหาเรื่อง practice ใช่ไหมค่ะ	In conclusion you think that this tool can assess knowledge and vision of mothers regarding breastfeeding but not the practical part?
(2)	ได้ ประเมินได้ แต่มีปัญหาเรื่อง practice เพราะว่า มันต้องตาม คืออยู่กับเค้าสอนประเดี๋ยวประด๋าว แต่จริงๆ แล้วคือ ต้องตามว่าเค้าทำด้วยตัวเองได้หรือเปล่า	Yes, it can. But not on what is being practiced because follow up is necessary. You are only with them for a short time but the reality is we need to know if they are really practicing.
(1)	แล้วน้ำคิดว่าทำยังไงถึงจะทำให้เค้าทำประสบความสำเร็จ ในฐานะ nurse ที่จะช่วย	As a nurse, how do you think you could contribute to their success?
(2)	ส่วนใหญ่น่าจะเป็นเรื่องติดตาม หลังจากการที่เราให้ความรู้ ความเข้าใจและฝึกปฏิบัติแล้วตามหลังจากนั้นตอนที่เค้าอยู่โรงพยาบาล สมมุติว่าสอนไปแล้ว ภายในน่าจะ 4	Mostly it's all about following up. After we have given them the knowledge and understanding and practical skills then we need to follow up while they are at

	Thai	English
	ชั่วโมง ก็ต้องดูว่าเค้าทำได้ไม๊ ไม่ใช่ตามวันที่ 2 วันที่ 3 ต้องตามตอนนั้นแหละว่าเค้าทำได้ไหม แต่ละวัน แต่ละเวร อย่างน้อยนะทุก 8 ชั่วโมง เพราะช่วงแรกเป็นช่วงสำคัญไงว่าเค้าจะเลี้ยงได้สำเร็จไหม	the hospital, after 4 hours, to see whether they can do it by themselves. Not on the 2nd day or 3rd day. We should follow up right away. Every day, every shift, at least every 8 hours because the beginning part is very important and could indicate whether would be successful or not.
(1)	แล้วโดยรวมที่น้ำสอบถามมา 6 case เค้ามีความตั้งใจเลี้ยงลูกด้วยนมแม่อย่างไรบ้าง	What is the overall picture of the six cases that you used the tool with regarding their determination to breastfeed?
(2)	ทุกคนนะ ได้ข้อมูล ตั้งใจเลี้ยง 6 เดือนหมดเลยถึง 1 ปี แล้วแต่ที่เค้าทำได้	Everyone who got the information has determination to breastfeed for at least six months to 1 year, depending on how far they can go.
(1)	แล้วเค้าทำงานอะไรกัน	What kind of jobs do they do?
(2)	เค้าทำงานกันนะ แต่เค้ารู้ว่าต้องบีบเก็บไง รู้วิธีเก็บน้ำนม เครื่องปั๊มเตรียมกันหมดเลย คือ คนที่เค้ารู้เค้าจะเตรียม คนที่เค้าศึกษามา เค้าจะเตรียมกันหมดละ แต่เราก็ว่ายังไงก็ต้องบีบมือก่อน เครื่องปั๊มอย่างเดียวมันออกไม่หมดหรอก	They all have a job. They know that they should express and store milk. They know how to store breast milk. They all have prepared their breast pump. Those who know will prepare. Those who read will prepare. All of them. But I still think they should begin with expressing with their hands. Using pump alone can't get all of it out.
(1)	ส่วนใหญ่เค้าใช้เครื่องปั๊มแบบไหนกันคันโยกหรือแบบไฟฟ้า	What kind of pump do most mothers use…manual or electric?
(2)	แล้วแต่เศรษฐานะ ถ้าเกิดคนที่มีตั้งหน่อยเค้าจะใช้แบบไฟฟ้า มันมี 2 แบบคือหัวเดียวกับ 2 หัว แบบบางคนก็ซื้อมาเยี่ยมเลยไง	Depending on their income level. Those with more income would use electric ones. There are two types, for single breast and both. Some of them bought and brought them along, really excellent.
(1)	แล้วมีอะไรจะเพิ่มเติมอีกไหมค่ะ	Is there anything that you would like to add?

	Thai	English
(2)	คือคนไข้ฝั่งพิเศษ เค้าก็จะรู้กันมาอยู่แล้ว เราแค่พูดเสริมให้เค้ามีความมั่นใจ แต่ไม่ใช่เราพูดให้คนไข้พังอย่างเดียวนะ ก็เสริมญาติด้วย ญาติเป็นส่วนสำคัญ	There are patients at special ward who are usually well informed. We just only need to provide them more information to give them the confidence they need. I don't only inform the mother but also her relatives. The relatives are important part in this.
(1)	คือ เวลาน้ำใช้แบบประเมินก็มีญาติอยู่ด้วยใช่ไหมคะ	When you use the tool were the relatives also present?
(2)	ใช่ ก็มีญาติอยู่ด้วย ประโยชน์คือญาติก็ได้รู้ด้วย เพราะว่าเค้าต้องเป็นคนช่วย เป็นแรงเสริมไง ตอนเค้ากลับไปอยู่บ้าน เค้าก็ต้องมีข้อมูลด้วยเพราะเค้าต้องช่วยไง ว่านมแม่มันดียังไง	Yes, they were. The benefit is that the relatives also learn, because they are the ones who will support the mother. They can help reinforce. After discharged they also should have the knowledge because they are the ones who will continue to support, such as information about the benefit of breast milk etc.
(1)	แล้ว response ของญาติเค้าเป็นอย่างไรบ้าง	How was the response of the relatives?
(2)	เค้าก็ เค้าไม่ได้คิดถึงไง ญาติบางคนเค้าคิดว่า ลูกร้องเยอะ อะไรอย่างเงียะ แต่ถ้ารู้ เฮ้ย เราพูดไปว่านมแม่มันดียังไง นมผสมมันแทนไม่ได้ เค้าก็จะเห็นความสำคัญมากขึ้น เค้าก็จะให้ความร่วมมือเวลาส่งเสริมเลี้ยงลูกนมแม่ ตัวญาติอ่ะสำคัญเลย สำหรับฝั่งพิเศษนะ ถ้าญาติไม่ให้ความร่วมมือนะตอนเรากลับไปปั๊บก็ไปขอนมผสมแล้ว เพราะเค้ามีอิทธิพล ไม่ใช่ตัวแม่คนเดียว เพราะแม่เค้าต้องมีคนช่วยเลี้ยงด้วย มันดีตรงนี้ด้วย	There were hundreds of really! They never knew about this. Some relatives thought the baby would cry a lot, but after they were informed about the benefits, and how formula milk can't replace its value they would all then understand the importance of breast milk. They would then support breast milk. The relatives are extremely important especially with the special ward patients. If the relatives are not supportive when we return to see the mother we would often see them asking for formula milk. It is because they can highly influence, not only the mother. Mothers needed support as well. That's also a positive point.

	Thai	English
(1)	อ๋อ ค่ะ แล้วน้ำคิดว่ามันมีบริการอื่นๆ อีกไหมคะที่พยาบาลหรือบุคลากรทางการแพทย์สามารถทำได้เพื่อช่วยให้เค้าประสบความสำเร็จในการเลี้ยงลูกด้วยนมแม่อย่างเดียว 6 เดือน	I see. Are there any other services that you see nurses and health professionals could do to help mothers to be successful in exclusive breastfeeding for 6 months.
(2)	ของเรามันยากตรงที่ว่า มันมีคลินิกนมแม่ที่มันไม่ work จริงๆ มากๆ เลย มันจะต้องมีใครมาปรึกษา มันจะต้องได้กลับมาได้ หรือชักชวนมาได้ อย่างนัดให้มาได้ ไม่ใช่พอมีปัญหาแล้วนัดมา แล้วไม่มีห้องให้	The difficulty is, we have a breastfeeding clinic which doesn't really work. We should have someone there for people to consult with, people should be able to revisit the place, or it should be able to convince to the people to use the service there. Appointment should be made not only the time when the mothers have problem and when they come there is no room to accommodate them.
(1)	รู้สึกเห็นว่ามีห้องคลินิกเลี้ยงลูกด้วยนมแม่นะ	I think there is a room here for breastfeeding clinic.
(2)	มีห้อง แต่ไม่ค่อยได้ใช้ เมื่อก่อนเคยเปิดเป็นคลินิกนมแม่อยู่ มันใช้เงินของ สปสช. เค้าก็เลยมีเงิน ก็เลยมีพยาบาลไปนั่งประจำ ตอนนี้ นม 5.เค้าจะทำเป็นโครงการเพิ่มการเลี้ยงลูกด้วยนมแม่ ป้องกันเรื่องเต้านมคัด มันก็เลยเพิ่งมีห้องคือ มีห้องเฉพาะของเค้า	There is a room but it's hardly being used. Before it was used as a breastfeeding clinic, it used to run with sor-por-sor-kor budget, so there was sufficient fund. There is a regular nurse who sits there. Now it's on the 5th floor, they are making a project to increase breastfeeding and prevent breast engorgement, that's why there is a room. It's just for them.
(1)	แล้วเราส่ง case ให้เค้าได้ไหม	Can we send our patients there?
(2)	ก็จะส่งก็ได้ แต่เค้าก็ไม่ได้มีบริการให้เรา แต่ถ้าจะส่งให้ก็ได้ถ้ามีคน ถ้าเป็นเมื่อก่อนเคยมีเราก็ส่งไป เคสที่มีปัญหา	Yes, you could but they don't formally serve us. But if we have a patient we could send. Before, we used to send our patients there, difficult cases.

	Thai	English
(1)	แต่มีห้องอย่างเดียวก็อาจไม่ได้นะน้ำ ความหมายของน้ำ อยากให้มีคลินิกนมแม่ที่ work ขึ้น เพื่อจะช่วย	Having only a room may not be sufficient. What you are trying to say is, you want the breastfeeding Clinic to work ….because….?
(2)	ใช่ๆ มันต้องมีคนไง ต้องมีคนอยู่ อันนั้นเค้าเอาเวรเช้ามานั่งแป๊ปเดียว เค้าไม่ได้มานั่งทั้งวัน แต่คนไข้เรามันต้องปรึกษาไง คือมันมีห้องนมแม่ที่ไม่ประสบความสำเร็จเท่าไหร่คือ มีคนประจำ คนที่มีความรู้ ความสามารถ ที่สามารถช่วยเหลือเค้าได้จริง ๆ ไม่ได้แค่ปรึกษา แต่สามารถแก้ปัญหาเค้าได้	Yes, there should also be staff. There should also be someone there. What they are doing is just putting someone there for a short time….she is not there all day. How could our patients consult with them then? Yes, there is a breast milk clinic which is not very successful. I mean there should regularly be someone there, someone with knowledge and capacity who could really help these people. Not just giving consultation but also helping them solve their problem.
(1)	แล้วน้ำคิดว่า nurse ทำได้ไหมคะ	Do you think nurses can do this?
(2)	ได้ แต่ถ้าไปอบรมร่วมด้วยก็ดี nurse ที่ประจำก็ได้ ขณะบางอย่างที่เราไม่เคยทำ เราจะไม่รู้อย่างเช่น ที่เคยเจอก็คือ หัวนมมันมีตุ่มขาวๆ ขึ้น แล้วหมอก็บอกว่าเป็นหนอง ต้องกินยา แต่ที่เราเคยไปฟังมานี่ไม่ใช่ มันแค่ท่อน้ำนมตัน เจาะนิดเดียวก็พุ่ง	Yes, but if they also get the training it would be good. It could be our permanent nurse. There are things if without hand-on experience then would be difficult to put into practice. In my own experience, for example, a mother with white pimples on the nipples. The doctor said its puss and the patient should take medication. But from my training it isn't. It's only blocked milk duct. A simple pick and milk would pour.
(1)	แล้วน้ำทำอย่างไรคะ	What did you do then?
(2)	ก็ใช้เข็มสะกิดนิดเดียว เพราะที่ไปฟังเค้ามา เค้าเอาภาพมาให้ดู เออเหมือนแป๊ะเลยก็เอาหัวเข็มสะกิดนิดเดียว คือมันไม่ใช่หนอง มันจะโป่งขึ้นมาเป็นใส ๆ สะกิดนิดเดียวแค่นั้นแหละ น้ำนมก็พุ่งเลย คนไข้ก็หายปวดทันที	I just used a needle and gave it a tiny pick. I heard this in the training. They also show the illustration. They looked exactly the same. I just used a needle and gave it a little poke. It's not puss. It bulges out and it looked quite clear. With a little poke the milk would shoot out and the patient would quickly feel

	Thai	English
		no pain.
(1)	อ๋อ ค่ะ	I see.
(2)	คือ รู้ไงคนที่เค้ามีประสบการณ์นมแม่ แต่คนที่เค้ามีประสบการณ์นมแม่ เค้าก็จะไม่รู้ เค้าก็จะคิดว่าหมอบอกว่าเป็นหนองก็คือเป็นหนอง ห้ามให้ลูกดูดนม มันก็จะเสียไป ซึ่งมันคือคนไข้ที่กลับบ้านไปแล้ว เป็นเดือนแล้วมีปัญหา เค้าก็อยากมาปรึกษา ถ้าไม่มีทำไง ก็นั่นแหละโทรมาตามตึกที่เคยมา	Those who had breastfeeding experience would know this but those who haven't had wouldn't know. They would agree, if the doctor says its puss then they would think it puss and they would not let the baby breastfeed. In this case the opportunity is lost. It is an actual case of one of the patient who has already returned home. After about a month she had a problem and wanted to have a consultation with us. What if there isn't a clinic. She called the building where she was.
(1)	แล้วบริการเรามี Leaflets หรืออบรมอะไรไหมคะ	In the service do you hand out leaflets or give training?
(2)	อ๋อมี VDO เรื่องเลี้ยงลูกด้วยนมแม่ไง	We show video about breastfeeding.
(1)	VDO เค้าพูดเรื่องอะไรกัน	What is in the video?
(2)	เรื่องการเลี้ยงลูกด้วยนมแม่ ตั้งแต่กลไกแรกๆ เลย กลไกว่านมแม่สร้างมายังไง ดูดเร็ว ดูดบ่อย นมแม่ช่วยสร้าง Oxytocin	It is about breastfeeding but very basic knowledge. It shows how breast milk is made in mother's body, how the oxytocin is made.
(1)	มีให้คนไข้ทุกราย หรือตามคนไข้ request คะ	Is this service for every patients, or given at individual request?

	Thai	English
(2)	ก็มี VDO ตามห้อง เปิดช่วงที่คุณแม่ว่าง ก่อนเลี้ยงลูกด้วยนมแม่ ก็ไปเปิด ทำความเข้าใจเรื่องนมแม่ มีสองวิดีโอ อันนึงพูดเรื่องการเลี้ยงลูกด้วยนมแม่ กับอีกเรื่องเกี่ยวกับการดูแลเด็ก ห้องเด็กเค้าเอามาให้ร่วมกัน การดูแลเด็กก็จะมีเรื่องเช็ดสะดือ อาบน้ำ ห่อตัวลูก	The videos are shown in the room during mother's free time. We put it on before initial breastfeeding for them to have a good understanding about breast milk. There are two videos, one is about breastfeeding and the other is on baby care. The infant ward brought it for us so the mother can see both….the baby care one contains topics like cord care, baby bath, baby wrapping etc.
(1)	มีอยู่ทุกห้องรึเปล่าคะ	Are these available in every patient's room?
(2)	คือไปเปิดให้ทุกห้อง อ่อคือมีแค่เครื่องเดียวแหละ เครื่องสองเครื่องก็เปิดวนกัน ใครสนจะไป copy ก็แบบได้หมด	We show them to every room. We use just one set. We just take it around. Anyone who would like to have a copy, we would make for them.
(1)	ค่ะ แล้วมี suggestion อย่างอื่นไหมคะ	Is there any other suggestion?
(2)	คือ เรื่องนมแม่กับหมอเด็กก็มีปัญหาเหมือนกัน ตอนนี้เหมือนเค้าป้องกันไม่ให้ลูกน้ำหนักลด หรือน้ำหนักลดลงมากกว่า ที่เค้าคาดการณ์ไว้ ถ้าเมื่อไหร่ที่น้ำหนักลดลง เค้าจะให้แม่เสริมนมผสม คือเค้าดูเป็นวันนะ เช่น เกิน 10 % เค้าชั่งน้ำหนักทุกวันเลย นี่ก็คือปัญหาตอนนี้เพราะว่า หมอเล่นไม่ให้ลูกน้ำหนักลดเกินที่เค้าตั้งไว้ คือ 10 % ต่อวัน ดังนั้นคือถึงแม้จะน้ำนมพุ่ง น้ำนมดีเท่าไหน ถ้าน้ำหนักลง ก็ต้องเสริมนมให้	Yes, we do have some problem with doctors regarding breast milk. Now they are working on preventing babies from weight loss or losing weight lower than the level that they set. Whenever a baby's weight goes pass this level they would give formula along with breast milk. They follow the weight each day; for example, if the weight gets lower than 10 percent of the actual weight. This…what the problem is now. The doctor doesn't allow the baby's weight to drop 10 percent of its actual weight in a day. Therefore even if a mother has excellent milk flow, if her baby's weight dropped below the set level that day, the baby would still be formula fed.

	Thai	English
(1)	เพิ่งเป็นหรือเป็นมานานแล้วคะ	How long has this practice been going on?
(2)	เพิ่งเป็นช่วงไม่นานมานี้ ประมาณ 6 เดือนแล้ว	Not very long, about 6 months.
(1)	แล้วใครเป็นคนบอกว่าลูกน้ำหนักลด	Who is the one who indicates that the baby weight is below the level?
(2)	ก็ห้องเด็กไง ของเรามีห้องเด็กพิเศษ ชั้น 5 คือ nurse จะชั่งน้ำหนัก แล้วหมอก็มาตรวจทุกเช้า ตรวจสุขภาพตอนเช้า แล้วคือ เค้าก็มาดู report เค้าบอกถ้าลูกน้ำหนักลดลงมากๆ มันมี trend ที่จะเกิดภาวะตัวเหลืองมากขึ้น เค้าศึกษา trend มาว่ายังไงก็ต้องเสริม มันก็เป็นปัญหาขัดขวางการเลี้ยงลูกด้วยนมแม่เหมือนกัน อันที่ 2 คือที่ว่าเราจะไม่ให้ลูกกินนมจากแก้ว แต่หมอเด็กเค้าก็ไม่รับรอง ถ้าเกิดเด็กสำลักขึ้นมา	The new-born room. We have a special new-born room on the 5th floor. The nurse there would weigh the baby and the doctor would come and check every morning. The doctor would come and check baby's' health every morning and they would read the report. They said that if the baby loses a significant amount of weight there is an increased tendency they will develop jaundice. According to their study of the trend of risk they would definitely add the formula feed. This is also one of the obstacles hindering exclusive breastfeeding. The second is that we do not let babies drink from a cup…the doctors also will not take any responsibility if the baby aspirate.
(1)	คือ เหมือนเค้าไม่ให้กินจากถ้วยใช่ไหม	So it seems that they do not support cup feeding.
(2)	ใช่ เค้าไม่ให้กินจากถ้วย เค้าไม่ OK	Yes, they do not allow cup feeding. They are not OK with it.
(1)	แต่ถ้าบีบนมใส่ขวดได้ไหม	How about expressed breast milk in a bottle?

	Thai	English
(2)	ถ้าบีบนมใส่ขวดได้ เพราะนมแม่ทั่วไปเค้าไม่ให้กินจากจุกขวด เพราะเด็กจะติดจุกขวดไง	Breast milk in bottles is fine. Normally they do not want the baby to have it in bottle because they do not want babies getting used to pacifier.
(1)	แล้วน้ำคิดอย่างไร	What's your opinion about this issue?
(2)	ก็คือไม่เท่าไหร่ ไม่ success กับที่หมอพูดแบบนั้น เพราะถ้าเด็กติดจุกขวดแล้วเค้าอยากกลับมากินนมแม่ได้ยากมาก ต้องมาสอนกันใหม่นานมาก เพราะเด็กจะมีลักษณะติดการดูดจากจุกขวด จะใช้วิธีกัด ถ้ามากินนมแม่ ใช้วิธีกัดเนี่ย ก็คือดูดนมแม่ไม่ได้เลย	I don't have any strong opinion about that even though I don't really agree with what the doctor said, because of the babies are used to the bottles then it's really difficult to breastfeed again. We have to start training them right from the beginning again...because the babies have already developed their sucking style for the bottle which include biting. If they change to breastfeeding they would continue to bite and would make it extremely difficult to breastfeed.
(1)	แล้วน้ำโอเค ถ้าเกิดเป็นกินนมแม่แต่เป็นการกินจากขวด	And are you ok with breast milk from bottles?
(2)	ก็ข้อเสียของบีบใส่ขวดเนี่ย ซักระยะมันจะแห้ง ไม่ได้รับการกระตุ้นนานๆ อย่างเร็ว บางคนซักเดือนนึงก็แห้งไปแล้ว เสียดายไง แต่ถ้าน้ำนมเยอะ ก็นานกว่านั้น ส่วนใหญ่กลุ่มพวกนี้ที่ดูดจากขวดได้ก็จะเป็นพวกที่ดูดจากเต้าไม่ได้จริง ๆ แล้วค่อยสอน เช่น คนที่ไม่มีหัวนม หรือหัวนมบอดแม่ใช้อุปกรณ์เสริมแล้วก็ยังไม่ได้ ลูกก็ไม่เอา ก็ต้องสอนการบีบ แต่จะแนะนำให้บีบมากกว่าเครื่องปั๊ม เพราะเครื่องปั๊มมันแค่ดึงไม่มีการกระตุ้นไง สอนการนวด ว่าตรงไหนดี นวดแล้วกระตุ้นได้ดี บีบทุกเท่าไร ให้มันได้นานขึ้น	The negative point of breast milk in bottles is that after a while the production decreases because your breasts are not properly stimulated. Some mothers run out of milk in just a month. What a waste. Those with good milk flow would last longer. The babies who drink mother's milk from bottles are usually the ones having a lot of difficulties sucking from breasts, we would then train them. For example for mothers who have invert nipples and have tried the equipment to help but didn't work, we then would have to teach them to express by hand. We would recommend them to hand express rather than using breast pump. The pumps only suck without other form of stimulation to the breast. We would teach them how to massage, showing them good spots

	Thai	English
		to massage which would help to stimulate milk flow. We would advise them how many time they should massage to best stimulate to help the milk flow last longer.
(1)	แล้วน้ำมีเรื่องอื่นอีกไหมคะ เช่นเรื่อง leaflet	Do you have any recommendation on other topic such as the leaflets?
(2)	นอกจากยา Motilium ที่ใช้กระตุ้นน้ำนมแล้ว ก็ยังมีพวกสมุนไพร ที่มันบำรุงน้ำนม ต้องพูดเพิ่มขึ้น เพราะว่ามันก็มีหลากหลายนะ ที่มันช่วยกระตุ้นน้ำนมได้ เค้าบอกว่ามันก็ช่วยกระตุ้นให้ทัดเทียมกับ Motilium เลยก็ช่วย 10% อันนี้ฟังจากอาจารย์สูตินะ ก็ไม่แน่ใจ เช่น พวกอาหาร สมุนไพรที่บำรุงน้ำนม เราก็ไม่รู้นะว่าเค้าวิจัยออกมาว่ายังไง แต่เค้าบอกว่ามันทัดเทียมกับ Motilium เลย ช่วยได้เหมือนกันแต่บางคนกิน Motilium เข้าไปแค่เม็ดเดียวนะก็กระตุ้นแล้วนะ มันก็อาจเป็นเรื่องจิตใจด้วย บอกคุณพยาบาลว่าแค่กินเม็ดเดียวเอง น้ำนมอออกเลย เราก็บอกเฮ้ยดีแล้วคะคุณแม่ ก็เลยมีความรู้สึกว่าของเราอาจมีความเครียดเยอะก็ได้มั้ง เลยทำให้มีปัญหา อย่างอื่นก็ไม่มีอะไรแล้วนะ	Besides motilium that is used to stimulate breast milk there are also other herbs also. More things should be mention because there are many way you can do stimulate breast milk. They mentioned that it could be as good as motilium, up to 10% increase. This is what I have heard from obstetrics and gynaecology doctors. I am not sure about the research results on these herbs. But they said they are as good as motilium. But sometime just one tablet of motilium would give a good result for some mothers. It might also have to do with mother's psychological condition. A mother told me that she just took one tablet and she got a good milk flow. I told her that's amazing. I felt that it might have to do with the level of stress she was having. On other issues I don't think I have any more to say.

3. Ying (postpartum woman)

	Thai	English
(1)	คุณหญิง ตั้งใจจะเลี้ยงลูกด้วยนมแม่นานแค่ไหน	How long do you plan to breastfeed your baby?
(2)	ก็ซักปีค่ะ เพราะก็ไม่ต้องทำอะไรเลย	About a year. I have no other obligation.
(1)	หมายความว่า อยู่บ้านเลี้ยงลูกอย่างเดียว ไม่ต้องทำงานเหรอคะ	What you are saying is you just stay home and only look after your baby and don't have to work?
(2)	ค่ะ คือ ที่บ้านทำธุรกิจของตัวเอง คือขายมะนาวค่ะ อยู่ที่ราชบุรี	That's right. We have a family business. We sell lime in Rachaburi Province.
(1)	ค่ะ คุณพยาบาลได้มาใช้แบบประเมินกับคุณหญิงแล้วนะคะ คุณหญิงมีความรู้สึกอย่างไรบ้างคะ	I see. I understand that the nurse has already given you the breastfeeding support tool, could you please share your opinion about it.
(2)	สำหรับเราก็ได้ความรู้เพิ่มขึ้นค่ะ เพราะเราไม่ได้จริงจังกับการอ่านหนังสือ หรือเตรียมตัวอะไรมาก พอคุยกับพี่เค้า แล้วก็เออรู้มากขึ้น (พี่พยาบาล)	In my opinion, I felt that I have gained more knowledge from it, because normally I am not really serious about reading stuffs or preparing myself for things. After talking to the nurses, I learned more.
(1)	อย่างเช่นอะไรบ้างคะ ที่บอกว่ารู้มากขึ้น	Could you share something that you have learned?
(2)	อย่างอาหารกระตุ้นน้ำนม เราก็รู้บ้างแต่ไม่รู้อีกหลายอย่าง แล้วก็เรื่องปลุกลูก เราก็ยังไม่รู้ แล้วเรื่องยากไหม เราก็ได้คุยกับพี่ ทำความสะอาดหัวนมเราก็ไม่รู้ การบีบน้ำนมด้วยตนเอง การเก็บน้ำนม และก็ที่ว่าจะเริ่มปั๊มเมื่อไหร่ สำหรับเราก็คือดีนะ	For example, about food that helps stimulate breast milk. I knew a few, but there were many more that I did not know. The thing about waking up the baby, I didn't know about that. I got to talk about the difficulties I went

	Thai	English
		through. I also didn't know about nipple hygiene, hand expressing, storing breast milk and also when to begin pumping….I think that information is useful.
(1)	แล้วคิดว่าที่เอาแบบประเมินมาใช้ และให้การพยาบาลมันมีประโยชน์ไหมค่ะ	What is your opinion about using this tool to help nurses provide breastfeeding services?
(2)	อย่างเรามีคำถาม เค้าก็ตอบ เราก็เหมือนเออใช่ ใช่ มันเหมือนตรงกับใจเราที่อยากรู้ เออ อย่างบางหัวข้อเราไม่ทันได้คิด เค้าก็มีหัวข้อมาให้เรา แล้วถ้าเราไม่รู้ เราก็สอบถาม ถ้าเราไม่ได้คุย แบบว่าไม่มีหัวข้อมา เราก็ไม่รู้ว่าเรื่องอะไรบ้าง เราก็อาจจะ Blank ไป อะไรอย่างนี้	For example, if we have any question in mind, they would then answer us more accurately, according to our need. There were things I never thought of which were new knowledge to me. If we don't know about something we could just ask. If there was no tool guide then I would find it more difficult to ask and get engaged a conversation. My head could be just blank…don't know what to talk about.
(1)	แล้วที่คุณหญิงบอกว่าจะเลี้ยงลูกด้วยนมแม่ซักปีนึง หลังออกจากโรงพยาบาล พอได้รับคำแนะนำจากพยาบาลมันทำให้คุณหญิงอยากเลี้ยงลูกด้วยนมแม่ ยาวนานขึ้น หรือเปล่าคะ	You mentioned earlier that you plan to breastfeed for a year. After you received the services from the nurse here, were you encouraged to try to breastfeed even longer?
(2)	อ๋อ ก็ไม่ค่ะ คือเราตั้งใจมาก่อนอยู่แล้วว่าปีนึง คือเหมือนถ้าเราตอบว่าปีนึงแล้ว เราก็ว่ามันมานแล้ว ก็คงไม่คิดว่าจะเลี้ยงให้นานมากขึ้น เพราะหลังจากนั้นเราก็ต้องทำงานแล้ว	No, I already have plan from the beginning that it would be for a year. I think one year is already quite long, so I don't think that I would go further than that. I planned to do some work later.
(1)	ดีจังนะค่ะ อยู่กับลูกได้เป็นปีเลย แล้วทำงานประเภทไหนค่ะ	It is really wonderful to be able to fully look after your baby for a year. What kind of work did you plan to do?
(2)	คือมันเป็นธุรกิจ เราก็ไปบ้างไม่ไปบ้าง ก็ไป 1-3 ชั่วโมงช่วง 6 เดือนแรก เราไม่ไปก็ไม่เป็นไร แม่เราเป็นเจ้าของธุรกิจ แล้วอีกอย่างคือ บ้านเราไม่ค่อยมีหลาน แต่เราคิดว่าปีนึง	A business. I don't have to be at work all the time. I only have to go to work for 1-3 hours a day in the first 6 months…something like that. Even if I don't go it

	Thai	English
	เราก็ว่าจะเริ่มออกไป	would be fine. I own the business and in our family we don't have many young children, but I thought of taking a year off before I begin to do something.
(1)	ที่คุณหญิงพูด ก็หมายความว่าหลักๆ เพราะคุณหญิงมีเวลาใช่ไหมค่ะเลยจะเลี้ยงลูกด้วยนมแม่	It seems that from what you have mentioned, you are breastfeeding because you have the time to do so.
(2)	ก็ด้วย แล้วเราก็อยากให้ลูกกินนมแม่ด้วย เพราะจากปัจจัยที่เรามองก็คือว่า ถ้าบอกก็คือเราดูจากสื่อบอกว่ามีประโยชน์มากกว่า สองก็คือเรารู้สึกว่ามันผูกพัน ลูกยังไงก็ติดเรา ดูจากคนอื่นแล้ว หลายคนลูกก็ติดมากกว่า ดูจากคนข้างตัว อย่างพี่สะใภ้ ลูกเค้าก็ติดเค้า เค้าเลี้ยงนมแม่ เลี้ยงนานเป็น 3-4 ปีเลย	That's part of it. I also want my baby to have breast milk. From what I know and understand from the media, is it's healthier for the child. Second, it helps create bond between me and my child. Observing others I could see that my baby and I have a stronger bond. I could also see this from people close to me too. My sister-in-law has a very close bond with her baby. She breastfed him for 3-4 years.
(1)	ค่ะ แล้วคุณหญิงคิดว่ามีบริการอื่น ๆ จากบุคลากรทางการแพทย์อะไรอีกไหมค่ะ ที่จะช่วยสนับสนุนให้คุณหญิงเลี้ยงลูกด้วยนมแม่สำเร็จ	Do you think there are other services that health care professionals could give to help support you to be successful in breastfeeding?
(2)	ถ้ามี ก็อย่าง คือ จะมีปัญหาตอนแรกเนี่ยแหละ จะมีปัญหาเยอะ คือเราไม่มีประสบการณ์ตอนอยู่โรงพยาบาลก็อยากให้เค้ามาดูเป็นช่วง ๆ ก็เหมือนให้คำปรึกษา ถ้าเราทำอะไรเราก็จะทำก่อน อย่างเช่น เอานมเข้าปากมันก็หลุด ๆ เราก็ไม่รู้ว่าทำไม บางทีลูกท้องแน่น เราก็สังเกตอาการไม่ได้ ก็เรามือใหม่นี่คะ คือแล้วก็พยาบาลแต่ละคนก็ตอบไม่เหมือนกัน	If there should be any, it would be that… in the beginning I was having many problems because I have no experience and wanted to receive regular care, such as being given advice. I usually have to help myself in the first place, for example, I was trying to have my baby latch on and I just couldn't do it. I didn't know what the problem was. Sometimes my baby stomach felt very hard. I was new and the nurses gave me different answers.
(1)	อย่างเช่นอะไรคะ	Could you give an example?

	Thai	English
(2)	เช่น การนวดนม ต้องใช้ประคบน้ำอุ่นหรือเปล่า บางคนก็บอกประคบน้ำอุ่นแล้วมันจะแห้ง วิธีนวดก็ไม่เหมือนกัน วิธีเอานมเข้าปากก็ไม่เหมือนกัน บางคนบอกให้คีบใช้นิ้วชี้กับนิ้วกลางประคอง บางคนก็ทำแบบขยี้ๆ บางคนทำเป็นฉาก แล้วก็นวดๆ คือถ้ามันเหมือนมีศูนย์ให้ถาม ทีบอกเราได้จริงๆ ความจริงมันต้องทำยังไงแน่ เหมือนกับว่าเลยนะ คือเราก็เข้าใจนะ บางคนเค้าก็ตอบตามประสบการณ์ว่าที่เค้าได้ผล แต่อย่างเราแบบมือใหม่ เราอยากได้ทีมันแน่ ๆ คือไม่ต้องมาหาเราก็ได้ค่ะ เดี๋ยวเราเดินไปถาม ไปหา เพราะตามสภาพจริง มันจะเห็นภาพชัดกว่า พอมันมีศูนย์จะได้แน่ใจว่าเราจะได้แน่ๆ ตลอดเวลา เพราะลูกเราก็หิวไม่ตรงกับคนอื่น เราเดินไปปรึกษาที่ห้องนี้นะ เราจะได้แน่ๆ แล้วเราจะได้มั่นใจ	For example, I wasn't sure whether you need a warm press while massing your breast. Some nurses said that if you warm press your breasts it would make your skin dry. The way I was taught to massage were also different. The way to latch-on was also different. Some told me to use the index and middle finger to hold my breast, some told me just to guide with hand. On breast massage, some told me to squeeze while other told me to just press. So, which one is the proper one then. There should have been a clinic where we can get proper answer. I do understand that some people might have answered according to what was working in their experience. But as a new mother, I would want to know the best answer. They don't have to come to me, I can go to see them. In reality this way would give us clearer answer. If there is a centre then I can be sure that I will get proper answers. My baby has a different feeding time from other babies. If there is such a centre then I could just walk there and consult, and get the answers which I can feel more confident.
(1)	นอกจากนั้นมีอะไรมีไหมคะที่อยากให้มีบริการเพิ่มเติม	Beside these are there any more services that you would like to see?
(2)	คือ ถ้าตามเรานะ เราอยากให้เยอะขึ้นกว่านี้ รู้สึกว่าการสนับสนุนยังน้อย คือมันเหมือนกับว่า ถ้าพยาบาลคนไหนสนับสนุนเน้นนมแม่ เค้าก็จะบอกให้เรากระตุ้นมากกว่านี้ให้กระตุ้นอีก แต่อย่างคนไหนที่เค้าไม่เน้น เค้าก็บอกว่าให้เรากระตุ้นแค่ 10-20 นาที แค่นั้นก็พอแล้วค่ะแล้วก็เอาขวดมาให้บอกว่าเดี๋ยวน้องไม่ได้กินนม เข้าใจไหมค่ะ คือมันไม่มีศูนย์นมแม่ ถ้ามีศูนย์นมแม่เราก็จะได้ไปหาตรงนี้ อย่างพยาบาลคนที่แล้วเค้าก็บอกให้กระตุ้นอีกเดี๋ยวพัก แล้วก็ให้ดูดกระตุ้นอีก เค้าเลี้ยงลูกด้วยนมแม่คือ มันเหมือนกับว่า มัน	In my opinion, I want to see more support given to the mothers. I still feel that what we received was too little. It seems that the breastfeeding support nurses are the ones who always encouraged us to stimulate our breasts and continually keep telling us to continue. But other nurses were less serious about it, and would ask us to stimulate just for 10-20 minutes, and that's it. Then they would bring a bottle and tell us "Express milk for the baby or else the baby won't get any milk…Do you understand?". There was no breast milk clinic. If there is one then we could go there. The last nurse that check on me

	Thai	English
	เครียดนะ เพราะมันยังไม่มีน้ำนม บางทีที่คนคุยมันก็สบายใจ บอกว่า เออ เดี๋ยวมันก็มานะ แต่ถ้าทุกคนคือเค้ามีหน้าที่ของเค้า คือเราก็เกรงใจเค้า ก็คืออยากให้มีคนที่ปรึกษาได้จะได้ผ่อนคลาย	told me to continue to stimulate a little more before taking a break. Then told me to let the baby suck to stimulate my breast. I think she had breastfeeding experience…something like that. I was feeling quite stressful then because I still couldn't get my milk flowing. Sometime I would hear encouraging comments such as, don't worry, it will come eventually. Each one has their own duty. I also don't want to make them upset. It would be good if there is someone who I can really consult with so I can feel more relaxed.
(1)	แล้วคุณหญิงเครียดรึเปล่าค่ะ	Were you in stress?
(2)	เราก็เครียดนะ เพราะว่านมยังไม่ออก ต้องมีคนที่ให้เราคุย พอเริ่มผ่อนคลาย สบายใจแล้วนมก็เริ่มมานิดนึงแระ นอกนั้นก็ไม่มีอะไรแล้วค่ะ	Yes, I was. Because I couldn't get my milk flowing. There should have been someone for me to consult. When I got more relaxed my milk started flowing a little bit. That's all I want to say.

4. Participant 16 (participant who contributed the interview from Phase I)

	Thai	English
(1)	จากที่เราเคยได้คุยกันเรื่องการเลี้ยงลูกด้วยนมแม่ ตอนนี้แบบประเมินได้สร้างเสร็จเรียบร้อยแล้วพร้อมที่จะนำใช้กับผู้หญิงหลังคลอด แต่ก่อนจะนำไปใช้อยากจะทราบความคิดเห็นเกี่ยวกับข้อคำถามในแบบประเมิน ว่าข้อคำถามมันง่ายต่อการทำความเข้าใจไหมหรือข้อไหนที่ควรต้องปรับปรุงแก้ไข ในการสัมภาษณ์จะใช้เวลาโดยประมาณ 10 นาที เดี๋ยวจะอ่านแบบประเมินทีละข้อ อยากให้คุณตุ๊กให้ความคิดเห็นว่า เข้าใจภาษาดีไหม หากไม่เข้าใจข้อไหนอยากให้คุณตุ๊กให้คำแนะนำเพื่อปรับแก้ไขค่ะ	Regarding what we have discussed earlier on breastfeeding, now the tool is completed, and ready to be used with postpartum women. What I would like to do is to ask you to share your opinion whether the questions in the tool is easy to understand or if there is anything that you are not sure with or think that could be changed to improve the tool for the betterment of understanding. Your interview will be approximately 10 minutes. I will begin to read the questions in the tool one at a time. Please let me know if you have any difficulty understanding any question and suggest how they might be improved.
(1)	1 คุณคิดว่าจะเลี้ยงลูกด้วยนมแม่หรือไม่	Question 1. Are you considering breastfeeding your baby?
(2)	โอเคค่ะ	Yes, it's ok.
(1)	2 คุณทราบประโยชน์ของการเลี้ยงลูกด้วยนมแม่หรือไม่ (หากทราบคืออะไรบ้าง)	Question 2. Do you know the benefits of breastfeeding? (If Yes, what are they?)
(2)	โอเคค่ะ	Yes, it's ok.
(1)	3 คุณทราบหรือไม่ว่าควรเลี้ยงลูกด้วยนมแม่นานเท่าใด	Question 3. Do you know how long you should breastfeed your babies?

	Thai	**English**
(2)	โอเคค่ะ	Yes, it's ok.
(1)	4 คุณคิดว่าการลี้ยงลูกด้วยนมแม่ควบคู่ไปกับนมผสมเป็นเรื่องธรรมดาที่ทำได้ใช่หรือไม่	Question 4. Do you think feeding both formula milk and breast milk is acceptable?
(2)	ข้อ 4 ควรระบุระยะเวลา เช่น หลังจาก 3 เดือน เพราะบางคนอาจมีน้ำนมช่วงแรกประมาณกี่เดือนจึงจะให้นมผสมใหม่ เช่น อย่างตอนกลับไปทำงาน	On question 4 you could also mention the time span, for example, after 3 months, because some people might only have breast milk only during early postpartum. Approximately how many months we can use formula milk along with breast milk. For example, some people have to go back to work.
(1)	5 คุณคิดว่าคุณมีน้ำนมเพียงพอสำหรับลูกของคุณหรือไม่	Question 5. Do you think you have sufficient breast milk for your baby?
(2)	โอเคค่ะ	Yes, it's ok.
(1)	6 คุณทราบหรือไม่ว่าต้องทำอย่างไรเพื่อกระตุ้นให้คุณมีน้ำนมมากเพียงพอสำหรับลูก	Question 6. Do you know what you could do to promote enough breast milk to feed your baby?
(2)	โอเคค่ะ	Yes, it's ok.
(1)	7 คุณทราบหรือไม่ว่านมแม่อาจจะมาช้าได้	Question 7. Are you aware that milk flow is sometime delayed?

	Thai	**English**
(2)	โอเคค่ะ	Yes, it's ok.
(1)	8 คุณคิดว่า มารดามีรูปร่างค่อนข้างอวบหรือได้รับการ /มีเต้านมขนาดใหญ่หรือเล็ก / เสริมเต้านม ก็ยังสามารถมีน้ำนมเพียงพอสำหรับลูก ใช่หรือไม่	Question 8. Do you think mothers who are overweight; have breast augmentation or those with larger or smaller breasts tend to have enough breast milk?
(2)	โอเคค่ะ	Yes, it's ok.
(1)	9 คุณเชื่อหรือไม่ว่า อาหาร หรือยา หรือการดื่มเครื่องดื่มอุ่นๆ สามารถช่วยกระตุ้นการสร้างน้ำนม	Question 9. Do you believe that certain herbs, foods, drugs, and drinking warm water could help stimulate breast milk production?
(2)	โอเคค่ะ	Yes, it's ok.
(1)	10 คุณทราบหรือไม่ว่า เมื่อไหร่คุณควรจะเริ่มให้อาหารเสริมแก่ทารก (หรือให้น้ำ/ หรือหย่านม /กล้วย)	Question 10. Do you know when you should start feeding other foods and drinks to your baby (or weaning breastfeeding)? (e.g. water, banana)
(2)	โอเคค่ะ	Yes, it's ok.
(1)	11 คุณสามารถบอกได้หรือไม่ว่า ลูกได้รับน้ำนมเพียงพอกับความต้องการ	Question 11. Can you tell that your baby is having enough breast milk?
(2)	โอเคค่ะ	Yes, it's ok.

	Thai	**English**
(1)	12 คุณทราบหรือไม่ว่า ต้องปลุกลูกขึ้นมากินนมหากเลยเวลามื้อนมที่คาดไว้	Question 12. Do you know if it is necessary to wake the babies up from sleep to feed?
(2)	โอเคค่ะ	Yes, it's ok.
(1)	13 เป็นเรื่องยากหรือไม่ที่ลูกจะใช้ปากอมถึงลานนมขณะดูดนม	Question 13. Does your baby have difficulty latching on?
(2)	โอเคค่ะ	Yes, it's ok.
(1)	14 คุณมีหัวนมสั้นบอด สั้นหรือหัวนมแตกหรือไม่	Question 14. Do you have short, inverted, or cracked nipples?
(2)	โอเคค่ะ	Yes, it's ok.
(1)	15 คุณทราบวิธีรักษาความสะอาดหัวนมหรือไม่	Question 15. Do you know about breast hygiene?
(2)	โอเคค่ะ	Yes, it's ok.
(1)	16 คุณเคยได้ยินเกี่ยวกับ แผ่นซิลิโคนครอบหัวนม หรือไม่	Question 16. Have you ever heard about nipples shield?
(2)	โอเคค่ะ	Yes, it's ok.

	Thai	**English**
(1)	17 คุณทราบหรือไม่ว่าต้องใช้ แผ่นซิลิโคนครอบหัวนม เมื่อไหร่และใช้อย่างไร	Question 17. Do you know when and how to use a nipple shield?
(2)	โอเคค่ะ	Yes, it's ok.
(1)	18 คุณคิดที่จะเลี้ยงลูกด้วยนมแม่ต่อ ตอนกลับไปทำงานหรือไม่	Question 18 Do you plan to continue breastfeeding when you return to work?
(2)	โอเคค่ะ	Yes, it's ok.
(1)	19 คุณคิดว่าสามารถเลี้ยงลูกด้วยนมแม่อย่างเดียวนาน 6 เดือน ได้หรือไม่	Question 19 Do you think that you can exclusively breastfeeding for 6 months?
(2)	ค่ะ เข้าใจค่ะ	Yes, fine.
(1)	20 คุณทราบวิธีที่จะทำให้มีน้ำนมมากพอที่จะเลี้ยงลูกด้วยด้วยนมแม่ต่อ เมื่อต้องกลับไปทำงานหรือไม่	Question 20 Do you know how to sustain breast milk supply to feed your baby when you return to work?
(2)	ค่ะ โอเคค่ะ	Yes, it's ok.
(1)	21 คุณทราบหรือไม่ว่าต้องเตรียมตัวอย่างไรก่อนกลับไปทำงาน เพื่อที่จะสามารถเลี้ยงลูกด้วยนมแม่ต่อได้	Question 21 Do you know how to prepare yourself before returning to work so that you can continue breastfeed your baby?
(2)	ค่ะ โอเคค่ะ	Yes, it's ok.

	Thai	**English**
(1)	22 คุณสามารถบีบน้ำนมด้วยมือได้หรือไม่	Question 22 Are you able to express breast milk by hand?
(2)	ค่ะ โอเคค่ะ	Yes, it's ok.
(1)	23 คุณทราบหรือไม่ว่าสามารถใช้เครื่องปั๊มนมช่วยบีบเก็บน้ำนมได้	Question 23 Are you aware of using breast pumps?
(2)	ค่ะ โอเคค่ะ	Yes, it's ok.
(1)	24 คุณมีปัญหาเรื่องการเลี้ยงลูกด้วยนมแม่หรือไม่	Question 24 Do you have any difficulty in breastfeeding?
(2)	ค่ะ โอเคค่ะ	Yes, it's ok.
(1)	25 คุณมีความกดดันหรือเครียดกับการเลี้ยงลูกด้วยนมแม่หรือไม่	Question 25 Do you feel being pressured or stressed about breastfeeding?
(2)	ค่ะ โอเคค่ะ	Yes, it's ok.
(1)	26 คุณมีความมั่นใจว่าสามารถเลี้ยงลูกด้วยนมแม่ได้หรือไม่ (หากตอบไม่ หรือไม่แน่ใจ คุณต้องการให้พยาบาลช่วยเหลือเรื่องใดเพิ่มเติม)	Question 26 Do you have confidence to breastfeed your baby?
(2)	ค่ะ โอเคค่ะ	Yes, it's ok.

	Thai	**English**
(1)	27 ลูกของคุณหรือตัวคุณมีปัญหาสุขภาพหลังคลอดที่อาจขัดขวางต่อการเลี้ยงลูกด้วยนมแม่หรือไม่	Question 27 Does your baby, or do you have any post-delivery illness which could interrupt breastfeeding?
(2)	ค่ะ โอเคค่ะ	Yes, it's ok.
(1)	28 คุณยังต้องการการช่วยเหลือเกี่ยวกับการเลี้ยงลูกด้วยในด้านอื่นๆ จากหมอหรือพยาบาล อีกหรือไม่	Question 28 Do you still need breastfeeding support from nurses or doctors?
(2)	ค่ะ เข้าใจค่ะ	Yes, fine.
(1)	ข้อ 29 คุณทราบหรือไม่ว่า เมื่อคุณออกจากโรงพยาบาลแล้ว คุณสามารถหาข้อมูลหรือการสนับสนุนเรื่องการเลี้ยงลูกด้วยนมแม่จากที่ใด	Question 29 Do you know where to get breastfeeding information and support after being discharged from the hospital?
(2)	ค่ะ เข้าใจค่ะ	Yes, fine.
(1)	ข้อ 30 คุณต้องการข้อมูลเกี่ยวกับ การเลี้ยงลูกด้วยนมแม่ หรือการดูแลตนเองและทารก หรือการใช้ยาขณะเลี้ยงลูกด้วยนมแม่ หรือการคุมกำเนิด เพิ่มเติมอีกหรือไม่	Question 30 Would you like more information regarding breastfeeding, self-care, or caring your baby? (e.g. using drugs, or contraceptive methods)
(2)	ข้อ 30 มันยาก และก็ยาวไป แล้วมันหลายเรื่องอยู่ด้วยกัน น่าจะแยกทีละอย่าง ทีละเรื่อง	Question 30 is too difficult and there are many points asked in the same question. It should be separated, one issue at a time.
(1)	ข้อ 31 มีใครช่วยเหลือคุณภายหลังออกจากโรงพยาบาลหรือไม่	Question 31 Do you have anyone to help you after you are discharged from the hospital?

	Thai	**English**
(2)	ค่ะ โอเคค่ะ	Yes, it's ok.
(1)	ข้อ 32 คนที่คอยช่วยเหลือคุณ เช่น สามี หรือมารดาของสามี หรือมารดาของคุณ ให้การสนับสนุนการเลี้ยงลูกด้วยนมแม่หรือไม่	Question 32 Does the person looking after you e.g. your partner, mothers in law, mother or a person who you live with support breastfeeding?
(2)	ค่ะ โอเคค่ะ	Yes, it's ok.
(1)	ข้อ 33 หากคุณได้ตัดสินใจแล้วที่จะเลี้ยงลูกด้วยนมผสม มีข้อมูลอื่นๆที่คุณอยากทราบ เกี่ยวกับการเลี้ยงลูกด้วยนมผสมหรือไม่	Question 33 If you already decide not to breastfeed, would you like to receive more information regarding formula milk?
(2)	ข้อ 33 อันนี้ใช่เลยควรจะมี เพราะว่าตุ๊กไม่มีน้ำนม ข้อนี้ควรจะมี	This is very good….shouldn't be missed…because I don't have milk. You should have this question.
(1)	คุณตุ๊กคะ ยังมีคำถามข้อไหนอีกไหมคะ ที่ยังไม่ clear	Mrs. Tuk, are there any other questions that is still not clear to you?
(2)	ก็ไม่มีแล้วนะคะ ก็โอเค	No there isn't any. They are fine.
(1)	แล้วจากประสบการณ์การเลี้ยงลูก คุณคิดว่ามีประเด็นไหนที่สำคัญและควรให้มีอยู่ในแบบประเมินนี้ไหมคะ	After having the experience in looking after you baby, are there any points which you think are important and should be included in the tool?
(2)	ควรถามว่าเค้ามีปัญหาตอนลูกกินคือ เหมือนมีข้อนึง เกี่ยวกับเลี้ยงลูกนมผสมกับนมแม่ เช่น อย่างกินนมผสมกันส่วนมากจะท้องผูก เพราะน้ำนมไม่พอต้องผสมกับนมซง ระบบขับถ่ายลูกจะมีปัญหาให้เพิ่มว่า เค้าทราบไหมว่าให้กินนมแม่ร่วมกับนมผสม	The question regarding the problem with breast feeding…like, I think there is a question regarding formula feeding along with breastfeeding….for example…babies usually get constipation if they are formula fed. Now when one

	Thai	**English**
	เค้ามีปัญหาเรื่องการขับถ่าย อาจมีเรื่องท้องผูก นมแม่จะย่อยง่าย นมผสมจะย่อยยาก	doesn't have enough milk and must use formula milk along. Babies excreting system might have problem. This should be added. Whether they know that breastfeeding along with formula feeding can cause excreting problem. The baby might have constipation. Breast milk is digested. Formula milk is difficult to digest.
(1)	ค่ะ นอกจากนี้เรื่องอื่นอยากเพิ่มเติมอีกไหมคะ	Yes. Besides this is there any other thing that you would like to add?
(2)	ก็ครอบคลุมดีค่ะ	It is well covered.
(1)	แล้วคุณตุ๊กคิดว่าถ้าเอาแบบประเมินนี้ไปใช้กับหญิงหลังคลอดจะมีประโยชน์อะไรไหมคะ	Do you think using this tool with postpartum women would be beneficial to them?
(2)	ก็มีประโยชน์นะคะ มีประโยชน์มากเลย โดยเฉพาะแม่มือใหม่ ที่ต้องเลี้ยงลูกเอง เค้าต้องมีข้อมูลเยอะมาก ต้องมีความรู้ดีมาก ก็อยากให้พยาบาลแนะนำ ถึงจะได้มีปัญหาลดน้อยลง น่าจะช่วยได้เยอะ	Yes, I think it would. It would benefit a lot especially for the first-time mums who look after their baby by themselves. They should have lots of information, should have lots of knowledge. I want the nurses to give them advice so they have fewer problems after delivery. It should help a lot.
(1)	ค่ะ แล้วมีอะไรอีกไหมคะ ที่คุณตุ๊กอยากให้ข้อเสนอแนะ	Is there any other suggestions?
(2)	ก็ไม่นะคะ บริการเค้าก็ดี เค้าก็บอกเราทุกอย่างช่วยเราทุกอย่าง	I have nothing more. The service is good. They tell us everything…help us in every way

Appendix X **Approval document from University of Southampton (Phase II)**

UNIVERSITY OF Southampton

Pornpimol Apartsakun
PhD Student
Faculty of Health Sciences
University of Southampton

20th December 2013

Student ID: 24432504

Dear Pornpimol

Ethics Submission Number: 7344
Title: An Exploration of Thai Women's Breastfeeding Experiences and Support Needs

I am pleased to confirm **full approval** for your study has now been given. The approval has been granted by the Faculty of Health Sciences Ethics Committee, via the Ethics and Research Governance Online (ERGO) system.

Yours sincerely

Dr Alan Borthwick
Chair, FoHS Ethics Committee

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Appendix Y **Certificate of Approval from Chulalongkorn Memorial Hospital (Phase II)**

COA No. 059/2014

IRB No. 580/56

INSTITUTIONAL REVIEW BOARD

Faculty of Medicine, Chulalongkorn University

1873 Rama 4 Road, Patumwan, Bangkok 10330, Thailand, Tel 662-256-4493 ext 14, 15

Certificate of Approval

The Institutional Review Board of the Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand, has approved the following study which is to be carried out in compliance with the International guidelines for human research protection as Declaration of Helsinki, The Belmont Report, CIOMS Guideline and International Conference on Harmonization in Good Clinical Practice (ICH-GCP)

Study Title	: An Exploration of Thai Women's Breastfeeding Experiences and Support Needs.
Study Code	: -
Principal Investigator	: Mrs.Pornpimol Apartsakun
Affiliation of PI	: The Thai Red Cross College of Nursing.
Review Method	: Expedited
Continuing Report	: At least once annually or submit the final report if finished.

Document Reviewed :

1. Protocol Version 1.1 Dated 27 September 2013
2. Protocol Synopsis Version 2.0 Dated 8 January 2014
3. Information sheet for research participant (Postpartum women) Version 2.0 Dated 8 January 2014
4. Information sheet for research participant (Nurses) Version 2.0 Dated 8 January 2014
5. Informed consent to participate in the research for representative Version 2.0 Dated 8 January 2014
6. Informed Consent Form Version 2.0 Dated 8 January 2014
7. Principle Investigator's CV
8. Leaflets for Nurses Version 1.0 Dated 2 December 2013

9. Breastfeeding Support Tool Version 1.0 Dated 2 December 2013
10. Interview Schedule Version 1.0 Dated 2 December 2013

Signature:..... Signature:.....

(Associate Professor Unnop Jaisamrarn MD, MHS) (Associate Professor Supeecha Wittayalertpanya)

Vice-Chairman, Acting Chairman — Member and Assistant Secretary, Acting

The Institutional Review Board — The Institutional Review Board

Date of Approval : January 20, 2014

Approval Expire Date : January 19, 2015

Approval granted is subject to the following conditions: (see back of this Certificate)

Appendix Z **Modified version of 'Breastfeeding Support Tool'**

Items	Opinion & Nursing care
1. Do you know the minimum ideal period recommended for breastfeeding?	⬭ Yes ⬭ Unsure ⬭ No If answer 'unsure' or 'no' provide information follow Topic 1 General knowledge about breastfeeding
2. Do you know the benefits of breastfeeding?	⬭ Yes ⬭ Unsure ⬭ No If answer 'unsure' or 'no' provide information follow Topic 1 General knowledge about breastfeeding
3. Would you allow your child to have formula milk while you can produce sufficient breast milk?	⬭ Yes ⬭ Unsure ⬭ No If answer 'yes' or 'unsure' provide information follow Topic 1 General knowledge about breastfeeding
4. Do you think you have enough breast-milk for your child?	⬭ Yes ⬭ Unsure ⬭ No If answer 'unsure' or 'no' provide information follow Topic 2 Lactogenesis
5. Do you know ways to stimulate your breasts to produce more milk?	⬭ Yes ⬭ Unsure ⬭ No If answer 'unsure' or 'no' provide information follow Topic 2 Lactogenesis
6. Do you that it is not uncommon for a mother to have little milk flow for 2-3 days after giving birth?	⬭ Yes ⬭ Unsure ⬭ No If answer 'unsure' or 'no' provide information follow Topic 2 Lactogenesis

Items	Opinion & Nursing care
7. Do you know that being over or under weight, breast size, or having had operation to enhance breast size do not affect mothers' ability to produce sufficient breast milk for babies?	⬭ Yes ⬭ Unsure ⬭ No If answer 'unsure' or 'no' provide information follow Topic 2 Lactogenesis
8. Do you know that breast massage, certain herbs, and warm drink could help promote milk flow?	⬭ Yes ⬭ Unsure ⬭ No If answer 'unsure' or 'no' provide information follow Topic 3 Ways help stimulate breast milk production
9. Would you be able to tell if your child is having sufficient breast milk?	⬭ Yes ⬭ Unsure ⬭ No If answer 'unsure' or 'no' provide information follow Topic 4 'Baby's requirements and evaluating baby having sufficient
10. Do you know that babies have to woke up for feeding if he or she over sleep way passed feeding time?	⬭ Yes ⬭ Unsure ⬭ No If answer 'unsure' or 'no' provide information follow Topic 4 'Baby's requirements and evaluating baby having sufficient
11. Is helping your baby in latching on correctly quite easy for you?	⬭ Yes ⬭ Unsure ⬭ No If answer 'unsure' or 'no' provide information follow Topic 5 proper latching on and breastfeeding
12. Do you have short, inverted, or cracked nipples?	⬭ Yes ⬭ Unsure If 'yes' or 'unsure' Help practice & provide information follow Topic 5 proper latching on and breastfeeding position' ⬭ No If answer 'no' go question 14

Items	Opinion & Nursing care
13. Have you ever heard about nipples shield and know how to use it?	⬭ Yes ⬭ Unsure ⬭ No If answer 'unsure' or 'no' provide information follow Topic 6 Using nipples shield
14. Do you know about breast hygiene?	⬭ Yes ⬭ Unsure ⬭ No If answer 'unsure' or 'no' provide information follow Topic 7 Nipple hygiene
15. Do you think that you can exclusively breastfeeding for 6 months?	⬭ Yes ⬭ Unsure ⬭ No If answer 'unsure' or 'no' provide information follow Topic 8 Preparing before return to work
16. Do you know what to do to help sustain sufficient breast milk supply to feed your baby when you return home and/or have to go back to work?	⬭ Yes ⬭ Unsure ⬭ No If answer 'unsure' or 'no' provide information follow Topic 8 Preparing before return to work
17. Do you know how to prepare breast-milk for your child if you need to be away, e.g. working etc., so that you can continue feeding your baby breast milk?	⬭ Yes ⬭ Unsure ⬭ No If answer 'unsure' or 'no' provide information follow Topic 9 Expressing and storing breast milk
18. Do you know that you can store breast-milk in refrigerator?	⬭ Yes ⬭ Unsure ⬭ No If answer 'unsure' or 'no' provide information follow Topic 9 Expressing and storing breast milk

Items	Opinion & Nursing care
19. Can you express your breast-milk using your hand?	⬭ Yes ⬭ Unsure ⬭ No If answer 'unsure' or 'no' provide information follow Topic 10 Hand expressing
20. Are you aware that there are also manual and electric pumps to help you in expressing your breast-milk?	⬭ Yes ⬭ Unsure ⬭ No If answer 'unsure' or 'no' provide information follow Topic 11 Using breast pumps
21. Does your baby, or do you have any post-delivery illness which could interrupt breastfeeding?	⬭ Yes ⬭ Unsure If 'yes' or 'unsure' provide cares or refer ⬭ No
22. Do you have stress from, or being pressured by, other people about breast feeding?	⬭ Yes ⬭ Unsure If 'yes' or 'unsure' Help counselling and provide information follow Topic 12 Family issues ⬭ No
23. Do you have confidence about breastfeeding your baby?	⬭ Yes ⬭ Unsure ⬭ No If answer 'unsure' or 'no' Have a conversation to help reassure them
24. Do you need other breastfeeding support from nurses or doctors?	⬭ Yes ⬭ Unsure ⬭ No If answer 'unsure' or 'no' ask which part of services do you want nurses to help and give support
25. Do you think you have sufficient knowledge about weaning?	⬭ Yes ⬭ Unsure ⬭ No If answer 'unsure' or 'no' provide information follow Topic 13 Weaning breastfeeding

Items	Opinion & Nursing care
26. Do you feel that you have a good amount of knowledge about food supplement for the baby?	⬭ Yes ⬭ Unsure ⬭ No If answer 'unsure' or 'no' provide information follow Topic 14 Feeding supplement
27. Can you independently search for information on breastfeeding from different sources after your discharge from the hospital?	⬭ Yes ⬭ Unsure ⬭ No If answer 'unsure' or 'no' give leaflets & provide information follow Topic 15 Others important issues
28. Would you like to have more information on the following subject? (e.g. postpartum care for mother, child care, drug use during breastfeeding, birth control)	⬭ Yes ⬭ Unsure ⬭ No If answer 'unsure' or 'no' give leaflets & provide information follow Topic 15 Others important issues
29. Do your family members, such as your spouse, mother, mother-in-law or your helper support breastfeeding?	⬭ Yes ⬭ Unsure ⬭ No If answer 'unsure' or 'no' Help counselling and provide information follow Topic 12 Family issues
30. If you decided to formula feed, is there anything that you would like to know more about?	⬭ Yes ⬭ Unsure If 'yes' or 'unsure' provide information follow Topic 16 Formula feeding ⬭ No

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