Infant Feeding:

Perceptions and Experiences Among Working Women

in urban Malaysia

Submitted by:

Zaharah Sulaiman

MBBS (Adelaide), M Comm Med (USM)

A thesis submitted in total fulfilment of the requirements for the degree of

Doctor of Philosophy

School of Public Health & Human Biosciences

Faculty of Health Sciences

La Trobe University

Bundoora, Victoria 3086

AUSTRALIA

DECEMBER 2013

DECLARATION

This thesis is less than 100,000 words in length, exclusive of tables, figures, bibliographies, footnotes and appendices.

TABLE OF CONTENTS

LIST OF APPENDICES

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS

AUD	Australian dollars
BF	breastfeeding
BFHI	Baby-Friendly Hospital Initiative
BTCD	Bourdieu's Theory of Class Distinction
CI	confidence Interval
DHA	docosahexaenoic acid
FT	full-time
IIFAS	Iowa Infant Feeding Attitude Scale
IFPS	Infant Feeding Practice Study
ILO	International Labour Organization
LB	lactation breaks
NHMS	National Health and Morbidity Survey
MD	Maternal Deviance
ML	maternity leave
OR	odds ratio
PT	part-time
RR	relative risks
TPB	Theory of Planned Behaviour
UNICEF	United Nations Children's Fund
UK	United Kingdom
USA	United States of America
WABA	World Alliance Breastfeeding Actions
WFC	Work-family conflict
WHO	World Health Organization
WIC	Women, Infants, and Children

SUMMARY

Working status has been shown to pose a barrier to breastfeeding with evidence that the timing of breastfeeding cessation often coincides with the mothers' return to work. This is a great concern for Malaysia as the number of working women in their reproductive years is increasing; the period of paid maternity leave is short. This research qualitatively examines the perceptions and experiences of infant feeding among 40 working women in urban Malaysia. Since this research attempts to understand women's work-related behaviour regarding infant feeding, four theoretical frameworks were chosen to frame my research. These include the Theory of Planned Behaviour, the Work-Family Conflict model, the Maternal Deviance Framework and Bourdieu's Theory of Class Distinction. This research was undertaken using multiple methods and based on the post-modernism and feminism lenses, which provided space for the participants to be able to articulate their viewpoints in depth. The findings suggested that the ability to maintain breastfeeding after returning to work was not necessarily a reflection of good motherhood as perceived by working women in urban Malaysia. How they planned and prioritised their multiple roles were based on their 'tastes' and 'habitus'. The women were largely categorised into three groups. First the *Passionate* mothers*,* who determined and regarded breastfeeding as the only choice that mothers should have. Second the *Equivalent* mothers*,* who were more pragmatic and preferred infant formula. Third the *Ambivalent* mothers*,* who were more considerate about others and subsequently introduced infant formula when necessary. This study concludes that multiple truths exist in working women's breastfeeding behaviour and not all women felt that employment was a barrier. By presenting their experiences using their own voices, I hope to promote better understanding about working mothers and breastfeeding in Malaysian society which may lead to increased support for women to maintain breastfeeding after returning to work.

STATEMENT OF AUTHORSHIP

'Except where reference is made in the text of the thesis, this thesis contains no material published elsewhere or extracted in whole or in part from a thesis submitted for the award of any other degree or diploma.

No other person's work has been used without due acknowledgment in the main text of the thesis.

This thesis has not been submitted for the award of any degree or diploma in any other tertiary institution.'

All research procedures reported in this thesis were approved by the Faculty of Health Science Ethics Committee at La Trobe University and The Economic Planning Unit, Prime Minister's Department, Malaysia.

Zaharah Sulaiman

3rd December 2013

ACKNOWLEDGEMENTS

My greatest appreciation goes to:

- My creator, **ALLAH**, the Almighty, for the strength, for the blessings **HE** granted me all the way through the process of completing this thesis.
- My religion, **ISLAM**, that gives meanings to my life and makes my journey throughout PhD a meaningful experience in becoming a better **Muslim.**

The PhD process was hard for me and this thesis could not have been completed without the continuous advice and guidance of my supervisors. I cannot tell you how much I appreciate the hours you spent sharing your expertise and knowledge with me. I have truly benefited from the wealth of your knowledge and experience in breastfeeding research. Thank you to my two supervisors, **Pranee Liamputtong and Lisa Amir**.

A research project cannot take shape without participants. I would like to thank **all the participants** where they gladly gave their precious time to take part and contribute to the completion of the study.

I would like to thank specifically **Safiah Sidek,** for your ideas in the early stage of my thesis and thank you to **Nor Suharti Abdul Karim** and **Helen Rahman**, my final proof-readers. Also, thanks to my relatives in Malaysia, my father **Sulaiman Hassan** and my siblings who tried to support me in this long process the best way they knew.

To my husband **Azizee Rohim Japri,** thanks for your constant patience, your love, encouragement and support has helped to keep me motivated throughout this journey. To my two beautiful children, **Azeezah and Abdullah**, thank you for all of the joy you have brought into my life. Thanks for all of the time that I wasn't there!

PUBLICATIONS

Book Chapter

2013

- Sulaiman, Z., Amir, L. H., & Liamputtong, P. (2013). Infant feeding practices: rates, risks of not breastfeeding and factors influencing breastfeeding. In D. Narváez, J. Panksepp, A. N. Schore & T. R. Gleason (Eds.), *Evolution, Early Experience and Human Development: From Research to Practice and Policy* (pp. 277-298). New York: Oxford University Press.

- Sulaiman, Z., Liamputtong, P. & Amir, L. H. (2013). Exploring working women's experiences in regards to infant feeding choices in urban Malaysia: *A Case of a Research Project.* SAGE Publication, 2013. *in press*

CONFERENCE PRESENTATIONS

International Conference Presentations

2013

- Sulaiman, Z., Amir, L. H., & Liamputtong, P. (2013). *The role of the workplace in maintaining breast milk feeding for employed women in urban Malaysia* at The International Lactation Consultants Association (ILCA) Annual Conference, 25 - 28 July 2013, Melbourne. [oral]

- Sulaiman, Z., Amir, L. H., & Liamputtong, P. (2013). *Milk expression among working women in urban Malaysia: Where and how?* at The International Lactation Consultants Association (ILCA) Annual Conference, 25 - 28 July 2013, Melbourne. [oral and poster]

2012

- Sulaiman, Z., Amir, L. H., & Liamputtong, P. (2012). *How working mothers see breastfeeding as an infant feeding choice* at The Lactation Consultants Australia and New Zealand (LCANZ) Conference, 7 - 9 September 2012, Sydney. [oral]

- Sulaiman, Z., Liamputtong, P., & Amir, L. H. (2012). *Researching infant feeding choices among working mothers in Malaysia qualitatively at The* Association for Qualitative Research/Discourse, Power Resistance (AQR/ DPR) Conference, 22 – 25 August 2012, Darwin. [oral]

Postgraduate Festival Oral Presentations

2012

- Sulaiman, Z., Liamputtong, P., & Amir, L. H. (2012). *Infant feeding choices among working women in urban Malaysia; describing the findings.* Post Graduate Research Festival 2012.

2011

- Sulaiman, Z., Liamputtong, P., & Amir, L. H. (2011). *Infant feeding choices among working mothers in urban cities, Malaysia. Exploring the theoretical framework*. Post Graduate Research Festival 2011.

2010

- Sulaiman, Z., Liamputtong, P., & Amir, L. H. (2010). *Proposal: Breastfeeding and Working Mothers in Malaysia.* Post Graduate Research Festival 2010.

CHAPTER 1: BACKGROUND

1.1 Introduction

Historically, feeding newborn mammals with breast milk was never a choice but rather a natural way of feeding. Without the influence of culture and beliefs, babies would naturally continue to breastfeed until the age of 2.5 to 7 years (Dettwyler, 1995). Wet nursing was the second best choice if for any reason a mother was unable to provide breast milk for her infant. Not until the early 19th century when mixtures of formulas based on animal milk became available did the prevalence of wet nursing start to decrease. Due to the vast availability and assumed convenience of formula milk, women today appear to have a choice about infant feeding.

The World Health Organization (WHO) recommends that all infants are exclusively breastfed for six months, followed by the introduction of complementary foods and breastfeeding for up to two years of age or beyond (World Health Organization, 2001). Notwithstanding the established literature on the risks of formula feeding to infants, for most infants around the world, these WHO recommendations are not met. Infant feeding practices vary immensely in complex ways in response to individual, community and societal factors. The following section 1.2 gives an overview of the health risks of not breastfeeding (Sulaiman, Amir, & Liamputtong, 2013).

1.2 Risks Of Not Breastfeeding

It is well established that formula-fed infants have poorer health outcomes compared to breastfed infants (Stuebe, 2009). Infants who are not breastfed are at higher risks of developing infectious diseases and are more susceptible to certain chronic diseases

in later life. It is less well known that maternal health is also affected by the method of infant feeding. Mothers who do not breastfeed are more vulnerable to developing breast and ovarian cancers and chronic diseases such as rheumatoid arthritis (Allen & Hector, 2005; Ip et al., 2007; Leon-Cava, Lutter, Ross, & Martin, 2002; Stuebe, 2009; van Rossum, Buchner, & Hoekstra, 2006).

This section gives an overview of the health risks of not breastfeeding. It summarizes the results of five reviews published in the last eight years of the short and long-term risks for preterm infants, term infants and mothers (Allen & Hector, 2005; Horta, Bahl, Martines, & Victora, 2007; Ip et al., 2007; Leon-Cava et al., 2002; van Rossum et al., 2006). Only Ip et al. (2007) and Allen & Hector (2005) included preterm infants in their reviews, while Horta et al. (2007) focused on long-term health risks of formula feeding among term infants. Other reviewers looked at short and long-term risks for term infants and mothers.

The findings in this section are drawn from more than 10,000 papers screened and reviewed, mainly in developed countries. In this section, I categorize the evidence of health risks as 'convincing', 'probable' and 'possible' based on the strengths and weaknesses of the research methodology employed. The evidence is described as 'convincing' when a significant relationship has been found in a meta-analysis or a systematic review; 'probable' evidence is when there is evidence from many studies but confirmation is needed in better-designed studies; 'possible' evidence is used when only a few methodologically sound studies have been conducted.

1.2.1 Methods of the five reviews

Various methods were used by the five reviewer groups in their work. All reviewers extensively searched the literature using MEDLINE, OVID and/or the Cochrane Library electronic databases. Each search was based on a list of keywords determined by the reviewers over a specified time frame as shown in Table 1.1. Most reviewers reported the evidence in a grading system. Allen and Hector (2005) and van Rossum et al. (2006) labelled the evidence as convincing, probable or possible. Similarly, Ip et al. (2007) categorized their evidence as good, fair or poor. Leon-Cava et al. (2002), however, either stated the evidence as convincing or suggested more studies are needed to confirm the findings. Only Horta et al. (2007) used statistical models to estimate the effects. Table 1.2 summarises the results of the reviews.

1.2.2 Risks for preterm infants

All reviewers agreed that the risk of developing necrotising enterocolitis (NEC), a severe gastrointestinal disease, was reduced among preterm infants with a history of breast milk feeding compared to those who were formula-fed (Allen & Hector, 2005; Ip et al., 2007) (Table 1.2). Although the absolute risk difference among formula fed infants was only five percent higher than for infants receiving breast milk, the clinical outcome is significant since the case fatality rate is high (Ip et al., 2007). The evidence for an effect of breast milk feeding on cognitive development was rated ‘possible’ (Ip et al., 2007).

1.2.3 Risks for term infants

The risks for term infants can be divided into short-term (infancy) and long-term (childhood and adolescence). There is convincing evidence for a range of infectious diseases in the first year of life: gastrointestinal tract, respiratory tract and ear infections (Allen & Hector, 2005; Ip et al., 2007; Leon-Cava et al., 2002; van Rossum et al., 2006). The evidence for autoimmune health conditions was rated as 'probable'.

Looking at long-term health risks, chronic diseases were more prominent than infectious diseases, although the evidence was mostly rated as 'probable' or 'possible'. In some instances, the reviewers rated the evidence differently. For example, the risk of developing adult type II diabetes was ranked as 'probable' by Ip et al. (2007), but only ranked as 'possible' by Allen and Hector (2005) and Leon Cava et al. (2002).

1.2.4 Risks for mothers

The short-term health risks to mothers who do not breastfeed their babies were least convincing. All reviewers agreed that there was only possible evidence that mothers who did not breastfeed their babies were more likely to develop postpartum depression and late return to pre-pregnancy weight. For long-term risk however, reviewers found 'convincing' evidence that mothers who did not breastfeed their babies were at higher risk of premenopausal breast cancer. However, for postmenopausal breast cancer and ovarian cancers, there was mostly probable evidence that mothers who did not breastfeed their babies were at higher risk compared to mothers who breastfed.

Table 1.1: Methods of review

Authors, Year & *Title*	Organization name, place and country	Method of review	Review groups	Review risk
Allen & Hector, (2005). Benefits of breastfeeding.	NSW Centre for Public Health Nutrition, University of Sydney, Australia.	**Databases and time period:** Medline from 1996 to May 2005 OVID, CINAHL and EMBASE (time was not specified) Cochrane Library database (time was not specified). **Keywords:** Breastfeeding or breast milk AND health or prevention or protection or reduced risk. **Language:** Not specified **Evidence:** Mainly in developed countries **Reporting of evidence:** The strength of association between breastfeeding and a health benefit was classified as ***convincing*** (the findings were based on one or more cohort studies, with at least a measure of duration of breastfeeding and/or showed a clear dose-response in relation to health outcomes), ***probable*** (the findings in most studies found an association, but confirmation is required in more, or better designed studies) or ***possible*** (when the evidence of an association was only found in few studies).	Term infants Term infants Mothers Mothers	Short-term Long-term Short-term Long-term
Horta, Bahl, Martines & Victoria, (2007). Evidence on the long-term effects of breastfeeding: Systematic reviews and meta-analysis.	The Department of Child and Adolescent Health and Development, World Health Organization	**Databases and time period:** MEDLINE from 1966 to March 2006 Scientific Citation Index databases (time was not specified). **Keyword:** breastfeeding, breastfed, breastfeed, bottle feeding, bottle fed, bottle feed, formula milk, formula fed, formula feed were combined with these terms: blood pressure, obesity/overweight, total cholesterol, type-2 diabetes and intellectual performance. **Languages:** English, French, Portuguese and Spanish **Reporting of evidence:** Fixed and random-effects models were used to pool the effect estimates, and a random-effects regression was used to assess several potential sources of heterogeneity.	Term infants	Long-term

Ip, Chung, Raman, Chew, Magula, DeVine, et al., (2007). Breastfeeding and maternal and infant health outcomes in developed countries.	Tufts-New England Medical Centre Evidence-based Practice Centre (EPC), under contract to the Agency of Healthcare Research and Quality (AHRQ) Rockville, MD, USA.	**Databases and time period:** MEDLINE, CINAHL and the Cochrane Library Databases from 1966 to May 2006. **Keywords:** Subject headings and text words relevant to breastfeeding and the different outcomes **Evidence:** Mainly in developed countries **Language:** English **Reporting of evidence:** A three grading category system was used to denote primary study methodological quality were **A (good):** Least bias and results are valid; **B (fair/moderate):** susceptible to some bias, but not sufficient to invalidate the results; and **C (poor):** significantly biases that may invalidate the results	Preterm infants Term infants Term infants Mothers Mothers	Short-term Short-term Long-term Short-term Long-term
Leon-Cava, Lutter, Ross, & Martin, (2002). Quantifying the benefits of breastfeeding: A summary of the evidence.	Washington DC: Division of Health Promotion (HPP) of the Pan American Health Organization (PAHO), USA.	**Databases and time period:** Medline and Popline from 1977 to January 2002. **Keywords:** Breastfeeding, lactation, infant mortality, cancer, intelligence, cognitive, motor development, obesity, diabetes, chronic disease, cardio vascular disease, maternal health, breast cancer, ovarian cancer **Evidence:** Mainly in 'Western' populations **Language:** English **Reporting of evidence:** The results were reported as either convincing/better than formula feed or more research needed to confirm the findings	Term infants Term infants Mothers	Short-term Long-term Long-term
van Rossum, Buchner, & Hoekstra, (2006). Quantification of health effects of breastfeeding: Review of the literature and model simulation.	Ministry of Public Health, Welfare and Sports, BA, Bilthoven.	**Databases and time period:** Medline from 1980 to February 2005. **Keywords:** Breastfeeding, lactation or human milk. (primary search) Infections, otitis media, obesity (combination search) **Evidence:** Mainly in Western Europe, North America, Australia and New Zealand **Language:** English and Dutch **Reporting of evidence:** The strength of association between breastfeeding and a health benefit was classified as ***convincing***, ***probable***, ***possible or insufficient***, based on WHO-criteria for evidence.	Term infants Term infants Mothers Mothers	Short-term Long-term Short-term Long-term

Table 1.2: The short and long term risk of not breastfeeding in infant and mothers; based on level of evidence

Risk groups	Risk types	Level of evidence		
		Convincing	**Probable**	**Possible**
Preterm infants	Short-term risks	Neonatal necrotizing enterocolitis (Allen & Hector, 2005; Ip et al., 2007)		Poorer cognitive development (Ip et al., 2007)
Term infants	Short-term risks	Gastrointestinal infection or diarrhea (Allen & Hector, 2005; Ip et al., 2007; Leon-Cava et al., 2002; van Rossum et al., 2006) Otitis media (Allen & Hector, 2005; Ip et al., 2007; Leon-Cava et al., 2002; van Rossum et al., 2006) Respiratory tract infection (Allen & Hector, 2005; Ip et al., 2007; Leon-Cava et al., 2002; van Rossum et al., 2006) Sudden Infant Death Syndrome (SIDS) (Ip et al., 2007)	Asthma and allergy (Allen & Hector, 2005; Ip et al., 2007; van Rossum et al., 2006) Wheezing (van Rossum et al., 2006) Eczema (Ip et al., 2007; van Rossum et al., 2006) SIDS (Allen & Hector, 2005)	SIDS (van Rossum et al., 2006)
Term infants	Long-term risks	Childhood and adolescent obesity (van Rossum et al., 2006) Higher adult mean blood pressure (van Rossum et al., 2006)	Adult type-2 diabetes (Ip et al., 2007; Leon-Cava et al., 2002) Childhood leukemia (Allen & Hector, 2005; Leon-Cava et al., 2002) Childhood and adolescent obesity (Allen & Hector, 2005; Horta et al., 2007) Cognitive ability or intelligence level (Allen & Hector, 2005; Horta et al., 2007; Ip et al., 2007; Leon-Cava et al., 2002; van Rossum et	Childhood and adolescent type-1 diabetes (Allen & Hector, 2005; van Rossum et al., 2006) Adult type-2 diabetes (Allen & Hector, 2005; Horta et al., 2007; Leon-Cava et al., 2002; van Rossum et al., 2006) Childhood leukemia (Leon-Cava et al., 2002; van Rossum et al., 2006) Higher mean adult blood pressure (Horta et

			al., 2006) Inflammatory bowel disease (Allen & Hector, 2005; van Rossum et al., 2006)	al., 2007; Leon-Cava et al., 2002) Higher mean adult blood cholesterol level (Horta et al., 2007; Ip et al., 2007)
Mothers and infants	Long-term risks			Reduced maternal-infant bonding (Allen & Hector, 2005; Leon-Cava et al., 2002)
Mothers	Short-term risks			Slow return to pre-pregnancy weight (Allen & Hector, 2005; Ip et al., 2007) Postpartum depression (Allen & Hector, 2005; Ip et al., 2007)
	Long-term risks	Premenopausal breast cancer (Allen & Hector, 2005; Ip et al., 2007; Leon-Cava et al., 2002)	Postmenopausal breast cancer (Allen & Hector, 2005) Ovarian cancer (Allen & Hector, 2005; Ip et al., 2007; Leon-Cava et al., 2002; van Rossum et al., 2006) Rheumatoid arthritis (Allen & Hector, 2005; van Rossum et al., 2006)	Endometrial cáncer (Allen & Hector, 2005) Osteoporosis (Allen & Hector, 2005; Ip et al., 2007)

1.3 Breastfeeding In Malaysia

Breastfeeding has been traditionally practiced by Malaysian women for years (Manderson, 1984). In Malaysia, previous researchers showed that breastfeeding practices were influenced by working status, ethnic and socioeconomic status including education backgrounds (Awang & Salleh, 2000; DaVanzo, Sine, Peterson, & Haaga, 1994; Manderson, 1984; Mohd Amin et al., 2011; Tan, 2009, 2011; Tengku Ismail, Sulaiman, Jalil, Wan Muda, & Nik Man, 2012). However, the findings from these studies vary which may be partly be due to the differences in the study design and data gathering methods.

Manderson's (1984) research that took place in the late 1970's, involved nearly 300 participants and suggested that breastfeeding was the preferred method of infant feeding among women in east coast states of Malaysia and in remote areas than women from southern states and industrialised areas. Her findings showed that urbanisation may contribute to bing a barrier to breastfeeding but working status may not, as some of the housewives chose to bottle feed their infants too. Another study by Awang and Salleh (2000) suggested similar findings whereby women who worked in rural Malaysia breastfed for a longer duration than women who worked in urban areas.

Working status has been shown to affect breastfeeding practices, higher among the Chinese women (Mohd Amin et al., 2011). In their descriptive study which involved nearly 300 participants it was revealed that women who worked in the private sector

were significantly breastfeeding a shorter duration than women in the government sector. In terms of workplace facilities, Amin et al. (2011) stated that half of the women who discontinued breastfeeding within the first three months postpartum, was due to inadequate breastfeeding facilities at their workplace. Their findings also suggested that the lack of flexible time to express milk and a workplace that did not provide proper breast milk storage system such as a refrigeration were associated with women discontinuing breastfeeding earlier (Mohd Amin et al., 2011).

Tg Ismail et al. (2012), in their qualitative study, interviewed 20 formally employed women from rural and urban Malaysia regarding milk expression at their workplace. Their findings revealed that the reasons women did not express at work were related to the issues of perceived milk insufficiency, embarrassment and doubts regarding hygiene when handling expressed milk. They further suggested that the women need to understand that infrequent milk expression while at work may be the cause of perceived milk insufficiency too.

Previous studies in Malaysia had established the effect of ethnicity on breastfeeding duration whereby the Malays breastfed the longest compared to the Chinese and Indians (Awang & Salleh, 2000; DaVanzo et al., 1994; Manderson, 1984; Mohd Amin et al., 2011). For example, DaVanzo et al. (1994) further elaborated that the Malays who were mostly Muslim were encouraged by their religious teachings to breastfeed which may contribute to the higher rate of breastfeeding practices among the Malays, unlike the Chinese or Indians.

With regard to social status and breastfeeding practices, Manderson (1984) suggested that there was an inversely related association between breastfeeding cessation and monthly household income whereby, women with higher monthly household income were more likely to cease breastfeeding earlier. Manderson findings, however, was not supported by a later study which showed no difference in the breastfeeding cessation with the total household income in Malaysia (Mohd Amin et al., 2011).

1.3.1 Statistics on Breastfeeding in Malaysia

In Malaysia, the number of women in the labour force has been increasing for the past sixty years (Subramaniam, 2010 #371). The number of employed women in Malaysia who were in their reproductive years was estimated as 3.81 million (Statistic, 2008). From the Second National Health and Morbidity Survey (NHMS II) conducted in 1996, the prevalence of employed women who had ever breastfed was found to be 91.4% (Institute for Public Health, 1998). Of this figure, only 25% of employed women practised exclusive breastfeeding compared to 31% of non-working women.

More recent data from the Third National Health and Morbidity Survey (NHMS III) which was conducted in 2006 revealed that a few observations showed that 95% of women have ever breastfed their infants, but only 15% practised exclusive breastfeeding until six months of age (Fatimah, Siti Saadiah, Tahir, Hussain Imam, & Ahmad Faudzi, 2010). There were significantly more infants being exclusively breastfed in rural areas compared to urban localities. Since more women are contributing to the work force in urban areas, they are more adversely affected in breastfeeding practices.

1.3.2 Breastfeeding protection act

According to the Malaysia Employment Act 1995, Part IX there is a provision regarding maternity leave which includes the following (National Employment Act Commission, 2006, pp. 34-35).

> *Every female employee shall be entitled to maternity leave for a period of not less than 60 consecutive days in respect of each confinement. Maternity leave shall not commence earlier than a period of 30 days immediately preceding the confinement of a female employee or later than the day immediately following her confinement. A female employee shall be entitled to receive maternity allowance if she: Has been employed more than 4 months before confinement. If a female employee dies from any cause during the maternity leave period, her maternity allowance shall be paid to her nominee. The employer cannot terminate a female employee who remains absent from her work after the expiration of the maternity leave as a result of illness related to pregnancy or confinement and certified by a registered medical practitioner, until her absence exceeds a period of 90 days after the maternity leave.*

The Malaysian Employment Act (2006) does not have any provision on lactation break. Malaysia is one of the 45 countries that have no provision on lactation break for women at work as shown on a global review (Heymann, Raub, & Earle, 2013).

1.4 Researcher's Journey

I graduated as a medical doctor from the University of Adelaide in 1997. I returned to Malaysia and started my internship training for a year and then continued as a medical officer in a tertiary government hospital for a few years before joining a medical school as a trainee lecturer in the year 2001.

While I was undergoing a master training in Community Medicine, I gave birth to my first child. Since it was my first breastfeeding experience, I was struggling to maintain breastfeeding while pursuing my postgraduate master degree. Worse still, I was only given a one week break for postpartum. The experience was nowhere near satisfactory and I started to feel the pain of rushing for assignment deadlines while having to ensure I had an adequate expressed milk supply for my daughter.

After I obtained my master degree and started tutoring, I gave birth to my son which was four years after his sister was born. By this time, I was entitled to full leave of two months and I could feel the difference in my breastfeeding experience ompared to the first time. Having my own room in the office, a more flexible working time and access to the milk storage facilities at the hospital made my breastfeeding journey an enjoyable and a memorable one.

The two contrasting experiences that I personally went through make me wonder how vast the impact of having to work was while maintaining breastfeeding in two different environments. What would it be for other working women who may even have more stringent working conditions in order to manage and maintain breastfeeding? Would there be better options for women who would like to commit to both work and breastfeeding and to do it in a more conducive manner? All these questions made me ponder in greater depth which had led me to embark on the current study, hoping to promote a better understanding about the struggle faced by working women in urban Malaysia.

1.5 Rationale And Aim Of The Study

In keeping with the current WHO recommendation on breastfeeding duration, Malaysia has revised the existing National Breastfeeding Policy in 2005 (Institute for Public Health, 2005). Malaysia also promotes, protects and supports breastfeeding through various strategies including the Baby-Friendly Hospital Initiative since 1992, training of the health staff, and has recently initiated to increase 90 days maternity leave for women working in the government sector (Abdullah, 2010). The support for breastfeeding and control of appropriate marketing and proper use of infant formula, its related products and complementary foods, are regulated through the Code of Ethics for the Marketing of Infant Foods and Related Products, which was last revised in 2008 (Ministry of Health Malaysia, 2008).

Despite knowing the health risks of not breastfeeding, the World Health Organization (WHO) recommended practice of six months exclusive breastfeeding, for most infants around the world including Malaysia, has not been met (UNICEF, 2009). Since the data from the NHMS II and NHMS III suggested that women in urban areas and employed are more affected, my research project proposes to explore the extent working has other impact to women returning to work postpartum from urban localities in Malaysia.

This study postulates that how working mothers behave and respond to their infant feeding choices is determined by their perceptions on what best suits their infants and the influence of other people in their environments. This implies that there is a

complex interaction between a mother's perception and her perceived expectations from relevant individuals or groups that will bring about her behaviour which is best explored using a qualitative approach.

> *Qualitative researchers are after meaning. The social meaning people attribute to their experiences, circumstances, and situations, as well as the meanings people embed into texts and other objects, are the focus of qualitative research. Therefore, at the heart of their work, qualitative researchers try to extract meaning from their data (Hesse-Biber & Leavy, 2011, p. 4)*

The aim of this study was to gain a deeper understanding of how working women living and born in Malaysia, make decisions about infant feeding. Pertaining to working women in urban Malaysia, the specific objectives for this study are:

1. To define their attitudes and perceptions regarding infant feeding.
2. To explore their experiences of infant feeding practices.
3. To identify successful strategies in maintaining breast milk feeding or exclusive breastfeeding practices.
4. To identify the barriers and challenges that prevent maintaining breastfeeding practices after returning to work.

1.6 Organisation Of The Thesis

This thesis documents the research process, beginning from its inception to its contribution in knowledge to understand working women breastfeeding practices in

urban Malaysia. Following this introductory Chapter 1, the thesis consisted of another 10 chapters labelled as Chapter 2 to Chapter 11.

Chapter 2 discusses the determinants of breastfeeding while Chapter 3 presents the relevant literature on working conditions that influence breastfeeding practices among working women. Chapter 4 describes four theoretical frameworks that frame this research. Chapter 5 describes the research methodology, selection of participants to the transcription of the data. Chapter 5 also highlights issues related to ethical issues and the validity of the study. While the data are presented and analysed in the next four chapters, from Chapter 6 to Chapter 9, each chapter has a different focus.

In Chapter 10, the findings from Chapter 6 to Chapter 9 of the study are discussed in view of the theoretical frameworks described in Chapter 4 and literature described in Chapter 2 and Chapter 3. Lastly Chapter 11 summarises the main findings, relevancy and the contribution of new knowledge gained from the current study.

CHAPTER 2: DETERMINANTS OF BREASTFEEDING PRACTICES

2.1 Introduction

One way of conceptualising the many factors that interact with infant feeding practices is to divide them into three levels as illustrated by Hector et al. (2005) (Figure 2.1).

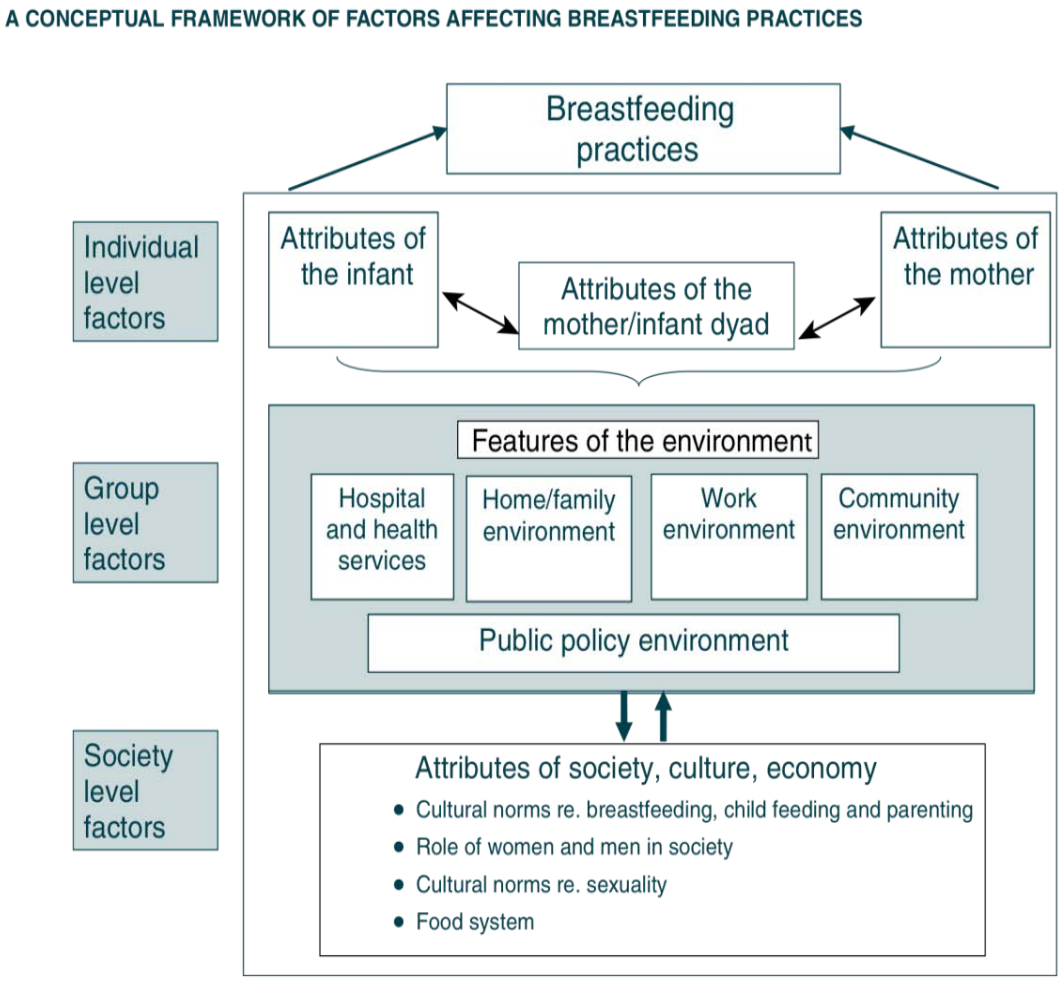


Figure 2.1: A conceptual framework of factors affecting breastfeeding practices in Hector et al. (2005, p 53).

Individual level factors deal directly with either the mother, the infant or mother-infant interaction. Group level factors refer to the environments that have direct effects on mothers' and infants' ability to practice breastfeeding. The environments include hospital and health services, home or family, work, community and public

policy, whereas, society level factors have an influence on breastfeeding practices in the context of society, culture and economy (Hector et al., 2005).

Based on the framework of Hector et al. (2005), the determinants of breastfeeding can be divided into two categories. The first category explains the determinants of breastfeeding practices which include individual level factors such as attributes of the mothers and infants themselves. The other category explains the group and society level factors that may be relevant in influencing women's breastfeeding practices.

Thulier and Mercer (2009) reviewed papers that included meta-analyses, Cochrane reviews, literature review of qualitative and quantitative studies from 1998 to 2008 on the variables influencing breastfeeding duration. They concluded that breastfeeding is a 'complex phenomenon' which is influenced by four factors: demographic, biological, social, and psychological (Thulier & Mercer, 2009, p. 266).

2.2 Individual Level Factors

This section focuses on individual level attributes of the mother, of the mother-infant dyad and of the infant.

2.2.1 Maternal intention

Breastfeeding intention is a woman's inner desire to breastfeed or otherwise. A literature review of 7000 quantitative and qualitative studies from 2000 to 2009

stated that strong maternal intentions are consistently associated with longer breastfeeding duration (Meedya, Fahy, & Kable, 2010).

A large population based study in the UK that followed 10 548 women from pregnancy to postpartum identified that the mother's prenatal intention to breastfeed was a very strong predictor of breastfeeding initiation and duration (Donath & Amir, 2003). They showed that prenatal intention was a stronger predictor of the mother's actual breastfeeding initiation and duration than the standard demographic factors combined (Donath & Amir, 2003).

A recent study by Sattari et al. (2013) suggested that when the mother's prenatal intention is specified with a goal for duration of breastfeeding, she was more successful in maintaining breastfeeding after returning to work postpartum. The authors confirmed that when this occurs, intention was a stronger predictor of actual breastfeeding duration than for women who did not specify a duration (Sattari et al., 2013).

Prenatal breastfeeding intention tends to change as women experience breastfeeding themselves (Moore & Coty, 2006). Moore and Coty (2006) in their qualitative focus group sessions which were conducted during pregnancy and postpartum, identified that women spoke about how they changed their prenatal intention such as '*I've dropped my [planned breastfeeding duration] to 4 [months]*' during the postpartum focus group session (Moore & Coty, 2006, p. 43). However, measuring the strength of prenatal intentions is beyond the limits of the present study and therefore,

investigations on whether a change of plan is associated with weak prenatal intention to breastfeed is not explored.

2.2.2 Maternal attitude and perception

Maternal attitude towards breasfeeding has been widely researched as they are important factors in determining the breastfeeding practices. Instead of attitude, 'perception' has been used in qualitative studies to describe and explain women's views and preferences about infant feeding (Jessri, Farmer, & Olson, 2013; McFadden & Toole, 2006; Schmied, Beake, Sheehan, McCourt, & Dykes, 2011). Focus group discussions and interviews were common methods used to explore perception in depth (Scott & Mostyn, 2003; Stewart-Knox, Gardiner, & Wright, 2003). Both attitude and perception are used throughout this thesis where applicable.

2.2.2.1 Positive

Positive attitude has been shown to be associated with longer breastfeeding duration in a longitudinal study in the USA which involved 1665 women (DiGirolamo, Thompson, Martorell, Fein, & Grummer-Strawn, 2005). It has been shown that the stronger the positive attitude, the longer the duration for breastfeeding (Sittlington, Stewart-Knox, Wright, Bradbury, & Scott, 2007). A recent prospective cohort study that used the IIFAF as their tool, found women with a higher attitude score exclusively breastfed and were more likely to do so longer than six months than women with a lower score (Holbrook, White, Heyman, & Wojcicki, 2013).

In addition to attitude towards breastfeeding being positive or negative, neutral attitude has been reported (a mean score of less than 55). A neutral breastfeeding attitude score using a simplified Chinese version of IIFAS has been observed recently among 1800 Chinese mothers who live in China and Australia (Chen et al., 2013). Compared to women with mean score of 55 or less, women who had a mean score of over 61 were almost four times more likely to breastfeed and were two and half times as likely to breastfeed for at least eight months(Chen et al., 2013).

In another study, Wilkins et al. (2012) compared women's attitude in the UK during prenatal and the postpartum periods using the IIFAS tool. They revealed that, nearly half the women at some point of the study had middle range attitude scores which indicates an 'ambivalent feeling' towards breastfeeding (Wilkins et al., 2012).

2.2.2.2. Negative

Women with negative attitudes felt that infant formula was just as healthy as breast milk (Sittlington et al., 2007) or that breast milk was not enough for their infants (Ekanem, Ekanem, Asuquo, & Eyo, 2012; Gesouli-Voltyraki, Deltsidou, Stamelaki, Karkageli, & Noula, 2009; Sittlington et al., 2007). Women who were uncertain about their milk supply, perceived that their infants had a need for supplemental feeding with formula (Gatti, 2008). In a cohort study in Perth by Scott et al. (2006) mothers who had negative attitudes were less likely to breastfeed their infants for longer than six months compared to mothers with more positive attitudes towards breastfeeding.

Some women attributed their negative attitude to their difficulty in breastfeeding, uncertainty about milk supply, inability to match their lifestyle or personal needs with breastfeeding (Wojnar, 2004). Other determinants that may contribute to women's negative attitude were feeling embarrassed about breastfeeding in public (Ekanem et al., 2012; Sittlington et al., 2007), associating breastfeeding practices with pain (Ekanem et al., 2012) or other problems related to breast and nipple conditions (Gesouli-Voltyraki et al., 2009).

Similarly, Ludlow et al. (2012) used interviews to explore why mothers in Canada choose infant formula despite knowing that 'breast is best'. The mothers who decided to give the 'best formula', claimed formula had a high nutritious value for their infants (Ludlow et al., 2012). By giving formula, these mothers claimed they were also able to perform well at work and spend quality time with their family (Ludlow et al., 2012).

2.2.3 Mother-infant dyad

Although the effects of breastfeeding on mother-infant interaction is often assumed, only recently has it been reviewed systematically (Jansen, Weerth, & Riksen-Walraven, 2008). Jansen et al. (2008) did a literature search from 1985 and extracted more than 300 papers, which was then reduced to 41 papers that mentioned the relationship between breastfeeding and bonding. Their reviews revealed that there was no empirical study to support the relationship between breastfeeding and mother-infant bonding (Jansen et al., 2008).

Furthermore, a study found that the quality of interaction between the mother and infant in mothers who gave infant formula were not compromised (Else-Quest, Hyde, & Clark, 2003). Since there was no conclusive evidence to show the relationship between feeding methods and bonding, it could mean that breastfeeding only has a minimal impact on mother-infant interaction. Thus emotional attachment may not be a promoting factor for breastfeeding.

Based on a feminist perspective, Schmied and Lupton (2001) explored the breastfeeding experiences of 25 Australian first-time mothers. Some of the women experienced breastfeeding as a connected and intimate relationship between themselves and their infants. For others, the close relationship between mother and infant was 'difficult to reconcile with notions of identity that value autonomy, independence and control.' (Schmied & Lupton, 2001, p. 234). Although the review by Jensen et al., (2008) concluded that there was no support for mother-infant breastfeeding interactions, the personalised bonding experiences by breastfeeding women were real. For these women, emotional attachment was a promoting factor to breastfeed.

2.2.4 Maternal socio-demographic factors

Dennis (2002) in reviewing 10 years of literature from 1990 to 2000 on breastfeeding duration suggested four variables that consistently predicted breastfeeding behaviours. Maternal personal characteristics identified as being positively associated with breastfeeding are older maternal age, higher socioeconomic status, non-employment and non-smoking status.

Later, Thulier and Mercer (2009), reviewed papers that included meta-analyses, Cochrane reviews, literature review of qualitative and quantitative studies from 1998 to 2008 on the variables influencing breastfeeding duration. Regarding demographic factors, they indicate that race, older maternal age, married, higher level of education, all were associated with longer breastfeeding duration (Thulier & Mercer, 2009).

2.2.5 Infant

Prematurity can have an impact on the initiation and duration of breastfeeding. In Australia, infants born at 35 to 36 weeks were less likely to be breastfed than infants born at 37 to 40 gestational weeks; even term infants born at 38 and 39 weeks were less likely to be breastfeeding at six months compared to infants born at 40 weeks, after adjusting for possible confounding factors (Amir & Donath, 2008).

First born infant, caesarean delivery, multiple pregnancy (Baxter, Cooklin, & Smith, 2009), and infant admission to intensive care (Al-Sahab, Lanes, Feldman, & Tamim, 2010) were also risk factors for early breastfeeding cessation. Even in Sweden, a country with good breastfeeding practices and support systems, breastfeeding duration is shorter for preterm infants compared to term infants after being adjusted for socio-economic status and other cofounders (Flacking, Wallin, & Ewald, 2007).

2.3 Group Level Factors

Hospital and health services, family and community environment, public policy, economy and cultural tradition are other factors that may influence breastfeeding

practices as outlined in the framework by Hector et al. (2005). This section discusses women in general regardless of their working status since health, support, family, culture and policy influence all breastfeeding women.

2.3.1 Hospital and health services

Following the Innocenti Declaration of 1990, the Baby-Friendly Hospital Initiative (BFHI) was launched by the WHO and UNICEF in 1991 as a global effort to implement practises that protect, promote and support breastfeeding. In many countries, breastfeeding rates have increased significantly faster in hospitals that comply with the BFHI Ten Steps to Successful Breastfeeding (Table 2.1) as seen in the 'Promotion of Breastfeeding Intervention Trial (PROBIT): A Randomised Trial in the Republic of Belarus' (Kramer et al., 2001) and observational reports from Scotland (Broadfoot, Britten, Tappin, & MacKenzie, 2005).

Table 2.1: The Baby Friendly Hospital Initiative (BFHI) ten steps to successful breastfeeding

Ten Steps to Successful Breastfeeding **Every facility providing maternity services and care for newborn infants should**
1. Have a written breastfeeding policy that is routinely communicated to all health care staff.
2. Train all health care staff in 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. Practise rooming-in - that is, allows mothers and infants to remain together - 24 hours a day.
8. Encourage breastfeeding on demand.
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.

Source: Protecting, Promoting and Supporting Breastfeeding: The Special Role of Maternity Services, a joint WHO/UNICEF statement published by the World Health Organization (2009), retrieved from http://www.childinfo.org/breastfeeding_iycf.php.

A systematic review of 36 research articles conducted in Europe, North America, Australia or New Zealand suggested that the BFHI is an effective programme in supporting breastfeeding (Hannula, Kaunonen, & Tarkka, 2008). This review revealed that healthcare professionals in supporting breastfeeding used multi-method interventions which were conducted throughout prenatal and postpartum period (Hannula et al., 2008).

McInnes and Chambers (2008) synthesised qualitative research papers, extracting social and health supports for breastfeeding and concluded that women tend to weight social support as more important than support from health professionals. This review revealed that hospital and professional support 'appears limited' and women report that health professionals provide conflicting advice regarding breastfeeding practices (McInnes & Chambers, 2008). However, with staff education and support skills, the breastfeeding rate may improve as shown in some of the individual studies (McInnes & Chambers, 2008).

2.3.2 Breastfeeding supports

The most recent Cochrane Review (Renfrew, McCormick, Wade, Quinn, & Dowswell, 2012) of mothers with healthy term infants examined the effectiveness of breastfeeding support. The review found that all forms of supports when analysed together, including family, partner, lay and professional, show an increase in breastfeeding duration and exclusivity. The support includes postpartum programs such as home-visiting programs and telephone supports or prenatal programs such as

breastfeeding education. All the effective supports were found to be personalised to the need of the individual mother (Renfrew et al., 2012).

Similarly, a qualitative study in Sweden exploring breastfeeding support provided by midwives found that mothers wanted to have on-going individualised care that is tailored to their needs (Bäckström, Wahn, & Ekström, 2010). Moore and Coty (2006) in their qualitative interviews with mothers prenatally and postpartum revealed that breastfeeding experiences were both easy and difficult depending on the positive or negative support that mothers experienced postpartum. In order to provide effective interactive support, the providers need to be trained, skilful and have experience in dealing with breastfeeding women (Moore & Coty, 2006).

2.3.3 Breastfeeding barriers

A recent publication by Mangasaryan et al. (2012) reviewed policies and programs related to breastfeeding from 1993 to 2007. They summarised the key challenges that influenced breastfeeding practices in six countries, Bangladesh, Benin, the Philippines, Sri Lanka, Uganda and Uzbekistan as shown in Table 2.2. The three key levels identified by Mangasaryan et al. (2012) are similar to the three levels described in Hector et al's. (2005) framework.

Mangasaryan et al. (2012) identified two main challenges at each level (Table 2.2). The more challenges a country had to face to adopt the recommended practice, the lower the rate of exclusive breastfeeding rate observed. In contrast to the key challenges,

women who were supported in the key areas may be able to breastfeed for longer (Mangasaryan et al., 2012).

Table 2.2: Challenges to adoption of recommended breastfeeding practices

Levels	Main Challenges and Problems Identified
Household/ Individual	**Lack of infant feeding knowledge and skills among caregivers** • Lack of knowledge of benefits of breastfeeding and the importance of exclusive breastfeeding. • Assumption that breast milk is not enough to nourish infants. • Lack of infant feeding skills, such as proper positioning and attachment and appropriate complementary feeding. • Lack of understanding that insufficient milk is due to poor suckling techniques and not feeding frequently enough.
	Lack of family support • Extended family members encouraging mothers to give other liquids and foods early. • Family members not able to support mothers through help with household tasks or other children.
Health facility/ Community	Cultural beliefs and practices • Prelacteal feeds, delayed initiation, and discarding of colostrum • Giving water, herbal teas, watery porridges, and other drinks within the first six months. Using feeding bottles and various breast milk substitutes. • Poor complementary feeding practices such as delaying introduction beyond six months of age and/or giving foods with insufficient variety, energy density, or feeding frequency.
	Unsupportive health facility and community-based services • Health facility practices not conducive to the establishment of good breastfeeding practices. • Limited knowledge on Infant and Young Child Feeding (IYCF) and lactation management, complementary feeding, and counselling skills among health providers and community volunteers. • Lack of time to provide the needed IYCF support by the health providers and community volunteers. • Poor supervision and monitoring of staff and volunteers trained to provide IYCF support.
National/ Sub-National	**Unsupportive work environment** • Limited or no maternity leave. • Inflexible working hours and lack of breastfeeding breaks. • No breastfeeding rooms or space for expressing and storing breast milk.
	Commercial pressures • Widespread advertising of breast milk substitutes through print media, radio, television, and billboard advertisements. • Provision of gifts and incentives to influence health workers to promote formula products. • Lack of monitoring and enforcement of marketing regulations for breast milk substitutes.
	Administrative and political challenges • Weak national commitment to IYCF and nutrition and inadequate resources. • Poor coordination among government offices and partners.

	• Lack of integrated, cost-effective and sustained approaches to address health and nutrition needs. • Rapid turnover of administrative, health service, as well as, community staff and volunteers with IYCF skills. • Small-scale and fragmented community-based services.

Source: Breastfeeding promotion, support and protection: review of six country programmes (Mangasaryan et al., 2012, pp. 999-1000)

2.3.4 Public policy

The International Code of Marketing of Breast Milk Substitutes was developed in 1981 by the general assembly of the WHO which recommended restrictions on the marketing of breast milk substitutes (infant formula) in order to ensure that mothers are not discouraged from breastfeeding and that substitutes are used safely if needed (World Health Organization, 1981).

Despite this, Code violations by manufacturers continue to be reported in industrialised (Costello & Sachdev, 1998; Pisacane, 2000) and developing countries (Aguayo, Ross, Kanon, & Ouedraogo, 2003; Sokol, Thiagarajah, & Allain, 2001). A multicentre study in Thailand, Bangladesh, South Africa, and Poland also showed that leading manufacturers were violating the Code (Taylor, 1998).

2.3.5 Culture and belief

Cultural beliefs and practices have been shown to influence breastfeeding in Australia (Sheehan & Schmied, 2011), China (Raven, Chen, Tolhurst, & Garner, 2007), Lebanon (Osman, El Zein, & Wick, 2009), Thailand (Kaewsarn & Moyle, 2000; Liamputtong & Kitisriworapan, 2011; Yimyam, 2011) and the United States (K. A. Dettwyler, 1995).

Some cultural practices may promote positive breastfeeding practices while others may promote negative breastfeeding practices. Yimyam (2011) listed the positive cultural beliefs among Thai women as recognising 'breast is best' and the practice of the traditional one month confinement period. While the negative cultural beliefs included the need for water supplementation via bottle at an early age, postpartum food restriction and misconceptions about breast milk and breastfeeding (Yimyam, 2011).

Colostrum which is known to protect infants from infections, has been regarded by some cultural groups as unsuitable for newborns and is sometimes discarded (Ertem, 2011; Hizel, Ceyhun, Tanzer, & Sanli, 2006). For example, people in the Hmong community do not believe it is part of milk, but believe that true milk will be produced only after day three of the infant's life (Rice, 2000). These examples illustrate how cultural beliefs can interfere with the practice of exclusive breastfeeding.

Chinese cultural practices had been shown to discourage breastfeeding in studies conducted in Malaysia and Singapore. In Singapore, a longitudinal study involving more than 2000 mothers of Malay, Chinese and Indian ethnicities suggested that the breastfeeding rate was highest among the Malay Muslim women and lowest among the Chinese women (Foo, Quek, Ng, Lim, & Deurenberg-Yap, 2005). Similar findings were observed in studies conducted in Malaysia, with the Malay group likely to breastfeed for a longer duration (Mohd Amin et al., 2011; Tan, 2011). In both studies, the high rate among Malays was attributed to their belief in the teaching from the holy book, the *Quran*, which promotes breastfeeding.

Although few studies have investigated religious commitment and breastfeeding practices, the findings have been shown to be consistently associated with higher breastfeeding initiation, duration and positive attitude (Al-Madani, Vydelingum, & Lawrence, 2010; Foo et al., 2005). A study that utilised data from a cohort of more than 4000 women in the USA showed women who attended religious activities were more likely to initiate breastfeeding than those who did not (Burdette & Pilkauskas, 2012).

A qualitative exploration among Middle Eastern women in Canada revealed that religion was the main theme and the strongest determinant in women choosing breastfeeding (Jessri et al., 2013). A Nigerian study found that those who identified as are Christians and Muslims had a more positive breastfeeding attitude and a higher rate of exclusive breastfeeding than those who were neither Christian nor Muslim (Ekanem et al., 2012).

2.4 Qualitative studies that examine breastfeeding experiences

Breastfeeding experiences have been widely studied qualitatively in Thailand (Yimyam, 2011), Malaysia (Tg Ismail et al., 2012), Canada (Nelson et al., 2005), and the USA (Rojjanasrirat, 2004), just to name a few. The experiences were explored among women with different background such as among the mothers with critically ill infants (Boucher et al., 2011), disadvantaged groups mothers (MacGregor et al., 2010), adolescent mothers (Wambach & Cohen, 2009), and low income mothers (Raisler, 2000). There were also research exploration of breastfeeding experiences among

women with different occupations such as in the military services (Stevens et al., 2003). More occupations related experiences will be reviewed in Chapter Three.

A metasynthesis of qualitative breastfeeding studies was conducted by Nelson (2006). She synthesised 15 qualitative studies which unveiled that breastfeeding was described as an "engrossing, personal journey," which was personalised for each women. Nelson (2006) also in the review showed that breastfeeding demanded the mothers' commitment and sacrifices their time.

A recent metasynthesis, specifically looking at the support for breastfeeding mothers had reviewed 31 papers which were screened from 254 potentially relevant papers (Schmied et al., 2011). The review revealed that, 'the support for breastfeeding occurred along a continuum from authentic presence at one end, perceived as effective support, to disconnected encounters at the other, perceived as ineffective or even discouraging and counterproductive' (Schmied et al., 2011, p.48).

2.5 Summary

There are multiple factors that influence breastfeeding initiation, breastfeeding duration and exclusive breastfeeding. The factors were categorised into personal and group. Some of the factors could be modified such as the supports and barriers but some cannot be modified such as the demographic background. A better understanding of women's breastfeeding experiences is possible by knowing how these factors influence them.

CHAPTER 3: BREASTFEEDING PRACTICES AND WORKING CONDITIONS

3.1 Introduction

This chapter covers specific topics related to breastfeeding practices and working conditions. It introduces and outlines maternity protection under the Maternity Protection Convention, 2000 (No. 183) ratified by the International Labour Organization (ILO) (2010). Then the main focus of this chapter is the literature review of working conditions that could have an impact on breastfeeding practices among working women.

3.2 Maternity Protection

The ILO is devoted to promoting decent work and social justice throughout its 183 member states and internationally recognised human and labour rights. The ILO, which was established in the early 1990s, has outlined the basic needs that should be provided by employers to ensure that women are protected and supported at work and that lactating women can continue giving breast milk to their infants. In general, there are seven key elements to maternity protection: scope, leave, benefits, health protection, job protection and non-discrimination, breastfeeding breaks, and breastfeeding facilities at the workplace (International Labour Organization, 2010; WABA, 2003). Descriptions of key elements are outlined in Table 3.1.

The ILO Convention on maternity protection is implemented in 120 countries and the baseline key elements conform to the minimum international standard (International Labour Organization, 2010). Usually, countries that implement the ILO Convention number 183 adopted the convention according to their national legislation. In many

cases, the convention only covers the formal work sector and excludes the informal work sector where nearly 80% of the workers are women (WABA, 2003). Only a few countries in the Asia and Pacific region comply with the ILO standard set out by Convention number 183.

Table 3.1: Maternity Protection Convention, 2000 (No. 183)

Key elements	Protections
Scope (what is protected)	• All married and unmarried employed women including those in atypical forms of dependent work
Amount of leave	• Not less than 14 weeks • Provision for 6 weeks compulsory postnatal leave
Cash benefits	• Two thirds of the women's previous earnings OR • Equivalent paying, on average, if an alternative calculation method is used. • To benefit from social assistance funds for women who do not meet the qualifying conditions • Benefits to be provided from social insurance or public funds or determined by national law and practice • Developing countries can provide cash benefits at the same rate as for sickness or temporary disability but must report to the ILO on steps taken to reach the standards
Medical benefits	• Prenatal, childbirth and postnatal care and hospitalisation care when necessary
Health protection	• Pregnant and nursing women shall not be obliged to perform work that is assessed as detrimental to the mother or child
Employment protection and discrimination	• Unlawful for an employer to dismiss a woman during pregnancy, whilst on maternity leave or whilst nursing, unless the grounds are unrelated to pregnancy or nursing • Burden of proof rests with the employer • Guaranteed to return to the same position or an equivalent position at equal pay • Protection against discrimination in employment on the grounds of maternity • Prohibition of pregnancy testing in recruitment
Breaks for breastfeeding	• Right to one or more day breaks for breastfeeding/lactation • Right to a daily reduction in daily working hours for breastfeeding Breaks or reduction in hours counted as working time and therefore paid

3.3 Literature Review

Papers were identified using an electronic database search of Medline, CINAHL and the Cochrane Library, limited to year of publication from 1996. The last literature

update took place in October 2013. The keywords for the search are shown in Table 3.2.

Table 3.2: The keywords used in the literature search

Keywords	Searches
Breastfeeding	breastfeed*, breastfed, breast milk feed*, breast-feed*, lactation
Infant feeding	infant feed*, formula feed*, bottle feed*, artificial feed*, mixed feed*
Working	workplace*, work*, employ*, occup*, part-time, full-time, flexible, inflexible, maternity leave, work* support, work* facilit*, family-friendly
Motherhood	mother*, first-time mother*, new mother*
Child care	Childcare, child care, nurser*, milk express*, breast milk pump, electric* pump, manual pump, breast pump
Maternity care	prenatal care, prepartum care, antenatal care, ante-natal, prenatal, prenatal care, post-partum, postnatal, confinement, nursing break, lactation break, breastfeeding break, paid break
Combined words	Malaysia, Malay, Chinese, Indian, ethnic, religion, culture, duration, initiation, support, barrier

Only studies that recruited women working as employees were included. However, studies that recruited both employers and employees were reviewed but only the employees results were included and discussed. Applying the search terms in Table 3.2, there were 51 papers which were included in this review. There were 12 comparative studies and the remaining 39 were descriptive studies. Of the descriptive studies, 12 were cross-sectional studies, 15 were retrospective studies, 4 were mixed methods and 8 were qualitative studies.

The studies are tabulated into four tables: maternity leave, lactation breaks, workplace supports or barriers, and working hours. Three studies discussed all areas (Miller, Miller, & Chism, 1996; Yimyam & Morrow, 1999; Zafar & Bustamante-Gavino, 2008) and therefore they appear in all the tables, but the majority focused on one or two areas only.

A few retrospective studies used the same dataset for their source of data. For example Berger et al., (2005) and Chatterji and Frick (2005) extracted data from the National Longitudinal Survey of Youth, USA. Fein and Roe (1998) and Roe et al., (1999) extracted data from the US Infant Feeding Practice Study (IFPS). In later years, Fein et al., (2008) and Mandal et al., (2010) extracted data from IFPS II.

3.3.1 Maternity leave

3.3.1.2 Background

Maternity leave has been defined as 'the number of weeks after childbirth when mothers were off work, without distinguishing whether it was a paid or unpaid leave, whether it was legally prescribed length, or whether there was a prolongation of maternity leave' (Staehelin, Bertea, & Stutz, 2007, p. 203). According to the ILO, working mothers are entitled to a minimum paid maternity leave of 14 weeks as shown in Table 2.1 (International Labour Organization, 2010).

According to ILO's review of national legislation regarding the trend in maternity leave from the mid-1990s to 2009, there had been a gradual shift towards longer maternity leave periods worldwide (International Labour Organization, 2010). Although many countries are increasing the length of their maternity leave, this is not the case in Malaysia (International Labour Organization, 2010).

2.3.1.2 Maternity leave

This review includes 9 comparative and 17 descriptive studies on maternity leave, breastfeeding initiation and duration among working women. Of these, two used mixed methods (Wallace & Chason, 2007; Yimyam & Morrow, 1999), two used qualitative methods (Gatrell, 2007; Zafar & Bustamante-Gavino, 2008) and the remaining 22 used quantitative research methods (Table 3.3).

Most of the studies did not indicate whether the maternity leave was paid or unpaid although some mentioned that it was mandated. The length of maternity leave ranges from the shortest at less than two weeks (Roe et al., 1999) to the longest being 52 weeks (Gatrell, 2007).

A national cohort study in Taiwan with a sample size of 24 200 confirmed that women with maternity leave less or equal to six months ceased breastfeeding earlier than those with maternity leave greater than 6 months and who did not return to work up to 18 months after birth (Chuang et al., 2010). In a longitudinal prospective study, 218 primiparous women in Hong Kong were recruited at the end of pregnancy and they were followed for 12 months postpartum (Dodgson, Tarrant, Fong, Peng, & Hui, 2003). Interestingly, Dodgson et al., (2003) found maternal employment was not a statistically significant factor in continuing breastfeeding. Their findings indicated that besides employment status, there were multiple factors which influencing breastfeeding continuation in Hong Kong (J. E. Dodgson et al., 2003).

A qualitative study in India, which interviewed 12 nurses regarding breastfeeding experiences revealed that nine weeks of maternity leave was inadequate to establish breastfeeding (Zafar & Bustamante-Gavino, 2008). After returning to work, the women had difficulty providing adequate expressed milk for their infants. Thus, all of them had started to introduce solids when their babies were four months (Zafar & Bustamante-Gavino, 2008). Nevertheless, the mothers believed that by introducing solids, it was easier for the caregiver to feed the baby and it increased satiety; therefore babies were not as hungry all the time (Zafar & Bustamante-Gavino, 2008).

As seen in Table 3.3, the majority of studies indicated that longer maternity leave promotes longer breastfeeding duration. However the relationship between maternity leave and initiation of breastfeeding was less clear.

Table 3.3: Studies on maternity leave [ML] and breastfeeding [BF] outcome among working women

COMPARATIVE STUDIES						
Author, date	**Study design, year of study**	**Sample size, participants, country**	**Length of ML**	**Paid/ Unpaid**	**Results**	**Conclusion**
Dodgson et al. (2003)	Cohort study 2000-2001	218 Primiparous women Hong Kong	Mean: 9 weeks	Mandated: 10 weeks	**Data collected at postpartum:** Immediate, then telephone follow-up at 1, 3, 6, 9, and 12 months or until discontinued BF At 1 month: 28% stopped BF Univariate: (HR 1.26; 95% CI: 0.85, 1.02), p = 0.20 Multivariate: (HR 1.37; 95% CI: 0.88, 1.02), p = 0.18.	Return to work, not barrier for BF continuation Longer ML did not support BF duration
Scott et al. (2006)	Cohort study 2002-2003	587 Women from 1 maternity hospital in Perth Perth Infant Feeding Study (PIFS) Australia	< 6 month, 6 – 12 months, > 12 months	Not stated	**At 6 months:** 46% received breast milk (95% CI: 41.8, 49.8), 12% fully breastfed (95% CI: 9.4, 14.6) **Return to work < 6 months:** < likely BF fully at 6 months (HR 1.42; 95% CI: 1.08, 1.88), or BF at 12 months (HR 1.69; 95% CI: 1.28, 2.34), compared to women who return to work at 6 to 12 months (HR 1.63; 95% CI: 1.18, 2.25)	Longer ML supports BF
Hawkins, Griffiths, Dezateux, and Law (2007)	Cohort study Not stated	6917 British/Irish White working mothers with singleton babies born Sept 2000 to Jan 2001 UK	< 4 months - 6 months	Paid Mostly eligible 4 months	**ML duration:** Longer ML, more likely to breastfeed for at least 4 months (p < 0.001). **Work for financial reasons:** (RR 0.86; 95% CI: 0.80, 0.93) to BF for ≥ 4 months **BF at 4 months:** used informal day-care < to breastfeed than care by	Longer ML supports BF

					themselves or their partner (RR 0.81; 95% CI: 0.71, 0.91). **BF at 4 months > likely if:** family-friendly workplace (RR 1.14; 95% CI: 1.02, 1.27), flexible work hours (RR 1.24; 95% CI: 1.00, 1.55), received Statutory Maternity Pay (SMP) plus pay during ML rather than SMP alone (RR 1.13; 95% CI: 1.02, 1.26)	
Baxter et al. (2009)	Longitudinal study of Australian children 2003-2004	4679 Australia	Not stated	Not stated	**At 1 month:** 69% fully breastfed; 11% breastfed and complementary feeds; 20% not BF **At 3 months:** Full BF was 10% lower for working mothers compared to mothers who had not returned to work **Paid ML:** reduced likelihood of employment in the first 3months (no p value or CI reported, only descriptive)	Longer ML supports BF
Chuang et al. (2010)	National population-based cohort study 2003	24 200 Taiwan	< 6 month, > 6 months, > 18 months	Not stated	At 1, 3, 6 and 12 months: 68%, 40%, 25%, and 13% mothers who started BF, were BF **Return to work ≤ 1 month:** lowest BF initiation (78%). higher prevalence of BF (35%) than overall population (27 %) **ML ≤ 6 months:** ceased BF earlier than ML > 6 months and those who did not return to work up to 18 months after birth ML1 month (HR 1.49; 95% CI: 1.41, 1.57); ML 2 months (HR1.41; 95% CI: 1.35, 1.50); ML 3	Longer ML supports BF

					months (HR1.18; 95% CI: 1.08, 1.29); ML 6 months (HR 1.26; 95% CI: 1.17,1.36); ML 12 months (HR 1.10; 95% CI: 1.02, 1.19).	
Skafida (2011)	National cohort study 2004 - 2005	2079 Babies born June 2004 to May 2005 Growing Up in Scotland cohort study Scotland	Not stated	Paid and unpaid	**Compared to ML at 10 months:** 1 – 2 months ML higher risk for BF cessation (HR 1.6; 95% CI: 1.06, 2.53), and 5 months of ML (HR 1.3; 95% CI: 0.99, 1.71).	Longer ML supports BF
Cooklin, Rowe, and Fisher (2012)	Cohort study 2005-2006	205 Primiparous women Australia	18 weeks	Unpaid	Employed women at 10 months 57% (73/129), work PT (<35 hours per week) (63/73, 87%), (mean 12.1. SD 19.0) hours per week. **Returning to work 10 months:** associated with BF at 10 months (OR = 0.30; 95% CI: 0.10, 0.70, p = 0.01) **Women who BF at 10 months:** less likely to be employed at 10 months than not BF.	ML supports BF
Guendelman et al. (2009)	Case-control study 2002-2003	770 California USA	< 6 weeks, 6 to 12 weeks	Paid 4 weeks before delivery; Paid 6 weeks after vaginal delivery; Paid 8 weeks after caesarean delivery; Unpaid 3	**Returning to work:** within 6 weeks strongest predictor of BF cessation (HR: 3.40; 95% CI: 1.57, 7.34), 6 to 12 weeks (HR 2.38; 95% CI: 1.39, 4.08), > 12 weeks (HR 2.70; 95% CI: 1.54, 4.74) Jobs as managerial or high in autonomy > likely to initiate BF **BF cessation:** higher among non-managerial, inflexible hours and high stress level workers	Longer ML, higher BF initiation, lower BF cessation

				months job-protected		
Baker and Milligan (2008)	Comparative study 2000-2001	Participants from 1998-2001 and 2000-2003 cohort National Longitudinal Survey of Children and Youth (NLSCY) Canada	> 3 months	Not stated	ML mandated in Canada increased ML to 6 months: **BF initiation**: little effect. **BF duration**: increase by 3 to 3.5 months	Longer ML supports BF
DESCRIPTIVE STUDIES						
Author, date	**Study design, year of study**	**Sample size, participants, country**	**Length of ML/**	**Paid/ Not paid/**	**Results**	**Conclusion**
Miller et al. (1996)	Cross-sectional study 1990	60 Resident physician mothers USA	Mean: 7 weeks	Paid 6 weeks	**BF initiation:** 48/60 (80%) **Return to work 1 to 2 months** postpartum: 24 who had initiated BF, discontinued BF **BF at 6 months:** 15% (9/60).	Shorter ML, a BF barrier
Yilmaz, Gürakan, Akgün, and Ozbek (2001)	Cross-sectional study Not stated	301 Working women Turkey	< 8 weeks, 9 - 16 weeks, > 16 weeks	Not stated	**Mean BF:** 6.2 ± 3.4 months 77% breastfeed ≥ 4 months, 41% started introduced solids < 4 months	Longer ML supports BF
Arthur, Saenz, and Replogle (2003)	Cross-sectional study 2000	146 Mostly White physician mother USA	ML in weeks	Not stated	**BF cessation**: return to work (45%), diminishing milk supply (31%), lack of time to express (18%). **Positive relationship between BF and ML** for first- and second-born children but not with subsequent children.	Longer ML supports BF
Khassawneh, Khader, Amarin, and Alkafajei (2006)	Cross-sectional study 2003	344 Women with children aged 6 months to 3 years;	Not stated	Not stated	**Employed women:** < full BF compared to not in paid workforce (OR 3.34; 95% CI:1.60, 6.98)	Longer ML supports BF

		5 villages in north of Jordan				
Weber, Janson, Nolan, Wen, and Rissel (2011)	Cross-sectional study 2009	998 Working women Australia	14 weeks for full-time and permanent part-time health service employees completed 40 weeks continuous	Paid: 14 weeks Unpaid: Up to 12 months from the date of birth of their child:	90%; n = 446; aware of ML entitlements 63%; n = 312; aware flexible work practices 95%; n = 470; intended to return to work following ML, 52%; n = 253; working full-time or part-time 44%; n = 220; still on ML	Paid ML supports BF
Sattari et al. (2013)	Cross-sectional study 2009-2011	Total 130 female physicians: 50 from Baltimore and 80 from Florida USA	Increase in ML	Paid and unpaid	A 1 week increase in total ML (paid and unpaid), a 0.14-month increase in BF duration (r = 0.16; p = 0.002)	BF duration in relation to increase in length of ML
RETROSPECTIVE STUDIES						
Author, date	**Study design, year of study**	**Sample size, participants, country**	**Length of ML/**	**Paid/ Not paid/**	**Results**	**Conclusion**
Visness and Kennedy (1997, #544)	Retrospective study 1988	9087 1988 National Maternal and Infant Health Survey (NMIHS) USA	2 months : 60% 4 months: 30%	Unpaid: Almost all	**BF initiation:** not associated with working status **BF duration:** shorter when return to work ≤ 1 year **ML duration:** associated with BF duration (P < 0.01). **Longer ML:** associated with longer BF duration (p < 0.001)	Longer ML supports BF
Fein and Roe (1998)	Retrospective study 1993	1488 Majority White, Infant Feeding Practices Study USA	< 6 weeks > 6 weeks	Not stated	**BF initiation**: likely when ML > than 6 weeks than not in paid workforce (OR 1.74, p = 0.06) **Working mothers with ML** breastfed for shorter times than not in paid workforce;	Any ML shortens BF duration than not in paid workforce

					Mothers with no ML < likely to return to work during the first year postpartum.	
Roe et al. (1999)	Retrospective study 1996	2615 Women with infants born March to Oct 1993. Infant Feeding Practices Study USA	< 2 weeks to > 52 weeks Mean: 13 weeks	Paid and unpaid (no separate data)	**At 6 months:** 38% FT BF and 16% have not returned to work **ML duration:** < 2 weeks, 5% ML; 6 to 8 weeks, 26% ML; > 52 weeks, 7% ML **ML duration:** affect BF duration at 3and 6 months At 3 months: 45% FT BF > working hours, < times per day for BF, direct and expressed milk	Longer ML supports BF
Berger et al. (2005)	Retrospective study 1998	Not stated Birth date 1988 to 1996 National Longitudinal Survey of Youth (NLSY) USA	≤ 12 weeks, 13 – 18 weeks	Not stated	**Return to work 12 weeks:** 13% < to breastfeed and breastfeed for 4.5 fewer weeks. Returning to work 13 to 18 weeks : longer BF duration than return work ≤ 12 weeks	Longer ML supports BF
Chatterji and Frick (2005)	Retrospective study 1998	7067 National Longitudinal Survey of Youth (NLSY79) USA	Within 3 months	Not stated	**BF initiation:** 51%, **BF duration:** 19 weeks. **Within 3 months:** 59% return to work; 42% return to FT work 35% return to work with one child, did not return with another child. 31% worked FT with one child, but did not work FT with another child.	Longer ML supports BF

Kimbro 2006	Retrospective study 1998 - 2000	2466 BF working mothers; Fragile Families and Child Wellbeing Study USA	Not stated	Not stated	**By 3 months:** 50% stop BF **By 6 months:** 75% stop BF 1 month after return to work, the odds of quitting BF was 32% higher than a mother who was not at work (p <0.001) In the month a mother returns to work, the odds of stopping BF was 2.2 times more than a mother who was not starting work (95% CI: 1.74, 2.74, p < 0.001) BF cessation in anticipation to return to work, 25% greater 2 months before and 34% greater 1 month before ML ended	Shorter ML higher BF cessation
Ogbuanu, Glover, Probst, Liu, and Hussey (2011)	Retrospective study 2001	6150 Mother with singleton birth USA	Total: 11 weeks Paid: 5 weeks	Total and paid	**1 to 6 weeks ML:** initiation (65%), **13 weeks ML:** initiation (74%), p = 0.001 **Returned to work:** Within 7 to 12 weeks: higher BF initiation than within 1 to 6 weeks (OR: 1.38; 95% CI: 1.05, 1.82). **Continue BF > 3 months:** higher when return to work >13 weeks than return within 1 to 6 weeks in unadjusted (OR: 2.30; 95% CI: 1.40, 3.76) and in adjusted (OR: 2.54; 95% CI: 1.51, 4.27). Adjusted for race/ethnicity, age, marital status, education, income status, country of birth, smoking status, birth weight, mode of delivery, birth order, health care professional advice about breastfeeding, child care arrangements	Longer ML higher BF initiation but not BF duration

Yimyam and Morrow (1999)	Mixed method Stage 1-1994 Stage 2-1995	313 Working women in urban workplace Thailand	Up to 3 months	Not stated	**At 6 months:** 203 (69%) had resumed employment **Of these women, at 6 months:** 53 (26%) stopped BF before or at the time of resuming work **Within 1 month after returning to work:** 36 (24%) of the 150 had totally stopped BF	Longer ML supports BF
Wallace and Chason (2007)	Mixed method Not stated	31 30 highly educated white, 1 Hispanic USA	Duration for paid ML by: job type socio-economic status	Eligibility for paid ML	**Greater paid ML more likely to:** Plan on BF prior to birth ($r = 0.57$, $p < 0.05$), Breastfeed following birth ($r = 0\ .78$, $p < 0.05$), BF for a longer period ($r = 0.80$, $p < 0.05$). Almost all returning to work made decisions regarding when to introduce a bottle (whether using breast milk or formula in the bottle)	Longer ML supports BF
QUALITATIVE STUDIES						
Author, date	**Study design, year of study**	**Sample size, participants, country**	**Length of ML/**	**Paid/ Not paid/**	**Results**	**Conclusion**
Gatrell (2007)	Qualitative study 1999-2002	20 Highly qualified/ professional, returned to work when infant < 1 year UK	40 to 52 weeks	A proportion was unpaid	**Mothers, who did not take their full ML,** return to work when their infant were between 3 weeks to 7 months old. **Early return to work** related to the cessation of maternity pay, and the impracticability of remaining at home with no income.	Women continued BF after returning to work even before ML was due
Zafar and Bustamante-Gavino (2008)	Qualitative study Not stated	12 Qualified registered nurses, working full-time on rotation duties in 6 hospitals, Karachi Pakistan	3 months	Not stated	**At 9 weeks:** returning to work and continuing to breastfeed was problematic All introduce solid when babies 4 months as they have to return to FT work as a nurse. Introduce solids is easier for the caregiver to feed the baby and Increases satiety.	9 weeks ML was inadequate Inadequate ML was a barrier to longer BF duration

3.3.2 Lactation breaks

3.3.2.1 Background

Lactation breaks are another key element covered under the maternity protection: Maternity Protection Convention, 2000 (No. 183) ratified by the International Labour Organization (ILO) (2010). It is stated in the convention that, breastfeeding women have the right to one or more daily breaks which is counted as working time and therefore paid (International Labour Organization, 2010). The Academy of Breastfeeding Medicine's recent summary statement regarding breastfeeding support for working mothers emphasised that lactation breaks or time off given to mothers while at work could be used to feed the baby if they are close by, as well as to express milk (Marinelli, Moren, & Taylor, 2013).

3.3.2.2 Lactation breaks

There were 13 studies which described the provision and duration of lactation breaks for working women (Table 3.4). Most were descriptive studies, two were comparative studies and five were qualitative studies. Most of the studies did not indicate whether the break was paid or unpaid. The length of lactation breaks (based on the infant's age) and the provision of lactation breaks in a day or in a shift were not mentioned in most studies either.

Most of the papers identified in this review found that employees were not given paid lactation breaks. Workers had to accommodate their milk expression time during their

regular working breaks. Yimyam and Marrow (1999) described how some women had to skip eating their lunch in order to accommodate time for milk expression as stated by one respondent, '*with my work, I didn't have a regular time for lunch break everyday. . . .*' (p. 963) .

Heymann et al. (2013) conducted a global analysis on the effectiveness of lactation breaks in member states of the United Nations. Of the 182 countries, 42 did not have any lactation break policy including Malaysia. Countries that implemented such policy however had significant variation in their allowance in a day and in total duration of months covered (Heymann et al., 2013). This global analysis indicates that countries with guaranteed paid lactation breaks for at least six months had a higher rate of exclusive breastfeeding across income levels as compared to countries without such lactation break policy (2013).

Slusser et al. (2004), in their cohort study found on average women express twice a day, taking in total less than 60 minutes. They also indicate that as the age of the infants increases, the time taken for milk expression became shorter (Slusser et al., 2004). In total, the time taken for milk expression is not longer compared to the meal breaks taken by other workers.

Payne and James (2008) and Payne and Nicholls (2010) published two papers from the same qualitative study conducted in New Zealand exploring 34 working women's experiences of milk expression. These women were not allowed time for lactation breaks on returning to work (Payne & James, 2008). Therefore, women who intended

to express at work, were 'forced' to accommodate their expressing time during their regular breaks which caused some pressure leading to breastfeeding cessation for some women (Payne & James, 2008).

In the other paper, Payne and Nicholls (2010) described the working women in two categories. The 'good mother' was committed to milk expression and they developed milk expression skills, while the 'good worker' presented themselves as obedient to work routines, shaped by disciplining oneself and disciplined by others as they were under surveillance by their employers. They also 'disciplined' their infants in terms of feeding time and frequency (Payne & Nicholls, 2010). 'Good mothers' adapt to their working environment and are able to accommodate milk expression into their work schedule unlike 'good workers'. This study concluded that, in becoming a 'good worker', breastfeeding women may 'marginalise' breastfeeding while at work (Payne & Nicholls, 2010, p. 1816).

Stevens and Janke (2003) explored the experiences of military mothers and found that they had good experience combining working and breastfeeding. However, they had the challenge to find the time and private space to express (Stevens & Janke, 2003). All but one woman expressed in a bathroom which had access to a sink and a power outlet, leading to concerns over the issue of adequate sanitation (Stevens & Janke, 2003). This study suggests that the nature of work is not a barrier when the workplace provides supports for lactating mothers.

In summary, milk expression has been shown to increase breastfeeding duration among working women. Furthermore, it only takes less than one hour to accomplish the task. However, the limited provision of lactation breaks and associated barriers has made milk expression a negative experience for many working women. This barrier often resulted in premature cessation of breastfeeding.

Table 3.4: Studies on lactation breaks [LB] and breastfeeding [BF] outcome among working women

COMPARATIVE STUDIES					
Author, date	**Study design, year of study**	**Sample size, participants, country**	**Paid/ unpaid Length of LB**	**Results**	**Conclusion**
Heymann et al. (2013)	Global comparative analysis 2000-2011	182 of the 193 Member states of the United Nations	Paid: 130 countries Unpaid: 7 countries No policy: 45 countries	**Paid LB until 6 months**: an increase of 9% rate of exclusive BF of infants under 6 months of age ($p < 0.05$) **Duration of LB (infant's age)** < 6 months: 3 countries (Bhutan, San Marino and Swaziland) 1 year: 41 countries; Not stated: 32 countries **Duration of LB (in a day)** 111 countries: specify the time allowed Most countries: daily total of 1 hour LB 30 countries: can accumulate LB to shorten work day. **22 countries:** the legislation specifies hours LB can be spread; E.g.: if 30 min in total, can take a single 30 min break or two 15 minute breaks, as long as the time is taken within a 3 or 4 hour window.	Countries guarantee LB, daily breaks, and breaks duration (months), longer BF duration
Slusser et al. (2004)	Cohort study 1997-1999	343 Women working full-time USA	Paid: 1 hour a day	Women express breast milk twice a day when infants are 4 months ($x \pm SD = 2.2 \pm 0.8$) and 6 months ($x \pm SD = 1.9 \pm 0.6$), with a significant decline in frequency of milk expression ($p < 0.05$) comparing the 2 age groups. **Milk expression**: 1 hour or less when infants were 3 (82%) or 6 months old (96%), with a significant difference ($p < 0.05$) between the 2 age groups.	Lactation support program at workplace help mother to express and likely to increase BF duration

DESCRIPTIVE STUDIES					
Author, date	**Study design, year of study**	**Sample size, participants, country**	**Paid/ unpaid Length of LB (Lactation Break)**	**Results**	**Conclusion**
Miller et al. (1996)	Cross-sectional study 1990	60 Resident physician mothers USA	No LB	**Return to work 1 to 2 months:** Dropped from 48 to 24 (80% to 40%) who had initiated, discontinued BF. **BF while working:** 83% expressed breast milk during their shift work; 79% insufficient time during work, and 42% no place at work to express milk.	Inadequate time and place for milk expression affect BF practices
Dabritz, Hinton, and Babb (2009)	Cross-sectional study 2006-2007	201 Mothers with infant age < 8 months who returned to work or school. California USA	Not stated	**LB provision:** 85% of working and student mothers had break time; 5% and 1%, working and student had no LB. Uninformed about break time for BF purpose 10% of working mothers and 14% of student mothers not informed	Inadequate supports, barrier to combine BF at 6 months differ between working mothers and students
Weber, Janson, Nolan, Wen, and Rissel (2011)	Cross-sectional study 2009	998 Working women Sydney Australia	Nurses: 30 minutes paid per 8 hour shift (49%) Others: No LB (51%)	**Awareness of LB entitlement:** 50% midwives (n = 38) and 28% general nurses (n = 204) aware of LB entitlement **Time for milk expression:** During allocated meal break times (57%), paid LB (16%), unpaid LB/own time (14%). **Clinical staff:** < flexibility in daily workload due to patient demands, could impact on the ability to take regular LB 92% not informed BF options upon return to work 19% had access to a room specially designed for BF	Low awareness of LB provision, less likely to express breast milk Majority did not have access to lactation room

RETROSPECTIVE STUDIES					
Author, date	**Study design, year of study**	**Sample size, participants, country**	**Paid/ unpaid Length of LB**	**Results**	**Conclusion**
Ortiz, McGilligan, and Kelly (2004)	Retrospective study not stated	462 Working women gave birth 1993 to 1997. Company sponsored lactation program USA	Not stated	**Milk expression:** No difference in milk expression practices between PT and FT employees **Duration of milk expression at workplace:** mean 6.3 months (SD = 3.9, range 2 weeks to 21 months). Mean age of infants when mothers stopped expressing at work was 9 months (SD = 4.1, range 1.9 to 25 months).	Breast milk expression duration is not affected by working time
Fein et al. (2008)	Retrospective study 2005-2007	810 Mothers who worked and breastfed Infant Feeding Practices Study II (IFPSII) USA	Not stated	**After returning to work:** Direct feeding: longer BF duration **Neither feeding nor expressing:** BF 8.8 weeks shorter than expressing and feeding (X^2 8.29; p = 0.004) and 4.7 weeks shorter than expressing only (X^2 4.61; p = 0.03). **BF duration:** between express only and express and feed: No difference: (X^2 2.59; p = 0.11).	Descriptive of strategies of combining BF at work
Yimyam and Morrow (1999)	Mixed method Stage 1-1994 Stage 2-1995	313 Working women in urban workplace Thailand	No LB	122 of 150 BF and work outside home. 73 (60%) tried expressing, 60 (49%) reported problems, in particular, `no private place for expressing' and `not enough time' **Barrier for milk expression:** long distance from workplace to child care (78%); not allowed to leave the workplace (10%); time limitations (8%);	Difficult BF experiences without LB and proper place

				Few did so regularly, because of employer support. Had to escape 1 hour lunch break to make time for breast feed, but hardly sustainable - not long enough to travel, breastfeed and return to work.	
QUALITATIVE STUDIES					
Author, date	**Study design, year of study**	**Sample size, participants, country**	**Paid/ Unpaid Length of LB**	**Results**	**Conclusion**
Stevens and Janke (2003)	Qualitative study Not stated	9 Military mothers who had breastfed within 6 months, Midwestern Air force Base USA	No formal LB, break allocation depend on work support	All able to express at lunchtime. Given LB while on duty **Concerns:** Finding time and a place to express All but one expressed in the bathroom. Access to a sink and an outlet, but concerns over the sanitation factor.	Technical barriers to expressing
Gatrell (2007)	Qualitative study 1999-2002	20 Highly qualified/ professional, returned to work when infant < 1 yr UK	No LB	No LB reduced BF duration as unable to express milk **Employer and co-workers barrier:** BF mother had to express milk in secret, or stop BF	No LB, reduced BF ability
Payne and James (2008)	Qualitative study Not stated	34 Mothers who gave birth from 2003 to 2005 New Zealand	No legislation or LB for paid employment	**Space, time, and support:** key themes on the mothers' perception of their ability to continue to breastfeed on their return to paid work Having to fit BF into the constrained fixed break times influenced some either not to return to paid work or to discontinue BF. 'Tea breaks' not a time of relaxation, but of isolation and another kind of work. **Stopped BF at 7 months:** when returned to paid work	BF experiences – isolation of expressing at work

Zafar and Bustamante-Gavino (2008)	Qualitative study Not stated	12 Qualified registered nurses, working full-time on rotation duties in 6 hospitals, Karachi India	No LB	**Need to find time for milk expression:** in between working time during lunch time or tea break can breastfeed their babies if there is an in-house childcare	BF experiences: Nearby childcare is helpful
Payne and Nicholls (2010)	Qualitative study Not stated	34 Mothers who gave birth from 2003 to 2005 New Zealand	No legislation or LB for paid employment	**Maintaining BF** required discipline 2 moral subjectivities – 'the good mother' and 'the good worker' For **'good mother'**; expressing breast milk was a commitment that they adhered to with sometimes stubborn resolution. This 'stubbornness' demanded that, they could be the sole provider of their infant nutrition. Expressing requires skills and the women found ways of achieving these goals within the constraints imposed on them by their work. Being a **'good worker'** presented themselves as by the routines, efficiency, and minimal disruption to the work environment were values as that they constantly adhered to. Some women had a degree of flexibility and leniency in the length of time they took to carry out BF practices. Being a 'good worker' was shaped by disciplining oneself and disciplined by others – under surveillance by their employers and their colleagues. They also 'disciplined' their infants.	BF experiences as: 'Good mother' or 'Good worker'

3.3.3 Workplace support and barriers

There were 23 studies that were included in the review of workplace supports and barriers. There was one comparative study, four mixed methods, seven qualitative methods and the remainder were descriptive studies (Table 3.5). The physical supports include providing facilities such as a lactation room, fridge and in-house childcare. Other supports include having employers and co-workers who understand the need of lactating mothers. In general, provision of support and facilities at the workplace has been shown to be positive and significantly associated with longer breastfeeding duration.

A cohort study in the UK of 6917 working women with infants concluded that women were likely to breastfeed if the workplace is family-friendly and the employers allow flexible working arrangements (Hawkins et al., 2007). Flexible working arrangements have been shown to be important for working women to maintain breastfeeding in other studies too (Thompson & Bell, 1997; Weber et al., 2011; Yimyam & Morrow, 1999). Likewise, inflexible working hours such as long shifts (Witters-Green, 2003), and inability to negotiate work schedules (Stevens & Janke, 2003) have been shown to be barriers to continue breastfeeding after returning to work.

Female physicians, who work on-call hours, indicated that it was more challenging to find the time than a suitable place for milk expression (Sattari et al., 2013). Usually they can use an on call room or empty patient room for milk expression. Another study that compares 60 resident physician women who worked between shift-hours

and full-time, found that full-time residents were more likely to breastfeed for a longer duration than residents working shift-hours (Miller et al., 1996).

Although some workplaces provide facilities, not all breastfeeding mothers are able to access these. For example, as reported by Chen et al., (2006), only 10.6% mainly office workers from a semiconductor manufacturer in Taiwan, were aware of such facilities and were able to benefit from them. Besides providing facilities, women found that by allowing them to bring their infants to work was important in supporting breastfeeding (Fein et al., 2008; Payne & James, 2008). Allowing women to work more hours from home allows them to spend more time with their infants, which is supportive for breastfeeding working mothers as well (Jacknowitz, 2008).

Women described breastfeeding in a non-supportive working environment as a 'taboo' (Gatrell, 2007). In this situation, the women are forced to express their breast milk secretly or to stop breastfeeding (Gatrell, 2007). In another qualitative study in India, women reported their frustration when they had to discard expressed milk due to lack of facilities for milk storage (Zafar & Bustamante-Gavino, 2008) and in Malaysia that do not provide the support for the expressing of milk, as they perceived that it was not feasible to do so (Tengku Ismail et al., 2012).

Thompson and Bell (1997) identified four themes from interviewing 38 working mothers with infants in the USA. The themes were employers, time, privacy and storage. Employers who did not consider breastfeeding as important, limited amount of time for milk expression, difficulty in finding privacy space and lack of storage for

expressed milk were all barriers to maintaining breastfeeding after returning to work (Thompson & Bell, 1997).

In summary, a supportive workplace environment was positively associated with longer breastfeeding duration. However, in order for women to utilise the facilities provided, they need to have accessibility and need the time off for milk expression. In many instances, lacking any of these factors may compromise optimal breastfeeding practices among working women.

Table 3.5: Studies on workplace support or workplace barrier and breastfeeding [BF] outcome among working women

COMPARATIVE STUDIES				
Author, date	**Study design year of study**	**Sample size, participants, country**	**Results**	**Conclusion**
Hawkins et al. (2007)	Cohort study Not stated	6917 British/Irish White working mothers with singleton babies born Sept 2000 to Jan 2001 UK	**Supports:** Likely to breastfeed ≥ 4 months if: The workplace is family-friendly (RR 1.14; 95% CI: 1.02, 1.27) or flexible work arrangements (RR 1.24; 95% CI: 1.00, 1.55)	Family-friendly workplace supports BF at 4 months
DESCRIPTIVE STUDIES				
Author, date	**Study design year of study**	**Sample size, participants, country**	**Results**	**Outcome**
Miller et al. (1996)	Cross-sectional study 1990	60 Resident physician mothers USA	**Supports:** Only 54% who continued felt supported by their attending physicians for their efforts to breastfeed; 67% felt colleagues were supportive **Barriers:** residency schedules, on-call nights, 33 (55%) estimated spending 25 to 35 hourswhen on-call, no place to express	Inadequate supports, barrier to combine BF
Whaley, Meehan, Lange, Slusser, and Jenks (2002)	Cross-sectional study Not stated	123 Women gave birth July 1996 to Jan 1999 Women, infant and children supplemental nutrition program (WIC) USA	**Supports:** WIC (mostly Hispanic) access to employer-provided breast pumps, and attended BF support groups, exceeded national BF duration	Workplace supports promote BF

Chen et al. (2006)	Cross-sectional study 2003	998 Working women in semiconductor manufacturer Taiwan	**Supports:** Provision of lactation rooms and breast expression breaks, but only 10.6% mothers continued to breastfeed after returning to work (2 months) Only office workers were aware of their company's BF-friendly policies.	Family-friendly workplace supports women to continue BF at 2 months
Dabritz et al. (2009)	Cross-sectional study 2006-2007	201 Mothers with infant age < 8 months who returned to work or school. California USA	**Lactation room:** Availability for working and student mothers (72% and 71%, p = 0.20). Not available for working and student mothers (22% and 17%) Not access (not allowed adequate LB for breast milk expression) for working and student mothers 6% and 12% < access to a lactation room for working or student mothers with < education 66% of mothers with high school or less 94% of mothers with some college and 78% of mothers with college degrees or higher, (p = 0.005).	Inadequate supports, barrier to combine BF, BF at 6 months differ between working mothers and students
Mohd Amin et al. (2011)	Cross-sectional study 2006	290 Working women from urban and rural Malaysia	**BF facilities:** Not adequate is a risk factor for BF discontinuation (OR 1.8; 95% CI: 1.05, 3.1) **At 3 months:** 51% discontinued BF	Inadequate supports, barrier to combine BF, stopped at 3 months
Weber et al. (2011)	Cross-sectional study 2009	998 Working women Sydney Australia	**Supports:** Flexible work options and LB, access to a private room, were main factors that facilitate BF at work. 92% no information about BF options upon their return to work, 19% had access to a room for BF **Qualities of the room as reported by the women:** clean (87%), within a five minute walk of their work station	Inadequate supports, barrier to combine BF

			(90%), providing access to a power point (83%) and cleaning facilities (79%). The room was not always available when needed (67%) and private (57%). A comfortable chair was reported to be available in just over half of rooms.	
Sattari et al. (2013)	Cross-sectional study 2009-2011	Total 130 Female physician: 50 from Baltimore and 80 from Florida USA	**Supports:** Not having to make up missed call/work that occurred as result of pregnancy or ML **Barriers:** Insufficiency of time at work for milk expression	Inadequate supports, barrier to combine BF
RETROSPECTIVE STUDIES				
Author, date	**Study design year of study**	**Sample size, participants, country**	**Results**	**Outcome**
Ortiz et al. (2004)	Retrospective study Not stated	462 Working women gave birth 1993 to 1997. Company sponsored lactation program USA	**Supports:** Access to on-site lactation rooms with hospital grade breast pumps, professional lactation support **Having time to express milk:** Longer BF duration (58% at 6 months and 19% at 1 year) than the average working woman in the USA (36% at 6 months and 17% at 1 year) 365 (79%) expressed and continued BF until infant 9 months of age.	Inadequate supports, barrier to combine BF at 6 months
Fein et al. (2008)	Retrospective study 2005-2007	810 Mothers who worked and breastfed Infant Feeding Practices Study II (IFPSII) USA	**Strategies to combine BF and work:** workplace provides on-site child care, allow the infant brought to the work site, allowing the mother to leave work to direct feed.	Descriptive of strategies of combining BF at work

Jacknowitz (2008)	Retrospective study 1979	1506 National Longitudinal Survey of Youth and the Children of the National Longitudinal Survey of Youth (NLSY) USA	**Supports:** Employer-sponsored child care increased BF to 6 months by 47%. Working extra 8 hours at home per week increased BF initiation by 8% and BF 6 months after birth by 17%.	Workplace support, increase BF duration. Flexible work increases BF
Del Bono and Pronzato (2012)	Retrospective study 2005	3094 Women who returned to work before their child turned one year old. Infant Feeding Survey UK	**Supports:** **Higher educated mothers,** better jobs or firms, 4% > lower educated mothers to have access to BF facilities. **Having BF facilities:** 5% increase in working at 4 months and 8% increase in working at 6 months	Inadequate supports, barrier to combine BF
Yimyam (1998)	Mixed method Stage 1-1994 Stage 2-1995	313 Working women in urban workplace Thailand	**Experiences:** **Supportive workplace and employer (examples):** *Returned to work baby was 3 months old.* *Sent baby to in-house childcare centre* *Can visit and breastfeed baby twice a day.* *Employer understood and supported BF* *Flexibility: minimal teaching initially.* *Finish work in the office and can spend quality time at home* *Able to continue BF until near 2 years.* **Unsupportive working condition (examples):** *No time to express milk, during busy times at work* *Felt that milk is not enough for her baby and supplement with formula* *Eventually baby refused to breastfeed* *Changed to bottle feeding after 3 weeks returning to work.* *Sometimes felt frustrated that unable to manage like others can*	Supportive workplace, promote longer BF duration
Yimyam and Morrow (1999)	Mixed method Stage 1-1994 Stage 2-1995	313 Working women in urban workplace Thailand	**Barriers:** Rigid working environments Long hours of separation from infants 79% expressed and discarded milk due to lack of proper storage facilities	Inadequate supports, barrier to combine BF at 6 months

			Working in the formal sector/< flexible: public or private work < BF at 6 months, than self/family employed (> flexible)	
Witters-Green (2003)	Mixed method Not stated	423 prenatal women 13 WIC clients Women, infant and children supplemental nutrition program (WIC) USA	**Supports:** health professional; nearby day care, autonomous job, supportive co-workers/ employers, breastfeed at home/wean during workday; privacy. **Barriers:** 12 hour rotating shifts, unsupportive employer, inflexible job, no privacy, express in the bathroom, unsupportive childcare provider. Employers do not allow to leave work to BF, do not know BF benefits	Inadequate supports, barrier to combine BF
Wallace and Chason (2007)	Mixed method Not stated	31 30 highly educated white, 1 Hispanic USA	**Supports:** Having a place to express > likely to breastfeed ($r = 0.31$, $p < 0.05$) and > sure feeding method ($r = 0\ .48$, $p < 0.05$). Having BF facilities > likely to breastfeed ($r = 0.53$, $p < 0.05$) and longer BF duration ($r = 0.41$, $p < 0.05$). **Barriers:** Frustration with the time-consuming expressing Mothers, who had added formula after returning to work, found trying to breastfeed and or express at work is difficult. Exceptions; a university professor who felt comfortable taking her infant to work to feed and who had ample privacy.	Inadequate supports, barrier to combine BF
QUALITATIVE STUDIES				
Author, date	**Study design year of study**	**sample size, participants, country**	**Results**	**Conclusion**
Thompson and Bell (1997)	Qualitative study Not stated	38 Working mothers with infants age 6 to 12 months. Women, infant and children supplemental nutrition	4 themes identified: **Employers**: who was not understanding or supportive were identified as an obstacle, when the boss did not consider BF important, impossible to maintain a milk supply **Time:** for BF and hours worked.	Special assistant to working women could help them continue BF after they return to work

		program (WIC) USA	Scheduling of LB - affected ability to use a breast pump when needed **Privacy**: difficult to find places for milk expression, one shared room **Storage:** unavailable **Supports:** Flexibility, boss, child's location, intake important for milk supply, advice to others have a positive attitude **Barriers:** Employers, time, privacy, storage.	
Stevens and Janke (2003)	Qualitative study Not stated	9 Military mothers who had breastfed within 6 months, Midwestern Air force Base USA	**Supports:** Finding time to express depends on workplace support **Barriers:** Inflexible work schedules, unsupportive supervisors, and no suitable place to express All but one expressed in the bathroom. Others had access to a sink and an outlet, but concerns over the sanitation factor.	Good experiences combining BF among military workers BF 6 months, work support and commitment helped to overcome obstacles.
Rojjanasrirat (2004)	Qualitative study 2000	50 Working mothers USA	**Supports:** **Emotional support:** behaviours that provide empathy and demonstration of understanding, acceptance, and the value of BF. **Instrumental support:** behaviours that directly helped the women during times of BF needs. **Informational support:** any source of information the women could use to cope with BF experiences. **Examples:** Statements reflecting the support: 'Understanding manager, proximity to home, flexible schedule," or 'No one has complained about me to the boss. I think most understand while I pump and am gone from my desk.'	Inadequate supports, barrier to combine BF

			'I work for the Federal government; they allow me to use the nurse station as much and as long as I need without making me use the time for breaks or lunch not having to work over; in other words, paid time to pump'	
Gatrell (2007)	Qualitative study 1999-2002	20 Highly qualified/ professional, returned to work when infant < 1 year UK	**Barriers:** BF is 'taboo' within the workplace. The workplace is inaccessible, and if no facilities are available for pressing or storing milk.	Inadequate supports, barrier to combine BF
Payne and James (2008)	Qualitative study Not stated	34 Mothers who gave birth from 2003 to 2005 New Zealand	**Supports:** Allowing to bring BF infants to work; Permit other work site spaces for BF and expressing; Allow mothers flexibility, time away to express breast milk **Co-workers support:** Shared experiences with women who had continued BF created a kind of norm **Barriers:** Perceived their workplace as unsupportive.	Inadequate supports, barrier to combine BF
Zafar and Bustamante-Gavino (2008)	Qualitative study Not stated	12 Qualified registered nurses, working full-time on rotation duties in 6 hospitals, Karachi India	**Barriers:** No facility for milk expression or storage Use wash rooms or store rooms to express, many stop BF early. Painful engorgement needs to be relieved, by expressing and wasting that milk.	Inadequate supports, barrier to combine BF
Tengku Ismail et al. (2012)	Qualitative study 2008-2009	20 Working women Malaysia	**Perceived inadequate supports:** Women who do not practice exclusive BF believed that expressing their breast milk is not feasible	Perceived inadequate supports, barrier to combine BF

3.3.4 Working hours and conditions

Based on the review criteria, there were 21 studies that described and analysed the relationship between hours of work and breastfeeding practices. Of these, five were comparative studies, three were mixed methods, one was qualitative study and the remainder were descriptive studies (Table 3.6). Working hours have been described as full-time, part-time, shift-hours or not in paid workforce.

There were two cohort studies looking at the effect of returning to work before their infants turned six months (Cooklin, Donath, & Amir, 2008; Skafida, 2011). Similar to the Australian findings in Cooklin et al., (2008), a national cohort study in Scotland concluded that both working part-time or full-time promotes a higher risk for breastfeeding discontinuance after adjustment for common confounding factors, compared to not in paid workforce. In addition, it was also found that full-time workers stopped breastfeeding earlier than part-time workers (Skafida, 2011).

More flexible work hours have been shown to be associated with a higher sense of time control for breastfeeding practice (Rojjanasrirat, 2004). Job inflexibility was common among long hours shift-workers (Rojjanasrirat, 2004), and more common with administrative or manual work than professional work (Kimbro, 2006).

One study did not find any significant difference in breastfeeding duration for women who returned to full-time or part-time work postpartum which could be due to small sample size (n=201) (Dabritz et al., 2009). Another study did not find any difference

between part-time and full-time work in terms of milk expression in similar inflexible working conditions (Ortiz et al., 2004)

A study in Kenya described the exclusive breastfeeding rate at one, two and three months among working women (Lakati, Binns, & Stevenson, 2002). They identified that, in general, working women were able to continue breastfeeding, but a lower percentage of shift-workers managed to do it exclusively compared to full-time workers (Lakati et al., 2002).

In summary, returning to work postpartum is a barrier to continue breastfeeding, with working full-time having a great effect than part-time employment. Work flexibility has also been found to promote breastfeeding as the workers were more likely to be able to incorporate their milk expression schedule into their work. At all times, non-employed women were consistently found to have a higher probability of maintaining breastfeeding compared to any kind of working arrangement.

Table 3.6: Studies on working hours: part-time [PT], full-time [FT], shift-hours or not in paid workforce [NW] and breastfeeding [BF] duration among working women

COMPARATIVE STUDIES				
Author, date	**Study design, year of study**	**Sample size, participants, country**	**Results**	**Conclusion**
Hawkins et al. (2007)	Cohort study Not stated	6917 British/Irish White working mothers with singleton babies born Sept 2000 to Jan 2001 UK	**Working FT:** shorter BF duration than working PT **Working PT or self-employed**: > likely to breastfeed for at least 4 months (adjusted RR: 1.30; 95% CI: 1.17, 1.44) than working FT (adjusted RR: 1.74, 95% CI: 1.46, 2.07).	Working FT, shorter BF duration than PT or self-employed
Cooklin et al. (2008)	Cohort study 2004	3697 Longitudinal Study of Australian Children (LSAC) Australia	**Working FT**: breastfed (39%), not in paid workforce (56%) at 6 months **Working FT before 6 months:** negative effect in continuing BF for 6 months, (adjusted OR 0.35; 95% CI: 0.22, 0.55), compared to not in paid workforce **Working PT before 6 months:** negative effect in continuing BF for 6 months (44%), (adjusted OR 0.49; 95% CI: 0.37, 0.64), compared to not in paid workforce	Working FT before 6 months, shorter BF than not in paid workforce
Baxter et al. (2009)	Cohort study 2003-2004	4679 Longitudinal Study of Australian Children (LSAC) Australia	**Working FT:** > likely to stop BF than not in paid workforce at 3 months.	Working FT, shorter BF duration than not in paid workforce
Skafida (2011)	National cohort study 2004 - 2005	5217 Babies born June 2004 to May 2005 Growing Up in Scotland	**Working FT** or **working PT** : (HR1.3; 95% CI: 1.06, 2.53]), higher risk of earlier BF cessation than not in paid workforce (adjusted for ML)	Working FT or PT: higher risk of earlier BF cessation than not in paid workforce

		cohort study Scotland	**Working PT** < likely to stop BF sooner than **working FT** (HR 0.9; 95% CI: 0.78, 0.99).	
Guendelman et al. (2009)	Case-control study 2002-2003	770 California USA	**Risk of BF cessation:** inflexible job, managerial position protective: risk of BF cessation **Inflexible job:** increased BF cessation (HR: 1.47; 95% CI: 1.00, 2.16), and managerial position protective (HR: 0.60; 95% CI: 0.39, 0.82). **BF cessation** in early returns (≤ 6 weeks) increased from (HR 3.04; 95% CI: 1.43, 6.45) to: (HR 4.14; 95% CI: 1.68, 10.21) non-managers, (HR 5.12; 95% CI: 1.68, 15.64) inflexible jobs, and (HR 4.15; 95% CI: 1.45, 11.86) high psychosocial distress.	Inflexible job, higher BF cessation

DESCRIPTIVE STUDIES

Author, date	**Study design, year of study**	**Sample size, participants, country**	**Results**	**Conclusion**
Miller et al. (1996)	Cross-sectional study 1990	60 Resident physician mothers USA	**BF while working:** 83% expressed breast milk during their SH; 79% insufficient time during work, and 42% no place at work to express milk. **Work schedule:** 80% reported main barrier to BF at 6 months	Shift work is not a barrier to BF
Lakati et al. (2002)	Cross-sectional study Not stated	444 Working mothers Kenya	**Shift worker:** less likely to exclusive BF 7% low and 14% high socioeconomic gp (X^2 = 6.112, p = 0.01, n=443) **Working FT as opposed to shift work a**ssociated with exclusive BF at 1 month (OR= 0.45, 95% CI: 0.24, 0.84) **Working hours:** 43 hours low and 48 hours high socioeconomic gp (t test = -4.166, p = 0.00).	Working status: Able to continue BF, but low rate of exclusive BF rates

			Days worked in a week: 5.5 days low and 6 days high socioeconomic gp (t- test =6.026, p < 0.01)	
Arthur et al. (2003)	Cross-sectional study 2000	146 Mostly White physician mother USA	**Working FT:** shorter BF duration than PT after the birth of their first child	Working PT than FT, longer BF duration
Hurley, Black, Papas, and Quigg (2008)	Cross-sectional study 2004-2005	799 Low income mothers with infants < 1 year old USA	**Working FT** (HR 1.42; 95% CI:1.07, 1.88) or **Working PT** (HR 1.15; 95% CI: 0.86, 1.54) higher rates of BF cessation compared to not in paid workforce or first-time mothers.	Working FT, shorter BF than not in paid workforce
Dabritz et al. (2009)	Cross-sectional study 2006-2007	201 Mothers with infant age less than 8 months California	**Working FT:** 53% BF **Working or studying PT or seasonally:** 48% BF. **Working FT or PT:** not a significant determinant for BF at 6 months, p = 0.50	FT or PT no different in BF at 6 months which could be due to small sample size
RETROSPECTIVE STUDIES				
Author, date	**Study design, year of study**	**Sample size, participants, country**	**Results**	**Conclusion**
Lindberg (1996)	Retrospective study 1988	2431 National Survey of Family Growth (Wave IV) USA	FT (55%) compared to not in paid workforce (60%) reduced probability of BF (p = 0.07), among non-Black PT (71%) compared to not in paid workforce (60%) reduced probability of BF (p < 0.01), among non-Black **Working PT**: longer BF duration than FT **Working PT:** different BF initiation and duration than not in paid workforce	Working PT than FT, longer BF

			Working FT: within the first 7 months, 2.2 times > likely to stop BF than not in paid workforce **Working at 3 months:** increased BF cessation for those returning to work	
Fein and Roe (1998)	Retrospective study 1993	1488 Majority White, Infant Feeding Practices Study USA	**Expecting to work PT than not to work:** no difference in BF duration (OR 0.83 and 0.89, p > 0.50), **Expecting to work FT:** decreased the probability of BF (OR = 0.47, p < 0.01). **Working FT at 3 months:** decreased BF duration by 9 weeks than not in paid workforce. (p ≤ 0.001) Working PT for more than 4 hours per day: BF > than working FT.(p < 0.05)	Working PT than FT, longer BF
Ryan, Wenjun, and Acosta (2002)	Retrospective study 2001	Mailed questionnaires 744 000 in 1996 and 1.4 million in 2001 Ross Laboratories Mothers Survey USA	**Working PT:** BF at 6 months > common than working FT **Working FT:** only 25 % BF at 6 months (a 70 % increase since 1996), and only 10% BF exclusively **Working PT:** likely to continue BF until 6 months than working FT	Patterns of BF among working women from 1996 – 2001 showed an increasing trend at 6 months
Ortiz et al. (2004)	Retrospective study Not stated	462 Working women gave birth 1993 to 1997. Company sponsored lactation program USA	84% return to FT work 55% return to PT work FT > likely to express milk at work than PT ($p < 0.01$) **Inflexible:** work schedules associated with BF cessation	Similar milk expression experiences between PT and FT

			Women working PT vs. FT directly following ML **Expressed milk at work:** no difference between FT and PT in duration of expressing and age of the baby when the mother stopped expressing	
Kimbro (2006)	Retrospective study 1998 - 2000	2466 BF working mothers Fragile Families and Child Wellbeing Study USA	**Working FT:** had a negative influence on BF duration **BF at 6 months:** Mothers with administrative and manual occupations are more likely to stop BF than stay-at-home moms **Job inflexibility:** Mothers with administrative or manual jobs had 34% and 35% higher odds of stopping BF, **Women in service and professional:** not different in quitting from women who do not work. **Professionals:** more flexible work environment that enables to continue BF	Working PT than FT, longer BF
Ryan, Zhou, and Arensberg (2006)	Retrospective study 2003	228 000 National sample of new mothers who worked FT, PT, or were not in paid workforce USA	**BF trends since 1984**: a large increase in the rate of BF at 6 months among FT working mothers (205%). **Working FT** 26%; **working PT** 37% , and not in paid workforce 35% breastfed their infants at 6 months **Working FT:** 1.28 (OR) < likely to initiate BF than not in paid workforce **Working PT:** higher BF rate (69%) than working FT (66%), or not in paid workforce (65%), ($p < 0.05$) **Working FT:** negative effect on BF duration ($p < 0.05$) Compared to **working PT**	Return to FT work at 6 months less likely to continue BF

Mandal et al. (2010)	Retrospective study 2005 - 2007	1400 Mothers Longitudinal Infant Feeding Practices Study II USA	Returned to work first 12 weeks: **Working FT:** shorter BF duration than working PT (<35 h/week) (28.3 weeks vs. 36 weeks, p < 0.05) **Expecting to work FT** (≥ 35 h/week): decrease BF initiation. **Working PT:** did not decrease BF initiation **Working PT:** (< 35 hours a week) increased BF duration relative to working FT employment, whether the mother returned to work before or after 12 weeks **Working PT:** and longer ML, increased promote BF initiation and duration **Compared with expecting to be not in paid workforce:** expecting to work PT <35 hours a week was not associated with BF initiation, while expecting to work FT decreased BF initiation. **Compared with not in paid workforce**: returning to work within 12 weeks regardless of work status and returning to work after 12 weeks while working more than 34 hours a week were associated with shorter BF duration.	Working FT, shorter BF initiation and duration
Yimyam (1998)	Mixed method Stage 1-1994 Stage 2-1995	313 Working women in urban workplace Thailand	**Experiences:** Combined work and BF caused exhaustion (20%), especially returned work outside home, double burden of paid and unpaid work. Also happene to self-employed at home. **Working hours (examples):** Works > 60 hours a week in a night shift found challenging Work 6 nights a week, from 7 pm to 7 am. Inflexible hours: have to sit the whole night.	Supportive working environment, promote BF at work

			A half hour break at midnight meal break and half an hour for breakfast During the first week, tried to breastfeed but found very tiring. Stopped breastfeeding a week after returning to work.	
Yimyam and Morrow (1999)	Mixed method Stage 1-1994 Stage 2-1995	313 Working women in urban workplace Thailand	41% worked away from home breastfed during work time.and were < likely to use formula than those who did not breast feed (X^2 = 20.14, p < 0.01 Informal sector workers > likely to maintain BF practice (X^2 = 6. 89, p < 0.05) **Working FT**: causes exhaustion to BF mothers **Working in the formal sector/less flexible**: < likely to BF at 6 months, then self/family employed women/ more flexible	Formal/less flexible Non formal/ more flexible
Witters-Green (2003)	Mixed method Not stated	423 prenatal women 13 WIC clients Women, infant and children supplemental nutrition program (WIC) USA	Only 1 of 14 large employers offered flexible working time. **Low flexibility:** jobs with 12-hour rotating shifts	Working flexible hours, longer BF
QUALITATIVE STUDIES				
Author, date	**Study design, year of study**	**sample size, participants, country**	**Results**	**Outcome**
Zafar and Bustamante-Gavino (2008)	Qualitative study Not stated	12 Qualified registered nurses, working FT on rotation duties in 6 hospitals, Karachi India	**Working FT:** found BF experience rewarding and challenging. **Despite knowing the value of BF:** due to working circumstance, the nurses were unable to breastfeed as wished.	Challenging BF experiences with FT work

3.4 Summary

This review has focused on four areas which are important for working women who combine breastfeeding with employment. Each of the studies reviewed are listed in Table 3.7, showing the study design and the relevant area: maternity leave, etc. All these factors influence one another and their synergistic positive effect may enhance the success of women's ability to maintain breast milk feeding at work. On the other hand, the cumulative negative impacts of these factors may retard breastfeeding practices.

Table 3.7: Checklist of studies on breastfeeding outcome among working women in relation to maternity leave, lactation breaks, working support or barriers and working hours.

Number	Author, date	Study Design	Maternity Leave	Lactation Breaks	Workplace Support	Working Hours
1	Dodgson et al. (2003)	Cohort	X			
2	Slusser et al. (2004)	Cohort		X		
3	Scott et al. (2006)	Cohort	X			
4	Hawkins et al. (2007)	Cohort	X		X	X
5	Cooklin et al. (2008)	Cohort				X
6	Baxter et al. (2009)	Cohort	X			X
7	Chuang et al. (2010)	Cohort	X			
8	Skafida (2011)	Cohort	X			X
9	Cooklin et al. (2012)	Cohort	X			
10	Heymann et al. (2013)	Comparative		X		
11	Guendelman et al. (2009)	Case-control	X			X
12	Baker and Milligan (2008)	Comparative	X			
13	Miller et al. (1996)	Cross-sectional	X	X	X	X
14	Yilmaz et al. (2001)	Cross-sectional	X			
15	Lakati et al. (2002)	Cross-sectional				X
16	Whaley et al. (2002)	Cross-sectional			X	
17	Arthur et al. (2003)	Cross-sectional	X			X

18	Chen et al. (2006)	Cross-sectional				X	
19	Khassawneh et al. (2006)	Cross-sectional	X				
20	Hurley et al. (2008)	Cross-sectional					X
21	Dabritz et al. (2009)	Cross-sectional		X		X	X
22	Mohd Amin et al. (2011)	Cross-sectional				X	
23	Weber et al. (2011)	Cross-sectional	X	X		X	
24	Sattari et al. (2013)	Cross-sectional	X			X	
25	Lindberg (1996)	Retrospective					X
26	Visness and Kennedy (1997)	Retrospective	X				
27	Fein and Roe (1998)	Retrospective	X				X
28	Roe et al. (1999)	Retrospective	X				
29	Ryan et al. (2002)	Retrospective					X
30	Ortiz et al. (2004)	Retrospective		X		X	X
31	Berger et al. (2005)	Retrospective	X				
32	Chatterji and Frick (2005)	Retrospective	X				
33	Kimbro (2006)	Retrospective	X				X
34	Ryan et al. (2006)	Retrospective					X
35	Fein et al. (2008)	Retrospective		X		X	
36	Jacknowitz (2008)	Retrospective				X	
37	Mandal et al. (2010)	Retrospective					X
38	Ogbuanu et al. (2011)	Retrospective	X				
39	Del Bono and Pronzato (2012)	Retrospective				X	

40	Yimyam (1998)	Mixed			X	X
41	Yimyam and Morrow (1999)	Mixed	X	X	X	X
42	Witters-Green (2003)	Mixed			X	X
43	Wallace and Chason (2007)	Mixed	X		X	
44	Thompson and Bell (1997)	Qualitative			X	
45	Stevens and Janke (2003)	Qualitative		X	X	
46	Rojjanasrirat (2004)	Qualitative			X	
47	Gatrell (2007)	Qualitative	X	X	X	
48	Payne and James (2008)	Qualitative		X	X	
49	Zafar and Bustamante-Gavino (2008)	Qualitative	X	X	X	X
50	Payne and Nicholls (2010)	Qualitative		X		
51	Tengku Ismail et al. (2012)	Qualitative			X	
	TOTAL	**51**	**26**	**13**	**23**	**21**

CHAPTER 4: THEORETICAL FRAMEWORKS

4.1 Introduction

The current study focuses on how women perceive breastfeeding and how working has an impact on their breastfeeding experiences. Although breastfeeding is a personal experience between the mother and her infant(s), her decision to breastfeed does not take place in private but in a context where she has to consider other commitments in her life, apart from being a mother. This is because the experience of feeding her infant is a result of how she blends her personal preferences within her environment (Liamputtong, 2006). In this Chapter 4, I discuss several theories and models that frame my research focus.

The aim of this chapter is to draw the theoretical terrain that I engage with in order to develop the arguments in my study. I situate my research within four theories; each interrelates with different aspects of the research focus. Since this research attempts to understand women's work-related behaviour and infant feeding, I chose the Theory of Planned Behaviour (TPB) (Ajzan, 2005), Work-Family Conflict (WFC) model (Greenhaus & Beutell, 1985), Maternal Deviance (MD) (Murphy, 1999) and Bourdieu's Theory of Class Distinction (BTCD) (Williams, 1995) to frame my research.

Referring to the work of Hector et al. (2005) as shown in Figure 2.1 and discussed in Chapter 2, this chapter describes how the TPB is relevant in explaining the individual-level factors that affect decisions about infant feeding (Bai, Middlestadt, Peng, & Fly, 2009). Unlike to the TPB, the MD model is suggesting the impact of not having intention in making breastfeeding a choice. Furthermore, MD helps to explain why

some mothers choose not to breastfeed perceiving that it was the right decision to do. While the WFC focuses on the group-level factors, which explicates on the ability to balance work and family roles, the BTCD moves away from self-related factors, looking at the impact of the external sources which may influence infant feeding practices in the societal realm as an attempt to understand the lived experiences of the women.

4.2 The Theory Of Planned Behaviour

4.2.1 Description

Ajzan (2005) initially developed the Theory of Reason Action which focuses on the complete violation control of behaviour. However, breastfeeding is not completely a violation control as there are many factors that can alter the breastfeeding duration which include infant and maternal issues (Wambach, 1997). Later, Ajzan revised the Theory of Reason Action which suggests that behaviour can be situated along a spectrum, from a complete violation to a no complete violation control, and this is more applicable to breastfeeding behaviour. *Control belief* in carrying out the behaviour is an additional construct that Ajzan (2005) added into the Theory of Planned Behaviour (TPB). In the TPB, Ajzan (2005) based the idea that an intended behaviour is likely to be performed when a person is motivated and has the ability (*control belief*) to do so.

The TPB has been used to predict health-related behaviour since it was first introduced more than twenty years ago (Avery, Duckett, Dodgson, Savik, & Henly,

1998). To a certain extent, the theory has also been used to model health-related intervention strategies (Giles et al., 2007). The TPB has been shown to be helpful in framing breastfeeding studies conducted in western countries, such as Canada (Daneault, Beaudry, & Godin, 2004) and the UK (McMillan et al., 2009), and in eastern countries such as Hong Kong (J. E. Dodgson et al., 2003).

The TPB has also been applied to participants with various social backgrounds: teenage mothers (Dyson, Green, Renfrew, McMillan, & Woolridge, 2010; Giles et al., 2007), working women (Duckett et al., 1998), new mothers (McMillan et al., 2009) and among unmarried women (Bai, Middlestadt, Peng, & Fly, 2010).

4.2.2 Theory of Planned Behaviour (TPB) and main constructs

Intention is the central focus in the TPB as it is assumed to be the immediate determinant in performing or not performing an act (Ajzan, 2005). Intention is pre-determined by three main constructs: *attitude* towards the behaviour which can either be positive, negative or neutral, *normative belief* or perceived social pressure towards performing or not performing behaviour, and *control belief* which reflects the degree to which perception behaviour can be or cannot be performed successfully as shown in Figure 4.1. The combined effect of these three constructs will contribute to the development of intention of the intended behaviour (Ajzan, 2005).

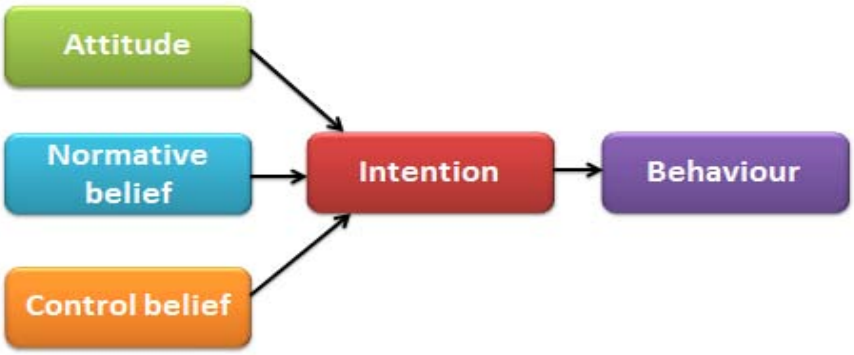


Figure 4.1: The constructs of the Theory of Planned Behaviour by Ajzan (2005)

The *normative belief* is a reflection of social pressure towards performing or not performing an intended behaviour. Social pressure has been suggested to be more influential for first-time mothers (primiparas) who have no previous experiences in initiation of breastfeeding (Swanson & Power, 2005). The sources of influence usually come from significant others such as the woman's husband, mother, mother-in-law or health care providers (Awang & Salleh, 2000; Bentley, Dee, & Jensen, 2003). Some research has suggested that, among the three constructs, *normative belief* is least likely to predict performing the intended behaviour (Cialdini, Kallgren, & Reno, 1991; Humphreys, Thompson, & Miner, 1998; Wambach, 1997).

The impact of *normative belief* on the intention is mediated by attitude and *control belief* (Dodgson, Henly, Duckett, & Tarrant, 2003). It is suggested that, when a woman has the support and the availability of resources, her *control belief* over her breastfeeding action may improve, and she is likely to perform her intended

behaviour which is breastfeeding (Bai et al., 2010). In the TPB, a*ttitude* represents the feeling a person has towards behaviour (Duckett et al., 1998). *Attitude* towards performing behaviour has been suggested as a strong predictor in performing the intended behaviour (Duckett et al., 1998; Wambach, 1997).

The extent to which each construct contributes in influencing intention was found to be different by populations (Montaño & Kasprzyk, 2008). The weighting of each construct may also vary in predicting breastfeeding initiation and breastfeeding duration (Bai et al., 2010). Generally, a behaviour is more likely to be performed when a person has a favourable attitude towards the behaviour, strongly supported by her social referents (*normative belief*) and believes she has the ability to perform (*control belief*) the behaviour of interest (Ajzan, 2005).

4.2.3 Theory of Planned Behaviour (TPB) and extended/proximal constructs

In addition to the main constructs, there are many other antecedents which may indirectly influence the intended acts (Daneault et al., 2004; Duckett et al., 1998). Some researchers call a variable such as social demography and education background as '*extended variables*'. Others term '*proximal variables*' which potentially influence intention, but they are considered not to have a direct effect in performing behaviour (Montaño & Kasprzyk, 2008).

An example of the influence of extended variable was a longitudinal study of Saudi women which revealed that religion and cultural factors strengthened women's intention to breastfeed (Al-Madani et al., 2010). Another study in Turkey suggested

that intention alone was not a strong predictor of breastfeeding, but the combined effects with other proximal constructs may better explain the behaviour (Göksen, 2002).

4.2.4 Theory of Planned Behaviour (TPB) and infant feeding research

Avery et al. (1998), in their longitudinal study which followed women for 12 months, suggested that among the reasons women stop breastfeeding was that they plan to work outside their home after giving birth. Their study suggested that prenatal intention predicted significantly the pregnant women's actual breastfeeding behaviour (Avery et al., 1998). On the other hand, Bakoula et al. (2007) who recruited more than 3000 Greek mothers in a longitudinal study suggested that among the factors strongly associated with women's positive intention to breastfeed were previous breastfeeding experiences and extended maternity leave for more than six months.

Intention to breastfeed has also been suggested not only to predict breastfeeding initiation, but also to influence the duration and exclusive feeding (Meedya et al., 2010). In their review of literature, they discovered that among the modifiable factors that could influence the breastfeeding duration for up to six months were a woman's breastfeeding intention and her social support (Meedya et al., 2010).

An interesting finding based on the focus group discussions during prenatal and postpartum exploring breastfeeding, Moore and Coty (2006) suggest that intention is dynamic and conditional. It is strongly related to how the mothers feel about their capabilities in dealing with challenges and their ability to encounter the problems

(Moore & Coty, 2006). The mothers' intentions may change when they encounter problems in which they suggested that the relationship between intentions and barriers or supports were of circular rather than linear nature (Moore & Coty, 2006).

In this current study, intention reflects the participants planning to continue breastfeeding or breast milk feeding when they return to work. If a mother planned to breastfeed her baby for an extended duration of time after she resumed working, and she managed to follow her plan, the mother is said to have strong intention to breastfeed. However, if a mother is only able to breastfeed for a shorter duration than what she had planned during prenatal time, she may still have a strong intention to breastfeed.

Intention alone may not be a strong predictor of the intended behaviour as there are other antecedent factors to be considered. To what extent the importance of having the intention overrules other determinants is discovered in the current study. This theory also helps to explain other antecedent constructs, for example education background and social demographic influence infant feeding experiences among women with different work settings.

4.3 Work-Family Conflict Model

4.3.1 Description

It is common today for women to work away from home as compared to a few decades ago. As illustrated in Chapter 3, a woman's employment status has been shown to pose a barrier to breastfeeding as there is evidence that the timing of breastfeeding cessation often coincides with the mothers returning to work (Aspinwall, 2008; Biagioli, 2003; Chen et al., 2006; Visness & Kennedy, 1997). Due to the increased involvement of women in the workforce, research related to the impact of women having multiple roles in their lives is important.

Working status is one of the factors women have to consider because it affects the duration of breastfeeding (DiGirolamo et al., 2005). It is useful to have a theory that discusses the potential conflicts that women may have in managing their multiple roles. According to the Role Theory, as the roles of individual increases, with the constant of time he/she has each day to fulfil his/her roles, there is a likelihood of overload and role conflict occurring (Biddle, 1986).

Role conflict is defined as the 'simultaneous occurrence of two (or more) sets of pressures such that compliance with one will make more difficult compliance with the other' (Greenhaus & Beutell, 1985, p. 19). Based on this definition, Greenhaus and Beutell (1985, p. 77) define Work-Family Conflict (WFC) as 'a form of inter-role conflict in which the role pressures of the work and family domains are mutually incompatible

in some respect'. Consequently, the mismatched expectation as a result of Work-Family Conflict (WFC) leads to compromising well-being and negatively affecting the health of employees (Grant-Vallone & Donaldson, 2001).

Work-family mismatch can lead to the mental or psychological stress (Grice et al., 2007), or could compromise their physical health (Grant-Vallone & Donaldson, 2001). Grice et al. (2011) suggested that both mental and physical stress can affect postpartum working women as a result of spill over job workload. In addition, WFC has long-term impact as shown in longitudinal studies at six months (Grant-Vallone & Donaldson, 2001) and 18 months (Grice et al., 2011).

4.3.2 Sources of conflicts

Greenhaus and Beutell (1985), propose three domains that may contribute to the source of conflict: time-based, strain-based and behaviour-based conflict as shown in Figure 4.2. Time-based conflict occurs when the time needed to fulfil a role, compromises time needed to fulfil another role. It can lead to the development of strain-based conflict. This occurs when a strain due to anxiety and fatigue in performing a role causes strain to perform another role in a time constrained situation. However, behaviour-strain occurs when behaviour modification is easier in a role and may not be compatible with another role (Cardenas & Major, 2005).

Figure 4.2: Sources of conflict that have potential to affect the work-family equilibrium

Frone et al. (1992) expand Greenhaus and Beutell (1985) Work-Family Conflict model, by examining the predictors and determining the direction of the conflict between work and family. Depending on the direction of conflict, the predictors are identified as job stress, family stresses, job involvement or family involvement (Frone et al., 1992). Noor (2003) studied the direction of conflict in British employed women with children and revealed the antecedents for work-to-family conflict were related to work, while the antecedents for family-to-work conflict originated from issues at home.

While both men and women can be affected by the demand between work and family, only working women have the specific role of breastfeeding. Their burden of family responsibility is heavier (Rothbard, 2001). Therefore, women who are breastfeeding are likely to face conflict at work and at home while trying to balance their multiple roles as a mother, as a wife and as a worker (Greenhaus & Beutell,

1985). It has been suggested that the strains faced by employees may reduce productivity and increase absenteeism, thus affecting the overall productivity of the work (Clays, Kittel, Godin, De Bacquer, & De Backer, 2009).

4.3.3 Managing work-related conflicts

The Work-Family Conflict (WFC) model has been applied to breastfeeding research to examine working women coping strategies (Cardenas & Major, 2005; McIntyre, Pisaniello, Gun, Sanders, & Frith, 2002). Guendelman et al. (2009) suggested that inability to manage work-related issues has been shown to affect breastfeeding practices. Specifically, work outside the home has been identified as a factor that leads to a lower rate of breastfeeding initiation and early breastfeeding cessation (Galtry, 2003). Hence, flexibility in working arrangements has been found to benefit employees (Grice et al., 2011), as well as the employers (Hill, Hawkins, Ferris, & Weitzman, 2001).

There is evidence showing that as the intensity of the workload increases, the frequency of breastfeeding decreases (Roe et al., 1999), which reflects the inability of women to cope with time-demanding multiple roles. Some women have to stop breastfeeding when they return to work, which suggests that they are not able to manage the dual roles of breastfeeding and working (Lindberg, 1996).

By understanding the challenges working women face at work and at home in their attempt to maximise their efforts to fulfil multiple roles, we are able to learn from their experiences and take steps to improve their lives. For that, women need

information and guidelines on how to manage their WFC and providing them with materials that have been shown useful in some workplaces (McIntyre et al., 2002).

4.3.4 Work-related conflict among breastfeeding mothers

Applying these models to breastfeeding and working conflict, we can postulate that the time a mother needs for milk expression while she is at work may be compromised by the time she needs to get her work done. Thus, she may feel under pressure to fulfil both roles as a result of time-strain. Initially, she may try to cope with both duties by perhaps compromising some other social commitments, but later she may not be able to tolerate the demand which may lead to some women either quitting their job or stopping milk expression. However, some women may manage both roles well enough that neither are compromised. This study will be able to explain how some women continue breastfeeding despite the obstacles they face. At the same time, this study will reveal what is unique about the workplaces that are conducive for some mothers to maintain on-going milk expression.

In the current study, the Work-Family Conflict (WFC) model may be useful in explaining women's experiences in deciding what is best for their infants and at the same time to maintain balance with what is manageable for them. The WFC balance is likely to be different from one work setting to another. As the current study also recruits participants who work from home, it will be of interest to explore the source of stress and direction of conflict which disturb the work-family equilibrium.

Although WFC is a challenge for many women, there are also women who manage to balance their roles effectively at work as well as at home. An area which this study has the potential to explore is the stressor that is related to women working from home. How different or how similar it is from the effect of the home workplace related issues in contributing to the Work-Family Conflict (WFC)?

4.4 Maternal Deviance

4.4.1 Description

Feeding newborn mammals with breast milk is not a 'choice' but the natural way of feeding (Earle, 2000, p. 1458). In many countries, a mother who chooses the natural way to feed her infant is strongly linked to the notion of a 'good mother' (Liamputtong & Kitisriworapan, 2011). The 'rule' is that a good mother should breastfeed as this is how an infant should be fed. Therefore 'to be a moral mother, one needs to follow the rules of motherhood knowingly' (Liamputtong, 2006, p. 47). The notion of 'good mother' and 'breast is best' (Murphy, 1999) has led many women to be mindful about what they choose and how they display their choices.

A mother who chooses to continue to breastfeed her infant despite the challenges can be considered as 'good mother' as she makes the choice knowing that giving breast milk is the best practice (Murphy, 1999). In contrast, in some places of the world, formula is perfectly acceptable within their social and cultural contexts (Dykes, 2005). A mother who opts to formula feed her infant may be open to criticism as her

behaviour is seen as 'immoral mother behaviour' (Liamputtong, 2006); breaking the rule of good motherhood. However, Murphy (1999) contends that a woman should only be judged as deviant if she breaks the rule knowingly. The flow of rule breaking assessment adapted Murphy (1999) is shown in Figure 4.3.

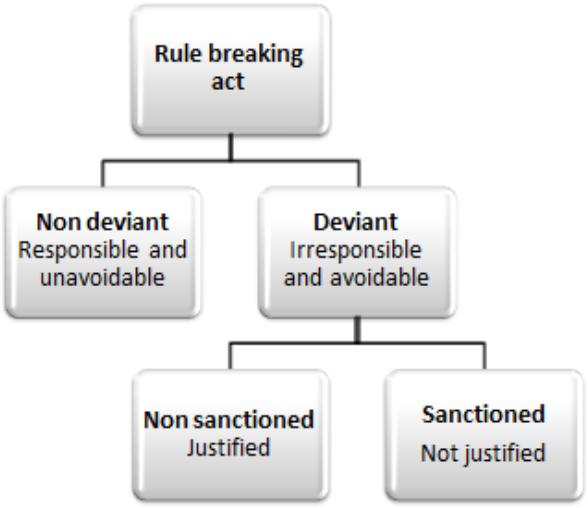


Figure 4.3: Flowchart of the assessment of rule breaking (Murphy, 1999, p. 191).

4.4.2 Infant feeding act

Murphy's work has been referred to by previous studies in an attempt to understand the women who decided to adopt formula feeding (Dykes, 2005; Liamputtong, 2006; Liamputtong & Kitisriworapan, 2011; Ludlow et al., 2012; Marshall, Godfrey, & Renfrew, 2007; Wall, 2001). Marshall et al. (2007), explored how new mothers in North England value their new motherhood life and suggests that good mothering is judged when the breastfed infants grow healthily. However, the notion of good mothers becomes more obscured when the infant is not growing as expected, despite her diligent breastfeeding effort (Marshall et al., 2007).

Turning to formula is seen to be an acceptable decision in an attempt to overcome the issue of failure to thrive in breastfed infants (Liamputtong & Kitisriworapan, 2011). In fact, to some couples, choosing infant formula is a way for them to show their support for each other. This is because the spouse can bear the role of motherhood by feeding the infant with infant formula which is unlikely if the infant is exclusively breastfeed directly from the mother (Marshall et al., 2007).

Liamputtong and Kitisriworapan (2011), examined women from different social classes in Northern Thailand and found that mothers decided to formula feed their infants despite knowing about the superiority of breast milk, because they perceived '*not enough milk*' supply for their infants. Dykes (2005) suggests that the idea of milk insufficiency is indeed a reflection of women's lack of confidence in trusting their bodies' ability to produce milk.

Besides '*not enough milk'*, returning to work is a common reason why the women introduce infant formula (Liamputtong & Kitisriworapan, 2011; Yimyam & Morrow, 2003). Liamputtong and Kitisriworapan (2011) further explain that the women felt their idea of giving infant formula is seen as a practice of a bad mother which in fact it is not necessarily so, as suggested by Murphy (1999).

4.4.3 A deviant act

A mother who has the intention to formula feed her infant without feeling guilty despite knowing she could avoid the act, may be charged as deviant (Liamputtong &

Kitisriworapan, 2011). The Maternal Deviance (MD) model explains the rationale behind a mother's decision to choose infant formula.

If a mother can justify formula feeding as unavoidable and indeed it is her way of showing her responsibility as a mother, she should not be sanctioned although her act is deviant (Liamputtong & Kitisriworapan, 2011). For example, a woman who has to work to secure her financial needs but feels guilty with her feeding choice and to justify that she is a responsible mother, she makes the effort to buy '*quality*' formula milk for her infant (Liamputtong, 2006).

4.4.4 Maternal deviance and infant formula

Figure 4.3 illustrates that not all rule breaking acts are deviant and not all deviant acts are sanctioned. It is unwise to judge a mother's morality just by looking at how she chooses to feed her infant. Also, it is wrong to judge these acts as immoral if formula feeding was the only choice she has due to her or her infant's health conditions.

For some women, formula feeding is the norm and acceptable, the way it should be and is not regarded as deviant. They are influenced by their culture and in the environment in which they are situated. The ability to breastfeed their infant is one aspect of mothering while ensuring that her infant is fed with '*quality*' food is another issue. Murphy (1999, p. 187) contends that '*whether they intend to breastfeed or formula feed, women face considerable instructional challenges as they seek to establish that they are not only good mothers but also good partners and good women'*.

In the current study, Maternal Deviance (MD) could be helpful in understanding why some mothers chose infant formula as opposed to breastfeeding. Their reasoning on the choice of infant formula may be influenced by their socio-demographic background, culture, support and barriers which could explain their behaviour.

4.5 Bourdieu's Theory Of Class Distinction

4.5.1 Description

Breast milk has been promoted as liquid gold by breastfeeding advocates to highlight the value it offers to newborns and infants (WABA, 2013). With the recognition of liquid gold, research has also aligned breastfeeding practice as a fulfilment of a good mother's moral obligation. It is therefore not a surprise when formula milk has been described as just food whereas breastfeeding is defined as *'a complex living nutritional fluid which contains antibodies, enzymes and hormones'* (Hoddinott, Tappin, & Wright, 2008, p. 881). Hence, how the food is described is somehow a reflection of how it is valued.

Distinction: A Social Critique of The Judgement of Taste by Bourdieu (1984) combines social theory with statistics data in an attempt to illustrate the connection between taste and social positioning. 'Tastes', according to Bourdieu (1984), refer to consumer preferences which are socially conditioned; and that the '*objects of consumer choice reflect a symbolic hierarchy that is determined and maintained by the socially*

dominant in order to enforce their distance or distinction from other classes of society' (Allen & Anderson, 1994, p. 70). Therefore, 'taste' is regarded as 'social weapon' that '*defines and marks off the high from the low, the sacred from the profane'* (Allen & Anderson, 1994, p. 70), pertaining to matters such as art, music, entertainment and literature extending to food, drinks, clothing and magazines.

Bourdieu (1996) also introduces the social concept of *habitus* in which he uncovers the core structure of what the social universe is made of. He describes *habitus* as a set of dispositions, the way in which individuals orient themselves in the world which includes how they interact, their ways of thinking, feeling and their actions (Bourdieu, 1996) which are generated in specific situations.

Bourdieu (1984) recognises the importance of social location which contributes to the world view and rejects the assumption that individual decision determines their actions. Therefore, instead of looking at the gender, age and culture of the individual person, Bourdieu's works explore the relationship between class, health and lifestyles which may have an impact on health-related behaviour of a defined social distinction (Williams, 1995).

In many circumstances *habitus* may appear as normal daily conduct, which actually is the product of a person's upbringing and orientation towards the social structure he/she belongs to (Sweetman, 2009). According to Bourdieu, '*all cultural symbols and practices, from artistic tastes, style in dress, and eating habits to religion, science and philosophy – even language itself – embody interests and function to enhance social*

distinctions' (Swartz, 1997, p. 6). Therefore, *habitus* may contribute to the formation of a social structure. Figure 4.4 is Bourdieu's theory as simplified by the schematic diagram illustrated by (Department of Anthropology, 2012).

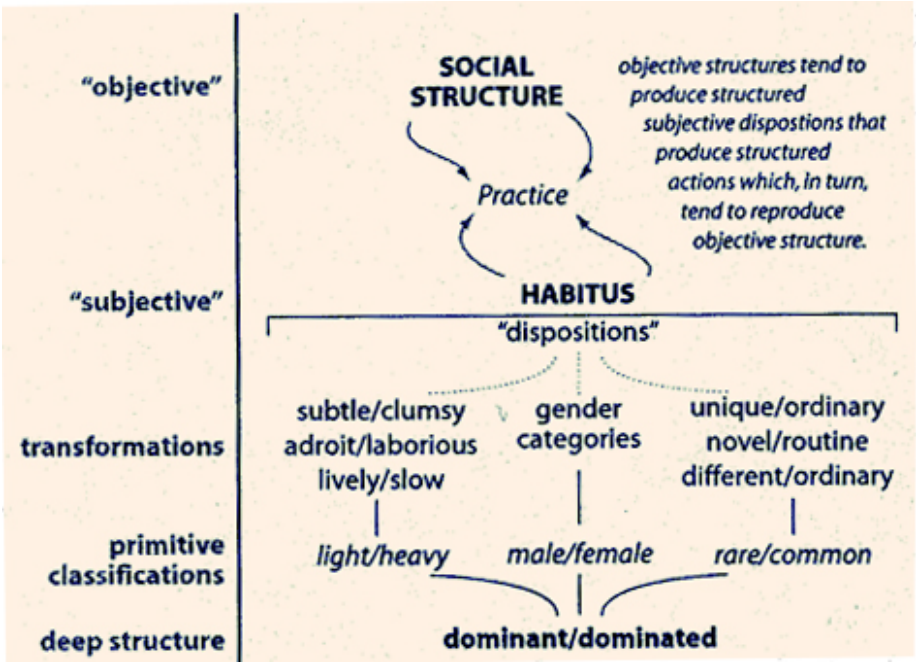


Figure 4.4: Bourdieu's Theory

Bourdieu theorises that practice is not or at least not wholly consciously organised within the social class cultural practices (Williams, 1995). Class distinction relates to the tendency to take up prescribed behaviour as passed down, learnt unconsciously and accepted until it becomes a norm and well-practiced act. Therefore, every group within a society has its class distinction which is generated by common sense behaviour, unconsciously coordinated which in many instances is 'inherited'. Many people take things for granted without realising that what actually materialises, happens for a reason.

4.5.2 Social class and food consumption

Darmon and Drewnowski (2008) suggest that there is strong evidence regarding diet quality and social ranking. Higher social status individuals are more likely to consume high quality food compared to individuals from the lower social status (Darmon & Drewnowski, 2008). In relation to food consumption, Bourdieu suggests that the choice of food and the manner of how the food is consumed is a reflection of a person's social status.

Social researchers have examined and found the connection between the *habitus* of food consumption and social class taking into consideration their culture, race, ethnic and religion ideology (Robinson, 2003). Members of a lower social class are more prone to choose food that is filling and likely to over consume which may lead to ill-health. However, families from a high social class are more likely to look for the nutrition content of the food and consume on appropriate healthy amount (Robinson, 2003). Interestingly, members of the lower social class do not regard their food choice as less good than the food choice from the upper class. Instead, they regard it as their freedom of taste (Bourdieu, 1984).

Coveney (2005) explored the lay knowledge about food and health among 40 parents from low and high social groups in South Australia. The parents' views regarding food and health were found to be greatly influenced by their social constructs. Parents from lower social economic suburbs tended to describe that the function of food is to provide them with energy which is vital for their growth, while the parents who came from suburbs with higher economic status describe the food content using more

scientific terms which reflect their deeper knowledge on the function of food. The food choice or preferences explanation in Coveney's (2005) study is meant to be the parents' freedom of taste (Bourdieu, 1984).

4.5.3 Social class and breastfeeding

Amir (2011) suggests that social theory like Bourdieu's work may be applied in breastfeeding research to explore the contributions of culture and society on infant feeding practices. Applying Bourdieu's (1984) concept to infant feeding may help us understand the complexity of mothers' lived experiences with breastfeeding. Furthermore, it opens up a new avenue as many researchers including nutritionists, public health practitioners and breastfeeding advocates have attempted to explain lower rates of breastfeeding despite efforts made to promote it. It can be theorised that, based on Bourdieu (1984), women who regard formula feeding as the 'normal' way of feeding their infants, will inherit this 'taste' and unconsciously practice it (Amir, 2011).

A cohort study in the UK which involved a large number of single women demonstrated that the initiation and continuation of breastfeeding is related to the social class. Women of a lower social status were four times less likely to initiate breastfeeding and likely to breastfeed for a shorter duration and they commonly work in a routine job which is considered as a non-conducive working environment as compared to those in the higher work ranking (Kelly & Watt, 2005).

Mothers who are aware of the importance of giving exclusive breastfeeding will avoid infant feeding and avoid giving any complementary food before their infants attaining the age of six months. However, Onyango et al. (1998) have suggested in their research that women from a remote area in Kenya are disposed to introducing complementary food earlier than what is recommended, assuming that extra food besides breast milk is important for growth (Onyango et al., 1998). They are also likely to introduce infant formula within the first month of life and exclusive breastfeeding rarely exceed three months.

The current study recruited working women from various educational backgrounds and occupation categories. The participants are employed or an employer and work at home or away from home. They come from different social classes and have attained different education levels. Bourdieu's (1984) concept can help us understand women's 'tastes'; why some women prefer infant formula while others prefer breastfeeding.

4.6 Aligning theories with conceptual framework

Breastfeeding is a unique behaviour in that despite being a personal experience between the mother-infant dyad, the decision to breastfeed is not possible to determine without taking into consideration other conditions that are related to the mother, her family and her working conditions. Putting all these into perspective I combine four theories, each serves to explain the impact and consequences of breastfeeding from different areas of the life of the mother, utilising all three levels; individual, group and society as described by Hector et al. (2005).

As this study focuses on the working status of the women, the Work-Family Conflict (WFC) explains the context in which a woman is situated between her family and her career working life. The demands of breastfeeding need her to be closer to her infant(s), while the working commitment of many of the women required her to be away from her infant(s). These contradictory expectations in many ways may place women in a difficult situation in balancing her different roles. Group and societal level factors intertwine and influence one another, contributing to the development of a woman's attitude, her breastfeeding experiences and how she makes decisions regarding infant feeding.

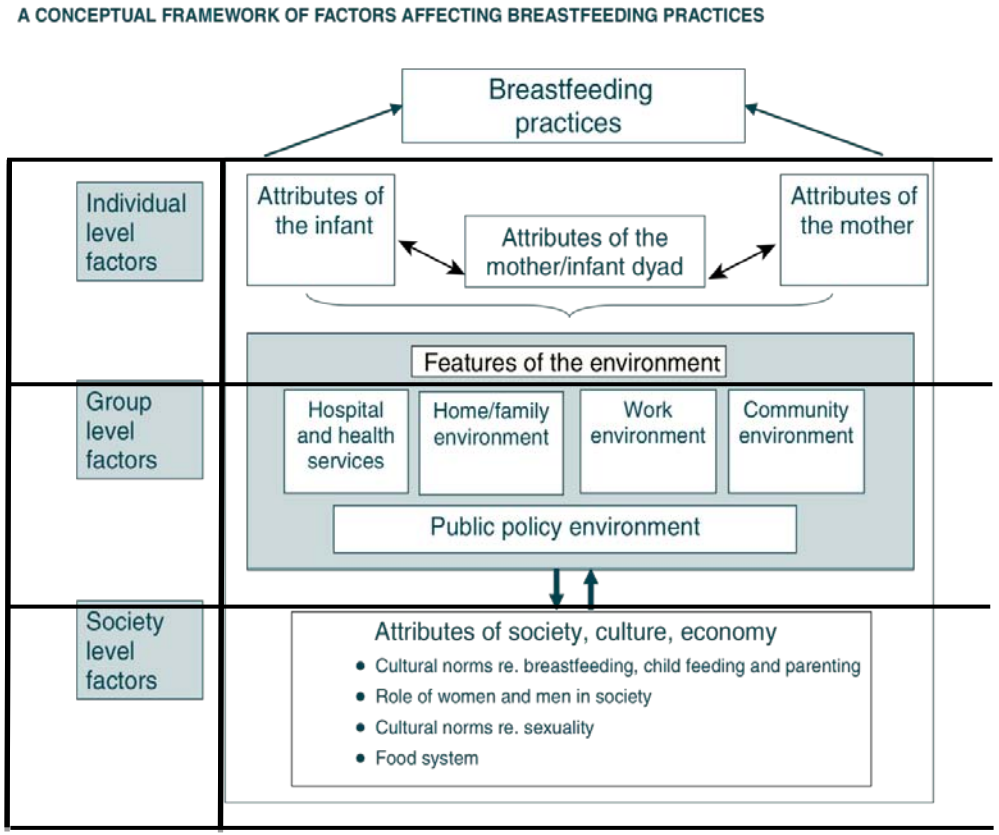
Based on the framework by Hector et al. (2005), the theories focus on different factor levels, while overlapping on emphasising similar determinants. The Theory of Planned Behaviour (TPB) and Maternal Deviance (MD) help to explain individual level factors, while considering the role of intention in acting out intended behaviour. The TPB explores the importance of intention in determining that the targeted behaviour is carried out. The MD looks into the role of intention before a knowing act is judged as deviant or not. Therefore, a mother who decides not to breastfeed should not be readily seen as being deviant as what underlies their choice may be justified based on their intentions. To a lesser extent, the other factor levels are minimally explained by these theories.

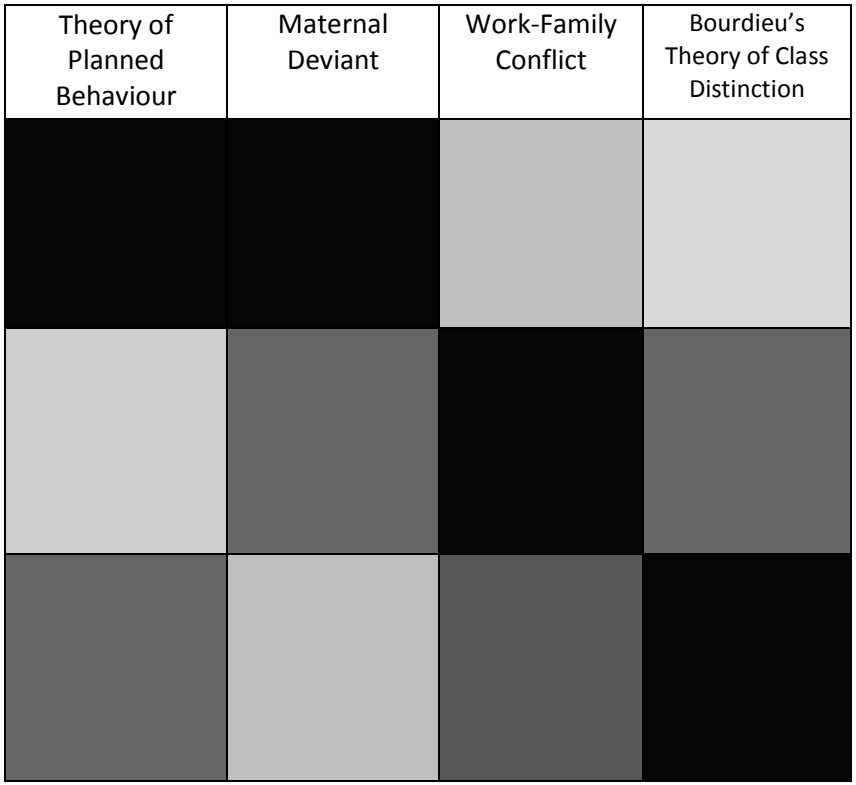
Bourdieu (1984), in his model of class distinction, regards the societal factor level as far more important in determining a behaviour. He theorises that an acceptable

behaviour is an unnoticed habit which is inherited by a particular group and not by what the person intends to do. It then becomes the norm of the group where the person lives which relates to the societal level factors in the Hector's et al. (2005) framework. Bourdieu's theory relates the class, social and lifestyle on a class habitus, the Theory of Planned Behaviour (TPB) and Maternal Deviance (MD) explain the antecedent factors that influence the behaviour intentions, Bourdieu's Theory of Class Distinction (BTCD) tries to relate it to the 'why' they happen, establishing on what class distinction she belongs to.

4.7 Summary

In short, breastfeeding is a personal lived experience that cannot be explained in isolation by just observing the intimate behaviour between the mother and her infant. It is influenced publicly and openly discussed by many stakeholders, who have an interest in the subject being discussed. These theories that explain a mother's behaviour and her experience regarding infant feeding choices that I have discussed in this chapter are summarised in Figure 4.5. This diagram attempts to map the relationship between the four theories and how strongly each of them is able to explain the range of factors affecting breastfeeding practices.





	The theory is slightly related to the factors at that level
	The theory is moderately related to the factors at that level
	The theory is strongly related to the factors at that level

Figure 4.5: Grid aligning four theories with Hector et al. (2005) conceptual framework of factors affecting breastfeeding practices.

CHAPTER 5: METHODOLOGY

5.1 Introduction

Methodology is 'the bridge that brings our philosophical standpoint (on ontology and epistemology) and method (perspective and tool) together' (Hesse-Biber & Leavy, 2011, p. 6). It is therefore a conceptual relationship that connects research to theory and discipline (Carter & Little, 2007) and an iterative planning relationship that interacts with objectives, questions and study design (Carter & Little, 2007). Kaplan (1964, p. 18) explains that methodology is about 'the descriptions, explanations, and justifications of the methods, and not the method themselves'. Further he contends that the aim of methodology is 'to describe and analyse method' (Kaplan, 1964, p. 23).

'A methodologist is someone who sits outside methods and describes, explains, justifies, evaluates, and helps us understand them' (Carter & Little, 2007, p. 1318). To achieve this, it is their responsibility to create methodologically convincing research protocol and 'it is crucial that qualitative research is situated within a methodological framework' (Gill & Liamputtong, 2009, p. 3). Therefore, a researcher who has a good understanding of the methodology will be able to 'interpret data sensibly and with insight, and not simply interpret data in the light of preconceptions and prejudice' (Liamputtong, 2013, p.6).

In this methodology chapter, I will explain my study approach in four main areas. First, I will describe the methodological concepts of my study. This is the theoretical perspectives pertinent to my project, which provides the background of my research philosophical standpoint (Carter & Little, 2007). It is important to examine how the

theoretical perspectives impact on the methodology because methodology is a bridge that connects the theories and the methods (Hesse-Biber & Leavy, 2011). Furthermore, qualitative research approach has a dynamic iteration between research methods and the theories whereby a researcher travels along the bridge throughout the research process (Hesse-Biber & Leavy, 2011). Second, based on my philosophical methodology stance, I will explain my data collection methods and how I enlisted my participants and select the recruitment sites. Third, I will describe the participants' background and socio-demographic characteristics. Finally, this chapter will address issues regarding rigour, expected ethical issues and unavoidable limitations that may arise from any stage in my project.

My research aim was to determine how working life had an influence on infant feeding choices among women from urban localities in Malaysia. This purpose was explored by looking into how working women were situated in their social contexts and how they related to their communities and workplace. By doing this, we would understand how working women viewed the world and how the environments they were in contact with influenced their perceptions and infant feeding choices. To achieve this, I found that post-modernism and feminist methodological approaches enabled me to explore working women's experiences in relation to infant feeding in depth.

5.2 Methodological Concept

5.2.1 Post-modernism

Post-modernism assumes that 'an individual holds multiple subjectivities and these subjectivities could change, shape and reshape in unforeseeable ways' (Liamputtong, 2007, p. 16). Post-modernists reject the fact that reality is known and objective, but suggest that it is unknown and subjective, and that reality cannot be explained by a single truth (Grbich, 2007) because there are many truths and many realities as people have many ways of expressing their stories (Liamputtong, 2007). Thus, post-modern researchers, instead of theory elaboration, extensively display data generated from their participants as a means to bring the reader closer to the experiences the researcher wishes to disseminate (Grbich, 2007).

Post-modernist researchers regard all stories shared by the respondents as equally important and therefore should be included in the analysis. Post-modernist approaches also encourage self-disclosure, which is important for the researcher to analyse critically the lived experiences of the respondents. Thus, it contributes to thick descriptions and elaborative explanations, even for a small scale research and a small number of participants (Liamputtong, 2007).

Post-modernists, who are also known as subjective ontologists, believe that the social world is continuously being constructed and changing (Hesse-Biber & Leavy, 2011). Post-modernists believe that researchers are part of the whole research, and could

influence the knowledge generated from the research (Liamputtong, 2007). In other words, a post-modernist's reality is designed by the interaction between the researcher and the participants in the context in which they exist; the interaction is dynamic and changing and the researchers are aware that their values, beliefs and emotions have an impact on the outcome of the matters being studied.

To understand this world of meanings one must interpret it. The inquirer must elucidate the process of meaning construction and clarify what and how meanings are embodied in the language and actions of social actors (Schwandt, 1994, p. 118). The working women in my study came from various walks of life and were surrounded by people in their everyday lives. Therefore, it was expected they would have different and complex infant feeding experiences (Schwandt, 1994). Working women constructed meanings of their experiences through their interactions with significant others. It would be interesting to understand how significant others' experiences of infant feeding have an influence on how the participants decided on feeding methods for their infants.

Besides human interactions, the meanings can also be constructed when mothers interacted with non-human elements such as the media, technologies and ideas, as construct of meanings can be built on what they see, feel and hear. Similarly, it would be compelling to learn how mothers use the availability of breastfeeding facilities at their workplaces to justify the options they make for their infant feeding.

The meanings people attach to their experiences will depend on how they valued their opinions and how others perceive their experiences. In short, what we learn from the post-modernism perspective is that knowledge is about the way in which people make meanings in their lives. This is because the meanings can be changed as people construct and de-construct knowledge in their dynamic world. By knowing how mothers construct and interpret meanings, which in turn are reflected in their actions, my study explores how mothers negotiate with other actors to come to a decision about infant feeding.

Besides looking at how the mothers construct meanings, I will also explore how the mothers in relation to other actors, arrive at making infant feeding choices. Further I will look into how their power relation positions at workplaces lead to them experiencing infant feeding differently from others. Their power struggle and interaction will be explained by a feminist perspective.

5.2.2 Feminist perspective

Taking a step further and focusing on endeavor, working women in my study has to face not only power struggle at their workplaces but also the challenges they are expected in order to balance multiple roles. Whether a woman successfully achieves what she wants for herself and her infant is likely to depend on how she constructs and deconstructs the meaning of her reality based on her experiences. This critical perspective examines the power struggle working mothers have to go through in order to shape their realities. The highlight in critical perspective is to understand the

power relation that is occurring in the chaotic world, which is governed by conflicting underlying structures including social, cultures, gender, economics and politics.

The critical perspectives (traditions) are best characterised as a set of intellectual positions that examine social arrangements through the lenses of power, domination, and conflict. Although they share with constructivists (interpretivists) a belief that our worlds are indeed socially constructed, they also hold that these constructions themselves are mediated by power relations and conflicting interests in any given society (Prasad, 2005, p. 109).

Constructing knowledge from critical perspectives means that we have to understand women's position and the power they have over their environment. An educated woman at her workplace is likely to define the power struggle differently from her subordinates. Likewise, a woman who has had a successful experience with breastfeeding would create a different meaning of reality, which then contributes to a new knowledge. The ultimate aim in critical approach is to facilitate change towards equality and social justice worldwide and lessen the power gap (Willis, 2007). Working mothers have had the ability to reconstruct their own realities through their actions and critical reflections, which could bring about change. This critical perspective, which examines power relations and struggles among working mothers, is the ground held by feminism.

According to Allen and Walker (1992, p. 201), 'feminism is a perspective (a way of seeing), and epistemology (a way of knowing), and an ontology (a way of being in the

world)'. Feminism is developed out of the second wave of the women's movement (Hesse-Biber & Leavy, 2011), and was started with the conviction that women worldwide are facing oppression or mistreatment (Brayton, 1997), and with that came a dedication to reveal and comprehend why and how oppression happens. Hence, there is an urge to abolish any kind of oppression and move towards creating a more just world for women (Liamputtong, 2007).

Further, on the same ground, based on O'Neill (1996, p. 131), the concern of feminism and feminist researchers is to construct knowledge that 'writes women into history and exploring, challenging, resisting and changing sexual and social inequalities'. Although there are various feminist ideologists, all are united by their common focus on the inquiry of women; the central concepts shared by all traditions are related to the notion of gender, patriarchy and the sexual division of labour (Prasad, 2005).

The standpoint of the feminist theorist is that women exist within a patriarchal and male dominated social context (Hesse-Biber & Leavy, 2011) which navigates feminist research topics on women's positions, concerns, experiences and perspectives. Therefore, the ultimate aim of feminist research is to 'capture women's lived experiences in a respectful manner that legitimises women's voices as a source of knowledge' (Campbell & Wasco, 2000, p. 787). There are two-fold goals in feminist research, to raise consciousness of women's issues and to empower women based on the research findings. Therefore, feminist researchers are interested in looking at any positive change resulting from research findings (Endacott, 2005).

5.2.2.1 Why post-modernism and feminist perspective

Infant feeding choices are a topic of concern, especially for working mothers who have multiple roles (Johnston & Esposito, 2007). It is an issue if they chose to breastfeed but are not supported at their workplaces or by their families and colleagues. Because breastfeeding is sex specific, it challenges the feminist principle of gender-neutral childbearing (McCarter-Spaulding, 2008). The fact that breast milk is superior to any brand of formula milk, choosing to breastfeed is a complex decision process. Mothers usually take into account many factors before they decide on their choice of infant feeding.

Both post-modernism and feminism methodologies agree that knowledge is constructed by multiple realities and support the variability within and between individuals, and consider the views of all the participants seriously. In a feminist research approach, important determinants such as cultural differences, socioeconomic status, educational levels, cultural diversity and employment status are addressed. Knowledge generation in feminist research is derived from what the researcher writes of women's views about their lived experiences from various contexts exploring the challenges, resistance and social discrepancies (O'Neill, 1996). Hence, their decisions are influenced by their emotions, beliefs, and perceptions.

These methodologies also promote a small-scale qualitative research, focus on specific socio-cultural contexts and treat all data as equally important as in this research project, besides advocating more innovative ways of data collection, such as the use of photographs and exhibits. It is common among the feminist researchers to use

multiple strategies in gathering information to construct knowledge about women and their social world, as multiple approaches are able to 'capture the richness of human experience' (Eder & Fingerson, 2002, p. 188).

In order to ensure the respondents' voices are heard, feminist researchers need to show appreciation and value the research participants so they would feel empowered during the research. This could be achieved by promoting an equal hierarchical position between the researcher and the participant. Among methods commonly used by feminist researchers are focus groups, oral histories or face-to-face interviews, and some would go for more creative methods such as diaries or art-based approaches (Liamputtong, 2007). Taking into consideration all of these issues in my study, multiple methods of data collection were reasonable as it was able to tie all aspects into a solid knowledge of the issues surrounding infant feeding choices among working mothers.

5.3 Research Methods

In this section, I explain the ways that I used to gather information from the participants. It also includes the strategies that I employed to ensure the data that I collected was reliable and able to generate thick descriptions from the interviewees who can provide information-rich accounts from their lived experiences (Liamputtong, 2011). Based on the methodologies explained above, multiple methods of data collections were used to tie different aspects of the participants' experiences into a solid knowledge of the issues surrounding infant feeding choices among working women. In this research, I combined face-to-face interview with diary methods and

used field notes and a summary that I made for every participant as additional information to further explain the findings.

5.3.1 Face-to-face interview

The interview was an appropriate data collection method for my research project because it was suitable for examining the impact of employment on infant feeding among working mothers (Liamputtong & Kitisriworapan, 2011; Stevens & Janke, 2003; Yimyam & Morrow, 1999). This approach differs from the oral history method which covers the whole life story, while face-to-face interview focuses the discussion on matters related to my respondents' experiences of their infant feeding.

The main agenda in an interview is to ensure the interviewer is able to cover predetermined topics within the flow of the conversation. Interviewing is 'a specific form of conversation where knowledge was produced through the interaction between an interviewer and an interviewee' (Kvale, 2007, p. xvii). The respondent, who is the interviewee, provides information while the researcher, who is the interviewer, is accountable for directing the conversation to focus on the topic (Weiss, 1994).

Based on the principles of feminist research, the relationship between the interviewer and interviewee should be as equal and as non-exploitive as possible (Grbich, 2012). Therefore, an effective face-to-face interview should be able to eliminate, if not minimise, any barrier between the two parties. Interviewees should be able to voice

and express their concerns using their own words (Liamputtong, 2011), so communication could take place in a natural and lively way.

In order to conduct a good interview, I prepared the interview guide and pilot tested it before the actual face-to-face interview took place**.** An interview guide is 'a set of topical areas and questions the researcher brings to the interview' (Hesse-Biber & Leavy, 2011, p. 103). Having an interview guide is practical because the interviewer can use it as a check list of the main issues that need to be covered in an interview (Merriam, 2009 #252). The guide helps the interviewer to follow the conversation with the interviewee and it is constructed based on specific issues that need to be explored during the interview (Liamputtong, 2011). I looked for social cues such as intonation of voice, facial expression or body language, which could add more value and meaning to the spoken words during my conversation with each participant (Opdenakker, 2006).

5.3.1.1 Planning an effective face-to-face interview

It is important to start planning with a clear research aim so that an interview guide can be constructed. As my interview will be semi-structured, having an interview guide is practical (Merriam, 2009). An interview guide is 'a set of topical areas and questions the researcher brings to the interview' (Hesse-Biber & Leavy, 2011, p. 103). My interview guide was constructed using my research questions as the basis. This is shown in Table 5.1.

Table 5.1: Face-to-face interview guide for the interviewer

	Working women	
Opening	Greet participant Explain the process of face-to-face interview Explain the audio-recording The participant will sign an informed consent Say 'I am going to start recording now' but reiterate that they can refuse, or make requests to stop the recording at any time	
Warming up	*Before we go into the details, would you like to tell me about yourself?* *Can you tell me a bit more about your job, the kind of work that you have to do, and also about your child?*	
Questions	**Issues**	**Probing**
1. What are working women's perceptions and attitudes towards infant feeding?	*What is your understanding of breastfeeding/ breast milk feeding / infant feeding?*	
	Can you please tell me why you choose this feeding method?	What is the reason for your choice? Tell me about the advantages/disadvantages of each?
2. How do working women make decisions regarding infant feeding?	What was important in making your choice? What has influenced your decision?	Do they support or oppose your decision? What was your stand?
	Along the way, did you change the way you fed your infant/child? Can you share what you have gone through in making decisions regarding your infant feeding?	Why did you change? How do you feel about it? If not, why do you continue with the method?
3. What are working women's experiences of infant feeding?	Tell me about your experiences in infant feeding?	What are the good, bad and ugly aspects about the choice of feeding method that you have chosen?
4. How do mothers maintain exclusive breastfeeding or breast milk feeding while working?	In your opinion, what are the important factors that have helped you maintain exclusive feeding even when you have started working?	
5. To identify barriers and supports in the workplace that can hinder or support breastfeeding or breast milk feeding.	*Let's say your employer asks how they can improve the workplace so that it is more conducive to mothers continuing to provide breast milk for their infants, what would you say?*	
6. Other matters	*What would be your advice for working mothers who have infants?* *Is there anything else that you would like to tell me?*	
Closing	*Would you like to comment about the interview?* *Thank participant* If you wish to have a copy, I can send you a summary of the results of these interviews in a few months' time once they are completed.	

In order to test the effectiveness of the interview guide, I conducted two pilot interviews and made necessary changes to the guide. Since the respondents can choose either English or Malay as the interview language, I conducted two interview sessions in my pilot study: one in English and one in Malay language. Each recording from the pilot interview session was transcribed accordingly. In the actual study, participants could choose to have the interview in English or Malay, and each session took approximately 60 to 90 minutes. In any interview, be it pilot or actual, interviewees were given information prior to the session, as shown in Table 5.2.

Table 5.2: Face-to-face interview information for the interviewee

PROJECT TITLE: **Infant-feeding choices: Attitudes, decision-making processes and experiences among working women in Malaysia**
• Participation in the interview is entirely voluntary. • You are free to stop the interview at any time. • The interview will take approximately 60-90 minutes at a location convenient for you. • The Interview will be digitally recorded. • The interview will be largely semi-structured; allowing you to reflect and respond in your own words. • The interview will be exploratory, based on the issues raised by the interviewee. • The interviewer will adopt a neutral stance (avoiding leading statements or questions) while expressing complete interest in the interviewee responses. • Permission will be sought to confirm/clarify aspects of the interview at a later stage if necessary.

5.3.1.2 Conducting the actual face-to-face interview

I was the sole interviewer for this study. The interview only started after the participant has signed the Informed Consent form. In the beginning, I started the conversation with informal questions about her infant and her work. Then I explored the topic using open-ended questions regarding her opinion about infant feeding in general, and I followed the flow of the discussion based on her responses. The

interview guide was used just as a guide for the interviewer, and it was not adhered to strictly.

The main focus of the interview was to explore interviewee's attitudes and experiences about her infant feeding. I examined factors that may have contributed to her choice, and the obstacles she had faced. The flow of these questions varied and was determined by the flow of each interview. During the interview, I looked for social cues such as intonation of voice; facial expression or body language, which could add more value and meaning to the spoken words (Opdenakker, 2006).

I asked additional question to mothers who had successfully practiced exclusive breastfeeding for the first six months of their infant's life. I invited them to share how they were able to maintain breastfeeding as recommended by the WHO and their strategies for overcoming the obstacles they faced. For mothers who were not able to exclusively breastfeed their infants, I asked how they feel about it and whether they wish they had done something differently. Before the interview ended, I invited the interviewees to participate in the diary method, which was optional for them.

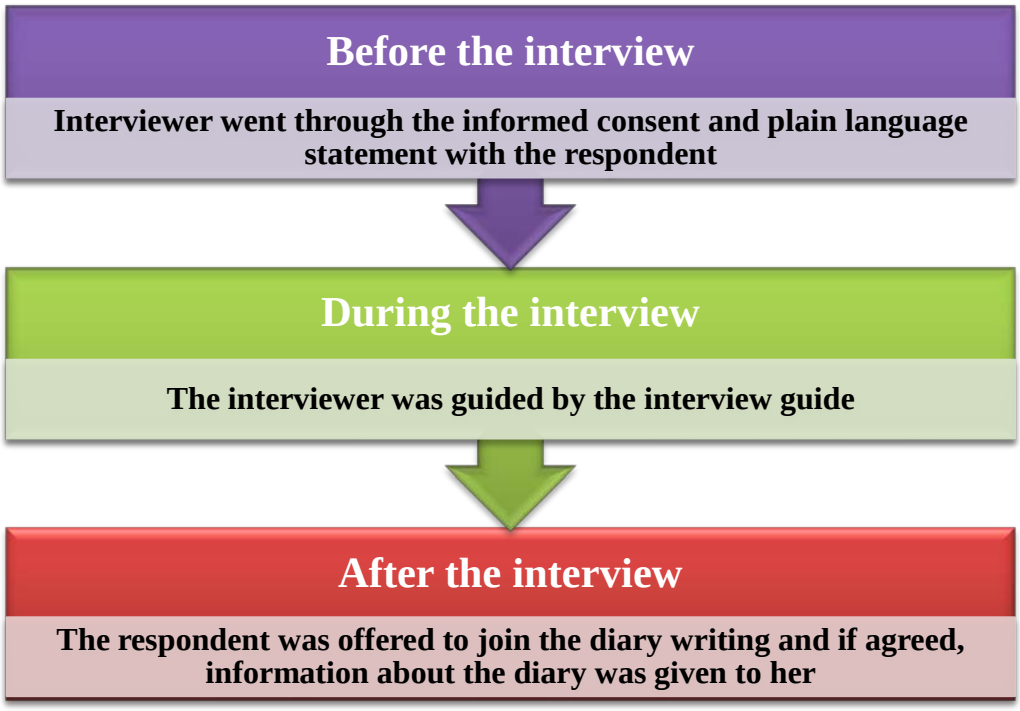


Figure 5.1: The flow of the interview session

The respondents were reminded that it was not compulsory to participate in the diary writing. Since this method only works well for those who are keen on and able to articulate well in writing but could be a burden for others (Gill & Liamputtong, 2009), so I made this method optional in this study. The flow of the interview session is shown in Figure 5.1 and the recruitment process for face-to-face interview and diary writing is shown in Figure 5.2. This flow diagram shows that the main data collection method is a face-to-face interview and diary writing was a supplementary or optional method.

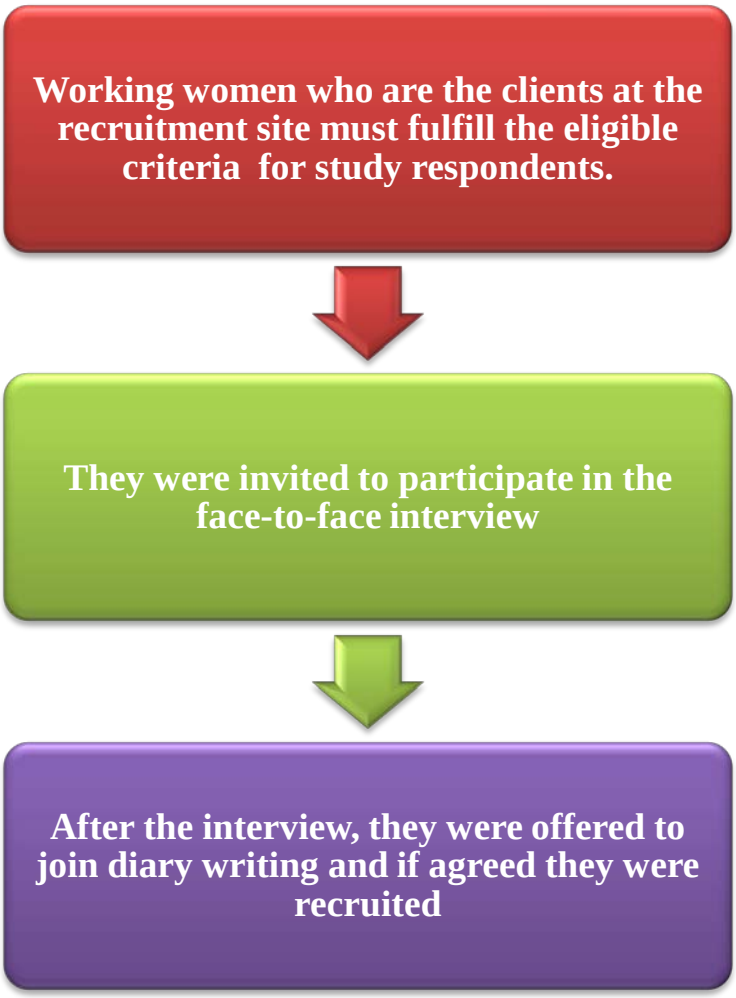


Figure 5.2: The flow of respondents' involvement in data collection

In order to minimise any barrier and make the interview process more transparent, I explained to every respondent who I am, why I am interested in interviewing her and what I will do with the interview transcript. I also explained that I am interested to know her and to understand the experience she had gone through in making decisions about her infant feeding. I talked to her without appearing superior so that she felt comfortable and in control, and therefore was encouraged to communicate freely. I acknowledged the respondents as the experts in the field and played the role of a moderator and an active listener rather than as an investigator (Liamputtong, 2011).

The more the interviewee trusts and feels comfortable with the interviewer, the more likely she is to share and transfer thick information during the interview. One of the ways to encourage the interviewee is to make the interview informal and to conduct it at the participant's house or anywhere comfortable for her (Yow, 1994). Interviewing is a skill and one will improve with experience (Hesse-Biber & Leavy, 2011), and an experienced interviewer can encourage the interviewee to share her emotions and underlying concern so data analysis will be more critical and extensively explored. As explained in the flow of recruitment process earlier, I offered the participants the option to join the diary writing part of the project after the interview session. If they agreed to join, information about the diary method was given to them. This information is shown in Table 5.3.

Table 5.3: Diary writing information for the diarists

PROJECT TITLE: **Infant-feeding choices: Attitudes, decision-making processes and experiences among working women in Malaysia**
• Your participation will be entirely voluntary. • You are encouraged to write in your diary every day for at least a week. • You can stop entering at any time without any conditions. • Your diaries will be largely unstructured; allowing you to reflect and respond in your own words. • For every entry, you are asked to write the time, date and place besides describing, how it feels like to be a mother and at the same time to work. How does it impact on your infant feeding practices?

5.3.2 Diary method

A diary is 'a document created by an individual who has maintained a regular, personal and contemporaneous record' (Alaszewski, 2006, p. 1). I used diaries as an additional method because it enables participants to share day-to-day experiences

and provide rich information that an interview may miss. It acts as a record and a reflection on participants' own behaviour and it is written according to their own style and preferences (Milligan, Bingley, & Gatrell, 2005).

Considering that some respondents may not be able to share many things during the interview, diaries would have given them an opportunity to document their daily experiences. Furthermore, diaries could help the researchers to sense the writers' mood, providing insight into the ways in which individuals perceive and interpret situations; these cues may be missed in an interview (Alaszewski, 2006). Further, it reduces recall bias, especially if it is written on the day of the event (Keleher & Verrinder, 2003). Therefore, it could be used with other methods including face-to-face interviews (Furness & Garrud, 2010; Gill & Liamputtong, 2009).

In this study, I used solicited diaries instead of unsolicited ones, which means the participants are fully aware that their diaries are meant to collect data and would be used by the researcher in the analysis to generate new knowledge (Gill & Liamputtong, 2009). It is important to note the time, date and place besides describing the actual feeling and emotion when the entry is made (Alaszewski, 2006 #133). I therefore asked the participants to keep a record of these issues for me. The participants had control over when and how long to write and they could write as many times a day as they wished (Thomas, 2006).

However, it was interesting to find that some of the women shared with me their personal blogs, journals and day-to-day diaries which they had written earlier, when

their infants were younger. In addition to the solicited diaries some of the participants shared their narratives from blogs, journal entries and previous diaries. They gave me the permission to use them; I selected to use the small number of entries that were related to their experiences with breastfeeding. These narratives were not included in my methods initially. However, it was an opportunity for me to capture the participants' previous experiences. I noted that the women who shared their written experiences were all strongly committed towards giving their infants breast milk or breastfeeding exclusively.

In this study, participants who choose to keep a diary had the options of keeping a notebook diary, or writing on their electronic devices. They decided on the length of each entry and they could write as many times a day as they wished (Thomas, 2006). Instructions about the diary task, as shown in Table 5.3, were given to those interested in participating after the interview session is completed. I have therefore made this optional. I roughly estimated that only a third of them would agree to write diaries. After the face-to-face interview session, the participant was invited to participate in the diary writing. Instructions about the diary task were given to interested participants after the interview sessions were completed.

5.4 Recruitment Sites

I recruited women from urban areas in Kuala Lumpur and Penang, Malaysia. I chose urban localities because 65% of Malaysians live in urban areas (Family and Community Development, 2008) and the majority of working women were also from urban areas.

Kuala Lumpur is geographically positioned in the centre of Peninsular Malaysia (Figure 5.3) and Penang is in the north of Peninsula Malaysia (Figure 5.4). The participants were recruited from four recruitment sites, two from mothers' support centres and two from childcare centres..

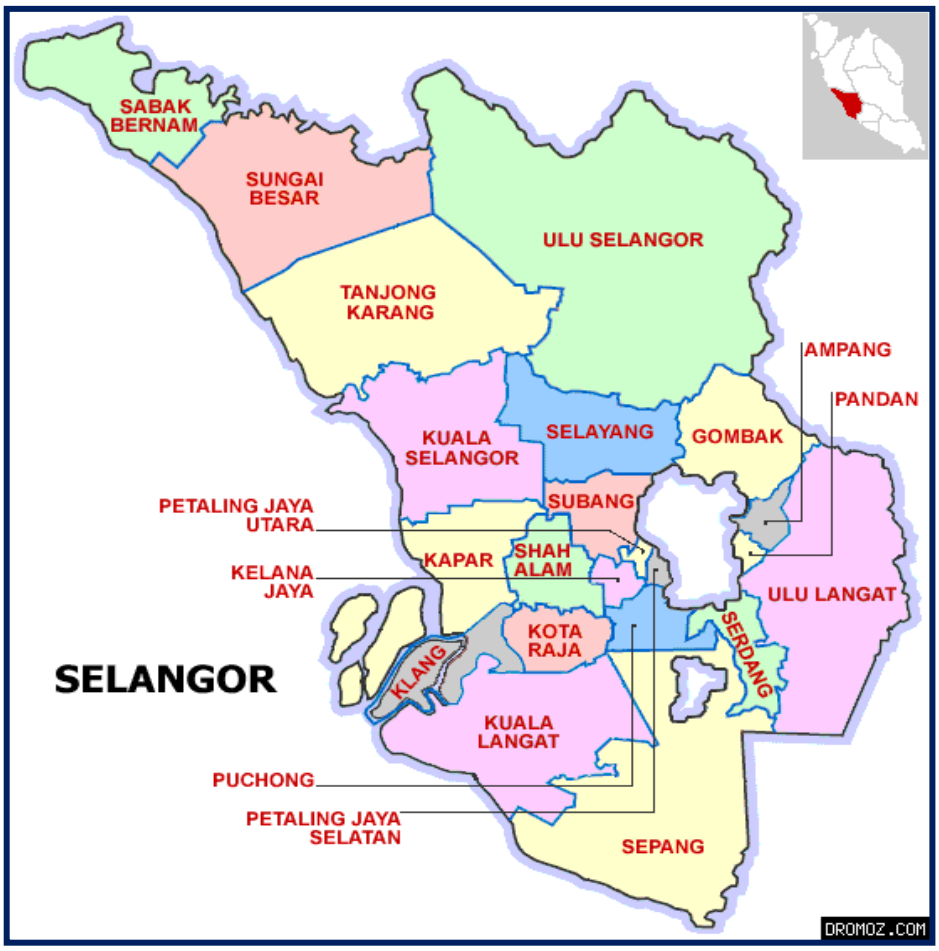


Figure 5.3: Selangor, Malaysia map

Kuala Lumpur is located in the central part of Selangor state and most of the participants were recruited from the adjacent suburban areas. Thirty two women were recruited from Ampang, Gombak, Puchong, Selayang, Serdang, Shah Alam and Subang. The rest of the participants came from Penang. Only eight participants were

recruited from Gelugur and Bayan Baru, Penang. These are two urban suburbs in the Penang Island.

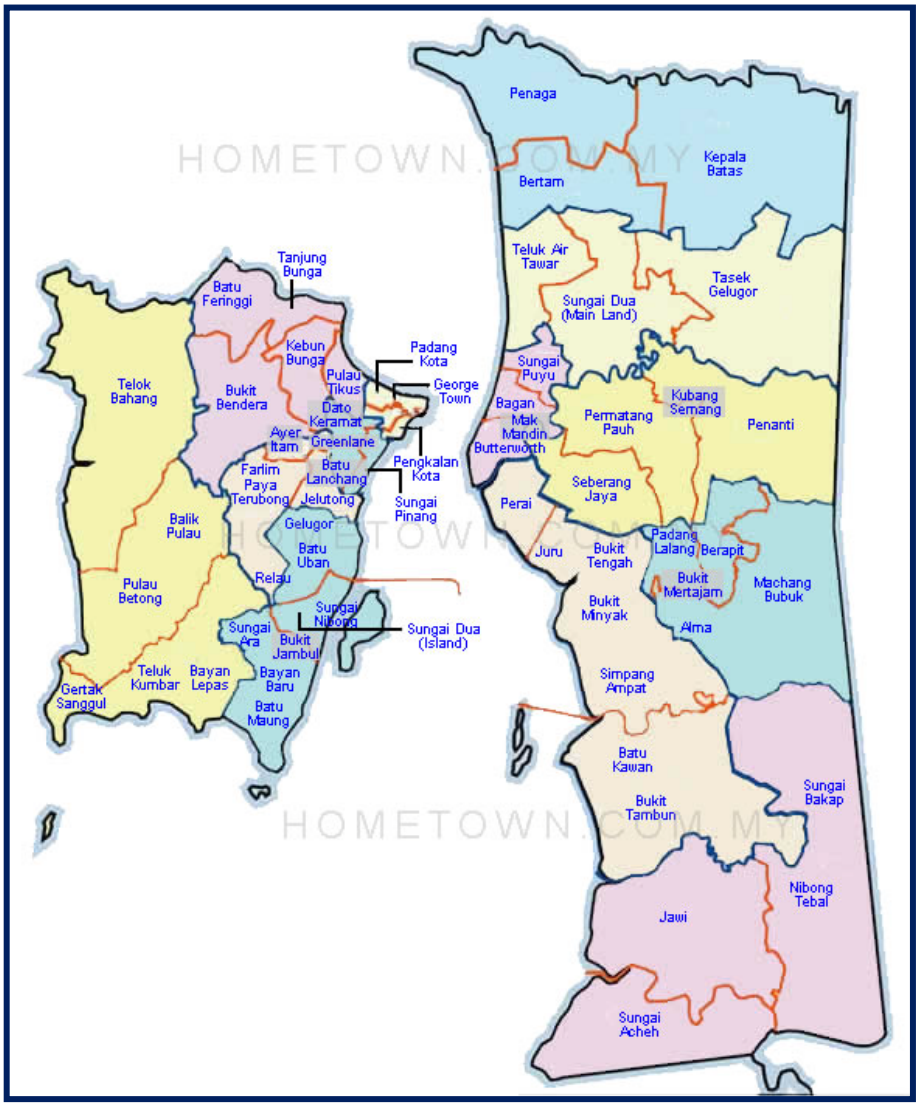


Figure 5.4: Penang, Malaysia map

5.5 Participants' Recruitment

The participants for my study were working mothers from various walks of life. They included professionals and non-professionals, who were doing home based and non-home based types of work, hold part-time or full-time jobs, and were shift or non-shift

workers. In order to ensure this study included respondents from diverse work conditions and types of occupations, based on the information from the Ministry of Women I have created a work matrix to organise work categories (Ministry of Women, 2008). This is shown in Table 5.4.

Table 5.4: Respondents' work matrix categories

Work category			**(a) Professionals**	**(b) Non-professionals**
	Social background		Higher education Higher income Higher social status	Lower education Lower income Lower social status
(c) Part-time	(e) Home based (f) Non-home based		1. *Consultants* 2. *Therapist*	5. *Operators* 6. *Clerical*
(d) Full-time	(f) Non-home based	(g)Non-shift work	3. *Accountants*	7. *Clerical*
		(h) Shift work	4. *Nurses*	8. *Machine operators*

Note: An example of occupations in each sub-categories are written in italics (numbered 1 to 8)

Table 5.4 showed that the main work category was divided into (a) professionals and (b) non-professionals with the assumptions that professionals had a higher education, higher income level and thus placed them on a higher social status. Based on this main category, they were further divided into several sub-categories to identify whether they were doing (c) part-time or (d) full-time work and whether they were working (e) from home or were (f) non-home based. If they worked full-time, they could be further classified as either (g) non-shift work or (g) shift work. In all, there were 10 groups, five were in the professional category (1-4) and another five were in the non-professional category (5-8) as shown in Table 5.4. In this context, the part-time job can be as little as an hour a week or an hour a day.

In recruiting the participants, I asked someone from each recruitment site for assistance to distribute the fliers regarding the study to all mothers. A larger print flier, written in Malay and English, was posted on the site's notice board to let the women know about it. Interested participants gave their names and contact details to the identified staff. I received the list of interested mothers from the staff and I called the interested women to explain the study and to answer any queries. The staff was allowed to convey this information if consent was given by the mothers.

It was made clear to the potential participants that no financial reward would be given to them. However, if they had to travel to attend the interview, their transport expenses would be reimbursed. All participants were followed up, through emails, phone calls or meetings, three to six months after the interview. The respondents had the chance to see their interview transcripts and they were invited to make any comment on them. Any discrepancies were clarified, as this was an important checking mechanism to ensure data validity.

5.5.1 Sampling method and sample size estimation

I used purposive sampling, a sampling method that is widely used in qualitative research (Gill & Liamputtong, 2009). In purposive sampling, the respondents are deliberately chosen because they could provide the information for the researcher (Gill & Liamputtong, 2009). Individuals who volunteered to participate and had rich information were the target because they were able to provide extensive data (Patton, 2002). In my sampling, I also applied a maximum variation technique to ensure there is a representative from each work category. Maximum variation

sampling, which considers the widest possible range of the respondents' characteristics, is also used so that the research is able to capture a thorough sample of the real population (Merriam, 2009).

Ideally, the sample size estimation is guided by saturation theory. In saturation theory, data collection stops when little new data can be generated (Padgett, 2008). Initially, about four to five participants were interviewed in each work category and since there were 10 categories (as shown in Table 5.4), it was estimated that number of participants for the interview would be approximately 40 to 50. However, if saturation was not reached by the end of the year 2011, the data collection had to be stopped due to the time frame of my PhD.

Fortunately, I managed to recruit 40 participants as planned within the specified time range. However, the numbers of representatives in each category were not equal. Although I started with having many working categories, when recruiting the participants, I noticed that many of the categories were overlapping. For example, women who worked part-time were also working from home and a few of them also had more than one job. Women who worked away from home were mainly full-time workers, except for one participant. Therefore, I ended up with having unequal participants' distribution according to categories. I decided to stop recruiting after 40 interviews when there was not much new information given by the women regardless of their work categories.

5.5.2 Eligibility criteria and working status

Working women with the criteria below were eligible to participate in this study:

- age 18 and above;
- working during the duration of my study and had at least one;
- at least one infant aged between 6 to 24 months at the time of the interview(s);
- able to communicate in English or Malay (Bahasa Malaysia).

Participants included women from various ethnic groups: Malay, Chinese and Indian. It was expected that working mothers who were involved in this project were healthy, and literate. The participants came from a few recruitment sites that I had identified in the state of Selangor and Penang, which acted as the gatekeepers.

5.5.3 Participants' background

The participants were mainly young women aged less than 40 with the mean age of 32 years. About half were first time mothers and only had one child, while the rest had 2, 3 or 4 children. Just more than half of them were Malays, and Chinese and Indian women were about equally represented. All participants except for two had at least a degree qualification. Their backgrounds are summarised in Table 5.5.

Table 5.5: Socio-demography data

Ethnicity	Frequency	Percentage
Malay	24	60
Chinese	8	20
Indian	8	20
Number of Children	**Frequency**	**Percentage**
1	19	50
2	11	25
3	4	10
4	6	15
Education Level	**Frequency**	**Percentage**
Secondary	3	8
Diploma	7	17
Degree and above	30	75

Among the 40 participants, a third of them worked part-time and the rest were full-time workers. For women who worked part-time, most of them worked from home and only occasionally they had to do work away from home. These women had more flexible time and worked less hours in a week as compared to the women who worked full-time. On the other hand, those who worked full-time had to be away from home on an average of eight to ten hours a day. They worked during the day, shift hours and also over the weekends. Their work hour is summarised in the Table 5.6.

Table 5.6: Work hour categories

Categories	Workplace	Hours	Frequency	Percentage
Full-time	Away from home	Fixed	12	30
		Flexible	6	15
		On call	6	15
		Shift	4	10
Part-time	Away from home	Fixed	1	3
	From Home	Flexible	11	27

5.6 Experiences During Fieldwork

In total the fieldwork required eight months: one month for the pilot study and another seven months for the actual data collection. I interviewed two women during

my pilot study; one who predominantly breastfed and another one who predominantly formula-fed. The reason for conducting pilot interviews was to test the suitability of the interview guide. After the completion of each interview, the interviewee was asked if they understood the questions and if they found any difficulty in following the flow of the conversation. The interviews were audio recorded with consent from the participants and then transcribed. I discussed the transcription with both of my supervisors to ensure the clarity was checked. Based on the interview feedback and discussion with my supervisors, minor changes were made after the pilot interviews.

I conducted and transcribed all the interviews for the pilot and actual study. The actual data collection took seven months for me to complete 40 interviews. I have summarised how my data collection was conducted in Table 5.7.

Table 5.7: Monthly interview planning during the fieldwork

Week	Mon	Tue	Wed	Thu	Fri	Sat/Sun
1-3	Interview_1	Transcribe_1	Interview_2	Transcribe_2	Contact respondents for next week	Finishing and checking transcriptions for 1 & 2
4	:: no planned interview for fourth week::emails respondents if necessary :: :: check field notes and transcripts ::					
Summary	2 interviews in a week :: 8 interviews in a month :: 40 interviews in 7 months					

Table 5.7 is a simplified version of my work in the field. However, in reality the day I conducted the interview may be different but the total number of interviews in a week and in a month were almost accurate. I gave myself a week break in a month so

that I could have time to sum up and complete any work before the next month resumed.

For each of the participants, the time I spent in total ranged between 10 to 15 hours. This is equivalent to approximately two working days. The detail of the time spent is shown in Figure 5.5.

Figure 5.5: Time spent in hours for each participant

The administration work included calling the participant and clarifying any questions if they needed. Once they were satisfied with the information given I set up a time for the interview. The time for travelling differed depending on the location and the time of the interview. Each interview never exceeded two hours, following which I spent less than two hours to complete my field notes and summary of the participant and the interview. I spent most of the time transcribing and on an average I took one hour to transcribe a 10 to 12 minute interview. Therefore for an hour interview I spent on average five to six hours.

I started recruiting my participants from one recruitment site at a time between March 2011 and August 2011. I did this to minimise the possibility of having double appointments. The flow of my movement from one site to another is shown in Figure 5.6 and the numbers refer to participants.

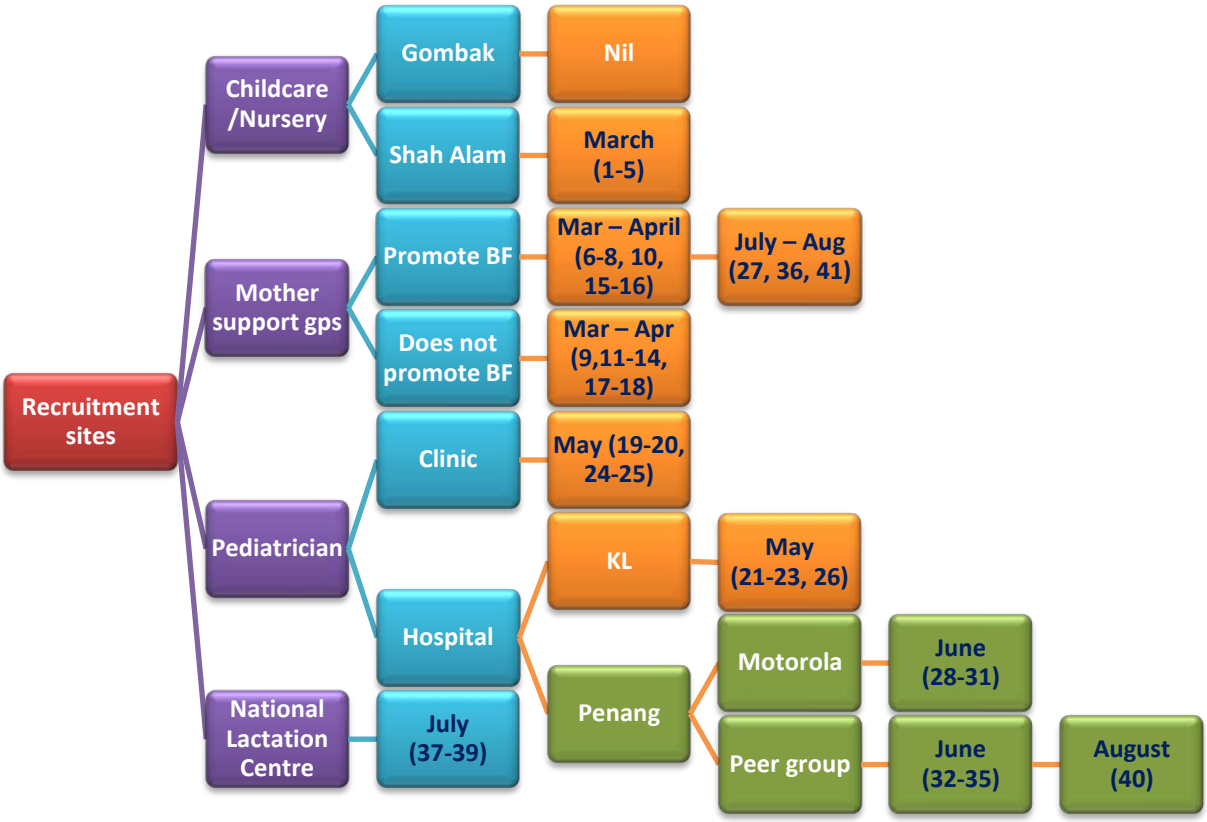


Figure 5.6: The flow of recruiting participants from various sites

I started recruiting from a nursery in Gombak. However there was no reply from the women at that centre and after a week, I moved on to the next centre in Shah Alam. Five women participated and then I moved on to another centre. The first three months I spent my time in Selangor. The next two months I spent my time

interviewing in Penang. Later on I returned to Selangor to finish up a few more interviews.

5.6.1 Challenges during the fieldwork and limitations on data collection

I managed to conduct on average six interviews a month and transcribed each interview before proceeding with the next one. All participants were willing to take part in this study and were keen to have their stories heard. However, in making interview appointments, there were a couple that I had to cancel when the women did not turn up on the interview day. In both cases, the women contacted me later and apologised for their absence. I decided to drop them from my list since they were not able to commit to another time and so I searched for other potential participants to replace them.

The interviews were carried out in Malay or English without much difficulty as Malaysians, regardless of their ethnicity, were able to communicate well in these languages. I did ask the participants if they wished to be interviewed in Malay or English and most wanted to talk with me in Malay. I believe they were more comfortable talking about this sensitive issue in their native language. Additionally, the fact that I am a Malay woman who is also a mother and disclosed that I had breastfed my children may also have contributed to this.

Interestingly, however, I noticed women who had to introduce infant formula to their infants talked less and were less expressive in sharing their experiences. Following their responses, I probed them by asking how it felt not being able to breastfeed as

they had planned. I noticed that they were more responsive when they knew I was not judging them; when this happened, the women started to open up. Probing the right question at the right time was also essential in building trust and encouraged the participants to share more. For example, when the participant mentioned about the difficulty of expressing breast milk at the workplace, the interviewer said, 'can you tell me more about that?'.

5.6.2 Limitations of study design

There were broadly three limitations affecting this research. First, the scope of this research only involved working women in urban areas in Malaysia. Therefore, the experiences of women in rural areas were not elicited. However, various work settings, social and economic variations were considered to ensure that the study covered a wider experience within the limited urban scope.

Secondly, the study only recruited women who were currently working at the time of interview. There may be recall bias in their recollection of the experiences they have gone through during the antenatal and immediate postpartum periods. Therefore, inputs from written diaries were meant to supplement the shortcomings from the interviews. Furthermore, the recruitment via support groups and childcare centres may limit the range of participants. However, I recruited participants from four different sites in different localities to increase a wider range of eligible potential participants.

Thirdly, not all of the participants agreed to participate in the diary method. This was mainly due to their busy daily lives. In order to overcome the shortcomings, I accepted entries from the participants' personal blogs, journal and diaries which they had written earlier but still were relevant to their current feeding experiences. Besides, our field notes and summary that I made for each participant, to some extent, were helpful in enriching the descriptions apart from the interview data. Although there were challenges, there was also a strength that helped to consolidate and improve the reliability of my findings as explained in the next paragraph.

5.6.3 The strength of my data

Every time after the interview, I spent an hour or two to write up my field notes and I also made a summary for each of my respondents. In order for me to ensure that I could remember each one of them easily and recall them for later use, I summarised what I found about them using a few headings. I also wrote my field note into a few themes that I found very useful for me to be able to distinguish each participant. The headings that I used to summarise them and to write my field notes (Table 5.8).

Table 5.8: Summary and field notes headings

	Headings
Summary	Antenatal experiences Delivery and immediate postpartum experiences Feeding experiences in the first few days of life Feeding experiences throughout confinement and maternity leave period Back to work and childcare Support and motivation Obstacles and challenges Attitude Milk expression experiences
Field notes	Critical reflection Uniqueness My view

On average for each participant I wrote about 1500 to 2000 words. I found having the summary and field notes in a few headings was very helpful when I wanted to digest the information while writing. It also helped to improve the rigour of my data and it showed the depth that I have put into the data. Furthermore I did the summary and field notes in most cases immediately after the interview or if not on the same day of the interview. By doing that I could minimise the recall bias and improve the reliability of my summary. Nevertheless, if there were any discrepancies, I was able to double check that with the participants' transcripts.

5.7 Data Analysis

Once data have been collected either in transcripts or written diaries, they have to be managed and transformed to evidence-based interpretations of significant knowledge (Gibbs, 2007). Therefore, data analysis requires careful coding, comparing, judging and combining to derive a coherent narrative (Rubin & Rubin, 2005). In qualitative research, data analysis starts early, even while data collection is still going on, which is not the case in quantitative analysis (Gill & Liamputtong, 2009). Analysing while collecting data would guide subsequent data collection if any amendments in the interview guide are needed (Endacott, 2005). Although the method for analysis in qualitative research depends on the methodological approach, the first common process is to develop codes and categories (Endacott, 2005).

Coding is the process of defining what the data are about before the researcher can move tangible data into making analytical interpretations (Gill & Liamputtong, 2009).

The whole analysis is a time consuming process and some codes may need to be recorded after more data are generated as a piece of data can be coded in more than one way. In my project, I analysed the data using a thematic approach after I had coded them.

5.7.1 Thematic analysis

In this project, I analysed the data using a thematic approach. Thematic analysis is 'a method for identifying, analysing and reporting patterns (themes) within the data' (Braun & Clarke, 2006, p. 79). It is widely used in qualitative analysis and is based on participants' conceptions of actual communication episodes; a theme is identified based on recurrence, repetition, and forcefulness of the data (Attride-Stirling, 2001). I used thematic analysis to manage data from interviews, diary entries and also from the participant's narrative collections which include their personal blogs, journal and previously written diaries.

Thematic analysis was suitable for this study as it helped to describe and organise the data simultaneously. I explored themes within and across participants' stories. In order to do this, I needed to read and reread the transcripts to create appropriate themes that helped us in answering the research questions. I defined each theme precisely and applied it in the same way every time we used them. In managing the data, I also used NVIVO 9 software as data storage and management.

First, data from the interviews and diaries were transcribed and edited to ensure the sentences were grammatically correctly structured. Careful reading was undertaken in

order to fully understand the ideas in the conversations. Then, similar patterns of the quotes were identified and grouped under the same theme (Aronson, 1994). The same coding patterns were applied to other data sources from diaries, blogs and journals. Later, related patterns are combined into subthemes in a comprehensive thematic analysis (Noor, 2002; Taylor & Bogdan, 1984).

5.8 Rigour

The concept of rigour in qualitative research is similar to validity and reliability in quantitative research in that it was a way to measure the research quality (Liamputtong, 2011). Although the concept is similar, the way to measure quality is not the same as the study approaches differ. By definition, validity is related to whether the researchers are able to measure what they should measure using the methods they choose, while reliability is about whether the findings are reproducible if the same methodology was duplicated elsewhere (Liamputtong, 2011).

The method that positivist researchers use to measure quality is not in any way comparable to qualitative research foundations (Hammersley, 2007). In qualitative inquiries, it is acceptable and expected to have findings that are not reproducible as their ontological belief is that realities are multiple and flexible (Hesse-Biber, 2011 #237). Instead, qualitative researchers have suggested different ways that could ensure the rigour or 'trustworthiness' of qualitative enquiries. Of relevance to my research is to include credibility and dependability (Padgett, 2008).

Credibility refers to whether the research findings resembled reality. When conducting research, a credible researcher is able to gauge what he/she observes (Gill & Liamputtong, 2009). Dependability, which is comparable to reliability, is concerned about whether the research findings could be replicated (Gill & Liamputtong, 2009), or if the study could yield the same result if it is repeated. In my study, I used a strategy called triangulation to enhance my research credibility and dependability.

Triangulation entails using multiple strategies as a way of increasing understanding about the research, and thus enhances the reliability in research findings (Merriam, 2009). According to Patton (1999), there are four distinctive triangulations; they are data, theoretical, investigator and methodological. For data triangulation, I triangulated my data using face-to-face interview and diary writing. I also used multiple theoretical perspectives which were constructivist and critical. I also ensure investigator triangulation, as my supervisors also read the transcripts.

Additionally, I applied a maximum variation technique during recruitment (Merriam, 2009). I ensured a thick description of the interviewee's experiences by conducting a thorough interview. I also included diary and other form of participants' narrative entries as additional important data. I took into consideration the field notes and summaries when I analysed all the data. I also made the interview transcripts and thematic analysis available to the participants for comments and confirmation through emails. All these strategies were applied in this research to ensure the rigour of my research.

5.8.1 Ethical issues

The study was approved by the Human Ethics Committee at La Trobe University (application number 10-056, dated 27 September 2010) (Appendix I). The Economic Planning Unit, Prime Minister's Department of the Malaysian Government has also approved the project dated 21 December 2010 (Appendix II). This study was unlikely to pose any physical or biological threat to the participants. However, the sensitive nature of the subject matter may cause strong emotional states; if this occurred during the interview, I would pause the recorder and let the interviewee takes a break or end the interview. I would also provide contact details for counselling supports that were available in the local areas. They could go to Health Clinic nearby their homes or workplaces if they needed any counselling support. The list of government health clinics in Selangor and Penang, Malaysia is attached in Appendix VIII.

While every effort was made to protect participants' anonymity, due to the small number of people participating in this research, it may be possible to identify specific participants in their local community. Possible risks include breaches of individual confidentiality. These risks were minimised by de-identification of the data and comments were not being attributed to specific participants. Participants were informed that if this becomes a concern at any stage during the project, they may withdraw and ask that data arising from their participation not be used. Participants were informed that the results of this research may be communicated through publication in a thesis, academic journals and presented at conferences. The participants' names were changed on all records to protect their confidentiality. This

information had been included in the Plain Language Statement in Appendix III and Appendix IV.

While in Malaysia (during data collection), the recorded interviews, consent forms and transcribed notes were kept in a briefcase that was secured with a code number. Only the researcher knew the code number. Electronic data was stored in a laptop that was also secured with a password, which was only accessible to the researcher.

While in Australia (after data collection), for the duration of the study, data collected was de-identified and stored in a locked cabinet at La Trobe University, Health Science 1 Building. I had the sole access to the cabinet. All computer files were password protected. On completion of the research, data were stored in the research data archive of the School of Public Health, La Trobe University in the Store Room, Health Science 2. All data obtained via digital devices in soft copy and hard copies will be stored for five years in a locked cabinet after which time they will be destroyed.

5.9 Summary

This study applied a post-modernism and a feminism theoretical framework in its methodology with the explicit aim to promote women's voices. This study involved 40 urban, multi-ethnic working women from Selangor and Penang, Malaysia. About two thirds worked full-time and a third worked part-time, mostly from home. All participated in face-to-face interviews and a quarter continued with the diary option.

CHAPTER 6: WORKING WOMEN'S PERCEPTIONS ABOUT INFANT FEEDING

6.1 Introduction

This chapter and the following three chapters contain results which present the findings of the current study that examines working women's perceptions, practices and experiences regarding infant feeding. Specifically, Chapter 6 presents the perceptions of working women regarding infant feeding and Chapter 7 focuses on the practices working women have about infant feeding. Chapter 8 describes infant feeding experiences at workplaces and the barriers and supports to successfully maintaining breastfeeding or breast milk feeding. Finally, Chapter 9 explains issues related to breast milk supply, milk expressions, breast and nipple conditions that can affect breastfeeding and milk production. The presentation of the findings in all of the four chapters is supported by quotations from participants' personal accounts during interviews and journal writing, hence providing a vivid and insightful description.

Chapter 6 highlights in detail how working women perceive different types of infant feeding and what contributes to the differences. Additionally, Chapter 6 looks into the underlying factors, certain characteristics of the women that allow them to perceive differently about infant feeding practices. As a whole, Chapter 6 explores the types of perceptions and the factors that contribute to the differences in their perception. Coming from various backgrounds, doing different jobs and living in various culturally rich environments, it was expected that participants would have different opinions about infant feeding and what they thought was the best infant feeding. In exploring their perceptions, the question that I asked during the interview was: '*As a working woman, how do you perceive infant feeding?*'

Going through the transcripts and diaries, there were three main themes that emerged on how the participants perceived breastfeeding or breast milk feeding as compared to infant formula. They were named The *Passionate* mothers, The *Ambivalent* mothers and The *Equivalent* Mothers.

The *Passionate* mothers, at one extreme, perceived all the positive aspects of breastfeeding. No matter what happened, these mothers would breastfeed their infants. Their belief and perseverance made two years of devotion and commitment to breastfeed their infants as invaluable when looking at the benefits for them and their infants. They were goal driven and highly motivated and would overcome any obstacles successfully even sometimes with difficulty. To them nothing is superior to breastfeeding or breast milk and there should not be any alternative to it. This golden opportunity only came once and was taken seriously in order to have no regrets for the rest of their life.

At the other extreme, The *Equivalent* mothers had a neutral feeding preference. They received good feedback from mothers who gave infant formula and they felt that was an acceptable choice. Furthermore, some of them were recommended by paediatricians to introduce infant formula because their infant growth rates were below average. Although economically they felt they had to spend more money but they regarded it as a sacrifice for their infant's well-being. On further communication, they admitted that they were not confident with their ability to produce enough milk and therefore their main worry was milk insufficiency. Besides, they were not able to

commit to expressing milk at workplaces because they found their working environments were not supportive.

Between the two extreme perceptions, lie the *Ambivalent* mothers who initially felt positive about breastfeeding and also mentioned their intention to breastfeed. However as they returned to work and were facing difficulty with expressing and producing enough breast milk to feed their infants, these mothers started to be ambivalent about breastfeeding. Thus, they were in a predicament by wanting to introduce infant formula, while also having difficulty with expressing breast milk adequately. The most important issue for the women in this group was not the type of milk their infants consumed, but the health status of their infants. As long as their infants were healthy and thriving, the mothers were satisfied regardless of the feeding type. The next section will describe the participants who approach breastfeeding positively.

6.2 The *Passionate* Mothers' Perceptions

The women who perceived positively about breastfeeding felt that it is natural that breastfeeding or breast milk was suitable for their newborns and the opportunity to breastfeed only came once in their infants' earliest lifetime. This is because, once their newborns had passed their infancy stage, breastfeeding was less likely to take place even if the mothers wish to do so.

'Breastfeeding is priceless' said Wardah, a mother of three who successfully breastfed all her children for at least two years. Despite being a public figure and working odd hours, family had always been her priority. Having the family as her priority in life, Wardah organised her busy schedule by making sure that her children's needs were not compromised. During the interview, Wardah further expressed her fondness about breastfeeding as below:

> *Breastfeeding is something that is so close to my heart. To me, it is the only natural way to do.*

Furthermore Wardah looked forward to meeting her infant and that was a motivating factor for her to end her busy working day. The ability to breastfeed directly not only helped her to reduce breast engorgement but holding her infant close to her was rewarding. It showed that breastfeeding was not seen as a burden to Wardah although she had to express her milk at work to maintain breastfeeding.

> *The thing I love most about breastfeeding is after I am really stressed out from work, when I come back and hold my baby, I feel like all my problems at work settled! Breastfeeding is like a stress reliever and it is just me and my baby. [Wardah]*

The quotation above revealed that Wardah felt it was a reward to be able to cuddle her baby after a long working day. Another woman who had a strong positive perception about breastfeeding was Sab. When I asked Sab, who was working from home and the mother of two daughters, aged four and one year old, about her perception of breastfeeding, this was what she had to say during the interview.

Well it is a natural thing to breastfeed. All I knew is that if I am going to have a child, I am going to be at home with the child for a while then only I will return to work. That is my idea of mothering you know. [Sab]

6.2.1 It is natural to breastfed

It was clearly expressed by Sab that breastfeeding was regarded as a natural behaviour of motherhood. Because of that, the participants felt it was unnatural to think of other options to feed their infants. In fact there should not be any options as said by another participant named Rose who had a 16 month old boy, worked full-time as a clerk with a government body.

Actually all babies should be given only breast milk. Because we have our own milk and there is no reason why we should give other than that. [Rose]

Below is another good example of why breastfeeding should be the only feeding choice. Nor, a degree holder, an economically stable engineer, and mother of four children, aged between 11 years old and 12 months old infant who was also a part-time postgraduate master candidate. She had to attend weekend classes and Nor, had this to say during the interview regarding breastfeeding as a motherhood behaviour as mammals.

I feel we have to breastfeed our children. Because we are mammals [laugh]. Mammals should breastfeed their children, right? [Nor]

Women who were dedicated to continue breastfeeding also inspired other working mothers to believe they can breastfeed too. Their endurance made the other mothers respect and believe in their ability to breastfeed. Farha, a researcher at a tele-

communication company described herself as someone who was very disciplined and efficient in managing her time. Interestingly, Farha noticed that her friends and colleagues at work admired her, and her steadfastness inspired others to breastfeed too. Farha also sacrifices her lunch hour break so she can use that time to express her milk too.

> *Others see my perseverance and after 6 months I still breastfeed my infant, so they said that I must be really serious about what I am doing. So now they follow what I say because I know more. They start to respect me. [Farha]*

Besides encouraging other women, Sab wrote in her journal that she wished to see breastfeeding becomes a norm in her country. She would like others to feel and experience the goodness of breastfeeding too.

> *Breastfeeding is a family commitment, a commitment that a community and country must understand, value and support. I hope that someday soon, my state will be the first Baby-Friendly state in Malaysia and perhaps the whole country will. [Sab, Journal]*

In general, these women had a strong belief that breastfeeding is the best choice. The women's positive perceptions towards breastfeeding were reflected in their actions towards supporting and practicing breastfeeding. They always put their infants' priority more than others; more important than their work. Because of that, some of them preferred to work casually from home based on their own convenience on being at home, like a music teacher, and only did part-time work, so they can have more quality time with their infants.

Women, who perceived breastfeeding positively, were also committed in ensuring their infants were given only breast milk exclusively for up to the first two years of life. Malaysia statistics on exclusive breastfeeding rate among women never exceeded by more than 20 precent in the last few decades (Fatimah et al., 2010) and it is an outstanding achievement for women who are able to do it. The topic of feeding practices will be elaborated in Chapter 7. What makes these women hold positively to their perceptions about breastfeeding will be explained next which will include their childhood experiences, previous breastfeeding experiences and their intentions and determination to breastfeed.

6.2.2 My childhood memories counts

Many women mentioned their childhood meaningful experiences with their mothers that had influenced their perceptions on breastfeeding. They learned a lot from how their mothers had brought them up and this has influenced their own motherhood. During the interview, this was what Wardah had to say about her mother who was also a working mother.

> *I have never seen my mother bottle-feed my younger brother and sister. I felt that was a strong message, it plays a big influence on me. My mother breastfed all of us even though she was working at that time. I also had breastfed all my children. I have always been informed that breastfeeding is wonderful. [Wardah]*

Similarly, Sab remembered her mother stayed at home when she and her siblings were small. Her mother only returned to work much later in her life after all the

children had grown up. She really appreciated the moments with her mother and that had influenced how Sab treats her own daughters.

> *Because my mother was there for us and I think that we were all right. I remembered I enjoyed the moments with my mother. I want my children to have it too. The idea about breastfeeding is there with me. [Sab, Journal]*

Both Sab and Wardah shared their meaningful childhood experiences regarding their mothers' commitment in breastfeeding which had a significant impact on how they treated their own children. Besides Sab and Wardah, there were a few others in this category who also talked about their childhood experiences in positive ways.

6.2.3 My previous breastfeeding experiences important

Not all mothers had previous experiences, as they were first time mothers and they learnt much from other women's experiences. There were also some of them who learnt from their failure to breastfeed previously and from that, they had improved their breastfeeding practices for their current infant. Rohana experienced that with her previous baby and currently she is much improved with breastfeeding technique.

> *I regretted that I did not breastfeed my third child. I tried to express using the hospital breast pump but it was not the same and it was so difficult. Furthermore, there was no support from the staff . . . For this baby I make sure I don't make any mistakes. I started to find information since I was pregnant and I will continue to breastfeed up to two years. [Rohana]*

Another point these mothers repeatedly stated during the interviews was regarding their own intention to breastfeed, which positively influenced their perceptions on

breastfeeding. Next, I will describe how their strong intention about breastfeeding was portrayed positively in their perception about breastfeeding.

6.2.4 Strong intention to breastfeed is crucial

Intention or having in mind that breastfeeding will be their practice, these mothers started to build their own perceptions on breastfeeding even before they knew they were pregnant. The *Passionate* mothers assumed that breastfeeding was the best infant feeding practice and therefore they wanted to give the best for their infants. Wardah was consistent in what she told me in the interview, and what she wrote in her journal about breastfeeding. She further stated how her strong intention kept her firmly to her choice.

> *I have had the intention to breastfeed all my children for two years even before I gave birth to my first daughter. I am glad, that I am doing this for all my children. [Wardah, Journal]*

Besides Wardah, other *Passionate* mothers also mentioned having a strong intention. Rose raised another example of strong intention to breastfeed. She was a mother of a one year old boy and worked as a secretary. Rose expressed her intention as below:

> *The most important is our mindset. If we have the intention to breastfeed, there will definitely be enough milk for our babies. [Rose]*

Rose, was so adamant about how important it is for her to have a positive mind set about breastfeeding. What were the characteristics of *Passionate* mothers that hold strongly to their intentions will be elaborated next. All of the *Passionate* mothers

shared some common features that made them hold firmly to their intention to breastfeed their infants.

As shown in Chapter 5 the description of the participants, women who with a positive perception of breastfeeding worked full-time such as a lecturer or a secretary, or worked shift hours, such as a nurse or an army officer. Some of them worked extra hours during the weekends like a sport coach and those who worked odd hours like a celebrity. A few of them worked from home, such as a music teacher and a journalist. They could be doing any work but the one thing in common was, regardless of the nature of their work, they had a passion towards breastfeeding or breast milk feeding.

6.2.5 Determination

These mothers also shared some common positive characteristics that motivate them regardless of the challenges they face in their lives. They knew the factors that were important for making breastfeeding work well. They utilised these factors to ensure that they got the necessary support from their employers and their colleagues. Farha remarked:

> *I make sure that my boss knew that I fully breastfeed the baby so that if I am not around he knows that I am in the mothers' room expressing my milk.*

Passionate mothers are not easily influenced by the infant formula companies' advertisements, which tried to portray the advantages of infant formula. For example, despite her busy schedules, Nor never gave infant formula which she believed has less value than her own milk.

> *We know our milk is the best. Even if you have money, you won't spend 100 dollars just to buy a kilo of formula. Yes, we always want to give the best for our children. But some people think the best is by buying expensive formula as if it is more nutritious. But our milk is the best. So why should we buy formula? [Nor]*

Nor is knowledgable about breastfeeding and infant formula which influenced her perception. Like Nor, Wardah said '*I read a lot of books and I like doing that'* which has helped her to maintain giving breast milk. Above all, these mothers have strong intention and determination to ensure their infants receive the best and for them the best is only breast milk.

> *It just needs the kind of determination that mothers have when they breastfeed their babies against all odds. [Sab, Journal]*

These mothers' hold positive perceptions of breastfeeding regardless of the changes that may occur in their environments because of meaningful childhood experiences about breastfeeding, learnt from previous breastfeeding experiences and strong intentions. These women found solutions to all of the problems that may interfere with breastfeeding. Some of them even inspire other women or became the role model of a mother who successfully breastfeeds her infant.

6.3 The Equivalent Mothers' Perceptions

While a group of mothers felt positively about breastfeeding, at the other end of the spectrum, a group of six women perceived indifference about breastfeeding. They hold the belief that infant formula was as good as breastfeeding. The most important issue for them was that, as long as their infants were healthy and thriving well, what

they fed their infants was not crucial. Hence, all of them introduced infant formula early, within the first month after they gave birth. They also weaned breastfeeding prematurely within the first three to six months of their infant's life.

Two of them introduced infant formula within the first week of life when their infants developed jaundice. They perceived that inadequate breast milk in the first few days of life was the reason for developing jaundice. Tunku, a dentist and her husband, a medical doctor was confident with their decision to introduce infant formula when their infant developed jaundice.

> *My baby had jaundice because I only breastfeed him little and that was not enough. [Tunku]*

She further explained that, as a healthcare professional she knew that there were many benefits of breastfeeding but when her infant developed jaundice she perceived that her breast milk was inadequate. It showed that having the knowledge about breast milk was not a factor in influencing breastfeeding practice. Furthermore, Tunku was determined to introduce formula because her husband who was a medical doctor supported her.

6.3.1 There is nothing wrong with infant formula

Zi, a registered nurse who also introduced infant formula within the first month despite knowing the benefit of breastfeeding. Zi said, '*Yes, in theory breastfeeding is good, but in reality it does not work for me'*. Her infant had been admitted to the hospital twice in the first six months of life due to upper respiratory infections. Zi

however attributed that the cause of her baby's ill health was related to her family genetic factor and not due to the short duration of breastfeeding. She was sure about it because her sister's infant who was breastfed also had an upper respiratory infection.

Both negative perceptions above happened despite their knowledge about the superiority of breastfeeding. Zi further explained that what she knew in theory may not always work well when it comes to the real life situations because of life challenges. Nevertheless, Zi who was able to breastfeed her infant for one month and she felt that she had done her best as compared to her other siblings who introduced infant formula much earlier than her. She was also considered as a good example in her family according to what she said below:

> *Like myself. Although it was not easy but at least I managed to do it for a month. My mother-in-law said that I am a good example.*

All six women perceived that it was easy to manage infant formula because other people can help with the feeding when the mothers were not around to nurse their babies. Two of them mentioned that giving infant formula makes it easy for them to travel because they do not have to worry about expressing milk. Why these women perceived in differently about breastfeeding will be explained next. There were two main themes that emerged as the reasons for giving infant formula early. Firstly, other people influenced their perceptions and secondly, they perceived infant formula was manageable for them as working women which will be explained next.

6.3.2 What other people say makes sense

The women tend to listen to opinions given by others regarding their infants' feeding conditions. Among the six women who felt indifferent about breastfeeding and infant formula, two of them mentioned that their paediatrician advised them to give an infant formula because their infants' growth rates were below average and this influenced them. However, two of them who were healthcare providers and knew about the benefits of breastfeeding found that it was difficult to comprehend this and despite the difficulty in real life they faced the challenge to continue breastfeeding. The examples were obvious with Tengku and Zi who perceived indifferently about breastfeeding when it came to their own experiences.

Besides influenced by health care providers, the women were also influenced by their families and friends suggestions. Sumaya said she was advised by her sister-in-law to introduce infant formula as it was easier for other people to manage the infant. The same thought came across with Hanin, who also believed that it was a way to share her burden with her family members. In short, Hanin said, her family also encouraged her to do it. Furthermore, Hanin also felt that by giving infant formula, it helped to prevent her infant becoming too attached to her until it restricted her work as she elaborated in the interview as follows:

> *Many in my family said that I don't have to do it. Because my baby tends to get so attached to me and it will be difficult to leave him when I have things to do.*

6.3.3 Convenience and manageable are the key

Apart from being influenced by other people, infant formula was found to be manageable for the women when they wanted to return to work. Thus, some of them had the intention to introduce infant formula when they returned to work. They planned to wean breastfeeding by the second month so by the time they returned to work, their infants would be on just infant formula. The main reason was that it was more manageable to give infant formula as Sumaya stated:

> *I planned to breastfeed only during confinement. Then I changed to infant formula after I returned to work because it will be easier that way.*

Interestingly, one of the six participants in this group exclusively breastfed her first infant for the first six months of life. However, she introduced an infant formula for her second and third children before she resumed work after two months of maternity leave. On further discussion, Seak attributed her first child as a special child and so deserved to be given the best possible care. Thus, her perception about breastfeeding as the best option was only true for her first child. She further explained that she was a full-time housewife when she gave birth to her first child but then she started to work full-time after the birth of her second child.

> *For my second and third children, it is OK to give an infant formula. It is the same with the first one, no difference. [Seak]*

Her husband and her mother-in-law also supported her to give infant formula and therefore she did not feel that there was anything wrong with giving infant formula. She also stressed the fact that she was not working when her first child which was

born, was a major reason why she was able to breastfeed all the time. However, with her second and third children, she was working as a full-time lecturer, which was her main barrier to breastfeed.

Six women in this group who perceived breastfeeding was as good as infant formula worked full-time except for one who worked from home. Those who worked full-time include a dentist, a nurse, two lecturers and a clerk. Out of the six, two were first time mothers and the rest had two or three children.

6.3.4 Dependable

Commonly, all of the women rely on other people who can help to look after their infants regardless of the nature of their jobs. They also let other people decide what and how the best way to care for their infants and appreciated their help. Erin, who worked from home, and ran her own bakery business, expressed her difficulty in managing multiple roles.

> *Basically I am a very busy mom during the day. Just to send them to and pick them up from school takes me around an hour. So I keep on going in and out of the house and it is very difficult to stay put and breastfeed my baby. [Erin]*

The above example by Erin showed how her daily work routine had an impact on how she perceived breastfeeding. Not all women who chose to work from home perceived that breastfeeding was manageable for their infants, nor a normal way to feed them. Some of them wanted to be close with their infants and spend more time with them but that did not necessarily mean they preferred to breastfeed.

In this group, their perceptions about infant feeding were greatly influenced by their ability to manage their work. They looked for convenience and manageable ways to undertake infant feeding while enabling them to be able to perform well in their occupations, which were challenging too. Erin further expressed that, she felt in general people tend to assume that women who worked from home, would have ample time and breastfeeding would not be a problem. However some mothers who worked from home disputed that and claimed that they also had challenges. They became frustrated when people underestimated their difficulties and stresses which make breastfeeding difficult. Erin shared her busy daily schedule as below:

> *I have to send my kids in the morning. The main barrier to breastfeed was not only inadequate milk, but also time barrier. My time is fully occupied with sending and picking up my kids at school. There are so many other things that need to get done as well. I have to buy the groceries as well and also making cakes my clients order from me. [Erin]*

It can be said that women who were perceived to be indifferent about breastfeeding were more realistic about their expectations and they would rather find an easy way to manage their work as long as their infants' health was not compromised. They were more receptive to other people's opinions and most of their families supported them to give infant formula. Next I will describe the third group of women who had a positive perception about breastfeeding – but with conditions. Their perception about breastfeeding may change when they were faced with challenges to breastfeed their infants that were beyond their control.

Another common feature was that none of them recalled their childhood breastfeeding experiences. What most of them remembered of their mothers or their mother-in-law did not prevent them from giving infant formula to their babies. Instead, the women were encouraged to give infant formula particularly if it is the opinion given by a doctor whom they assumed was more knowledgeable on infant feeding.

6.4 The Ambivalent Mothers' Perceptions

Between the two extreme perceptions lie the majority of women who perceived breastfeeding as the best only if they can manage to do it. There were 18 women who perceived positively about breastfeeding but with conditions. It means that when their situations were not supportive of breastfeeding, their perception of breastfeeding as manageable was no longer valid. Having a positive perception about breastfeeding, they also had the intention to exclusively breastfeed their infants for as long as their infants needed it. However, when they were faced with challenges that were not manageable, their perceptions changed and their intentions were compromised too.

6.4.1 Breastfeeding is good, but with conditions

There were three conditions that had changed the women's perceptions about breastfeeding as described below. First, the situations usually occur when they were with the people who helped looking after their infants were not supportive of breastfeeding. They felt ambivalent about how to handle important people in their lives who helped to look after their babies. *Ambivalent* mothers appreciate the

contribution from other people who helped them until they felt obligated to agree with them although they may not like it.

Second, most of them found it difficult to balance between their reproductive role as mother and their productive role as a worker or employer. When the working commitments were overwhelming and they were unable to breastfeed, they changed their perception and compromised their practice. It can be said that there was a close relation between perceptions and practice. Thus, it decreases the likelihood of having enough breast milk for their infants.

> *Well it is sometimes difficult to balance between my work and breastfeeding my baby. Sometimes, when I rush, I don't have the time to pick up my son, and he started to get cranky. [Zee]*

Lastly, the demand from a tight schedule and working hours has an influence on how the women perceive the feasibility of breastfeeding. Izzah found that her superior was not accommodating in allowing her to have regular breastfeeding breaks to allow her the time to express her milk. She found that was challenging at times and she was not able to cope with the limitations.

6.4.2 Predicament

Like mothers who were determined to exclusively breastfeed, many of them had the intention to breastfeed too. However, they started to feel the challenge to maintain breastfeeding when the work demands were intense. Nevertheless, they persevered and breastfeed for at least six months. Not expecting the difficulty in managing the

infant and work was another reason why the women changed their perception. Zee, a lecturer who had an infant aged 12 months old, expressed her opinion as below.

> *And by the time I go home, he has become irritable. He is exploring, picking up things. And now I don't have a maid at home. So, when I come home, and wanted to cook, it all such in a mess and I can't cope with that.*

Not knowing how to handle objections from their relatives who were against breastfeeding was also prominent among the women in this group. Initially, the women tried to convince their families about the value of breastfeeding but most of them failed. Most of them reluctantly agreed with their family while considering that it was important to maintain family ties.

6.4.3 Dealing with work demand

Another common thought among the women in this group was not to burden other colleagues at work. They easily felt guilty if their absence also caused inconvenience to their employers. Therefore, they perceived that breastfeeding, to a certain extent, can be practised when the environment was supportive. So, when they cannot compromise their job, their choice was to introduce formula when circumstances required them to do so.

The participants with the perception that breast milk is the best but with certain limits are women with the most diverse working conditions. The majority of them worked full-time with fixed hours, a few worked full-time with flexible hours or shift hours and a few worked from home. There are no specific occupations that are prominent in this

group. However, women in this category had the target to at least breastfeed their infant for the first six months, as they believed that was the minimum duration a baby should be given breast milk. Therefore, most of them would try their best to breastfeed for the minimum duration before they changed their views as a result of conditions. In short, they were not determined and did not persevere enough as *Passionate* mothers did in order to breastfeed for the duration.

6.5 Summary

Based on how they perceive breastfeeding as compared to infant feeding, the women's perceptions can be categorised into three groups. The three different types of perceptions are described briefly in Table 6.1.

Table 6.1: Infant feeding perceptions among working women

INFANT FEEDING PERCEPTIONS AMONG WORKING WOMEN			
	Passionate Mothers	**Ambivalent Mothers**	**Equivalent Mothers**
Perceptions	All positive perceptions about breastfeeding or breast milk feeding (n=16)	Perceive breastfeeding is good but with conditions (n=18)	Breastfeeding is as good as formula feeding (n=6)
Examples of significant quotes	Breastfeeding is the best	Breastfeeding is good in a supportive environment	It is acceptable to give an infant formula
What about it	It is natural It is priceless It is a stress reliever	When I have the time When I can express at work	My paediatrician says it is OK It is good because has added nutritious content
The role of intention	A strong intention to exclusively breastfeed	Started with the intention to breastfeed but later on changing their intentions	No specific intention to breastfeed

The table above summarised important descriptions of the three different perceptions. As shown in Table 6.1, there were 16 participants who were positive about breastfeeding, 18 participants perceived that breastfeeding was good but only

with certain conditions, while only six participants were indifferent about breastfeeding and infant formula. The differences in the perceptions are also described based on the examples quoted, the reasons for their perceptions and the role of intention. The following section will provide detailed descriptions of the three groups of perceptions stated above.

The intention was found to be a factor commonly mentioned by the participants when they talked about their perceptions of infant feeding. Among the participants, many of them who had the intention to breastfeed, subsequently did it while those who did not intend to do so, most of them ended up giving formula milk. *Passionate* mothers had a strong intention to breastfeed their infants exclusively. Thus, they developed the positive perception about breastfeeding. Women who were indifferent about breastfeeding on the other hand did not mention about their intention to breastfeed. Instead they perceived that breastfeeding was equally good as was infant formula. What mattered most to them were their infant health statuses and that they were able to manage their work without many difficulties. Lastly, *Ambivalent* mothers despite their positive perceptions about breastfeeding, most of them perceived it with the condition that they can manage their work and the people around them well.

The perceptions that were discussed in this chapter are illustrated in the line diagram below. This is to show that there was a spectrum to how the women perceived breastfeeding as shown in Figure 6.1. Although I generally classify them into three main groups, however in reality they were no clear demarcation between the groups.

Nevertheless, the purpose of the division was mainly for the ease of description and understanding of their perceptions.

In Figure 6.1, the arrow points in opposite directions to show the extent of the spectrum. It is also noted that, for many of the women how positively they perceived breastfeeding influenced the duration that they breastfed their infants. In the next chapter, I will describe the different feeding practices the women had for their infants and how these practices were influenced by their perceptions.

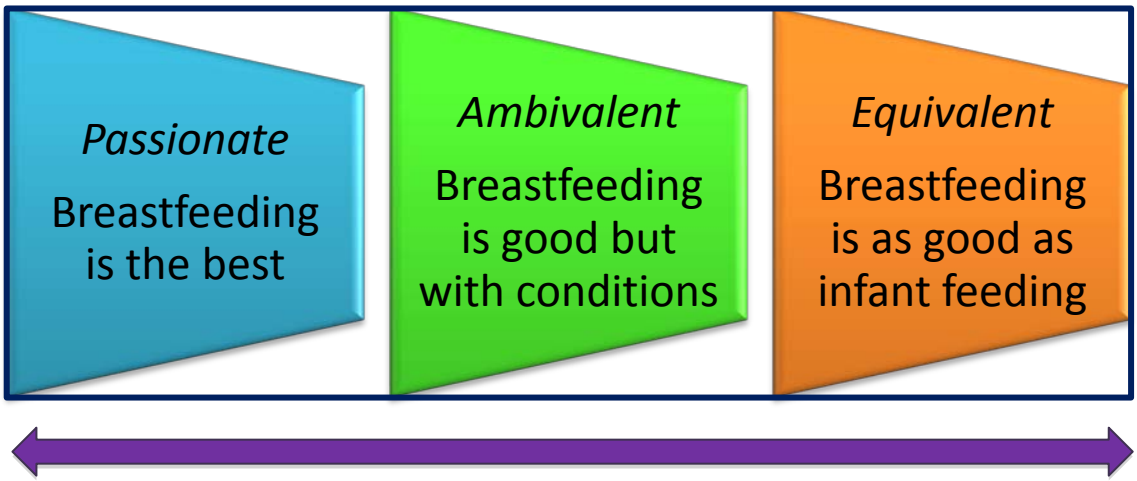


Figure 6.1: The spectrum of breastfeeding perceptions among working women

After knowing how the women perceive breastfeeding and what factors contribute to the differences, the next chapter will describe the women's breastfeeding practices and what makes them prefer their ways. The practices will be described based on how long they had breastfed their infants and the related factors including those that influence the participants' social environment as they also contributed to the scenarios.

CHAPTER 7: INFANT FEEDING PRACTICES AMONG WORKING WOMEN

7.1 Introduction

Whilst Chapter 6 focuses on the different perceptions that working women had regarding breastfeeding, this chapter describes the actual infant feeding practices among working women. In many cases, their perceptions played a significant role in influencing their decisions on infant feeding. All the women initiated or attempted to initiate breastfeeding after they gave birth. It was a common practice for the women who gave birth in an uneventful delivery to hold their baby before the baby was taken away for cleaning and weighing. In this thesis, infant feeding only refers to milk feeding. In talking about infant feeding practices, I will describe the participants' experiences with their infants for up to two years of life. I will not talk about feeding or introducing solids as this is not the focus of my study.

Examining the transcripts and diaries from the participants, it was found that their practices about infant feeding varied. However, in presenting their data, the participants' practices could be reported a spectrum based on the breastfeeding frequency and duration. The first practice was to only breastfeed or to give breast milk all the time for as long as they can. For the second practice, what some of the women did was initially only breastfeed their infants but later on they introduced infant formula, usually after six months. Lastly and least commonly, the women predominantly gave the infant formula and introduced it as early as within the first month of life.

In the following sections, I will describe the three practices, and how the women made their decisions to select one of the practices. For some women, their practices were

not their first choice but what they managed to do and deal with. All mothers in my study initiated breastfeeding when they were in hospital. Not one, after they had changed to infant formula and discontinued breastfeeding, was able to reintroduce breastfeeding in their infant's later life.

7.2 Only Breastfeeding In All Circumstances

There were 16 women who practiced exclusive breastfeeding. These women avoided giving infant formula and other types of food or liquid for the first six months of their infant's life. They all had positive perceptions about breastfeeding as described in Chapter 6, and a strong intention to breastfeed their infants in all circumstances. In order for them to practice it successfully, most had strategised their plans to accommodate the changes that might occur. They were committed to breastfeeding for at least two years. These *Passionate* mothers had a 'package' of personality and characteristics that make them resilient, vibrant and determined in pursuing what they believe is the best practice.

7.2.1 Intention and determination

The *Passionate* mothers talked about how by having a clear intention even before they gave birth had helped them to be positive about breastfeeding. Rohana, one of the women who chose to breastfeed her infant emphasised the importance of having a clear intention which navigated her practice towards breastfeeding as captured below.

> *The most important is your intention and spirit. If we have clear intention, we will find ways to do it. Have the intention for our infants that we want to give our milk. [Rohana]*

Rohana believed that anything was possible if the mother was determined to accomplish it. Furthermore, self-determination made a woman steadfast in carrying out what she had intended. Wardah who worked odd hours also described herself as someone who was very determined to ensure she was able to breastfeed her infant at all times. There were times she took her infant with her when she had to travel for a few days so that she could personally feed her infant.

> *But I think it takes your personality, your character is also involved. Like me and I have seen other moms who breastfeed; we have a very strong character. Very determined. [Wardah]*

Passionate mothers avoid keeping any infant formula at home so they were not thinking of an alternative and it was a way of showing their determination to breastfeed. Not having an alternative actually helped them to believe on their ability to produce enough milk for their infants as explained by Fariza.

> *If you are determined by your choice, firstly don't buy formula. Once you buy formula, you already have an alternative and you started to feel in comfort. That is dangerous. Don't, don't. Because I don't want to mix. No matter what I will not mix and I will not buy formula even if I go to shop. [Fariza]*

7.2.2 Dedication and sacrifice

Among those who were dedicated to breastfeeding, four participants reduced their working hours. They changed to a part-time job or working from home believing that

they could breastfeed their infants without being compromised. Sab, decided to change to a part-time job when she was pregnant and she was satisfied with her decision. Sab knew that when she changed to a part-time job her financial income was reduced. To counteract the financial constraint, Sab and her family moved into a smaller house with cheaper rent.

For *Passionate* mothers who had to continue working full-time, they knew their diligence in following the milk expressing time schedule was crucial to ensure a continuous milk supply. They also realised the importance of self-discipline in following the schedule as has been shared by Liza, a full-time lecturer at a private university.

> *I can feel the difference. Discipline is very important especially with the pumping timing. If you only pump when you have the time, definitely you will not have enough storage. [Liza]*

7.2.3 Help seeking

Liza also realised the importance to seek help if she had any difficulty with the milk expression. She learnt from her previous experiences that if she started to miss the expression schedule, she would be having problems with not having enough milk storage as she described below.

> *After maternity leave, I did not maintain milk expression regularly. So, when I started to recommence my work that was when I started to pump. So, I was not able to keep my milk storage adequate and at times I had under supply.*

The example about Liza showed that to ensure what was intended would go well, a mother needed to know how to overcome problems when things went wrong. This is because, women who knew how to handle the challenges they faced with breastfeeding felt empowered and able to manage many obstacles successfully. Hence, their confidence about their ability to breastfeed improved.

Being knowledgeable made them confident about how to handle their infants. Erma, a first time mother, ignored the advice by her paediatrician to introduce formula. Instead, she did not worry about the low weight of her infant because she knew her infant was healthy. This is another example when a woman is empowered with knowledge; she is confident in making a decision that she believed was best for her infant. According to Erma,

> *My paediatrician asked me to give an infant formula because he said my baby is small and doesn't get enough from the breast milk. But to me that was OK and I was not worried so much about her weight. She can catch up slowly but surely.*

Erma also had a problem with a flat nipple and she turned to a lactation counsellor early when she realised that it was difficult to get her infant to properly latch on. She learnt about proper attachment when she attended breastfeeding classes during antenatal care which had been helpful.

> *I didn't know that I had inverted nipple. Only when I wanted to start and breastfeed her, the nurse told me that I had an inverted nipple. So immediately I called the lactation counsellor because I used to see her. She gave me advice and that was very helpful. Thank God! [Erma]*

Fast action and a correct way of dealing with flat nipple and breast or bottle refusal was crucial to ensure the problems can be rectified and corrected early before other problems with milk insufficiency occurred. *Passionate* mothers sought knowledge and made sure they knew what to do when things went wrong. In order to exclusively breastfeed their infants, these mothers also made proper plans. They compared a few possible alternatives and drafted a few possible action plans that they could carry out which would help them to manage their work and daily activities smoothly. They also anticipated obstacles that may interfere with breastfeeding practices.

> *I have asked about breastfeeding even before I got pregnant. Once I knew I was pregnant, I started to make plans using excel file. I marked what I have got and I also compared prices and choices. I was well prepared with many plans. [Farha]*

7.2.4 Bonding and benefit

There were many reasons why *Passionate* mothers only breastfeed their infants. Many women shared their experiences with passion when talking about bonding. Bonding was the experience most *Passionate* mothers mentioned that made them appreciate breastfeeding. Holding their babies close to them was priceless and a stress-relieving experience, as told by Sab, a journalist who had two daughters. We noticed that only mothers who were passionate about breastfeeding highlighted bonding spontaneously and this is significantly difference from other mothers.

> *If we give formula in the bottle, we see them from far. It doesn't feel good not to be able to hold her close. But when I give direct, I can do that. Yes, you can feel the connection. Then you really feel you love your baby and it is indescribable. Any difficulty that you had during labour just gone! [Sab]*

Most women knew breastfeeding was the best choice and they could feel the benefits for themselves and their infants. Among personal benefits the women mentioned was an ability to lose weight faster and some returned to their pre-pregnancy weight during confinement without much exercise or strict diet control. For example Kavitha, an Indian executive who worked with a tele-communication company had experienced as below:

> *I find that breastfeeding helps me to tone down and slim down faster. Even my womb got contracted well and fast within 2 weeks. [Kavitha]*

Women who decided to give only breast milk believed that colostrum, rich with immunological substances, was an important protection against infections in their newborn which in infant formula or any breast milk substitutes is lacking. Selvi, a vegetarian Indian woman thought that wise mothers would not invest in formula milk that had lower nutritional quality and posed health risks to their infants.

> *You can't get the colostrum into the formula milk. Nature has given you the best why can't you use it? How you are going to bring up a new born is with breast milk. God has created all this for us? Otherwise he may have just left it for us. Whatever that comes naturally, it should not be wasted. [Selvi]*

7.2.5 Safety

Furthermore, they were also concerned about the preservatives used and possible side effects of infant formula. In short, *Passionate* mothers felt that breast milk was safer, natural, and fresh without any additional ingredients as explained by Erma, a lecturer at a private college had to say.

> *If we give the formula, we don't know what the preservatives are and we don't know the side effects. That is so scary! [Erma]*

Some of them realised that by breastfeeding their own infants, it has changed them to become better daughters and had made them closer to their mothers. Only after they had breastfed their own children, that they could feel and appreciate their mothers' sacrifices and effort to breastfeed them while they were little which they had never felt before.

> *I was not very close with my mom. But I don't know after I start breastfeeding my child, I now start to be close to my mom and other elderly people. And think back, they have sacrificed to bring you up and why must you dislike them, right? [Selvi]*

Selvi also realised that her personality had changed gradually and she became more sensitive towards the needs of her infant. She was more alert to her surroundings and more tolerant with uncertainties, which she never was before.

> *But my baby has changed me because of breastfeeding. Little cry also I will get up. It is a tremendous change. I am more sensitive towards what is happening around me compared to last time. Just because I breastfeed and am aware of my kid better. [Selvi]*

It was clear that *Passionate* mothers had strong intention and determination. They were also equipped with the right knowledge and ability to manage their breastfeeding problems. As mentioned in Chapter 6, their childhood experiences and previous experiences played a significant role in their current practices. It can be said that, women who chose only breastfeeding or breast milk feeding had a strong intention to do it. They materialised their intention well by having a proper plan and

they equipped themselves with essential knowledge that enabled them to be versatile in all environments. Above all, they had strong characteristics and they believed that they achieve their goals. Furthermore, all women who exclusively breastfeed had positive perceptions about breastfeeding.

This is in contrast to another group of women who not only changed to infant formula, but they also discontinued breastfeeding as early as within the first two months of their infants' life. I will describe this group in the next section.

7.3 Early Introduction Of Infant Formula

Women who started to introduce infant formula within the first month of life, stopped breastfeeding their infants in the first or second month. They realised that the milk production slowly decreased and ceased eventually once they introduced infant formula. Six of the eight women in this group had decided when their baby should start on infant formula before they gave birth. Most of them used the confinement time as a transitional period from breastfeeding to formula feeding. For example, Sumaya a first-time mother who worked as a clerk said:

> *I planned to breastfeed my baby. But I will introduce formula milk when I return to work after two months because it will not be easy with breastfeeding. [Sumaya]*

Some women would slowly introduce the bottle hoping that their infants would be familiar with the bottle and teat by the time they returned to work. They could cope

better with infant formula and were confident that infant formula was a good choice for their infants.

> *It depends on the mother, if she thinks breast milk is good she will give no matter how difficult it is. And for me, I can be happy when I am able to be doing it for a month despite my workload. That is good enough! [Zi]*

7.3.1 Wait and see

In comparison with *Passionate* mothers, *Equivalent* mothers had no strong intention to breastfeed their infants. They preferred to have a *lassai-faire* or 'wait and see' attitude which was acceptable to them and their infants when the time came. For example, Teo preferred to leave it and let time decide.

> *I didn't really plan how I would feed him when I was pregnant; I just kind of decided that I would try to breastfeed as much as possible. Currently we give him cereals for breakfast, porridge for lunch and dinner.*

The women also believed that breastfeeding was only manageable when they were not separated from their infants. Once they returned to work, they felt that it was acceptable to change to infant formula. Most of them started to introduce infant formula during the confinement period, while others started a few weeks after they returned to work. Tunku, a dentist said she had to give infant formula because her infant developed jaundice in its first week of life. She believed that it was due to breast milk insufficiency as she thought breasts could only produce milk after day three of life.

> *Partly my husband was blaming that not enough breast milk was the cause of jaundice. He said just give the formula. We know the superiority of breast milk but what can we do when the baby is jaundice? [Tunku]*

However, one of the participants in this group, Diza, who introduced infant formula in the first week after birth felt bad about her decision. She wanted to breastfeed her baby girl but she had difficulty with flat nipples. Diza, a first-time mother started with the intention to give breast milk but due to unexpected problems that she encountered and with lack of experience, she changed her practice. Out of frustration and not knowing how to handle the problem, Diza introduced infant formula.

> *I don't know what to do and when my husband said why not try infant formula and that's how it all started. I was so relieved at last my baby stopped crying.*

In both examples, the women followed their husbands' suggestion to give infant formula because they were unsure of their capability of being able to produce enough milk for their infants. Although they were in the minority who practiced predominant infant formula feeding, they did it with valid reasons. In the next section, I will elaborate the reasons for their choice.

7.3.2 Worry and unsure

There were a few reasons why the women decided to introduce infant formula early. Firstly, many mothers who were indifferent about breastfeeding admitted that they were not confident in their ability to produce enough milk and therefore their main worry was a milk insufficiency if they depend solely on breast milk. Sumayya was worried when her infant's weight was below average and she started to supplement

with infant formula hoping that the baby would gain weight. The example given below clearly shows the strong influence of the advice given by health care providers in directing woman's decisions regarding infant feeding.

> *I was so worried, my son was so tiny. I thought I wanted to give formula so that will help to increase his body weight. And that was the recommendation from my paediatrician too, I was so glad. [Sumayya]*

Worrying their infants may be under nourished with just breast milk; they kept infant formula at home so they could always have another resource during an 'emergency'. By having the formula at home they were less worried about not getting enough milk and therefore it was no surprise that most of them ended up resorting to infant formula.

> *I bought the formula, in case my milk runs out. But a lot of them said trying to give her formula at night. So that like I do give her occasionally, but very rarely. I think for the first 2 months I gave her every alternate day. So she gets to sleep the whole night and I got to rest too. Which is helpful for me too? A lot of them said there is no harm giving her the formula at night because it is heavier. Unlike breast milk which is so light. [Sugeta]*

In contrast, as mentioned in an earlier part of this chapter, mothers who were passionate about breastfeeding did not keep any infant formula because they were confident of producing enough milk, hence were not dependent on any formula.

7.3.3 Nothing stunning about breastfeeding

Some of the *Equivalent* mothers did not see the benefit of breastfeeding. Instead of losing weight, Teo gained a few more kilos. Teo believed breastfeeding alone was not helpful to burn the calories, although it might work for others.

> *I don't know, because when I breastfeed I put on weight a lot. You see. Now I was about 49 kilograms, last time 47 kilograms. (Looks so sad). But I breastfeed because my doctor said it is good for my baby. I actually work the opposite for mothers. My cousin gets slimmer. But not me, I cannot do exercise because I have caesarean, so I really regret I did caesarean. I don't get ideal figure for my body. [Teo]*

Although literature claimed that breastfeeding reduced the risks of respiratory infections, participants who introduced infant formula early were not convinced with it. Zi, a nurse believed that a genetic factor was more important in determining infant health status and not the immunological and nutritious values in breast milk. Zi chose infant formula when her infant was a month old. Her infant twice needed antibiotic treatment in the first six months due to respiratory infections.

> *So far my baby is OK. Regarding his health condition . . . that is much related to family factor and not due to formula milk. [Zi]*

Some women, when faced with breastfeeding problems, did not seek help. They became frustrated and stopped breastfeeding as though nothing could be done to overcome the problem.

The nipples pop out but it was very difficult for the baby to latch on. It was so difficult and I got frustrated. After a month the milk dried up and I stopped breastfeeding my baby. [Zi]

7.3.4 The goodness of formula

Not only were they unaware of the benefits of breast milk, they also believed that the content of infant formula fortified with fatty acids had better nutritional values than breast milk.

Formula feeding supportably with omega is better right? But, actually I noticed if the child tolerates cheaper brand, then OK, I am using Dugro. [Seok]

Further, women who introduced infant formula early also believed the infant formula was better than breast milk because it was added with docosahexaenoic acid (DHA) which they thought was essential for infants' growth. They wanted to have bigger babies which to them indicated healthier babies. Jenny noticed that babies who were breastfed were smaller.

Usually they grow up because of the formula they have the DHA in it that it can make the baby bigger. I believe in it too and that is why I give my baby formula. Another thing about breastfeeding is that the baby is usually smaller than those who take formula feeding. [Jenny]

7.3.5 Manageable

Some women felt that their babies were not interested in breast milk. According to Seok, by the second month, she had to introduce infant formula. At the same time,

Seok felt it was a relief because she did not have to worry about expressing at the workplace which was inconvenient for her.

> *The third one, I also tried to breastfeed her, but she also was not very interested, just like her brother. So, by the second month I already stopped expressing, just the time I started to return to work. So I don't have to express at work, she was on full formula by month two even before I started going back to work. [Seok]*

They decided to give infant formula believing that it was a better choice at that time. Some women even bought expensive formula to make sure their infants received the best formulation as they believed a more expensive formula would be enriched with added nutritional components.

7.3.6 Expert knows best

Among this group of mothers, a couple were advised by paediatricians to introduce formula because their babies were under weight. Since the advice came from professionals, they were convinced and followed the advice. Below is an example of what Erin experienced when she visited a paediatrician for her infant's follow up check-up.

> *At 1-month check-up, the doctor said she was underweight. So, that means my breast milk was not enough. I didn't realise that and he said I better give formula to my baby. So, after that I give infant formula and at the same time I tried to give direct feeding but I didn't express my milk. [Erin]*

Like this group, the third group of women also introduced infant formula. However, the latter introduced it at a much later time and also they did not discontinue

breastfeeding. Instead, they maintained giving breast milk whenever possible, and they only supplemented with infant formula when breastfeeding was not possible. In the next section, I will elaborate on the practices of the third group.

7.4 Combine Infant Formula Later

Among the participants, continuing giving breast milk while introducing infant formula was as common as giving only breast milk. They were 16 women who tried to continue with breastfeeding despite having some difficulties. Therefore, instead of changing it to infant formula totally, they continued giving breastfeeding when possible.

The women in this category started with the intention to exclusively breastfeed or planned to breastfeed their infant for as long as they could manage to do it. Many of them also bought a breast pump so that they could express at the workplace. It was common during the interviews to find out that some of them expressed their guilt and felt sorry for their infants when they had to introduce infant formula by necessity. Therefore, when they had difficulty with breastfeeding, they felt disappointed about it as depicted by Lee, a reporter working with a newspaper company.

> *I used to feel bad you know, like I asked myself am I doing a good thing, am I doing the right stuff, I am saying like, only this much I can feed her. Especially when I have to mix her with formula I felt so bad, and I said oh my God, she is not getting purely from me. So, you know these things sometimes make you feel guilty and things like this also may affect your supply. You shouldn't think negative right, but of course sometimes I feel it that way. [Lee]*

7.4.1 My working constraints

The reasons for introducing infant formula can be seen from two sides: the mother and the infant. From the mother's side, the reasons were related to working issues and also lack of support and discouragement from their family members with breastfeeding. Half of the women in this group realised that due to work commitments, they had to stop breastfeeding. Kavit, an engineer who worked with an international company found that sometimes she was not able to find a break to express her milk. This usually happens when she was in a meeting and it was not easy to leave the room while the meeting was still ongoing.

> *I have to stop because it got engorged, I couldn't express on a timely basis, especially when I am busy with long meeting. So, the milk reduced and gradually I just stopped like that. [Kavit]*

The example from Kavit highlighted that the tight schedule at her workplace was a barrier to expressing breast milk. A few participants also found that it was tiring to express after they returned from work, although they managed to be more consistent in the morning before they left home. Faal, an entrepreneur and worked with more flexible hours also found it difficult to keep the regular milk expression schedule.

> *By night time, I am already tired and I don't wake up at night. I only pump during the day, what I can. I don't know how other people can have a lot of milk storage. Amazing! [Faal]*

7.4.2 My family concerns

Secondly, family influences were found it be a major contributing factor in making decisions about infant feeding. In the Malaysian context, the family include immediate and extended families from both the women and their spouses' sides. Zee had to introduce infant formula when she was pressured by her mother-in-law, who was the carer of her infant, to do so. She felt it was tedious to manage the frozen expressed milk and it was easier to prepare infant formula. Zi initially tried to negotiate with her mother-in-law but later found that it was too difficult to convince her about the importance of breastfeeding.

> *I have a conflict in my house, which did not really help. Conflict with my mother-in-law. So, that was one of the challenges that I have to go through. She keeps on asking me to give formula and it was a real pressure. I manage to ward her off for about 6 months. [Zee]*

Besides mothers-in-law, spouses also play a crucial role in influencing their partners' practice. When the couple had different opinions about feeding choices, they discussed them and usually the decisions depended on who was more convincing and persuasive in their opinions. Seok said her husband's decisions followed what she wanted as long as it was easy for them and other people to help with the feeding.

> *Actually he [husband] prefers bottle feeding because other people can do the job. But for the elder one he said you should breastfeed her. Because for the first one, he was really taking care of her. Because the first experience, but second and third, he doesn't mind. [Seok]*

7.4.3 My infant's ill-health

There were also conditions of the infants that contributed to the introduction of infant formula, particularly when their infants refused feeding directly from the breast and only wanted expressed milk. Because of this problem, the mother had to express regularly although they were with their infants during confinement and maternity leave. At times the mothers were not able to cope with keeping up the pace with milk expression. They believed that due to reduced direct nipple stimulation, the milk production decreased eventually.

> *I tried to give direct but he refused. So starting from after birth while I was still in the hospital, I have started pumping my milk. I tried to give direct feeding but he seems not getting enough and then I have to give my expressed milk. [Suzy]*

It is clear that although the women decided to introduce formula, it was not always with great willingness. Most of them had to do it and it was beyond their wishes. Making a choice about infant feeding was a complex process. Apart from the above scenarios, there were other factors that also influenced their decisions about infant feeding. Beside individual intention and influences from family members and working conditions, there were a few other factors, which contributed to their decision.

With all the limitations above, *Ambivalent* mothers had to introduce infant formula after six months of their infants' life. They believed that if they were not able to breastfeed for up to two years, at least they tried to ensure their infants were given breast milk for the first six months. There were a few reasons why they had to introduce formula after six months and the next section will describe these factors.

7.5 Cultural Influences On Infant Feeding Practices

Malaysia is a multi-ethnic and multi-cultural country. It has three major ethnic groups that represent nearly 90 percent of the population which are the Malay, Chinese and Indian groups. The participants in this study were represented by all of the major ethnic groups mentioned above. As such, their practices were different in the way they were brought up within their socio-cultural environment.

Ethnicity had a significant influence on the women in their postpartum care. Usually they would have a confinement lady, a 'bidan', who looked after them and their infants, prepare food for them and also cleaned their houses, sometimes. There were the dos and don'ts which were also known as 'pantang' that gives guidance to the mothers on how they should take care of their infants. I will describe how the cultural and traditional practices of each ethnic group influenced their infant feeding practices.

In the next section I will describe the differences by ethnic practices after the women gave birth. I will start by describing the practices among the Chinese women, followed by the Indian and then the Malay women.

7.5.1 Chinese women

It is common among the Chinese to have confinement ladies, *bidan* that looks after the mother and the baby during the confinement period. Traditionally, the confinement period for the Chinese is the first 40 postpartum days. The *bidan* usually cooks special food for the mother and looks after the infant so that the mother can

rest. However, May felt restless when she was not allowed to take her bath. She felt a relief when her husband agreed with her and helped her to have a shower without the knowledge of her mother. May remarked:

> *I have to take food that has sesame and ginger a lot. Also cannot take a bath, which one I can't stand and my mum insist cannot wash my hair. Some people say even to wash hand also they cannot use tap water. I feel very troublesome.*

The *bidan* usually puts the infant in another room and feeds the infant with infant formula so the mother can rest. Being a modern and educated woman, May thought some of the traditional practices during confinement were not helpful in promoting breastfeeding. Therefore, May avoided the traditional practices, which she felt useless in helping her to breastfeed.

> *My husband will help me. He also wants me to go and have a shower. He also cannot stand it. The Chinese said the 'wind' will go inside if I wash my hand and that is not good for you. I also have to take thing hot. And when you eat you make sure your meal is hot. I also cannot use tap water. And I have to do it for 30 days. This time I am just following because my aunt cooks the water for me. So I just follow. [May]*

The mother also cannot wash her hair and can only drink a restricted amount of water as the Chinese believe the water will be accumulated in the body and may cause health problems in later life. In contrast, inadequate water intake may impede breastfeeding. May only obeys some of the rules which she managed to follow. But Jenny and Teo followed all the *pantang* religiously, which made it difficult for them to breastfeed.

> *I follow everything the confinement lady has planned for me. She does all the cooking and also taking care of my baby. I have to pay her a lot and I have to pay extra for the herbs that she uses. [Jenny]*

However, Lily, a modern woman and who had up-to-date information about breastfeeding would not follow the cultural practices. She knew that it was not easy to go against her cultural beliefs, particularly if the women lived with their family and relatives who held on to their cultural practices.

> *The problem with Chinese is a lot of Chinese don't breastfeed. While I was pregnant, there were 2 other Chinese who were pregnant and I was trying to give them a lot of information about breastfeeding and wanted to support them. Unfortunately, they do not breastfeed; they just do it for a while. You know breastfeeding takes a lot of hard work and if you don't have the support and if there are many people who are discouraging you because they see you are tired you can easily become tired. And of course the worst culprits are when they say 'You don't have enough milk'. . . And usually the mother, the mother in law and the confinement lady. And I don't have all the three ladies with me. (Laugh) [Lily]*

Teo expressed her feeling about the *pantang* in her diary. Being a modern woman, she hardly appreciated her cultural practices, which she found were illogical in many ways. However, she followed without much questions in order not to create conflict with the elderly family members.

> *Confinement was a haze of all kinds of rules (which I surreptitiously broke), evil soups, hot and clammy weather, slippered feet, aches and pains, the sound of a baby crying (for sometimes unknown reasons), and worst of all, not being allowed to leave the house. I'm glad it's over! [Teo, diary]*

Lily's situation was different. Realising her cultural practice was not supportive of breastfeeding, she had an alternative plan and her husband also supported her to find a non-Chinese confinement lady.

> *Luckily I have a very good support from my husband and my confinement maid. I have an Indonesian maid that is specialised in confinement and this is not the same like the Chinese confinement lady. She was very good. She could even cup feed my baby. Because she can cup feed, which is why I can express and she cups feed him. [Lily]*

7.5.2 Malay women

Of the three cultures, Malay culture is the most supportive of breastfeeding practices. However, they also had the *pantang* during their confinement period. Some of which could interfere with exclusive breastfeeding practice, which is to give luke warm water to the infants after a feeding. The elders believe that jaundice was due to inadequate water and to quench the baby's thirst, they would give water after breastfeeding.

> *The doctor did not allow giving water. But my mother gave on the first day. She wanted to make sure my baby is not thirsty. [Rose]*

However, some Malay women refused to follow the advice because they felt the cultural rituals were against breastfeeding practices. For example, it is common among the Malay to give some water after every feed to quench the thirst as their belief that breast milk is food with only a small amount of water.

> *Many people advise me to give water to my baby. But I ignore them and my mother is so angry at me. But I am so stubborn and did not bother. [Emma]*

Although most Malays initiated breastfeeding, their cultural practices made exclusive breastfeeding difficult. However, many of them continue breastfeeding for up to two years despite the fact that they also introduced infant formula.

It is also a common practice among the Malays to wet the mouth of the infant with *zam-zam*, holy water from Mecca, in the holy land Arabia. However, this practice is not in conflict with breastfeeding as the amount of water is just enough to wet the mouth. Besides the ethnic practices that promote breastfeeding, the Malay and Indian also have their religious obligation that encourages them to breastfeed their infants. In the next section, I will explain how their religious commitment influenced their breastfeeding practices.

7.5.3 Indian women

There are many similarities between the Indian and Malay cultures. They both use lots of herbs in their cooking which they believe are helpful for the health of the mother and her infant. They also do body massage (*urut*) as a way to rejuvenate their bodies after the delivery. Breast *urut* is also done in order to stimulate milk production. These practices were observed by the Indian women in my study.

> *My auntie came from India and she bought all the traditional herbs from India, so I can get the pure one. So, from the day I delivered, she started giving me. Immediately after I gave birth, she gave me something, start from there, so she was with me the whole 2 months after I delivered. So she stayed with me in total 3 months. [Kavit]*

Unlike the Chinese tradition which discourages taking a bath, Indian culture encourages women to take a bath from day one postpartum and it does not interfere with breastfeeding practice.

> *In Indian tradition for the first 16 days what they did they splash hot so you have to stand the resistant water on your stomach and also your back. It helps to strengthen your back and your womb too. So, all the dirt will come out. There were some items my daughter was a bit sensitive, so I use some lotion to help her. [Kavit]*

It is also common for the Indian women to be vegetarian. From the woman's experiences, being vegetarian was not a barrier to breastfeeding although many people told them the opposite. They were dedicated to breastfeeding and they have managed to exclusively breastfeed their infants for six months and two years respectively.

> *I was quite worried and I was very careful with my diet. Everyone advises me to take fish and all are non-veg. I think there should be ways for vegetarian. I did some research and my sister helps me and she cooked for me. So, with God's grace everything went well. There are lot sources of vegetable that will increase the milk supply. I didn't take any supplement. [Selvi]*

Only the Indian women had a restricted vegetarian diet and just two of them practiced it. Although from their description above, there were some worries whether being vegetarian could have an effect on their infant's health, but it turned out to be not true. Next I will describe the traditional practices among the Malay women. Malays are the major ethnic group in Malaysia and their practices were the most breastfeeding friendly.

In general, it can be said that for every culture there were rituals that could influence breastfeeding practices to all women not just working mothers. Some of the women followed strictly while others avoided adhering to them. Ethnicity was not found to have directly influenced decisions, but there were other factors that also influenced their acceptance of their ethnic rituals for mothers during the post-natal period. Table 7.1 below shows the number of participants with different practices according to their ethnic groups. For all ethnic groups, the least that they practiced was to give predominantly infant formula.

Table 7.1: Infant feeding practices by ethnicity

Infant feeding practices among working women			
	Malay (n=24)	**Indian (n=8)**	**Chinese (n=8)**
Only give breast milk or breastfeeding at all times	11 [46%]	2 [25%]	4 [50%]
Started with only breastfeeding but later on introducing infant formula	8 [33%]	5 [62.5%]	2 [25%]
Predominantly give infant formula	5 [21%]	1 [12.5%]	2 [25%]

In Malaysia, it is synonymous that when Malays talk about their culture, they sometimes mean religion because some religious practices are incorporated in Malay culture such as in wedding ceremonies and conversational practices. In actual fact, they are two separate topics but assume a similar connotation by lay people. The next section will elaborate the points some women brought up when explaining about their belief and culture.

7.6 Socio-Environment Influences On Infant Feeding Practices

7.6.1 Religious obligation

A Muslim mother knows she is encouraged to breastfeed their infants for up to two years old as stated in the holy book, the Quran. The Quran further explains if a mother cannot feed her infant, she could get a wet nurse to breastfeed her infant. A wet nurse is any women who can breastfeed an infant which is usually a woman who also is lactating. It is not a sin if the mother cannot breastfeed their infants.

> *I gave breast milk because it is written in the Quran. We have to breastfeed up to 2 years. If you have a problem and cannot breastfeed your infant, you can ask a wet nurse just like with our prophet Muhammad. We have to go to basic. I always ask myself why God asks us to breastfeed our children; there must be a reason for it. [Erma]*

A few women mentioned commitment towards religious obligation as one of the factors that shaped their perceptions towards breastfeeding, which later influenced their practice. Mothers who chose breast milk found that it was a great strength to know their infants grew up with their milk.

> *And being a mother, especially being a Muslim mother, I would say the fact that I know my child grows up with my blood running through her body, you know it is actually very powerful. [Wardah]*

Hanin also mentioned about the commandment in the Holy Quran, which led her to try her best to breastfeed her infant. She did not feel guilty for not being able to breastfeed her infant for up to two years as she had tried her best to do so. This is

because she felt that what matters the most is that she had tried and her intention is counted.

Likewise, Hinduism also believes there must be a reason in every God's creation including breast milk. A wise person will spend some time to ponder upon the gift from God and will not waste the best natural resources, like breast milk, as explained by Selvi.

> *It is the nature's way of growing up. It is God's ways of creating that. And if you are really concerned about your baby, I don't think you want to give formula milk. Formula milk is just a commercially produced. Definitely, I don't think that it is 100% good for your baby. And nobody knows the ingredients exactly and who wants to do the research? They are big industries in the world. I think it is a matter of whether you love your baby or not. I mean when you really want to give your own milk, giving process comes with sacrifice.*

In short, some mothers would rationalise religious obligation as the factor for the reason to breastfeed but others would justify their inability to produce enough milk as acceptable as long as they had the intention to do it. However, the Chinese participants did not share anything about their religious belief about breastfeeding.

7.6.2 Urban life and social status

Living in urban Kuala Lumpur and Penang has its own lifestyle. In common, the working women in urban metropolitan areas have more financial burden as their cost of living is higher. They also usually have to spend more time on the road especially if they rely on public transport to get to work. It is common for the women who work

full-time to leave their houses early in the morning before the sun rises to avoid heavy traffic and they often reach home late after work for the same reason. By the time they get home, they are exhausted and it is a real challenge to continue doing the household chores and milk expression.

Fara lived at her parents-in-law house which is about an hour drive to her workplace and she had to help with the house chores. Her in-laws' ability to manage the daily routine was a bonus for her. Nevertheless, it was a hard work and required a lot of commitment.

> *Usually I wake up early around 5 in the morning and I will cook for the day, breakfast and also dinner. I have planned the night before what to cook so that my work will be easier in the morning. It takes around one hour then for me to get to my workplace by car and I have to leave the house before seven in the morning. [Fara]*

As explained in the participants' background, only two of the women had a secondary education level and the rest had at least a degree qualification. True for some of the participants, their educational level was an indicator of how much they earned and the type of occupations they did. All who chose to work from home were degree holders. Looking at the participants' responses, it is difficult to suggest that what they did and how much they earned shaped their perception of breastfeeding. Educational qualification alone was not a factor that influenced their perceptions, but those who sought knowledge on breastfeeding had a better perception of breastfeeding.

Most of the women who chose infant formula, regardless of how much they earned, would buy the expensive formula. They believed that the more expensive the infant formula, the better the nutrition quality. Therefore, they had to spend more and doing this also made them feel good about being a mother, a way of compensation for not being able to breastfeed. Nearly half the respondents had more than one child thus they also had experience previously with infant feeding. Having previous infants can be a positive or a negative factor. This will be discussed in Chapter 8.

It can be said that, apart from the working status and working conditions, women in general were influenced by many other factors in their environment about their infant feeding choices. Being in an urban community with a busy lifestyle required the women to be efficient in their ability to manage their family and work. It was an advantage for women with strong intention and determined personality to ensure what they planned to do did turn out well. *Passionate* mothers were able to breastfeed their infants for up to two years. They also managed to overcome obstacles they faced in ensuring their infants were exclusively breastfed.

Table 7.2 summarises the infant feeding practices among the participants. It compares the three types of practices in terms of the number of women, the duration of breastfeeding, and timing of introduction of infant formula, if any. In Table 6.1, the numbers of *Ambivalent* mothers were 18 and the numbers of *Equivalent* mothers were only 6.

Table 7.2: Infant feeding practices among working women

INFANT FEEDING PERCEPTIONS AMONG WORKING WOMEN			
	Passionate Mothers	**Ambivalent Mothers**	**Equivalent Mothers**
Characters	Only give breast milk or breastfeeding at all time	Started with only breastfeeding but later on introducing infant formula	Predominantly give infant formula
Number of participants	16	16	8
Started to introduce infant formula	Never	After six months of life	Within a few weeks after birth
Breastfeeding duration	Two years and more	The first six months only gave breast milk and later combined breastfeeding with infant formula	Just a few months and not more than six months

With reference to Table 7.2, the two common practices were solely breastfeeding and combining breastfeeding and infant formula. Of 40 participants, 16 of them never gave other types except breast milk or breastfeeding and another 16 chose to introduce infant formula after six months of life while maintaining breastfeeding. The least commonly practiced among the participants was to give predominantly infant formula. Eight of the participants started to introduce infant formula as early as within the first month of their infant's life. Most of them fed their infants infant formula only by the second or third month.

7.7 Summary

The infant feeding practices among the participants can be summarised into three main ways. The first option is practised by a group of dedicated working mothers who only chose to breastfeed as it was the best choice for them. They did not allow any negative factors to interfere with their practices. The second group refers to working

mothers who preferred to introduce formula and discontinued breastfeeding. This practice usually happened when they returned to work after their maternity leave. The third option lies in between the two extremes. This group refers to working mothers who were greatly affected by the changes in their environment and therefore they were only able to breastfeed their infant much less than what they expected to do, hence they had to introduce infant formula.

Similar to the findings on perceptions, the women's responses also demonstrated a spectrum of practices. Figure 7.1 illustrates the spectrum of practices among the women. However, in reality, the division is not absolute. The categories evolved based on the findings of common themes that were derived from the data in this study.

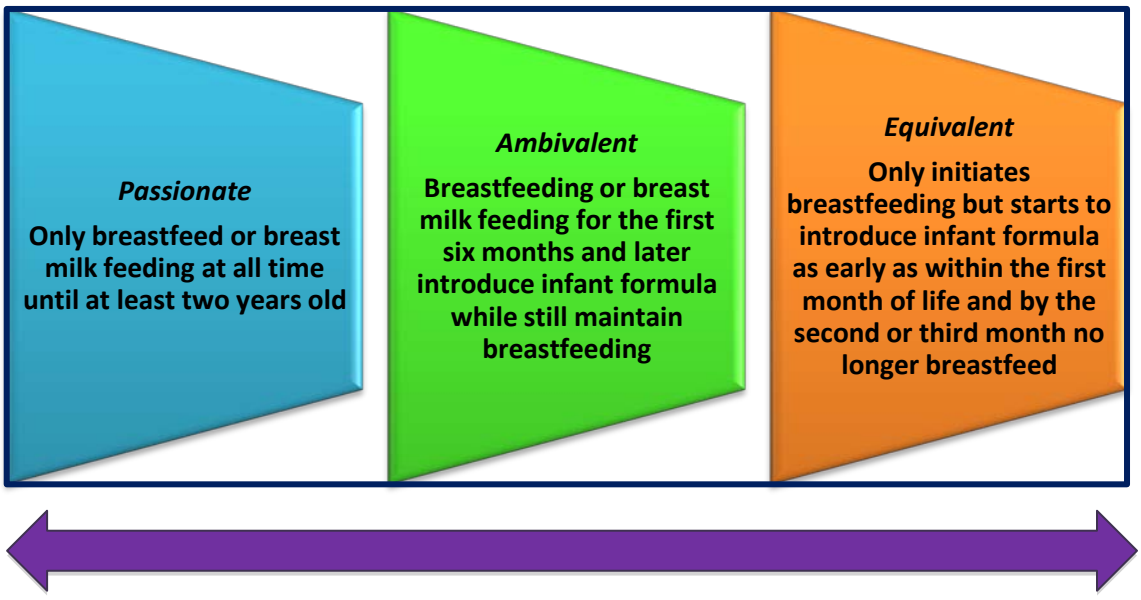


Figure 7.1: The spectrum of breastfeeding practices among working women

There were various factors that influenced their practice. These factors interacted with each other and therefore made the practices of breastfeeding a publicly

determined rather than a private matter for the mothers. Moreover, there were differences in social-cultural rituals which could promote or prevent breastfeeding practices, as these women reacted differently according to their belief and their perceptions of breastfeeding.

Although ethnic plurality practices during the postpartum period and religious obligation were important factors, the women's perceptions about breastfeeding were more important in influencing their practices. This is because, as can be seen in Table 7.1, the distribution of breastfeeding practices across the ethnic groups was almost similar. In all ethnic groups, most of them preferred to breastfeed more than use an infant formula and less than a third of them chose predominant infant formula. What was more prominent, all participants who practicee breast milk feeding exclusively were *Passionate* mothers and they ensured that their cultural practices did not interfere with breastfeeding.

The next chapter will focus on infant feeding experiences at the workplace. Since the women worked at various places and experiencing differing conditions, the next chapter will describe how being at different work settings could influence their breastfeeding practices. It was noted that the duration of breastfeeding practices was also related to how much preparation they made during the prenatal period.

CHAPTER 8: INFANT FEEDING EXPERIENCES AND WORKING CONDITIONS

8.1 Introduction

This chapter focuses on working conditions that had an impact on infant feeding practices among the working women. Around 70 percent of participants were full-time workers whereas only 30 percent worked part-time. Full-time workers included women who worked shift hours or on-call at night. In this study, some of the women who work full-time had more rigid and hectic working schedules which influenced their breastfeeding practices. Generally, women who worked as executives or top level leader managers had more flexible hours although at times they had to attend managerial courses over the weekends.

On the other hand, all the part-time workers, worked from home except for one woman. She worked four hours a day for five days a week as a helper at a pre-school. Other part-time workers had more flexibility with their hours; they could tailor their hours accordingly to fit well with their infants' breastfeeding schedules. Besides having formal occupations, there were a few women who also worked voluntarily for non-governmental organisations. For example, they worked with mother support groups that help to promote breastfeeding and as an activist for women's organisations. The details of the participants' background have been elaborated in more detail in Section 5.5.3 under the 'Participants' background'.

This chapter covers the topics related to work and working conditions. It describes the experiences of the participants who chose to work from home and those who work away from home. For women who worked away from home, their experiences in

managing their infants while they were at work will be described too. Further, this chapter also explains how working women made adjustments to their daily routines when they returned to their work and how they deal with their colleagues. Women found that returning to work postpartum was difficult in many ways and adjusting to new routines with a newborn was not always a pleasant experience. Therefore, they made a few plans which were supposed to be helpful in managing their new daily routines with the presence of a new family member. A couple of women took time off from work to ensure they had adequate rest before they gave birth.

8.1.1 Prenatal preparation

Prenatal preparation referred to any effort the women made as a way to help with breastfeeding preparation before they gave birth. There were three women who reduced their working hours towards the end of their pregnancy. All of them were primigravida mothers; two of them were expecting a twin and a triplet pregnancy. None of the multigravida mothers made prenatal working adjustments. This was probably due to the fact that they had previous experience.

Renuga, a lecturer at a public university in Kuala Lumpur, decided that she would go on study leave when she discovered that she carried triplets as a result of a pregnancy-inducing therapy. She started on study leave when she was seven months pregnant and that was helpful because she delivered prematurely soon after that. She was not stressed with her commitment as a lecturer. Reguna was pleased with her decision as she states below:

> *I decided to go on study leave because I want to go home early. I come to my university every day but the maximum I only stay until 3 pm. And I feel that I should give them more time since they were born premature and they have been facing a lot of difficulty and it was not easy to take care of the twins. So I give priority to them. If I work 8 to 6 and by the time I am home I will be so tired and my parents would be very exhausted and I don't think that it is actually practical. And I don't like to send to nursery or baby sitter because of their condition from the very beginning.*

Renuga was clear that taking care of her premature infants required more attention and thus was prepared to give less time to her other commitments. Another mother with a triplet pregnancy was a registered nurse. She requested for a shorter shift hours and she also opted for early leave before she gave birth.

Besides women with multiple pregnancies, a couple of the women with singleton pregnancy also made working adjustment prior to their infants' deliveries and both of them were first-time mothers. Liane, a marketing officer working with a multinational company started to reduce her working hours and she believed that was the best sacrifice a mother could do for her child. Furthermore, she only planned to have one child and she wanted to give the best care that she could. Similarly, another Indian woman who also decided to have only one child changed to work from home in order to reduce the burden of travelling to work in a hectic daily schedule.

All the experiences above were meant to prepare the women for the coming new members in their family. All of them managed to breastfeed their infants for at least six months although some were not able to reach up to two years. In the next section I will describe when the women decided to return to work after they gave birth and

how the duration of maternity leave had an impact on their breastfeeding practices. The duration varied from as short as a couple of weeks to as long as a year.

8.2 Returning To Work

How long working women had to return to work after they gave birth was largely dependent on the duration of maternity leave to which they were entitled. In Malaysia, only formally employed women are entitled to paid-maternity leave. In this study, women who were self-employed, working from home, contract workers, working as a part-timer, were not entitled to paid-maternity leave and most of them returned to work earlier than women who were entitled to paid-maternity leave.

The timing of women's return to work can be categorised into early return (within the first month postpartum), intermediate return (after two to three months postpartum) or late return (more than one year postpartum). Some women recommenced their work early even before they completed the confinement period, which is less than 40 days postpartum. A more common choice was to recommence their work when their maternity leave expired. The least common return was extended leave which could be more than a year after postpartum.

Only two of six of the women who returned to work early were able to exclusively breastfeed their infant regardless of whether they worked from home or not. The other three who returned to work early started with breastfeeding but after six months they introduced infant formula while they breastfed when possible. Only one

who worked from home chose to give predominantly infant formula and she did that as early as within the first month of life. Although some of them were working from home or only working part-time, this was not necessarily helpful in breastfeeding.

Out of 12 women who work from home, only four were able to exclusively breastfeed their infant for the first six months. Later in Section 8.5 under 'Experiences With Working From Home', I will describe the challenges faced by women working from home. The above paragraph is merely a quantitative description of the maternity leave duration of infant feeding practices. Following this, I will elaborate the reasoning for deciding when they returned to work and how that had impacted their practices.

8.2.1 Early return

There were only six women who returned to work within the first month postpartum. All of them were self-employed except one who started her new job with a new company. The rest were self-employed and they did not have any paid maternity leave. On average, by one month postpartum they had returned to their usual work routines. Some women who made an early return, started some informal work as early as within the first week postpartum. However, they tried to keep the work to a minimum such as answering phone calls and replying to emails and to avoid doing active jobs. Hannan, a financial adviser who works from home, found two weeks of rest was adequate.

> *I totally rested the first two weeks postpartum. After two weeks, I was so bored, and I did not want to stay at home then. Even during the confinement I have conducted meetings in my house with my non-government-organisation*

colleagues. After 2 weeks I already spent time outside the house and did some shopping. [Hannan]

The other four self-employed mothers completely rested during their confinement period, before they commenced any work. They believed that it was important to take care of their health especially during the confinement period to avoid any long-term health complications. As explained in the previous chapter, regardless of their ethnicity, all of them had a confinement period of around 40 days whereby during this time they had to follow certain rules of diets and activities. Faal, who owned a publication house, strictly followed the rules during confinement period.

I am self-employed. I just go to my office when I have things to do. For example, like I have to meet my clients. But I only started to go to my office after the confinement was completed which was 40 days. I also took my baby with me to my office until she was around five to six months, when I left her at home. She was then taken care of by my maid. [Faal]

However, Jamie the only women who worked full-time had to commence her duty with her new employer at six weeks postpartum. Nevertheless, Jamie was able to exclusively breastfeed her infant for up to two years despite having returned to work early. This was her second child and she also managed to exclusively breastfeed her first child.

I signed contract with a private college. So, I started my work after 40 days postpartum. I was expressing since day one actually which helped to keep my breast milk supply. [Jamie]

Jamie, a *Passionate* mother, has been a full-time worker since her first child was born. In her case, working status was not a barrier for her to exclusively breastfeed her children although she had a shorter maternity leave for her current infant. Having a positive perception about breastfeeding helped Jamie to overcome the challenges at work and she planned her work well.

8.2.2 Intermediate return

Intermediate return to work was the most common experience among the women. It was the choice among full-time employees as the Malaysian Labour Law indicates that a minimum of 60 days paid-maternity leave is applicable to female employees. For federal government servants, they are entitled to a paid-maternity leave up to 60 days for a maximum of five children or a total of 300 days throughout their service durations. Therefore, it is common for most formally employed women to return to work after two or three months after they give birth. On the other hand, some private employers may give a few months paid maternity leave; however they may not necessarily cover for up to five children. In addition, some of the women used their annual leave, which added more days at home postpartum.

> *It is up to us how many days we want to take leave. The most important is that, the total days we can take with full pay are only 300 days in a lifetime. So, if I plan to have 5 children, I will take 60 days maternity leave for each child. Or I can take all 300 days now with full pay and I will not have any later. But for husbands, they can get a week leave every time their wives give birth. [Rose]*

Above is an example of a transcript from Rose who explained about the maternity leave for working women. Rose took three months leave as she planned to have only

three children. Among intermediate return, nearly half the women were able to exclusively breastfeed their infants and then continue breastfeeding for up to two years at least. Of the remainder, half were able to breastfeed for at least six months while the other half introduced infant feeding earlier than six months. The description above showed that working full-time may not necessarily be a barrier to exclusive breastfeeding. The next description will be about the women who returned to work late postpartum.

8.2.3 Late return

Late return after six months or more is very uncommon for working women in Malaysia. This is because it is not commonly accepted for the worker to be on unpaid leave for a long duration as the job vacancies would easily be filled by other applicants. Lily explained about this below:

> *In Malaysia once you stop working it is difficult to get back on job. That is why, if I don't get back soon, I may not be able to get a job. I was thinking how I can go back to work without sacrificing my time with my son. So when my friend said Toyota can consider my request for flexible hours, I was happy but I have to come in as a contract worker. So it is the sacrifice that you have to make. [Lily]*

Those who opted for longer maternity leave usually had to resign from their work. Therefore, only mothers who were confident they could find a job later and have the financial capacity despite being unemployed would choose to take a longer maternity leave.

Another example was regarding Sab who used to work full-time and was also actively involved in a mother's support group. She gave up her full-time work and became a stay-at-home mother, doing her journalism work from home as well as continuing to actively inspire women to breastfeed their infants through her mother's support group.

> *All I knew is then if I am going to have a child, I am going to be at home with the child for a while then only I will return to work. That is my idea of mothering you know. Because my mother was there for us and I think that we were alright. I remembered I enjoyed the moments with my mother. I want my children to have it too. The idea about breastfeeding is there with me. [Sab]*

All women who returned to work late by more than a year were able to exclusively breastfeed their infant for the first six months and then continued breastfeeding for up to two years. All were *Passionate* mothers who prioritised their family and adjusted their career life to suit their family need. They purposely planned for longer leave so they could have the time with their infants and family. This could only be done by women who were financially secure.

8.3 Postpartum Workplaces

A major theme that was a topic of concern among the participants was their working environments and their experiences with their colleagues at work. This topic was extensively explored during the interviews. Among the questions related to this were those regarding how mothers planned their working life after they gave birth. As mentioned earlier in the postpartum working and childcare adjustment sub-section, a

few of them had thought about their working plans in early pregnancy. Their postpartum plans were strongly influenced by how long they could be away from work after they gave birth which was related to their entitlement to maternity leave. Their plans also depended on who could take care of their infants when they returned to work.

Broadly, there were two choices that mothers could make for their working plans postpartum as shown in the Figure 8.1. They either returned to their same working environment prior to giving birth or they changed to another working arrangement after delivery. The common choice was to return to their same workplace with the same working environment as before they gave birth. The less common choice was to change their workplaces. They either had a new employer or continued with working full-time or they changed to work from home and had flexible working hours. Their experiences will be described in the next section. Why they changed if they did and if the change had an impact on infant feeding practices will be elaborated on in the next section.

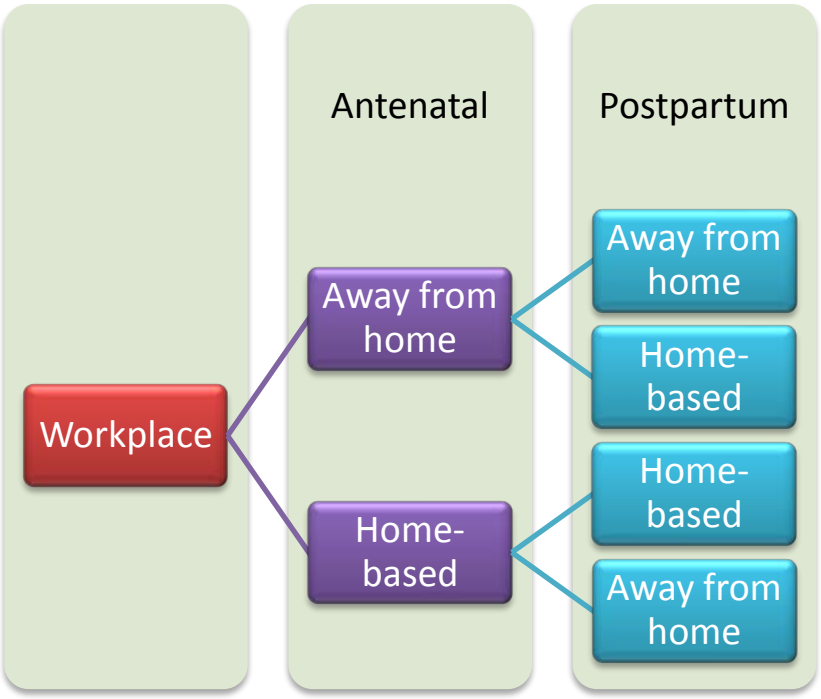


Figure 8.1: Workplaces during antenatal and postnatal among working women

8.3.1 Returning to the same working environment

Returning to the same occupation was the most common scenario among women who worked full-time; they returned to their previous job with the same employer at the same workplace. It was also common to retain the same occupation for those who worked from home and continued with their home-based job or private business and remained self-employed. They did not have to adapt to a new working environment, however they needed to adapt to the new routine with the presence of a new family member.

Working women who had supportive employers found their working adjustment postpartum was a smooth transition. One of the participants, Veena, a registered nurse who gave birth to triplets, was given shorter shift hours during her pregnancy

which was very convenient for her. After giving birth, Veena, extended her maternity leave until six months postpartum and was able to exclusively breastfeed two of her triplets for that duration. On returning to work, she was also given the day shift, so that it was easier for her to arrange nursery care for her triplets.

> *The most important is to be mentally prepared because it is a big change and I need adaptation. In terms of work, I was lucky because they [my employer] allowed me to change from shift hours to day work. Furthermore, this is a baby friendly hospital and the staffs are caring too. [Veena]*

The case of Veena showed that with a supportive employer, her return to work postpartum made breastfeeding possible despite working shift hours and that she had triplet infants to look after. In fact, another woman, Sumathy, who worked shift hours found that it was easier than working office hours.

Sumathy found that working shift hours was more manageable for breastfeeding and to plan for milk expression. She felt that she had more quality time at home when she was not at work.

> *I like working shift hours because the working time is shorter. If you work office hours you literally spend the whole day at work. But if my shift is at night, from 10 to 6 in the morning, then I can have the whole day at home. My house is not so for from my workplace. It is easy.*

Women who used to work from home and continue working from home after they gave birth also had their challenges too. For these women, it was more challenging because people thought working from home was without much difficulty. In fact, Erin

who ran a home-based business expressed that she experienced a twice as much workload as women who work away from home.

> *The main barrier to breastfeeding was not only inadequate milk but also lack of time because my time is fully occupied. I am the driver and I have to send and pick up my kids from school besides I also have to do the housework. Go to the supermarket and do the shopping and buying groceries. [Erin]*

Erin was a mother of three children who used to work in a corporate company but she decided to retire after her first child was born. Her husband supported her decision. Despite her husband's support, Erin still found that working at home was more stressful. However, she chose it because she wanted to take care of her children and did not want to send them to childcare.

> *Of course, when I work from home, my income is much less than before. But looking at the quality time I am happier now even I get less. I keep thinking about my baby, every time I send him to my mom I feel very sad. It is not that I don't like my mom, but they raise him as the way they want la. But now I have the control over them and I will raise them according to what I want. [Erin]*

The example experienced by Erin showed that working from home without the support and help from other people could be more challenging to breastfeed. However, some women purposely chose to work from home after they gave birth believing they would have more time with the infants.

8.3.2 Returning to different working arrangement

Returning to different working environment was less common among the participants. Only four of the participants changed their workplace. Of these, three who used to

work away from home, made the arrangement so that they were able to work from home postpartum. Lily used to work full-time but after she gave birth, she reduced her office hours so she could have more time with her baby at home. She purposely chose to change from a full-time to a part-time job with the same company. That arrangement was possible because some of the work tasks such as making phone calls, replying to emails and writing memos could be done from home.

> *I found a job with an automobile company. And I gave them the condition that I can't work full-time. So I am in the office from 9:30 in the morning until 3pm. And then I will go home. And whatever job that I can do out of office, I will do it on my own time. [Lily]*

Another example was Sevi, a music teacher, who planned to conduct the classes at home until her infant reached two years old. She considered herself lucky as she had the cooperation to operate her class from home:

> *And after the third month postpartum, I started to do my music class at home. Thanks God, my students' parents very understands they didn't mind sending their kids to my house for the classes instead of at the music centre. I told them until I stop breastfeeding they have to send their kids to my house.[Sevi]*

It was uncommon to see a woman who used to work from home begin to work away from home after the delivery. This was the least common working arrangement for a mother postpartum and only one participant did this. Faal, a mother of four children, used to work for her printing and graphic design business from home. However, as her business expanded recently, she rented an office outlet and employed a couple of workers before she gave birth to her fourth child. After the birth, she had to work

from her office which was around 10 minutes' drive from her house. Because her working time was flexible, she was able to adapt well to the new working schedule.

> *Before this I used to work from home. But as my business grows, and I became busier, I started to have my own office and my work became more formal. I started to have this office in 2009. So, in my case, it is different. I don't have to express my milk before because I was with my kids all the time. But now I have to learn to do it as it is not possible to bring my baby now as she is already eight months old. But I started to pump quite late. However my working time is still flexible and I usually will go back during lunch break to give breastfeeding [Faal]*

Faal's experience showed that working away from home was not always a bad choice if women were able to organise their working time according to their other needs. In the next section, I will explain in detail the experiences at workplaces in relation to practising breastfeeding.

8.4 Experiences At Workplaces

When the women returned to work postpartum, most had to adapt to their new work routine because they needed to find time to express their milk at work if they wanted to continue giving breast milk. Furthermore, women who decided to continue breastfeeding exclusively, needed to make milk expression a regular routine in order to ensure an ongoing milk supply. Even if a woman had no plan to breastfeed exclusively, she needed to do it at least daily in order to avoid breast engorgement.

There were a few important aspects about workplace environments that were of concern among the women as they appeared to influence decision-making about

infant feeding practices. There were three main issues at work that influenced the women about breastfeeding, including supportive colleagues, working hours and workplace facilities.

8.4.1 Support from colleagues and superiors

There is no written law in Malaysia that allows the women to have time off for milk expression. Therefore, having supportive employers and colleagues would make it easier for the women to request or to negotiate time off for milk expression. Some of the working women made the effort to let their superiors and colleagues at work knew they breastfed their babies. By making it known, these mothers thought that they would be supported and allowed to have breaks for milk expression.

> *So, when I started to go back to work, I made it public to all my colleagues that I fully breastfeed my baby and because of that I have to make time to have regular break for milk expression. [Farha]*

At times Farha also faced some difficulty as not all of her colleagues were supportive. Farha usually found it was a stress relief for her to write in her diary and express her feelings. Below is an example of what she wrote. Realising that at times she had to face the obstacles, Farha being a *Passionate* mother was certain that her priority was to her family and her infants.

> *I expressed my feeling. Yes I am a mother, but not just an ordinary mother. I am a damn GOOD one! I will not sacrifice my family time for the sake of my company. I would not do that, seriously. [Farha, Diary]*

Farha, a *Passionate* mother said that although some of her colleagues were not supportive, she managed to continue providing breast milk. She also made sure that all her duties at work were done on time to avoid any complaints from her colleagues. *Passionate* mothers wanted to be seen as capable of performing their work while not compromising their routine to express milk regularly.

Rozyla, who is the manager at her workplace, found it was easier to arrange her time for milk expression. Being the head, she knew her rights and had the advantage of arranging her own work schedule. At the same time, she sometimes extended her working time to complete her work

> *I am the only married staff here and have babies. The rest is still single. So it is easier for me to have a break and manage my own time. But it is important to give and take with others as well. For example, if I have taken the time to express early morning, then I usually will not go out for lunch break because I usually take quite some time to express because I use manual pump.*

Women who decided not to continue breastfeeding were not concerned about getting support from their colleagues. Only a few of them needed to express once a day; a short break during lunch hours was enough to avoid breast engorgement.

On average, a mother usually took a total of 30 to 60 minutes in an eight hour working day to express breast milk two times. In order to avoid delaying their duties which might affect their colleague's work, they usually made a few changes in their routines. They also made sure their superiors knew where they were if they were not at their work stations.

> *Early stage I think my boss doesn't know about breastfeeding. Now my boss knows that at 10, I have to come down and he schedules the meeting accordingly. He is very supportive. OK so far but I know some of my colleagues still complain. [May]*

Two of the *Passionate* mothers who had male colleagues did not face any problem with taking breaks for milk expression. One of the women was a lecturer at a private college in Kuala Lumpur. She was the only female lecturer in her department and this was what she experienced:

> *All around me are male staff (while pointing to the entire cubicles around her). I am the only female. They are actually OK, it's me that initially I felt a bit uncomfortable. [Erma]*

However, when *Ambivalent* mothers did not receive the support from their colleagues, they found it was not easy to maintain breastfeeding. For example, Kavit who had to attend long meetings and frequently missed her time for milk expression eventually had to stop breastfeeding. Kavit was not comfortable to express in the room and she also felt guilty to leave the room while the meeting was ongoing. Liza also experienced similarly. This was what Liza had to say:

> *It is common that I have to be in a meeting from morning till late evening. Sometimes I have the take meeting minutes or make notes. It is just not possible to simply leave the room to express my milk. From my experience I need at least 30 minutes to do it and there will be nobody who will take the minutes. [Liza]*

Liza had a superior who was not supportive with breastfeeding and he was also very suspicious about Liza taking breaks for milk expression.

> *He did not believe that I need to express in order to avoid engorgement. He was so suspicious. He said his wife did not have to do that. Yes, of course, because his wife never worked and just stayed at home. I was very sad when he started to ask around and query about what I was doing. Luckily my colleagues were very supportive and told my boss that I needed to do it. [Liza]*

Liza had rigid working hours. She realised that irregular milk expressions not only caused her breasts engorgement but also her milk production would eventually drop. Some of the women, who were in the same situation, eventually stopped doing it soon after they were back to work when they were faced with inconvenience as experienced by Jenny.

> *I tried to express because I wanted to give my milk. But when I started work, I stopped because it was difficult to find the time, there is no room to express my milk; I only did that for the first week only.*

8.4.2 Workplace facilities

Having the right to take time off was not enough, as having a mothers' room facility was equally important for the convenience to express milk. Most workplaces did not provide a proper room and a fridge for the women to use for expressing milk. Only a few of the employers provided proper mothers' room facilities, which included a room with chairs or sofas, sinks or washing area and a fridge. According to Liza who works with a multinational company, there were a few mothers' rooms provided at her workplace and the women could use the room anytime they wanted.

> *There are a few mothers' room here; one in every four or five floors. Every room is equipped with a fridge and a wash area. That is very helpful. [Liza]*

Another participant, Liza, also said that her company promoted breastfeeding and encouraged the workers to express at the workplace. Her employer provided a mothers' room but the women workers had to make a booking to use the room, as there were limited place for doing so. The company is currently building a bigger room complete with all the facilities so that it would be a comfortable place for the mothers.

The majority of the employers did not provide a proper mothers' room. Therefore, for these women, they usually needed to use a prayer room, a spare room or a storeroom. The storeroom is very inconvenient and usually has no proper ventilation. On the other hand, the prayer room is open to public and therefore lacks privacy.

> *We don't have a specific room. Now I am using the stock room, it is private, I put a fan and a small chair there, and yeah it is alright. [Sugeta]*

At times when they could not find any suitable place; a few women had to express in the car. They realised that the passers-by were curious about what they were doing and they had to move their car to a more secluded area.

> *The best is to find a parking space where no one walks in front of your car. I will be facing the front. So, I just pretend that I am waiting for somebody in the car. I don't look down and don't look suspicious, and so far OK. I usually take 15 minutes. [Jamie]*

Some women did not wish to find any specific place. They simply did it on their workstation. For those who had a private room, they could have the privacy. But for many others, they just covered their top and used an electric pump, which was much easier in this situation. Sometimes, their colleagues did not realise they were doing it.

Some women had difficulty when they had to attend courses or training for a few days or weeks that did not allow them to bring their babies. Faizah, an officer, is an unusual example of a woman very dedicated to milk expression. When Faizah had to attend two weeks field training, she managed to express breast milk and then requested to use the freezer at the training site to store her milk. She felt anything was possible if she was determined in looking for possible options and never stopped asking for her rights.

> *That time I had to go for field training. In the army we call it exercise. So at that time I had to go and since I was breastfeeding at that time, I had to bring my entire pump and the gadget. The training was held outside Kuala Lumpur and I had to keep my expressed milk in the freezer at the training centre. [Faizah]*

Suzy, a sports trainer, frequently had to go for a weekend training session. She was very committed to expressing her milk. However, unlike Faizah, Suzi could not find any proper facilities for milk storage and she had to throw the milk away in case it turned bad.

> *When I go for outstation, I will bring the battery operated pump. But the problem is there is no fridge to store the expressed milk. I pity myself because after I express the milk I have to just throw it away. It is so sad having to do that and it is not that easy to get the milk. But I have no choice but to just throw it away. [Suzi]*

Not all mothers felt the mothers' room facility was necessary because they were able to express at their own workstation. Some did not use the facilities even if it was available because they felt it was easier to express at their work station where they

could do other work simultaneously. Instead, it was more convenient to express at the cubicle; it was easier and faster as they did not have to walk to the mothers' room which was usually located elsewhere.

> *I just do it in my cubicle. I use a jacket to cover my top and just do it there. It was much easier and convenient. I bring my cooler bag and I will keep it in there my expressed milk. [Erma]*

8.5 Experiences With Working From Home

Around one-third of the participants worked from home. Some of them worked full-time from home, for example running a home-based bakery or food catering, and being a music teacher. Others only worked part of their total working hours from home and at times they had meetings with their clients. The types of work they did include a journalist, an insurance agent and a financial adviser. In this section, I will explain the reasons why the women chose to work from home and the challenges they face. Common reasons women gave when they decided to work from home was because they wanted to have more time with their infants and to be able to direct feed whenever their infant wanted to feed. For these mothers, they felt that spending time with their newborns for a certain period of time was important. Sab said:

> *All I knew is that if I am going to have a child, I am going to be at home with the child for a while then only I will return to work. That is my idea of mothering you know. Because my mother was there for us [for the first two years] and I think that we were alright. I remembered I enjoyed the moments with my mother. I want my children to have it too.*

Lily, a mother of a boy aged 14 months, was at home with her infant for the first 12 months postpartum. Then Lily decided to work part-time. She felt that it was worth spending time that long with her son and found that a year was a reasonable time to be at home.

> *So, since giving birth to my son, I stayed at home. So that helps with breastfeeding a lot. He did not take a bottle. So it is straight from the cow (me). It doesn't really reduce my stress, but it gives me the opportunity to have more time with my son…When I started my work, I don't have to be in the office all the time. You just need to be in a few hours and get things done what really you have to do. Then the rest of the stuff you can do at home and you can arrange your time accordingly or when you are available. [Lily]*

In short, women who chose to work from home wanted to have more time with their infants. However, being at home may not necessarily mean they were able to breastfeed as they also faced challenges like other working women as explained next.

8.5.1 Working from home: challenges

It is a common belief that women who work from home usually have all the time for themselves because they are not tied to specific working hours. However, for the women in this study, being at home also meant that they had to also manage the household chores besides their own working tasks and also looking after their babies. They also had to find time to breastfeed their infants and sometimes to express their milk.

Hannan found working from home challenging. Hannan worked as a financial adviser and was also an activist in a youth movement in her community. In her case, she was given more tasks than other committee members because she was considered as 'not working', although in fact she was working from home as a financial planner.

> *I have a lot of work to do at home. I also work with an NGO besides my professional work as a financial planner. Most of my informal work takes more time than my professional work. I realised that when I have a lot to do, I get so stressful and my milk production dropped. And now I cannot express my milk anymore because there is no milk that comes out.*

Hannan's experience showed that not having a helper at home was difficult for her and for most of the women who work at home. The same experience was shared by Erin who had to look after her two older children and her newborn baby in the first few months after she gave birth to her third child.

> *The first three months after I gave birth I did not have helper at home. It was a tough time. Thinking back about it, I wonder how I survived? I don't understand how some people can say that to be at home is easy. I was nearly half crazy at that time (laugh). [Erin]*

Neither Hannan nor Erin were able to breastfeed for long periods. While Erin only managed to breastfeed for a couple of months, Hannan did it longer for about six months. In order to breastfeed while working from home, having a helper was very helpful. Below were the experiences of these women.

8.5.2 Managing at home

Women, who worked from home and had a helper, were able to manage their work more efficiently. Unlike Hannan and Emma, who had no helper and had to do all the work by themselves. Teo found that having her mother-in-law at home was very helpful. However, she still felt that being a mother was a full time, ongoing job. In her diary, Teo wrote:

> *My mum in law takes him in the morning so that I can get housework done, do some work on the computer (I do design and copy writing for an NGO), have some time to myself and regain my sanity. In the afternoon, I play with him, feed him a snack, and give him a nap (thank God that children nap, their parents can gather their wits). After dinner, his dad and I play with him some more (or show him some YouTube videos – his current craze) and then I put him to bed. Repeat, repeat, repeat! (No public holidays/medical leave/annual leave etc. [Teo, Diary]*

Selvi, a music teacher, decided to work from home for at least a year after she gave birth. She also planned to have only one child and she wanted to spend time with her infant in his early life. Selvi only had a helper to come whenever she had her music class. At all other times, she was the main caregiver and she enjoyed spending her time with her son.

> *I told my students, in case I need to give milk to my son, I will do in during the class but I will continue teaching. He is used to it. Only during my class someone will come for just one to two hours. Most of the time during the class he sleeps. If he cries for milk, the person will bring him to me. And he enjoys being there rather than sleeping. To wake him up is very easy. Once I move he will wake up. He is very sensitive to sound. Sometimes it is very difficult for me to finish some work. [Selvi]*

Having someone to help at home was very fulfilling. Mothers who had helpers were more likely to continue breastfeeding, while those who had to do most of the work by themselves, converted to formula feeding much earlier, as early as a few months postpartum. Their experiences showed that home-based work was not an absolute advantage to promote breastfeeding. Support was more crucial to women although they worked away from home, as they were able to breastfeed much longer.

8.6 Managing Their Infants While At Work

In Malaysia, working mothers had a few options regarding the avenue for the care of their infants while they were at work. Generally, the participants in my study too had a few options. Among other things that were important when considering options for their infant care were convenience, distance, price and quality provided by the carer as tabulated in Table 8.1.

Table 8.1: Carer for infants

Baby sitter	Private Childcare or Childcare at workplace	Carer at home
The women had to send their babies to a baby-sitters house. A woman looks after a few babies at her house.	The childcare is like a nursery whereby infants and toddlers are cared for	Can be their own family members or helper who works at home

The most common choice among the women was childcare. Some employers provided childcare services at the workplace for their staff.

> *The hospital has its own nursery. So, my baby was here until 6 months. We can go there anytime to breastfeed our babies. Because of that, I did not do too much expression. So I had that pleasure of bringing her to work for 6 months old. [Kani]*

Workplaces that provided childcare for their staff usually promoted and motivated mothers to breastfeed their babies. This means the mothers could always be in contact with their infants whenever they had the time to feed their infants. They also only charged a minimum amount to their staff which was mostly an affordable rate.

> *The hospital that I work has its own nursery. So, my baby was here until 6 months. And I was very glad that we have that service. We pay nominal fees. And we put our baby here and then we go and do our work. And we can go there anytime to breastfeed our baby. Because of that, I did not do too much expression. So I had that pleasure of bringing her to work for 6 months old. I paid 350 ringgit a month (~AUD110). [Kani]*

Mothers who worked in the Baby Friendly Hospital also used the milk pump facilities provided by the hospital. They could also use the freezer and mothers' room which were very convenient thus making breastfeeding easier. Being recognised as Baby Friendly was a positive influence for mothers to continue breastfeeding as seen among mothers who worked in two hospitals with this accreditation.

> *But I was lucky for the two of my younger ones I was a specialist. So I can always run off and express. I have my own fridge and equipment. There is a place where I can express. In that way it can be done in, many facilities. [Suhaila]*

However, some mothers did not like to use the service provided by their workplace as they felt the quality was of a low standard. They preferred to pay more and be satisfied with the services that were up to their standard and expectations. These nurseries usually hired experienced carers who were well trained in handling expressed breast milk. The nurseries usually were located further away from their

workplace but this did not worry them because the mothers had provided enough breast milk for their babies.

> *I send my baby to a nursery. That nursery was very good and they support breastfeeding. The location is also strategic for me. But the price is on the high range. And if I have to send earlier or pick her up later than the scheduled time, I have to pay extra 10 dollar for an hour. [Iza]*

The mothers would usually drop their infants on their way to work and pick up their infants after they finished their work. Baby-sitters usually worked from their houses and were commonly chosen among women who work on shift hours. Unlike many childcare facilities that mostly only accept infants during the day, baby-sitters were usually more flexible with time and more convenient to deal with.

Many mothers purposely chose a childcare centre that was close to their workplace so they could go there during breaks to feed directly, which was important for babies who refused expressed milk. It was possible for the mothers to do this and maintained exclusive breastfeeding for six months because they were supported by their employer.

> *Sometimes I tried and put my milk in a bottle, still he refused that. So, I have no choice but to bring him to my workplace sometime. But most of the time I go to the nursery which is just a few minutes' walk from my workplace. [Kabihah]*

One of the most challenges that *Passionate* working mothers faced was to find a nursery or a baby-sitter who not only could look after their infants but also was capable of handling expressed milk. However, some of them did not receive

cooperation from the babysitter because it was a hassle for the helpers to thaw and warm frozen expressed milk before feeding. Some of the baby-sitters requested the mother buy infant formula and the mothers bought it just to satisfy their baby-sitters' requests hoping they would be more cooperative in looking after their infants.

> *Just to make the baby-sitter satisfied, so I just bought a tin of formula. But I still express and give my breast milk. [Faizah].*

Some mothers took their babies to their workplace and were able to be with their babies while working. This was possible for a few mothers who had their own business and could do so at their own work premises, until their infants were around six months. Another option mothers chose was to leave their infants at home where they usually had other family members taking care of their infants. It was common to see their extended family staying with them and these people had a great influence on the upbringing of their infants.

Another common choice was to send their infants to the babysitter's house. Usually, the babysitter's houses are near their residential area and it was very convenient to drop off the infant on their way to and from the workplace. Mothers who worked shift hours preferred this option as they could send their infants according to their working shift hours.

> *The baby-sitter lives in the next block which is very near. And the best thing is that I can send my baby anytime according to my working shift day and night. [Zu]*

Not all working mothers needed to find a nursery or a baby-sitter. For those who lived with their extended family such as their mother or mother-in-law, some of them could leave their infants at home. A personal carer who helped to look after their infants at home was the least common option. The private carer could be their own family members like their mother or mother-in-law or they could have servants who worked with them at home.

This option was much better and easier for the mothers. However, the problem arose when the families of *Passionate* and *Ambivalent* mothers' were not supportive of breastfeeding and they preferred infant formula because it was easier to prepare and believed that breast milk alone was not nutritious. Although *Ambivalent* mothers did not agree with them, they had no choice but to follow. But *Passionate* mothers would find other babysitters.

> *But I don't know because I live with my mother-in-law. And they prefer powdered milk because that was easier to give. So, it seems that I have made their life more difficult by asking them to handle my frozen milk. They don't use to the idea, you know; expressing, keeping in freeze it, thaw it and people's mindset. [Zee].*

For mothers who worked from home, most of the time they took care of their infants themselves. Some mothers had a helper or their family members who provided some help for them.

> *During confinement I was on my own and I did not have any helper or family with me. I still have my mum but she is already old and I don't expect her to help a lot. It was a tough time initially because I have to do everything on my own besides I have to take care of my other children. [Erin]*

8.7 Summary

Women returning to work, regardless of the location of their occupations required tremendous adjustment. The main challenges for mothers who decided to continue with giving breast milk, was to have regular breaks for milk expression during their working time. Some who had supportive colleagues and employers found it was easier while others had a more difficult time with their superiors. It was an advantage for some mothers when their workplace provided mothers' room facilities. Working at home was not without challenge. Instead, it was more challenging because of the general assumption that the women working from home had ample time to get nearly everything done. In fact, it was not true for many of my participants as they had more workload compared to women working away from home.

Looking for the appropriate childcare or baby sitter was challenging for many mothers. It is not always a good choice to have someone at home looking after their infants when the helper is not reliable or cooperative with the mothers. Neither is it a bad choice to put their baby to childcare especially when the staff were well trained in handling expressed breast milk. Mothers had diverse experiences throughout their confinement until the time they returned to work. Throughout the journey, they faced many challenges which were influential and had an effect on their choice of infant feeding. Some maintained breastfeeding when they returned to work but others had a more difficult time and had to stop earlier than what they initially wanted to.

CHAPTER 9: BREAST MILK SUPPLY

9.1 Introduction

Chapter 9 reveals the participants' responses in relation to breast milk supply. The main issue that concerned the working women was to have adequate breast milk supply and storage for their infants. In this chapter, I will describe their experiences in handling expressed breast milk, starting from removing the milk, transporting the milk, storing it and handling the expressed milk.

I will also explain their problems with inadequate milk supply and over-supply including how they handled the difficulties with nipple and breasts conditions. The milk can be removed in many ways. First, by putting the baby directly to the breast and let the baby suckle. Second, expressing the milk from the breasts which can be done manually using hand expression or using a breast pump. Expressing using a breast pump was more widely practiced by the participants than hand expression as explained in the next section.

9.2 Breast Pumps

In general, there are wide choices of pumps; manual, battery operated or electric breast pumps. There are certain unique features of each type that made some women prefer one over the other. Table 9.1 summarises the good and bad aspects of breast pumps that were used by the women.

Table 9.1: Milk expression methods

	Hand expression	Manual breast pumps	Electric operated breast pumps
Good experiences	Easy Painless No cost	Cheaper than electric pump Easy to clean Faster to express	Easy Can relax while expressing Not tiring
Bad experiences	Painful if not done properly	Need more physical effort	Heavy to carry Longer time to express than manual pumps Expensive

Jamie, a breastfeeding advocate, provided her view about different ways of milk expression. She had tried different types but she felt that hand expression was the most effective way. She encouraged women to try hand expression first before trying to use any pumps, either manual or electric. From her experience, she believed that if mothers knew the right technique, hand expression was easy, painless and with no cost. What matters most was not to get a brand-name breast pump but to be able to express in a way that was most comfortable.

> *I am using a manual, Avent. To me, Avent has the most powerful vacuum and it gives the most volume in the shortest time. And in a long run, because it is manual, it could be used by my first and now my second child and it can continue. And the parts are also cheap. Comparing to other electrical brand like Medela, which cost you up to RM1600. It is also heavy and the parts are more expensive. So, if I see a mother I would say the best thing is hand expressed. The next is Avent manual. Even the Avent electric is not good because of the suction power is less. [Jamie]*

Faizah, a mother of three, tried various types of pumps and she had different experiences with all of them. She was looking for a breast pump that was effective to express in a short time period. She had spent quite a lot of money and she still used all

of them at different places and time according to her own convenience. From her experiences, Faizah found that, the price was not necessarily related to the quality, and an electric breast pump was not always superior to a manual breast pump.

> *Usually at work I use a Spectra pump. And at home, I have another pump, Amida. And I have another manual pump, Avent. But I usually don't get much if I use Avent and that was the reason why I bought Spectra. Because Spectra is an electric pump and it is so easy to use that and it is not tiring as you can just relax while waiting for the pump to do the job. Only that my Spectra is a double pump and it is heavy to carry. And only later when I had more money I bought Amida pump as that one was more expensive but more handy. [Faizah]*

In general, mothers believed that manual pumps were cheaper and easier to clean. However, Zee found that although it was cheaper, but using manual pumps required more physical effort thus it was more tiring.

> *I use Avent, a manual pump. I actually prefer the manual one, it is faster. The electric one, you have to wait, it is very slow. The basic Avent set price is about 100 ringgit (AUD30). That one was very good. So, for the first two months I expressed twice a day at work. [Zee]*

Manual pump was also a choice for women who usually expressed infrequently or when they had to work away or work during odd hours.

> *I only have the simple horn pump with the round cap. It is a manual pump but that is enough because I don't have to express that much. Usually when I am at home, I just feed directly. I seldom express just to make sure it doesn't get engorged. Now I hardly do it because my baby refused to accept expressed milk. [Kabihah]*

Women, who chose an electric breast pump, felt the pump was easier to use and they could rest while expressing. However, the electric pump usually took a longer time as the pump had a timer and collected milk at a slower speed. Nevertheless, mothers chose the electric pump because it allowed them to be multi-tasking which was important for them due to their multiple responsibilities.

Regardless of the types of pump used, it is not an indicator of successful breastfeeding. Erin who predominantly gave infant formula bought one of the expensive types of breast pump. But she only used it for a month.

> *I expressed for one month. All my babies I cannot express more than two oz, I hardly get much when I pump. In fact I use one of the most expensive pumps, the advance type that cost me 1500 ringgit (~ 500 AUD). [Erin]*

Looking at the wide experiences from the participants, it could be said that a breast pump was not a necessary tool for milk expression but it was becoming a trend to use it. Further, breastfeeding duration was not related to the type of breast pump used. Women with higher income were more likely to buy a more expensive pump. However, women did not necessarily need expensive pumps to breastfeed longer as shared by Jamie and Kabiha, *Passionate* mothers who breastfed for up to two years.

In the next section, I will describe the experiences of milk expression at different times and the challenges they faced. Looking at their experiences, the timing for starting milk expression can be divided into early, intermediate or late; early when they

started to do it within a few days postpartum, intermediate during the confinement period and late after they resumed their work.

9.2.1 Early start

Mothers, who had to be separated from their infants immediately after the delivery due to medical reasons, usually, started milk expression on day one postpartum. This happened when the mother experienced difficult labour or when the newborn had to be observed in the neonatal intensive care unit (NICU). To ensure the baby is fed on colostrum, the mother started to remove the colostrum within a few hours after delivery. Tee, who delivered through an emergency caesarean section was encouraged to breastfeed her newborn who was admitted to the NICU.

> *When we think, oh my baby was in NICU, so how can I breastfeed her. But then my husband came back and told me that the specialist even advised me to, like see if I can walk or not to the NICU. If I cannot walk, then I express it out. Because the doctor said even in that condition, doctor advice is to express it. [Lee]*

Lee was pleased because she could express colostrum for her infant for his first feed. Faizah, a mother of two children, said she did not have adequate breast milk supply. She decided to express as soon as she was discharged from hospital and that had helped with breastfeeding maintenance.

> *For my second child, I made earlier preparation. I started to express as early as after I returned from the hospital. Even at that time, I only produce less milk, but that was the motivation for me to go on with it. Initially I only express a few times a day as my baby wanted to breastfeed most of the time. But when he sleeps, I will use that time to express my milk. [Faizah]*

Both women who started early managed to breastfeed for two years. However, there were also women who were not able to breastfeed for long despite starting milk expression within the first week postpartum. One of them was Jenny who only managed to breastfeed her infant around three months. Every time Jenny expressed, she could remove 10 ounces (280 mls) of milk from both breasts. She had no problem in producing much milk but when she started to work, she stopped expressing and her milk production ceased abruptly.

> *Yes, very difficult to do at work, so I only manage to give her breast milk up to 3 and a half months even though I had a very good supply, because each time I pump I can get around 10 oz and in a day I can get around 60 oz. This was when I did it during my confinement period. [Jenny]*

Jenny's experience showed that regular removal was more important than starting early in maintaining breast milk supply. There were also women who started to express later, just before they returned to work.

9.2.2 Started before returning to work

A more common practice was for women to start milk expression between two to six weeks prior to their returning to work. Liza learnt from her previous experience that by starting in the second week postpartum, she was able to produce enough stored milk.

> *My stock can be up to 200 bottles. I started to pump two weeks postpartum. Until now my milk storage is about 100 bottles. [Liza]*

There were a few mothers who realised that their infants were not able to feed directly from the breasts. They usually realised the problem after a couple of weeks of the infant's life as described by Suzy, who found that she had to be committed to expressing her milk to ensure adequate milk supply.

> *I started to express during confinement because I have a lot of milk. My milk is abundant and yet my baby was not able to feed directly from my breasts. So I had no choice but to express my milk. I keep it in a bottle container and keep it in the freezer. And it has been like that all the while. [Suzy]*

Although Suzy was very committed to milk expression, she sometimes ran out of her stored milk. There were times when she also had to give infant formula due to her work demand when she had to leave her infant for a few days.

> *I try to keep stock but when the stock run out, I have to give formula. It happened when I had to frequently leave him for out station job. [Suzy]*

Sugeeta started milk expression later during her maternity leave and she regretted not doing it earlier. Because of this, she had to introduce infant formula just a month after she returned to work as her expressed milk ran out of stock.

> *And only later I bought the pump . . . I didn't do it earlier and now I am regretting it you know. Now my supply is finished. It is like a daily basis supply. If I don't pump the next day she will have no supply. [Sugeeta]*

Unlike Suzy and Sugeeta, *Passionate* mothers would not compromise with infant formula in any situation. When mothers who were passionate about breastfeeding

realised they did not have enough milk storage, they did more frequent expression, day and night, to increase milk supply.

> *One week before I returned to work I started to express my milk. It was just enough for me to get the stock. Thanks God I manage to get it. So I have to really vigorously do it day and night. And I also do it while I breastfeed my baby. So before I returned to work I had around 60 bottles and it was a relief. [Emma]*

Although they started milk expression later, the strategy *Passionate* mothers applied helped them to ensure their infants were only given breast milk at all times. There were also some women who only started milk expression after they returned to work and this was the least common practice as explained next.

9.2.3 Started after returning to work

Starting milk expression after returning to work was the least common practice. Many women who started late only did it for a short while. They were women who removee the milk in order to avoid breast engorgement. Usually, they had introduced infant formula prior to their return to work and they breastfed when it was convenient.

> *I just do it [milk expression] once a day during the lunch hour break. I use the prayer room. [Sumaiya]*

Kabihah, who worked part-time, only occasionally removed her milk to avoid breast engorgement because most of the time her baby refused expressed milk.

> *I started to express when I start to work. I did not do it earlier because he refused to drink expressed milk. But I still tried to give my expressed milk from the bottle.*

And he still refused that and that is why I have to find a nursery nearby my working place. [Kabihah]

9.3 Removing Milk

The quantity of milk that the women removed varied from person to person and from session to session. It also depended on how regularly they did it during the day and how long they had been doing it. Mothers who only did it in order to avoid breast engorgement removed the least volume of milk. Others who removed the milk because they wanted to ensure adequate milk supply usually did so more consistently.

I am the type that doesn't have much milk. So I have to work hard to increase my milk supply. I have to wake up at night every two to three hours to express my milk. Every time I express, I can only get around two to three ounces. If I express less frequently, I am sure I will not have enough milk supply. [Nor]

When the women expressed milk at their workplaces, they needed transit storage, used appropriate containers and kept them at the right temperature before they reached home as shown in the Figure 9.1 below.

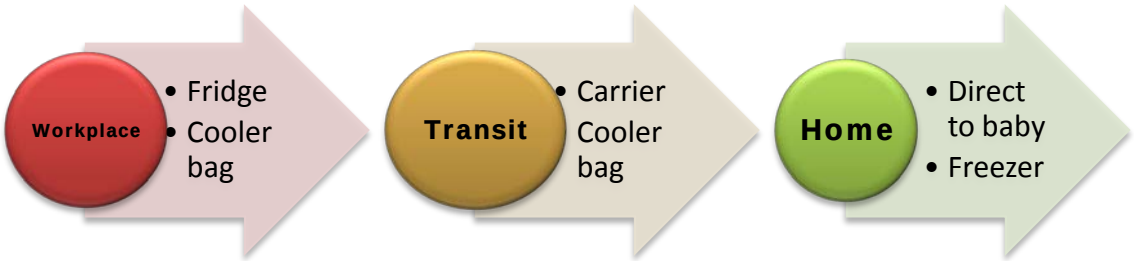


Figure 9.1: Flow of expressed milk storage from work to home

9.3.1 Storing milk

There were many steps in handling expressed milk before it was given to the infants. If the women removed the milk at their workplaces, they needed to ensure they had transit containers or a carrier to bring it back home. Usually, the mothers used a common fridge to store their milk while at work and later they took it with them when they left for home. Some women had their own cooler bag and they could keep the milk for up to several hours. Usually, when they reached home, some would use the milk and others would store it in a freezer.

Proper milk storage is important because it will determine how long the milk can be used. The participants in this study stored the milk in many ways and they used different storage containers. Having a large freezer storage capacity was essential and some mothers purposely bought deep freezers, while others only used their kitchen freezer at home. The women knew how to store milk properly and labelled the container to track the expiry date.

> *I bought a freezer with drawers. I use the drawers to keep my milk, only my milk and nothing else. [Nor]*

9.3.2 Handling milk

For later use, the milk needed to be thawed and attended to by the baby-sitter or carer. Often, the women faced a difficult situation where the career or the baby-sitters were not well trained in handling expressed milk. Kani, a dietician, was very

particular when she was looking for a childcare centre. She had to pay a high fee to find a carer who was well trained to handle frozen expressed milk.

> *The challenge is to find the one that accept 6 months old infant and the nursery that will accept your breast milk. Finally I found one and it was run by a breastfeeding counsellor. So she was very into expressed milk and she knew everything about that so I did not have any problem with them handling my expressed milk.*

Zee, a lecturer had no difficulty in maintaining adequate milk storage, but was not able to continue breastfeeding exclusively. She had to introduce infant formula when her infant was six months old because her mother-in-law who was looking after her infant was not cooperative and preferred to give infant formula.

> *I stay with my mother-in-law, and you know she is quite annoying, and when the baby is crying, she is worried and said the baby didn't have enough milk and things like that. So she said why you don't start him off with formula. I live with my mother in law. So, they prefer powdered milk which to them it was easier to prepare. So my idea of using expressed milk was really a burden for them at home. They are not used to the idea, you know, expressing, keeping in a freezer, thawing it and then warming it. Too much, it is easier to pour it from the tin. I think, this is the older person's mindset. [Zee]*

Having to do all these steps to ensure the infants were getting the best from the milk can be a daunting task. It frequently added stress to the women when they had to do it. Teo expressed the feeling when she had to go through it.

> *After the confinement lady was gone, it was hard for me to find time to express milk and what's more I had to wash the pump (several components) and bottles (more components!) It seemed quite ridiculous to go through all the extra steps to*

get the milk into his mouth. Plus, my handbook had all kinds of cautions on ensuring that the milk is stored properly, bottles are sterilized, and the fear of accidentally giving my poor child food poisoning was an ongoing stress. I tried to allow him to suckle but it was painful for me and he would often fall asleep immediately or refuse to let go. I once breastfed him for one and a half hours! God have mercy. [Teo]

9.4 Ensuring Adequate Milk Supply

As explained above, mothers started to express at different times and they chose different methods to do it. However, how long they kept on doing it and how consistently they did varies as well. Mothers who wanted to continue giving breast milk after they returned to work planned their milk expression schedules. It seems that those who were committed and followed their schedule consistently were more likely to maintain breast milk feeding for up to two years.

Thank God, my milk production is plenty. I never had any problem with it since my first baby and I am able to fully breastfeed those up to two years. [Rozyla]

Starting milk expression early postpartum was not a determinant that mothers were likely to do it for long. It was important for mothers to maintain regular expression at work in order to keep the supply adequate for her baby. If a mother worked full-time which is approximately eight to ten hours a day, she needed two to three breaks to express her milk.

That one I plan was one time. 10 in the morning, 1:30 and 4:30. At least three hours apart, three times a day. My work is quite flexible. [May]

At home, dedicated mothers also continued milk expression and they usually did that after or while feeding their infants including at night. In her diary, Rose reflected on some of her busy days, she had to rush to fit milk expression in between her tight schedules.

> *When there is extra work in the office I can only have time to express one time. And I could only get around 2 bottles. So after I return home, I have to make up and pump more when ever I could. Thank God I usually could get at least another 2 bottles. But when I look in the freezer I am worried because my milk stock is depleting. I know I have to be strong and I can do it. I will make sure tomorrow I can done better. I am determined to breastfeed my daughter for at least 2 years. [Rose, Diary]*

In order to ensure adequate milk supply, some women believed that taking health supplements or traditional remedy, known as 'jamu', could help to increase their milk production. Some of them bought commercially prepared supplements where they could obtain them from any pharmacy. Other women preferred to get 'jamu' from a traditional midwife who poduces their own formulation. All these were believed to increase milk production.

It was also common among the Malay and Indian women to have a traditional midwife to take care of them, including providing traditional herbs and also breast massage 'urut' as a way to increase milk production. A few of the Chinese participants who realised the importance of *urut,* also arranged for *urut* sessions. Lily hired an Indonesian confinement lady who was also a good *tukang urut (masseuse)*.

So she came one month before I deliver and she bought all the traditional herbs from India, and from India you got the pure one, she bought the entire full package. So, from the day I delivered, she started giving me. Immediately after I gave birth, she gave me something, start from there, so she was with me the whole 2 months after I delivered. So she stayed with me in total 3 months. [Kavitha]

9.4.1 Inadequate milk

Women commonly mentioned about not getting enough milk for their infants. This was a common assumption among first-time mothers that milk usually 'comes out' after a few days of their infants' life. Most of the participants who were first-time mothers talked about this problem. However, later on inadequate milk removal could lead to milk insufficiency. It could happen when the women only expressed once at work during their break and then as time passed, they gradually stopped doing it.

Sometimes when I am lazy to pump, and I have no expressed milk, so I asked the babysitter to give formula. Initially I used to be very diligent but now I hardly express my milk at the workplace. I waited until I finish my shift and straight away I will go to the baby sitter's place and feed directly my baby. [Sumathy]

It was not easy to maintain regular milk removal and Suhaila found doing milk removal in between feeds difficult. During confinement, she only expressed once or twice daily while at other times she gave direct feeding. She realised that she needed to be persistent otherwise she would ended up adopting formula.

The hardest part I found that when I express in between feed it is a bit difficult because my baby fully breastfeed. When the baby feed a lot, I started to express once a day. Then after a week I did it twice a day and slowly increased it. [Suhaila]

9.4.2 Milk excess

On the other hand, there were some women who had excess milk production. Hence they had ample storage. Some women donated their milk while others just threw the excess milk away. Liza who had excess milk production needed to express her milk to avoid breast engorgement. However, her baby refused to take expressed milk and she and her husband were reluctant to give excess expressed milk away. Instead they used it to water their plants.

> *Before I started working, I had around 100 bottles of milk stored. But now it is getting less because I have to throw away the expired stock. I sometimes use it to water my plant which helps to make the plant grow more. [Liza]*

Not all mothers liked to donate their milk. On further inquiry, they had a fear of health complications of the infants that may be related to their milk. Erma said that her mother was reluctant for her to donate her milk and preferred her to just throw it away. Erma did not reject the idea and just followed her.

Women had to discard milk if they were concerned that their expressed milk could 'turn bad'. This happened to women who had to attend courses away from home and when there was no proper milk storage available. Milk sharing is not a norm in the society, which made it awkward for many when they were offered breast milk. However, in some places this started to change. Donating milk to other infants in need is not a common practice in Malaysia. It was more common for mothers to share if they knew the recipient. In my interviews, there were a few mothers who had excess milk storage and donated milk for other children, known and unknown.

The problem is that he doesn't take a bottle, so I have a whole fridge full of milk and I don't know what to do. Luckily, my friend suggested me to give to refugee shelter. So, the first round, I donated around 40 bottles of 5 oz each to a refugee centre. Because I have already started piling from my second week. Then 40 bottles. And then my friend said actually do I mind if I give my milk to her child because she doesn't have enough. So from that I have been supplying to her until her baby was 10 months. [Lily]

On the other hand, not all mothers who had an inadequate milk production wished to accept milk donation. Faal refused to receive donated milk even from her own family member and would rather give infant formula if she could not produce enough breast milk.

My sister is very committed. She even wanted to donate her milk for my baby but my husband refused it. He just wants me to feed my baby with my own breast milk. I just give what I can get and usually I used all my expressed milk. [Faal]

9.5 Breast And Nipple Conditions

Many mothers encountered breast and nipple problems. Some women knew how to deal with them based on their previous experiences while others had difficulty to overcoming the difficulties. Many of the participants revealed that they had experienced breast engorgement. However, in many instances, the cases were mild and resolved without any interventions. Women tried using cold packs or cabbage leaves to alleviate the soreness but the effectiveness varied. Instead, women believed that the cabbage could absorb the entire nutrient from the milk and avoided using it.

I use cabbage to help ease the inflammation. Just take a whole piece and put it to cover the whole breast. I don't have to use the chilled one. It helped a lot. [Suzi]

When a mother knew the cause and how to handle problems related to her breasts and nipples, she was more likely to overcome the problem with success. Jamie, being a breastfeeding advocate, was able to manage the situation and having had previous experience with the same problem made her calmer in managing it.

> *Then I found myself really engorged. There were episodes where I had a very blocked duct. It was not mastitis; just blocked duct and the milk just couldn't come out. I was just expressing blood for a few days, badly, badly. But I was not on antibiotics. I was only taking paracetamol. I didn't panic because I knew I got injured when I used a tooth pick to take out the blocked duct because I don't have a sterile needle at home. I had a cracked nipple, I used lanolin. I put olive oil to soften it because of engorgement. [Jamie]*

Some mothers felt that the pain from engorgement was so intense which discouraged them to remove the milk. They tried other means, including using nipple shields or hot packs which for some of them were effective.

> *It was really challenging. I was nearly giving up. But I tried to use nipple shields. The crack was quite bad and it bleeds. I was to a point wondering how can other people tolerate such thing. The problem was that my baby only wanted to take from one breast and the other breast that became engorged. But then, I forced myself and let the baby suck from both breasts and thank God! After that the milk started to flow and all just suddenly subsided. It was such a relief! [Farha]*

Some of the cases progressed to develop into mastitis and the mothers had to be treated with antibiotics. The main problem mothers complained about mastitis and other nipple conditions like cracked nipple was the pain and that it was excruciating to express. If they refused milk expression their milk supply may be depleted. It was

apparent that *Passionate* mothers bore the pain and continued with milk expression, while other gave up at this stage.

> *Well, cracked nipple, it was very painful but I insisted that I really want to breastfeed. So I bought the nipple shield. It was not very helpful. But actually, once she started to suckle it is OK. The pain was only at the beginning, but I just bear it because I really want to breastfeed all my kids badly. When I had the cracked nipple, I still expressed even though it was very painful. I just go on with it. [Wardah]*

Having a flat nipple was another challenge some mothers encountered. It was noted that *Equivalent* mothers felt helpless and decided to introduce formula after they failed to latch their babies to the breasts. However, *Passionate* mothers called for help and insisted on trying until their infants were able to latch on properly.

> *The problem was that after we stopped pumping, the nipple retracted again. And it was very difficult and yet I was able to make it up to a month. And then after I started to introduce formula when I expressed there was no milk as it has already started to dry up. [Zu]*

Sometimes mothers were not aware that it was their breast and nipple conditions which could cause problems with breastfeeding. There was a mother who had to express breast milk because she had large nipples and her baby had difficulty latching on. The mother did not know how to deal with it; she thought that her baby refused her milk. Similarly, another mother had flat nipples, thus making it difficult for a proper latching on.

I started to express my milk on the second day. Because I tried to give direct but she seemed to refuse it. If she takes it directly, I think she did not get enough because she cannot properly latch on. [Dilla]

9.6 Summary

Working women who wanted to maintain breastfeeding or breast milk feeding in nearly all cases need to give expressed milk while they were at work. In order to have adequate expressed milk storage, a proper regular milk expression schedule needed to be implemented which included having to do it at work. Regular and consistent milk expression was crucial in maintaining ongoing milk supply because how much a woman could remove the milk for a later use was not determined by the pump she used or the time she started to express the milk. Regardless of where they worked, having someone to help with the infant was much appreciated by the participants. However, the challenge was to find the most suitable carer or nursery that was able to fulfil the mothers' needs and expectations.

CHAPTER 10: DISCUSSION

10.1 Introduction

The purpose of this study is to explore the impact working status has on breastfeeding practices among women in urban Malaysia. The findings suggested that working status was only a partial barrier to maintain breastfeeding after the women returned to work. It was also agreed upon by some participants that availability of workplace support and facilities were helpful in making return to work more manageable. Besides employment, how the women perceived breastfeeding, their characteristics and the support and challenges they experienced influence their infant feeding practices.

The determinants of breastfeeding practices: individual and group level factors are discussed in Chapter 2. Factor such as cultural practice could be a supportive (Mohd Amin et al., 2011; Yimyam, 2011) and a barrier (Ertem, 2011; Foo et al., 2005; Hizel et al., 2006) to breastfeeding. Religious belief has been shown to be a supportive factor for breastfeeding (Al-Madani et al., 2010; Foo et al., 2005; Jessri et al., 2013).

As suggested in the literature review in Chapter 3, previous researchers have agreed that working status has been shown to be a major barrier to maintain breastfeeding. The support at the workplace was likely to make their breastfeeding journey easier (Hawkins et al., 2007; Jacknowitz, 2008; Payne & James, 2008; Yimyam & Morrow, 1999). Longer maternity leave have been shown in cohort studies to promote longer breastfeeding duration (Baxter et al., 2009; Chuang et al., 2010; Scott et al., 2006). In a global comparative analysis, lactation break for at least six months have been

suggested to prolong exclusive breastfeeding for working women (Heymann et al., 2013).

Factors that were associated with a greater barrier to breastfeeding include a full-time job and working away from their infants (Chuang et al., 2010; Fein & Roe, 1998) while being self-employed with flexible working hours was supportive of breastfeeding (Hawkins et al., 2007). The other relevant studies on working women and breastfeeding practices are summarised in Tables 3.3, 3.4, 3.5 and 3.6 in Chapter 3.

The results in Chapter 6 revealed the differences among the three categories of mothers pertaining to how they perceived breastfeeding and Chapter 7 described the impact of working in their lives. The variations on how they coped with the challenges they encountered at work and in the community were discussed in Chapters 8 and 9. Based on how long the women can sustain breastfeeding or breast milk feeding, the women were divided into three categories. In this chapter, each category, their perceptions and practices will be discussed in view of the theories and literature.

In this Chapter, I discuss the three characters of mothers which are the *Passionate, Ambivalent* and *Equivalent*, pertaining to breastfeeding practices in view of the theories and previous literature. This chapter also highlights significant isolated findings that are of value in understanding working women breastfeeding experiences.

10.2 The Passionate Mothers

10.2.1 Passion above others

It is clear that *Passionate* mothers had strong intentions and managed to breastfeed exclusively regardless of their working conditions. Based on the Theory of Planned Behaviour (Ajzan, 2005), intention is the immediate determinant in performing a planned behaviour which relates to the *Passionate* mothers who managed to maintain breastfeeding as they also aimed to breastfeed. It is also true that the intention to breastfeed during pregnancy plays an important role in determining the success of continuing breastfeeding, as suggested by previous researchers (Bai et al., 2010; Donath & Amir, 2003; Tengku Ismail et al., 2012).

Passionate mothers shared many 'tastes' (Bourdieu, 1984) on breastfeeding perceptions, coping mechanism at work, views on family commitment, and strategies in balancing their work. According to Bourdieu (1984), the 'tastes' they 'inherited' are referred to as *habitus.* Their positive *habitus* helped them manage multiple roles which reduce the likelihood of experiencing work-family conflict (Greenhaus & Beutell, 1985).

Only *Passionate* mothers spontaneously raised the topic of bonding during the interview which is a distinction of their 'taste'. Although Jansen et al (2008) in their review did not reveal any significant empirical study to support the relationship between breastfeeding and mother-infant bonding, the findings in the current study is

obvious. Since only *Passionate* mothers described the feeling closely attached to their infants as rewarding, this is in fact a class distinction (Bourdieu, 1984) of *Passionate* mothers.

When mothers continuously breastfeed their infants, the emotional attachment tends to grow stronger as described by the *Passionate* mothers participants in Chapter 6. Emotional connection was another 'taste' commonly described by *Passionate* mothers as powerful. Schmied and Lupton (2001, p. 239) have referred this to as '*pleasurable and intimate, a vital means of emotional connection to their infants'.* They suggested that by just talking about their fondness towards their infants during the interview, they could feel their breasts become engorged. They related that experienced to the closeness as described in Chapter 6.

Passionate mothers valued the bonding as a stress reliever and they appreciated the emotional benefits of breastfeeding. Perhaps the stress relieving effects of bonding had made the *Passionate* mothers more resilient in maintaining breastfeeding practices. *Passionate* mothers revealed that by direct feeding, they were more alert to the physiological needs of their infants; in which feeding directly is another 'taste' of *Passionate* mothers.

10.2.2 Confident commitment

Passionate mothers confidently expressed their ability to breastfeed. It was commented by an American feminist Hausman (2004, p. 280) that '*it is interesting to note that confidence currently is considered a key factor in mother's perseverance in*

breastfeeding, not bottle feeding'. According to Avery et al. (2009), '*confident commitment'* comprises a few components whereby in order to breastfeed successfully, the mothers need to hav faith in their ability to breastfeed and in overcoming obstacles to make breastfeeding work. Based on what Avery (2009) theorises, when the *Passionate* mother could secure their 'taste' of '*confident commitment'*, their decision to breastfeed was without question.

In relation to the Theory of Planned Behaviour (Ajzen & Fishbein, 2000), *Passionate* mothers had a great *control belief* that they were capable of controlling their environment in order to perform their intended behaviour. Most *Passionate* mothers developed their confidence to breastfeed before their babies were born, which prepared them to withstand the challenges later in life.

Passion was the driving force that motivated *Passionate* mothers which according to Azjan (2005), created the strong *control beliefs* that they could breastfeed. They were also self sufficient and therefore did not rely on the lactation facilities at their workplace for milk expression. According to Bourdieu (1984), being self-sufficient could be seen as another class distinction of *Passionate* mothers. That is being self-sufficient may have been a prescribed behaviour that is passed down and learnt unconciously by mothers who had strong intention to breastfeed their infant.

10.2.3 Passionate mothers at work

It was important for *Passionate* mothers to have the breaks as Weber et al. (2011) have shown that women who were serious about breastfeeding talked to their

employers regarding breastfeeding at workplaces even before they returned to work. A study by Slusser et al. (2004) revealed that on average women need around an hour, in two separate sessions for milk expression during their 8 or 9 working hours. This was also experienced by the *Passionate* mothers. They requested lactation breaks from their employer so they can have proper time for milk expression.

Dabritz et al. (2009) revealed that less than a third of their participants requested lactation space and facilities at the workplace. In my study, some *Passionate* mothers requested facilities but if they were denied, they would still continue milk expression using any existing common facilities that may not necessarily be allocated for lactating mothers, such as a prayer room. They fit in with the subjectivity of 'good mother' of working women in New Zealand as described by Payne and Nicholls (2010). The behaviour of *Passionate* mothers is driven by a strong intention as suggested by the TPB strong intention and having *control belief* (Ajzen, 1991), could be the driving force for the *Passionate* mother to strive in all situations.

Passionate mothers were more likely to balance their commitment at work and their role as a mother as they had removed the tension in having to compromise on breastfeeding. Some of them reduced their work or chose to work from home, which was more manageable. Gatrell (2007), in her qualitative study, described this scenario as a reflection of the *Passionate* mother's behaviour, whereby proactive female workers would find ways to meet their aims in breastfeeding their infants.

10.2.4 Framing Passionate mothers

The Theory of Planned Behaviour relates closely to the P*assionate* mothers. According to the TPB (Ajzan, 2005), the current study suggests that *Passionate* mothers' intention to breastfeed were driven by their positive attitude and strong *control belief* which had facilitated them in manifesting their intended behaviour as theorised by Ajzan (1991).

Some of the *Passionate* mothers had breastfeeding support from significant people but not having support was not a barrier either. For example, their mothers or their colleagues were not supporting them to breastfeed but the *Passionate* mothers managed to steadfast with giving breast milk to their infants. It showed that support or the influence of *normative belief* was an additional factor that made their breastfeeding journey easier but without it they still managed to do it well. Because *Passionate* mothers had a strong *control belief*, they managed to maintain milk expression regardless of the availability of facilities for milk expression at the workplace.

Balancing working and family commitments is relatively easy for *Passionate* mothers who are clear about their priorities to breastfeeding. *Passionate* mothers always prioritised their family and infants rather than their work. Therefore, *Passionate* mothers were not reluctant to resign or reduce their working commitment if that was necessary to ensure they can continue breastfeeding their infants. A few of them made adjustment in their daily working schedule by changing to work part-time temporarily. By reducing the demand of their work, *Passionate* mother avoid any

trigger that may contribute to the development of work-family conflict (Greenhaus & Beutell, 1985).

Previous studies which suggested that the support from significant others was crucial in ensuring breastfeeding success (Galtry, 2003; Persad & Mensinger, 2008; Sikorski, Renfrew, Pindoria, & Wade, 2003) was not always true for *Passionate* mothers. Similarly, the studies that suggested the availability of workplace lactation facilities (Table 3.5) may be helpful in maintaining breastfeeding after returning to work was not always true for *Passionate* mothers too.

As theorised by Bourdieu (1984), the distinction about *Passionate* mothers and their ability to manifest their intended behaviour is a marker of their class. The confidence in *Passionate* mothers about their ability to maintain and manage breastfeeding regardless of their working conditions and the obstacles they encounter, distinguish them from the rest. By this, other factors such as socio-demographic, culture and belief had lesser impact in influencing their behaviour as revealed by Donath and Amir (2003) in their analysis of a large population study in the UK.

10.3 The *Equivalent* Mothers

10.3.1 Health matters

Equivalent mothers measured their infant's health by the infant's growth and weight gain. They believed that choosing the best formula for their infants meant they were

responsible parent for their infants (Liamputtong & Kitisriworapan, 2011). This is because breastfeeding was not their gold standard as *Equivalent* mothers judged the quality of a feeding by the health status of their infants. How *Equivalent* mothers determined their priorities for their infant feeding was based on their *habitus* and their perceived 'taste' (Bourdieu, 1984; Darmon & Drewnowski, 2008). That is, according to Bourdieu (1984) the *Equivalent* mothers' choice of food consumption in which they favored infant formula rather than breastfeeding is a reflection of their 'taste' and class distinction.

Commonly, *Equivalent* mothers' decision to introduce infant formula was a result of their paediatrician's suggestions. Although some of the paediatrician's advice was against breastfeeding, *Equivalent* mothers regarded the paediatrician as the expert in the field and therefore accepted the advice. According to Murphy (1999), the *Equivalent* mothers' justification for choosing infant formula was morally acceptable, although for many women, it was not easy to feel accepted in a society that regards breastfeeding as a norm (Esterik, 2002).

Only a minority of physicians recommended infant formula to the mothers as suggested by DiGirolamo et al. (2003). *Equivalent* mothers were among those who accepted the suggestion of physicians. Their justification in accepting and agreeing with the advice from authoritative figures, according to Bourdieu (1984), is another 'taste' of *Equivalent* mothers. Only *Equivalent* mothers tend to agree more with authoritative figures who they assumed knowledgeable although the advice given may not support breastfeeding.

10.3.2 Practicality counts

Most of the *Equivalent* mothers perceived that infant formula was a practical way in managing their multiple roles. They perceived that preparing infant formula was more manageable than expressing breast milk therefore they believed that it was appropriate to replace breastfeeding with infant formula. Preferring infant formula to breastfeeding is a reflection of the *Equivalent* mothers' freedom of taste (Bourdieu, 1984). They justified their action as being responsible mothers because they believed what they substituted was the best thing for their infants (Liamputtong & Kitisriworapan, 2011). According to Murphy (1999) in the Maternal Deviance rule breaking assessment, *Equivalent* mothers' practical reasoning in choosing infant formula could be justified. Furthermore, the mothers' act of giving infant formula was seen as 'unavoidable'. Instead, it was a coping mechanism in dealing with their work demand.

Unlike *Passionate* mothers who emphasised the emotional attachment with breastfeeding, *Equivalent* mothers responded to breastfeeding as '*difficult, unpleasant, and disruptive*' as suggested by Schmied and Lupton (2001, p. 239). These contrasting ways of seeing the practicality in breastfeeding were influenced by their perceptions. They perceived that expressing breast milk at work was not practical and caused much trouble not only for them but also for their colleagues. This was a distinct *habitus* (Bourdieu, 1984) of *Equivalent* mothers, whereby only practicality was an important aspect in determining their behaviour.

According to the Theory of Planned Behaviour (TPB) having intention (Ajzen, 1991) prenatally is not a characteristic of *Equivalent* mothers. Therefore, TPB predicts that the *Equivalent* mothers assess their needs based on the practicality and not on their intention (Ajzen, 1991).

10.3.3 What matters most

Equivalent mothers claimed that infant formula had high nutritional value and therefore was an acceptable alternative for their infants (Ludlow et al., 2012). Realising they had '*milk insufficiency', Equivalent* mothers justified their infant formula choice as an effort of responsible mothers. Their justification was important so they should not be blamed for their choice as suggested by Murphy (1999) and Marshall et al. (2007). Furthermore, their decision to introduce infant formula was also supported by their spouse.

The work-family framework (Greenhaus & Beutell, 1985) was less relevant in explaining the *Equivalent* mother's behaviour, they had removed the conflict of choosing between having the time to express at workplaces. Fein et al. (2008) found that women who did not pump at work breastfed the shortest duration, as seen in *Equivalent* mothers. Instead, they just had to focus on their jobs while at work and at home their helper can help with the feeding if they were not around.

Interestingly, a study by Mozingo et al. (2000) suggested that for women who believed that maintaining jobs was more important, quitting their job was never an option as *Equivalent* mothers also thought. Prioritizing their occupation and the feeling of

importance to remain employed was indeed a *habitus* of Equivalent mothers. They fit in the description of 'good worker' as described by Payne and Nicholls (2010) in their study among working women in New Zealand. In becoming a 'good worker', a breastfeeding woman may 'marginalised' breastfeeding while at work (Payne & Nicholls, 2010, p. 1816) Breastfeeding was indeed an idealist expectation which actually clashed with reality, and inadequate assistance and guidance made breastfeeding to be not portrayed as the best decision (Mozingo et al., 2000) at which *Equivalent* mothers could arrive at.

10.4 The *Ambivalent* Mothers

10.4.1 Conditional intention

Ambivalent mothers were as motivated as *Passionate* mothers to breastfeed their infants, but their intention to breastfeed was conditional. Unlike *Passionate* mothers, *Ambivalent* mothers may not have planned well in anticipating the challenges which may interfere with breastfeeding. In many cases, they referred to their significant others for suggestions.

A UK cohort study has shown that the mother's prenatal intention to breastfeed was a more important predictor than other demographic variables on the duration of breastfeeding (Donath & Amir, 2003). Their findings on intention explained *Passionate* mothers' experiences but not for *Ambivalent* mothers. The experience of *Ambivalent* mothers showed that although they had the intention, their behaviours were

influenced by *normative belief* on how others perceived how they should behave, which according to the TPB *normative belief* is a construct that influenced their behaviour (Ajzen, 1991).

Ambivalent mothers felt a predicament in having to please significant people that may not agree with them. Therefore, when *Ambivalent* mothers were faced with families and friends who were not supportive of breastfeeding, they easily gave up. A study among working mothers in Thailand suggested that the cultural practice of family members supporting women after delivery has helped to increase breastfeeding duration (Liamputtong & Kitisriworapan, 2011) which most of the *Ambivalent* mothers did not experience.

Many previous studies in similar settings also revealed the women's concern of inadequate milk and thus they felt it was not worth the effort to express their milk (Tengku Ismail et al., 2012). *Ambivalent* mothers were not exceptional in having the same concern about milk insufficiency which may reflect their negative 'taste' about breastfeeding. They were likely to fall into the middle range attitude score which indicate 'ambivalent feeling' as described by Wilkins et al. (2012), in their study on breastfeeding attitude among UK women. According to the TPB (Ajzen, 1991), *Ambivalent* mothers did not have the *control belief* that they were able to provide enough milk for their infants. In contrast, their *normative belief* was more prominent which made their intention to breastfeed conditional.

When *Ambivalent* mothers felt the challenges were overwhelming and they were not able to manage breastfeeding while working, they changed their intention. The experience of *Ambivalent* mothers of changing their intention as suggested by Moore and Coty (2006) that intention is not a static concept rather than it is a circularity determined by the situations. Furthermore, it strengthens their notion on practicality and is far more realistically important than materialising the intention which is a 'taste' of *Ambivalent* mothers.

10.4.2 Unsupportive family

Based on how *Ambivalent* mothers responded to the influence and expectations of other people, their planned behaviour to breastfeed was mainly controlled by the *normative belief* which is how others thought they should behave (Ajzen, 1991). When the *Ambivalent* mothers were faced with unsupportive family who may have a negative perception of breastfeeding they lost their *control belief* and they compromised on their intention to do what they had planned initially.

Ambivalent mothers need supportive family members including their spouse or partner, their mothers or mother-in-laws (Galtry, 2003). McInnes et al. (2008), in their review of support~~s~~ for breastfeeding mothers, revealed that continuous family support turned out to be more important than professional help. Stewart-Knox et al. (2003) also suggested the extended family support plays an important role in the women's perceptions about breastfeeding. Likewise, *Ambivalent* mothers were also affected by the lack of support from family with the housework and child care similar to the findings by Mangasaryan et al. (2012).

Ambivalent mothers felt that both their family and working commitments were important. They wanted to be able to breastfeed their infants for as long as possible and at the same time they wanted to be able to work full-time. According to the work-family framework, (Greenhaus & Beutell, 1985), *Ambivalent* mothers' conflict occurred when they were not able to balance the roles effectively. They did not want to compromise their work as they had constraints with the financial burden if they quit their job and give attention to the family. They decided to compromise by giving infant formula to their infants while still being able to keep their job secured.

10.4.3 Workplace support

Like *Passionate* mothers, most *Ambivalent* mothers who worked full-time were separated from their infants while at work. In many cases, their separation created a conflict between breastfeeding and employment because breastfeeding is an activity that demands the women's time out of work (Del Bono & Pronzato, 2012). Unlike *Passionate* mothers, *Ambivalent* mothers relied on the availability of facilities at the workplace as a support so they could continue to express and maintain breastfeeding. A study in the United Kingdom by Del Bono and Pronzato (2012) suggested that by providing breastfeeding facilities at the workplace, the probability of breastfeeding increased at four and six months of the infant's age among their workers.

Inadequate facilities at the workplace were perceived by *Ambivalent* mothers as a barrier to maintain breastfeeding. This finding has also been suggested by Weber et al. (2011) who studied the perception of organisational support by female employees. A

study in East Peninsular Malaysia among employed women regarding facilities for milk expression revealed that they wanted a specific fridge just to keep their expressed milk to avoid contamination if stored in the common fridge (Tengku Ismail et al., 2012). Having in mind that milk expression is impossible without having the facilities at the workplace is yet another *habitus* of *Ambivalent* mothers which subject them to a higher failure rate to maintain breastfeeding in a non-supportive working environment.

Ambivalent mothers were less successful in handling multiple tasks. In many cases, because of their *habitus*, they chose to compromise breastfeeding instead of giving up their job. For *Ambivalent* mothers, keeping their jobs was more crucial in order to avoid financial instability but they could substitute breastfeeding with infant formula. Their experiences suggested that as the intensity of their workload increases, the frequency of breastfeeding decreases (Roe et al., 1999), and gradually *Ambivalent* mothers had to stop breastfeeding. As suggested by Lindberg (1996), the experience of *Ambivalent* mothers could happen when working women were not able to manage the dual roles of breastfeeding and working.

10.5 Isolated But Significant

As described in Chapter 5 , less than a third of the participants in this study worked from home or was doing part-time work. Most of them were *Passionate* mothers who purposely chose part-time or working from home, believing that they could have the

time to breastfeed fully. Having all the time and their infant with them exclusive breastfeeding was achieved without much challenges.

Of those who work from home, two of them were *Equivalent* mothers. Choosing to stay at home is not a typical 'taste' of *Equivalent* mothers. For them, being with their infants and to care for them may not necessarily mean they have to breastfeed. The experiences of *Equivalent* mothers working from home were not able to explain previous studies findings whereby the duration of breastfeeding was inversely related to hours of work; full-time breastfeeding less than part-time (Fein & Roe, 1998; Hawkins et al., 2007).

Referring to these scenarios, the current study suggests that, working part-time may support mothers to breastfeed only if they had the intention to do so. As explained earlier, it was clear that, *Equivalent* mothers work on practicality and not on what is intended which explains that working from home may not necessarily mean a practical way for breastfeeding.

10.6 Redefine Frameworks

It was commonly observed that the participants who were *Passionate* mothers relate what they were practicing with their infants mirrored what their family used to do for them when they were young. For example, women who were born into families where infant feeding was their culture repeated their family tradition practices. When some of the mothers talked about infant feeding they just followed or agreed with their

family norms, they unconsciously followed their family *habitus* that had been inherited from generation to generation (Bourdieu, 1984).

It is clearly demonstrated in the current study that maternal socio-demographic factors had not much influence in determining the women breastfeeding practices. Instead, their 'tastes' as *Passionate, Ambivalent* or *Equivalent* mothers are more influencing in explaining how they perceived and practice infant feeding. Their culture, belief and ethnic background are not strongly determined as seen in *Passionate* mothers who are able to maintain breastfeeding regardless of their culture and ethnic background. Similarly, *Equivalent* mothers justified their infant feeding choice regardless of what their religious beliefs propagate.

The theoretical frameworks for this study as depicted in Figure 4.5 in Chapter 4 aligned with the Hector et al.'s (2005) concept on infant feeding determinants. Based on the findings of this study, the grid alignment can now be redefined taking into the 'tastes' of the *Passionate, Ambivalent* and *Equivalent* mothers. It means that the influence of each theoretical framework of the factor level could be further specified based on the women 'tastes' as modified in Figure 10.1.

The Theory of Planned Behaviour (Ajzan, 2005) describes well *Passionate* mother's strong intention that leads them to exclusive breastfeeding. Maternal Deviance (Murphy, 1999) facilitates the understanding how *Equivalent* mothers decided that formula feeding was the best option for their infants. Work-family framework

(Greenhaus & Beutell, 1985) explains the potential sources of strain that could interfere with the *Ambivalent* mothers' effort to balance their multiple roles.

The perceptions and practices of *Passionate, Ambivalent* and *Equivalent* mothers could be considered as their *habitus* (Bourdieu, 1984). Each of these groups of women has developed their own breastfeeding culture or referred to as 'taste' by Bourdieu (1984). Each breastfeeding culture was united by their perceptions and the extent of their determination of what they wanted to achieve for their infants and themselves. It is clear that the distinct 'taste' of *Passionate* and *Equivalent* mothers is represented by their class distinction (Bourdieu, 1984).

10.7 Summary

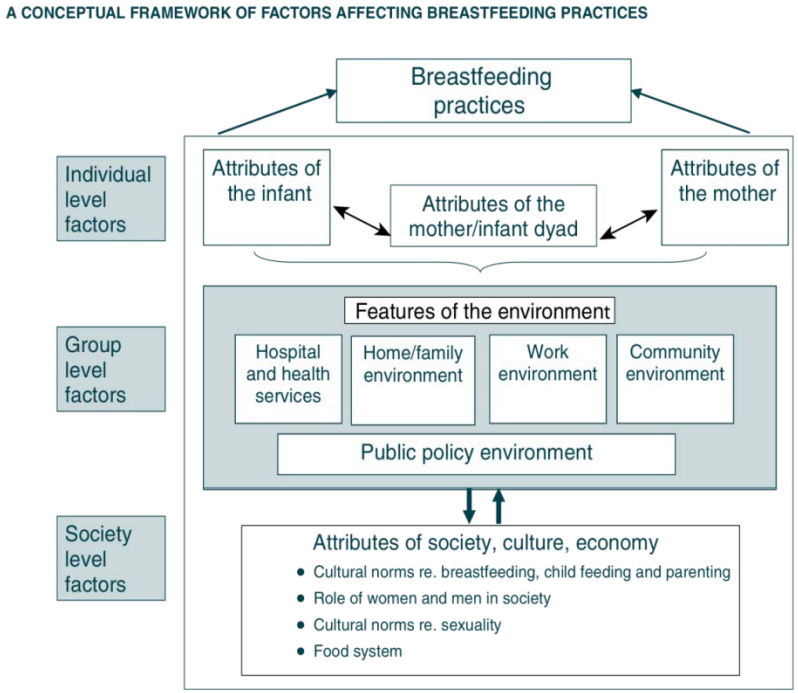
This chapter discusses the findings of the current study in view of the theoretical frameworks by taking into consideration previous research. The current research reveals that working is only a partial barrier to maintaining breastfeeding, or breast milk feeding, after returning to work. Since breastfeeding is an on-going commitment which requires a continuous effort, therefore workplace support had been suggested by some of the participants to help them maintain breastfeeding while working.

Their 'tastes' moulded how they perceived infant feeding practices which were influenced by the unconsciously inherited *habitus*. Learning from the *Passionate* mothers' determination in pursuing with breastfeeding, we can say that it took not only courage and perseverance but also skills in managing breastfeeding difficulties.

They had the courage to express what they felt was right and appropriate although at times these could be against the odds. Instead, for many women it was easier to accept and agreed with others' opinions and suggestions and played the role of followers.

Female workers, mainly the *Ambivalent* mothers, need more help than *Passionate* mothers to continue breastfeeding or breast milk feeding at work due to their predicaments. The employers have to be approachable and the workplace has to be a breastfeeding friendly place so that the women are empowered to voice their concerns and their needs can be met.

Equivalent mothers are clear with their choice not to breastfeed their infants. They justified their decision and did not see their choices as inferior to others. They also found family and healthcare professionals were supportive of their decision. Based on the women's experiences and their 'tastes' of infant feeding as *Passionate*, *Ambivalent* or *Equivalent* mothers, the theoretical frameworks are reframed as summarised in Figure 10.2.

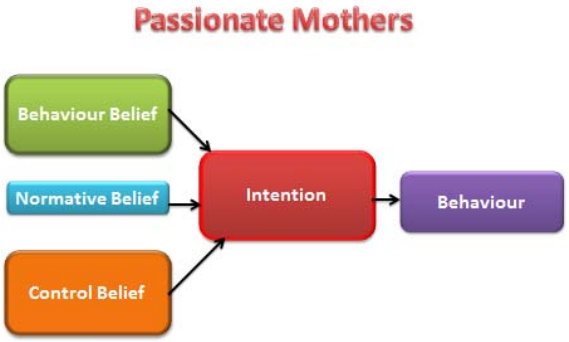
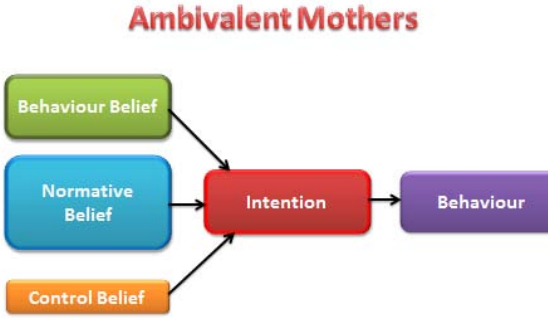
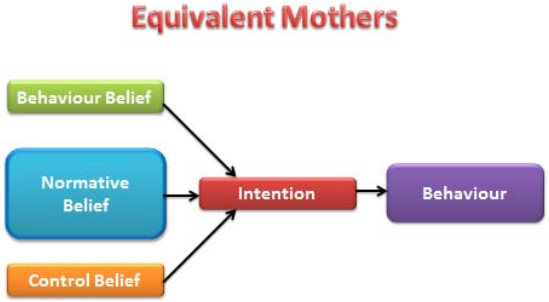
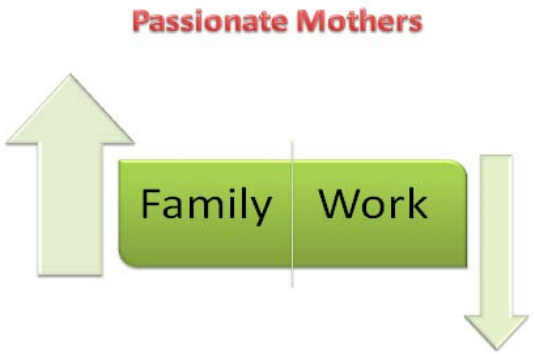
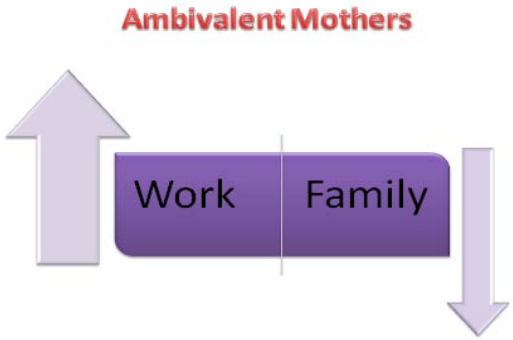
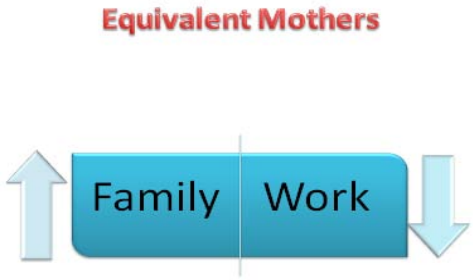


Theory of Planned Behaviour	Maternal Deviant	Work-family Conflict	Class Distinction

Passionate mothers				
Ambivalent mothers				
Equivalent mothers				
	The theory is slightly related to the factors at that level			
	The theory is moderately related to the factors at that level			
	The theory is strongly related to the factors at that level			

Figure 10.1: Redefined grid based on the women's characteristics

Mothers' characteristics	• **Passionate mothers**	• **Ambivalent mothers**	• **Equivalent mothers**
Perception	• Breastfeeding is natural • Bonding and attachment are priceless • Gold standard	• Conditional intention to breastfeed • Breastfeeding is challenging • Breastfeeding is stressful	• Nothing is wrong with formula feeding • Formula feeding is manageable • Formula feeding is practical
Practice	• Exclusive breastfeeding for 6 months • Continued for 2 years	• Breastfed at least 6 months • Continued when possible	• Breastfed for 1 to 2 months • Introduced formula within 1 month
Personal factors	• The mother's positive perception contributes to the ease of breastfeeding	• The mother's ambivalent attitude towards breastfeeding contributes to the stressful situation	• The mother's negative perception contributes to the choice of infant formula
Work-related factors	• They do not have to rely on the support from their family or colleagues or facilities at the workplace	• They rely on the lactation facilities at the workplace	• They do not need the lactation facilities at the workplace
Non-work related factors	• They are independent.	• They were ambivalent towards their family who do not support breastfeeding.	• They rely on their family or professional advice.
Theory of Planned Behaviour	• Strong intention is driven by strong behaviour belief and *control belief*	• The intention was compromised by strong *normative belief*	• No intention and labile attitude. Strong *normative belief*

			
Work-family Framework	• Balance is achieved by compensating work and give focus to breastfeeding	• Balance is achieved by compensating breastfeeding and give focus to work	• Balance is not an issue as giving infant formula does not interfere with work
			
Deviant Mother	• Not applicable	• Justified and not guilty as the act of choosing infant formula is seen as a responsible behaviour of mothers who are unable to breastfeed their infants	• Justified and not guilty as the act of choosing infant formula is seen as a responsible behaviour of mothers who are unable to breastfeed their infants

Habitus	• Determined • Disciplined • Proactive • Passion	• Unsure • To please others • Guilty	• Easy • Keep it simple • Practical
Theory of Class Distinction	• Passionate mother's class distinction only accepts breast milk. • Formula milk is never tolerated. • Breast milk is the gold standard and nothing can replace it. • Any efforts or sacrifices are highly regarded as important as long as it helps to ensure the infants are given breast milk.	• Ambivalent mother's class distinction valued breast milk is the best only when it is manageable. • Replacement with other form of formula is acceptable only after the mothers had shown a significant effort but fail. • Breastfeeding is good for the infants provided that the mothers are able to manage it.	• Equivalent mother's class distinction equalised the value of breast milk and infant formula making the choice of feeding rely on the convenience of providing any of these. • Managing work was easier and no conflict with breastfeeding as it does not demand any from the women. • Practicality is a consideration in making decision on infant feeding

Figure 10.2: The *Passionate, Ambivalent* and *Equivalent* mothers in relation to their features and relation to the theoretical frameworks

CHAPTER 11: SUMMARY AND CONCLUSION

11.1 Introduction

This research qualitatively examines the perceptions and experiences of infant feeding among 40 working women in urban Malaysia, chosen using the maximum variation technique in a stratified purposive sampling. Since this research attempts to understand women's work-related behaviour of infant feeding, I choose the Theory of Planned Behaviour, the Work-family Conflict model, the Maternal Deviance Framework and Bourdieu's Theory of Class Distinction to frame my research. This research is undertaken using post-modernism and feminism lenses, which gave voice to the participants in articulating their viewpoints using in-depth interviews and written diaries, blogs and journals.

The research aims to understand women's work-related behaviour of infant feeding and how they perceived infant feeding. In response to the research questions, this study reveals that working women's perceptions towards breastfeeding can be described as positive, negative or indifferent which were influenced by many factors. True in many instances, the perception relates closely to how they practice infant feeding. Working status and workplace conditions may be a barrier to maintaining breastfeeding for some women.

Although this study was conducted in urban Malaysia, the findings could be inferred to working mothers in general. The participants' experiences could be useful for any working women who have infants less than two years old. People could learn from the struggle of *Ambivalent* mothers in overcoming the challenges to maintain

breastfeeding; the success stories of *Passionate* mothers on how they deal with difficulties in breastfeeding and people may be better informed as to why *Equivalent* mothers decided to choose infant formula.

This study is also relevant for women who want to learn from the experiences of others in handling milk expression especially for mothers who have to be separated from the infants. It gives some practical guidance on how to manage breastfeeding and milk expression. It may suggests some child care alternatives in view of the advantages and disadvantages of each option.

11.2 Key Findings

First, the *Passionate* women managed breastfeeding or to give breast milk exclusively for the first six months and then continued for up to two years of their infant's life. They were exceptional, determined, proactive, and confident in character. Strong intention, bonding and emotional attachment were believed to be important 'taste' for *Passionate* mothers to breastfeed longer. They were always positive and believed in their ability to breastfeed their infants. Regardless of the working conditions and the working schedules, they managed to breastfeed successfully. Their *habitus* allowed them to breastfeed longest and they never failed even in a very difficult situation.

Second, the *Equivalent* women 'taste' to breastfeed for only a short period mainly before they returned to work which was on average two months of postpartum.

Practicality instead of intention is an important *habitus* for *Equivalent* mothers who like to keep things simple and manageable. They perceived formula feeding is as equally nutritious as breastfeeding. Therefore, for *Equivalent* mothers 'taste' of formula milk was because of its practical nature of working mothers and its equally acceptable nutritional value for the infants.

Thirdly, the *Ambivalent* women who struggled to balance work-family commitment and breastfeed their infant for at least the first six months. The *Ambivalent* resembles the *Passionate* in their intention to breastfeed but not their determination in overcoming challenges at workplaces and with family members. They were less likely to confront challenges at work and therefore in many cases they did not manage to continue breastfeeding.

Referring to the women's characteristics, employment has a different impact on different characteristics. Employment may not be a barrier to *Equivalent* mothers, a partial barrier to *Ambivalent* mothers and only a potential barrier to *Passionate* mothers to maintain breastfeeding after returning to work. The flexibility and facility provided at the workplace may be of value in helping mothers prolonging their breastfeeding duration for those who had the intention to maintain breastfeeding for their infants.

The theoretical frameworks facilitate in the understanding of the complex women's breastfeeding behaviour. Since each framework explains different aspects of the

women, by combining the four frameworks, the women's perceptions and practices in relation to infant feeding practices could be described as more meaningful.

11.3 Strengths And Limitations Of The Study

It is well known that working status, mainly full-time, rigid hours and being away from home have a negative impact on breastfeeding practices. Nevertheless, not all women working in a negative environment were unsuccessful in maintaining breastfeeding, nor do supportive environments indicate a promise to a better breastfeeding practice. This study signifies that there is a spectrum to how employment may be a barrier to working women who have infants less than two years old.

The findings in the current study added value to the current knowledge on the understanding of the impact of working mothers on breastfeeding practices in Malaysia. We are better informed with the ways how the Malaysian working women manage breast milk expression, making arrangements for their child care and dealing with the obstacles at work and at home. We may understand better why some women prefer infant formula although they may have the support at the workplace or work from home with their infants around. The three descriptions of *Passionate, Ambivalent* and *Equivalent* summarised the main distinctions on how infant feeding practices took place.

Having limited time and unsupported by a research grant were the two main constraints faced in the study. Two precautionary steps were taken to avoid any

compromise to the validity of the study data. First, a wide range of participants was recruited by applying a maximum variation technique. This sampling technique allows the widest possible variety of participants to be included in the study. By employing this strategy it helps to cover a wide range of women with different work categories and therefore more working experiences can be documented.

Second, the participants were told no financial incentives shall be given to their agreement to participate which helped to reduce the research cost. In contrast, it has helped to reduce the selection bias which may be due to financial gain. In order not to incur any unnecessary cost to the participants, they were allowed to claim for the interview transportation cost if required.

11.4 Future Research And The Way Forward

Future research in Malaysia could focus on breastfeeding support and policy at the workplace. There is limited research on support for working mothers in Malaysia. The research could explore various ways on how to support working women in managing their infants better. The support from the family, peers and employers may be tailored to the work settings and environments. Another research area is to expand and evaluate the setting on the current work about family friendly workplace policy. There is potential to explore and apply the policy to a wider range of workplaces so that it could benefit a larger population of working women. To date, Malaysia has not legalised any law that allows lactation breaks during working hours. Furthermore,

Malaysia also only allows a short maternity leave which is far less than the minimum recommended days by the International Labour Organization (ILO).

The way forward is to promote family-friendly workplaces in which the employer could play an important role in initiating the effort. First, by making working conditions more suitable for the women, such as flexible working hours or job sharing is important for the working mothers to have the flexibility in their employment schedule so they can fit in the time for milk expression. These practices are more manageable in terms of cost saving to the employer and create a more flexible and conducive working environment for the working women who need to undertake milk expression.

Second, the employer could provide a private space or improve the accessibility to the currently available facilities at the workplace especially for women who do not view extended leave from work as an option. Furthermore, mothers could be taught a proper plan on how to manage milk expression at a workplace that does not provide proper facilities.

11.5 Conclusion

This study concludes that there are many 'tastes' of infant feeding practices among working women. Intention played a major role in determining whether a practice is maintained for *Passionate* mothers or changed for *Ambivalent* mothers with the adjustments in their surroundings. Practicality is viewed as more important than to

ensure intention is materialised for *Equivalent* mothers. How significant the mothers assumed others wanted them to behave and how their childhood memories within their family culture persisted, in many instances would contribute to their current practices too. The ability to maintain breastfeeding after returning to work was not necessarily reflected as good motherhood as perceived by some working women in urban Malaysia.

There is no single truth in understanding working women's breastfeeding behaviour. Women who experienced a similar working environment may have different infant feeding's outcome in terms of their ability to maintain breastfeeding. Thus, how they planned and organised their multiple roles were uncovered in the current study which lead to defining them into *Passionate,* who is recognised based on their perseverance, *Equivalent* mothers who preferred for practical things and *Ambivalent* mothers who are concerned about others in making decisions about infant feeding.

Not all women felt that employment was a barrier especially for *Equivalent* mothers who have had the plan to formula feed their infants when they returned to work. Employment may only be a partial barrier too for *Passionate* mothers who carefully planned to give breast milk when they returned to work. If *Passionate* mothers felt that their employment may cause a threat to continuing breastfeeding, they would make necessary changes in their life. Working could be a main barrier for *Ambivalent* mothers who in many instances were faced with the unexpected challenges and lack of support from significant people, hence escalating the problems.

Since breastfeeding experience could vary for different infants as experienced by the researcher, the description of the participants into *Passionate, Ambivalent* or *Equivalent* mothers was only true at the time of the interviews. Reflecting on my own experiences, my first breastfeeding experience suited more of an *Ambivalent* mother but with experience I resembled more of a *Passionate* mother for my second infant.

Having in mind the differences in these women, the strategies to help them in managing their work and infant feeding may differ too. Intervention in the workplace may be useful for most women; however, for those who have decided to formula feed their infants it may not have an impact in creating a mother-friendly environment. Changing or introducing a policy therefore may be of relevance in influencing some women. In order to implement or create change in the workplace, utilising various strategies may help to reach a wider spectrum of women who have different ways of how they interpret the circumstances around them.

In Malaysia there has been movement to develop a positive family friendly workplace environment. Perhaps strengthening the ground on this initiative may make further intervention a fruitful strategy. Synergistic approaches from breastfeeding advocates and stakeholders looking into different approaches are essential in creating a family-friendly workplace environment in Malaysia a reality.

APPENDICES

APPENDIX I: Ethics Approval from La Trobe University

LA TROBE UNIVERSITY

RESEARCH SERVICES

MEMORANDUM

To:	**Professor Pranee Liamputtong, School of Public Health, FHS** **Ms Zaharah Sulaiman, School of Public Health, FHS**
From:	**Secretary, La Trobe University Human Ethics Committee**
Subject:	**Review of Human Ethics Committee Application No. 10-056**
Title:	**Infant feeding choices: Attitudes, decision-making processes and experiences among working women in Malaysia**
Date:	**27 September 2010**

Thank you for your recent correspondence in relation to the research project referred to above. The project has been assessed as complying with the *National Statement on Ethical Conduct in Human Research*. I am pleased to advise that your project has been granted ethics approval and you may commence the study.

The project has been approved from the date of this letter until 30 June 2012.

Please note that your application has been reviewed by a sub-committee of the University Human Ethics Committee (UHEC) to facilitate a decision about the study before the next Committee meeting. This decision will require ratification by the full UHEC at its next meeting and the UHEC reserves the right to alter conditions of approval or withdraw approval. You will be notified if the approval status of your project changes.

The following standard conditions apply to your project:

- **Limit of Approval.** Approval is limited strictly to the research proposal as submitted in your application while taking into account any additional conditions advised by the UHEC.
- **Variation to Project.** Any subsequent variations or modifications you wish to make to your project must be formally notified to the UHEC for approval in advance of these modifications being introduced into the project. This can be done using the appropriate form: *Ethics - Application for Modification to Project* which is available on the Research Services website at *http://www.latrobe.edu.au/research-services/ethics/human.htm*. If the UHEC considers that the proposed changes are significant, you may be required to submit a new application form for approval of the revised project.
- **Adverse Events.** If any unforeseen or adverse events occur, including adverse effects on participants, during the course of the project which may affect the ethical acceptability of the project, the Chief Investigator must immediately notify the UHEC Secretary on telephone (03) 9479 1443. Any complaints about the project received by the researchers must also be referred immediately to the UHEC Secretary.

APPENDIX II: Ethics Approval from Prime Minister Department, Malaysia

UNIT PERANCANG EKONOMI
Economic Planning Unit
JABATAN PERDANA MENTERI
Prime Minister's Department
BLOK B5 & B6
PUSAT PENTADBIRAN KERAJAAN PERSEKUTUAN
62502 PUTRAJAYA
MALAYSIA

Telefon : 603-8872 3333

Ruj. Tuan:
Your Ref.:

Ruj. Kami: UPE: 40/200/19/2684
Our Ref.:

Tarikh: 21 Disember 2010
Date:

Zaharah Sulaiman
PT 712, Taman Desa Paduka,
Wakaf Stan,
16150, Kota Bharu,
Kelantan
Email: zaharahsulaiman@yahoo.com

APPLICATION TO CONDUCT RESEARCH IN MALAYSIA

With reference to your application, I am pleased to inform you that your application to conduct research in Malaysia has been *approved* by the **Research Promotion and Co-Ordination Committee, Economic Planning Unit, Prime Minister's Department.** The details of the approval are as follows:

Researcher's name	:	**ZAHARAH SULAIMAN**
Passport No. / I. C No:		**700313-01-5172**
Nationality	:	**MALAYSIA**
Title of Research	:	**"INFANT FEEDING CHOICES: ATTITUDE, DECISION-MAKING PROCESSES AND EXPERIENCES AMONG WORKING WOMEN IN MALAYSIA"**
Period of Research Approved:		**3 YEARS**

2. Please collect your Research Pass in person from the Economic Planning Unit, Prime Minister's Department, Parcel B, Level 1 Block B5, Federal Government Administrative Centre, 62502 Putrajaya, Malaysia and bring along two (2) passport size photographs.

3. Please take note that the study should avoid sensitive issues pertaining to local values and norms as well as political elements while undertaking your research project in Malaysia. You have to adhere to the conditions stated by the code of conduct for foreign researchers. You are also required to comply with the rules and regulations

APPENDIX III: Plain language statement for face-to-face interview

PLAIN LANGUAGE STATEMENT FOR FACE-TO-FACE IN-DEPTH INTERVIEW

PROJECT TITLE:Infant feeding choices:
Attitudes, decision-making processes and experiences among working women in Malaysia

PRINCIPAL INVESTIGATOR: Professor Pranee Liamputtong, Personal Chair in Public Health, School of Public Health, La Trobe University, Australia.

ASSOCIATE RESEARCHERS: Dr Lisa Amir, Mother and Child Health Research, La Trobe University;
Dr Zaharah Sulaiman, Postgraduate Candidate, School of Public Health, La Trobe University, Australia.

Welcome and thank you for your interest in this study. This study is open to working women who are:

- **18 years old and above**
- **At the time of interview has an infant age between six to 12 months**
- **Able to understand and speak in English or Malay language**

This Plain Language Statement and Consent Form are four (4) pages long. Please make sure you have all the pages.

1. Your consent
You are invited to take part in this research project.
This Plain Language Statement contains detailed information about the research project. Its purpose is to explain to you as openly and clearly as possible all the procedures involved in this project before you decide whether or not to take part in it. Please read this Plain Language Statement carefully. Feel free to ask questions about any information in the Statement. Once you understand what the project is about and if you agree to take part in it, you will be asked to sign the Consent Form. By signing the Consent Form you indicate that you understand the information and that you give your consent to participate in the research project.
You will be given a copy of both the Consent Form and this Plain Language Statement to keep as a record.

2. Description of the Project
This project aims to investigate working women's attitudes, decision-making processes and experiences about infant feeding. We would like to understand working women experiences and how they make decision regarding their infant feeding. We would like to compare the findings among women from various occupations and work setting, from different cultural and religious background.

This research is being conducted as the requirements for Zaharah Sulaiman. You are invited to take part in an in-depth interview as you may have gotten information about this study through advertisements found in notice board at research recruitment centres. You may have contacted the person in charge at the centre to express your interest to take part.

We plan to undertake in-depth interviews with around 40 to 50 working mothers to investigate these issues. The in-depth interview will discuss on the issues related to the

project title.

Participation in the project will involve in a face-to-face interview that we expect will take approximately 60 to 90 minutes. We ask your permission to tape-record the interview as this is the best way for your responses to be accurately recorded. A copy of the transcript will be made available to you to confirm accuracy.

3. Possible Benefits
Although we cannot promise that your participation in this project will be of direct benefit to you, you could greatly assist researchers in understanding working women experience and how they decide on infant feeding. You may also find it useful to identify the gaps and needs of employers in improving and strengthening workplace facilities for reflect on issues regarding surrounding the use of medicines in breastfeeding women. The outcome of this research will be a practical handbook for working mothers on infant feeding based on real experiences. This write up can be benefit to you and other working women in general too.

4. Possible Risks
The study is unlikely to pose any physical or biological threat to the participants. Possible risks include breaches of individual confidentiality. These risks will be minimised by de-identification of the data and comments will not be attributed to specific participants. However, the sensitive nature of the subject matter may give rise to strong emotional states, which if it occurred during the interview, I will pause the recorder and offer to take a break or end the interview. I will provide contact details for counselling support that are available at local area too.

You may refuse to answer any question at any time during the interview and you may withdraw from the project at any time If you have any concerns you would like to discuss, you are welcome to contact any of us at the contact number given above.

5. Privacy, Confidentiality and Disclosure of Information
We intend to preserve your confidentiality and anonymity to the extent allowed by the laws and regulation. To do this, the following measures will be undertaken. The tape of your interview will be fully transcribed and only a code number, and not your name will identify both the tape and the interview transcripts. All information you provide including audiorecording will be kept in a locked cabinet for a maximum duration of five years will be stored in a locked filing cabinet at Room 212, HS1 Building, La Trobe University, Bundoora. Only members of the research team will have access to it.
As mentioned above, you will be assigned a pseudonym and this will be used in the results instead of any identifiable information. We would also remove any personal information that may make it possible for others to guess your identity. However, it is still possible to guess your identity if the number of interviews are small.

We plan to publish the results of the study. For publications of this research, only group data will be reported and your identity will remain confidential.

6. New Information Arising During the Project
Not applicable.

7. Results of Project
Participants will be sent a summary of the results at the completion of the study; please indicate on the Consent Form if you would like to receive a copy of the results.

8. Further Information or Any Problems
If you require further information or if you have any problems concerning this project, you can contact the principal researcher or one of the other researchers. The researchers responsible for this project are:

- Prof Pranee Liamputtong, Personal Chair in Public Health, School of Public Health, La Trobe University, phone 61-3-9479 1760, email pranee@latrobe.edu.au
- Dr Lisa Amir, Research Fellow, Mother & Child Health Research, La Trobe University, phone 61-3-8341 8577, email l.amir@latrobe.edu.au
- Dr Zaharah Sulaiman, Postgraduate candidate, School of Public Health, La trobe University, phone 9479 3921, email z2sulaiman@students.latrobe.edu.au

9. Other Issues
If you have any complaints or queries that the investigator has not been able to answer to your satisfaction, you may contact:
- The Ethics Liaison Officer, Human Ethics Committee, La Trobe University, Victoria, 3086, (phone 03 9479 1443, email humanethics@latrobe.edu.au).

10. Participation is Voluntary
Participation in any research project is voluntary. If you do not wish to take part you are not obliged to.
You have the right to withdraw from active participation in this project at anytime and, further, to demand that data arising from your participation are not used in the research project provided that this right is exercised within four weeks of the completion of your participation in the project. **You are asked to complete the "Withdrawal of Consent Form" or to notify the investigator by e-mail or telephone that you wish to withdraw your consent for your data to be used in this research project.**
Your decision whether to take part or not to take part, or to take part and then withdraw, will not affect your relationship with the hospital.

11. Ethical Guidelines
This project will be carried out according to the National Statement on Ethical Conduct in Research Involving Humans (June 1999) produced by the National Health and Medical Research Council of Australia. This statement has been developed to protect the interests of people who agree to participate in human research studies.

12. Funding
You will not be paid for your participation in this study. However you will be reimbursed for travelling to your interview where applicable.

APPENDIX IV: Plain language statement for diary/written method

PLAIN LANGUAGE STATEMENT FOR DIARY METHOD

PROJECT TITLE: Infant feeding choices:
Attitudes, decision-making processes and experiences among working women in Malaysia

PRINCIPAL INVESTIGATOR: Professor Pranee Liamputtong, Personal Chair in Public Health, School of Public Health, La Trobe University, Australia.

ASSOCIATE RESEARCHERS: Dr Lisa Amir, Health Professional Research Fellow, Mother and Child Health Research, La Trobe University;
Dr Zaharah Sulaiman, Postgraduate Candidate, School of Public Health, La Trobe University, Australia.

Welcome and thank you for your interest in this study. This study is open to working women who are:

- **18 years old and above**
- **At the time of interview has an infant age between six to 12 months**
- **Able to understand and speak in English or Malay language**

This Plain Language Statement and Consent Form are five (5) pages long. Please make sure you have all the pages.

1. Your consent
You are invited to take part in this research project.
This Plain Language Statement contains detailed information about the research project. Its purpose is to explain to you as openly and clearly as possible all the procedures involved in this project before you decide whether or not to take part in it. Please read this Plain Language Statement carefully. Feel free to ask questions about any information in the Statement. Once you understand what the project is about and if you agree to take part in it, you will be asked to sign the Consent Form. By signing the Consent Form you indicate that you understand the information and that you give your consent to participate in the research project.

You will be given a copy of both the Consent Form and this Plain Language Statement to keep as a record.

2. Description of the Project
This project aims to investigate working women's attitudes, decision-making processes and experiences about infant feeding. We would like to understand working women experiences and how they make decision regarding their infant feeding. We would like to compare the findings among women from various occupations and work setting, from different cultural and religious background.

This research is being conducted as the requirements for Zaharah Sulaiman. You are invited to take part in a diary method as you may have gotten information about this study through advertisements found in notice board at research recruitment centres. You may have contacted the person in charge at the centre to express your interest to take part.

If you agree to participate, you will be asked to take part in writing up your diary for a week. We would like to you to share your feeling how your work has affected the way you choose your infant feeding. We would like you to fill in your diary at the end of the day after you return from work. We appreciate if you can describe your feeling of having to fulfil multiple roles. With your permission, the information in your diary will be retyped every word into a document. The document will only state the pseudonym assigned to you. You can choose how you would like the diary to be like. It can either be written in a notebook, through emails or SMS or through your blog or online diary. A copy of the transcript will be made available to you to confirm accuracy.

3. Possible Benefits

Although we cannot promise that your participation in this project will be of direct benefit to you, you could greatly assist researchers in understanding working women experience and how they decide on infant feeding. You may also find it useful to identify the gaps and needs of employers in improving and strengthening workplace facilities for reflect on issues regarding surrounding the use of medicines in breastfeeding women. The outcome of this research will be a practical handbook for working mothers on infant feeding based on real experiences. This write up can be benefit to you and other working women in general too.

4. Possible Risks

The study is unlikely to pose any physical or biological threat to the participants. Possible risks include breaches of individual confidentiality. These risks will be minimised by de-identification of the data and comments will not be attributed to specific participants. However, the sensitive nature of the subject matter may give rise to strong emotional states, which if it occurred during the interview, I will pause the recorder and offer to take a break or end the interview. I will provide contact details for counselling support that are available at local area too.

You may refuse to answer any question at any time during the interview and you may withdraw from the project at any time If you have any concerns you would like to discuss, you are welcome to contact any of us at the contact number given above.

5. Privacy, Confidentiality and Disclosure of Information

We intend to preserve your confidentiality and anonymity to the extent allowed by the laws and regulation. To do this, the following measures will be undertaken. The tape of your interview will be fully transcribed and only a code number, and not your name will identify in your diary and the diary transcripts. All information you provide in your diary will be kept in a locked cabinet for a maximum duration of five years will be stored in a locked filing cabinet at Room 212, HS1 Building, La Trobe University, Bundoora. Only members of the research team will have access to it.

As mentioned above, you will be assigned a pseudonym and this will be used in the results instead of any identifiable information. We would also remove any personal information that may make it possible for others to guess your identity. However, it is still possible to guess your identity if the number of interviews are small.

We plan to publish the results of the study. For publications of this research, only group data will be reported and your identity will remain confidential.

6. New Information Arising During the Project

Not applicable.

7. Results of Project
Participants will be sent a summary of the results at the completion of the study; please indicate on the Consent Form if you would like to receive a copy of the results.

8. Further Information or Any Problems
If you require further information or if you have any problems concerning this project, you can contact the principal researcher or one of the other researchers. The researchers responsible for this project are:

- Prof Pranee Liamputtong, Personal Chair in Public Health, School of Public Health, La Trobe University, phone 61-3-9479 1760, email pranee@latrobe.edu.au
- Dr Lisa Amir, Health Professional Research Fellow, Mother & Child Health Research, La Trobe University, phone 61-3-8341 8577, email l.amir@latrobe.edu.au
- Dr Zaharah Sulaiman, Postgraduate candidate, School of Public Health, La trobe University, phone 9479 3921, email z2sulaiman@students.latrobe.edu.au

9. Other Issues
If you have any complaints or queries that the investigator has not been able to answer to your satisfaction, you may contact:

- The Ethics Liaison Officer, Human Ethics Committee, La Trobe University, Victoria, 3086, (phone 03 9479 1443, email humanethics@latrobe.edu.au).

10. Participation is Voluntary
Participation in any research project is voluntary. If you do not wish to take part you are not obliged to.
You have the right to withdraw from active participation in this project at anytime and, further, to demand that data arising from your participation are not used in the research project provided that this right is exercised within four weeks of the completion of your participation in the project. **You are asked to complete the "Withdrawal of Consent Form" or to notify the investigator by e-mail or telephone that you wish to withdraw your consent for your data to be used in this research project.**
Your decision whether to take part or not to take part, or to take part and then withdraw, will not affect your relationship with the hospital.

11. Ethical Guidelines
This project will be carried out according to the National Statement on Ethical Conduct in Research Involving Humans (June 1999) produced by the National Health and Medical Research Council of Australia. This statement has been developed to protect the interests of people who agree to participate in human research studies.

12. Funding
You will not be paid for your participation in this study. However you will be reimbursed for travelling to your interview where applicable.

APPENDIX V: Consent form for face-to-face interview

Consent Form: Face-to-face in-depth interview

Project title: Infant feeding choices: Attitudes, decision-making processes and experiences among working women in Malaysia

I have read and I understand the Plain Language Statement. Any questions I have asked have been answered to my satisfaction.

I freely agree to participate in this face-to-face in-depth interview for this project according to the conditions in the Plain Language Statement.

I realise that whilst every effort will be made to protect my anonymity, it is possible that I may be identifiable as a participant in this research.

I realise that I may physically withdrawn from the study at any time and may request that no data arising from my participation are used. I agree that research data provided by me or with my permission during the research may be included in a thesis, presented at conferences and published in journals or books on the condition that neither my name nor any other identifying information is used.

A copy of the Plain Language Statement and Consent Form will be given to me for my record.

Participant's Name (printed) ……..

Signature Date

I would like a summary of the results at the end of the study: Yes ☐

No ☐

Witness to Signature (printed) ……..

Signature Date

Researcher's Name (printed) ……..

Signature Date

Note: All parties signing the Consent Form must date their own signature.

APPENDIX VI: Consent form for diary/written method

Consent Form: Diary Method

Project title: Infant feeding choices: Attitudes, decision-making processes and experiences among working women in Malaysia

I have read and I understand the Plain Language Statement. Any questions I have asked have been answered to my satisfaction.

I freely agree to participate in this face-to-face in-depth interview for this project according to the conditions in the Plain Language Statement.

I realise that whilst every effort will be made to protect my anonymity, it is possible that I may be identifiable as a participant in this research.

I realise that I may physically withdrawn from the study at any time and may request that no data arising from my participation are used. I agree that research data provided by me or with my permission during the research may be included in a thesis, presented at conferences and published in journals or books on the condition that neither my name nor any other identifying information is used.

A copy of the Plain Language Statement and Consent Form will be given to me for my record.

Participant's Name (printed) …….

Signature Date

I would like a summary of the results at the end of the study: Yes ☐

No ☐

Witness to Signature (printed) …….

Signature Date

Researcher's Name (printed) …….

Signature Date

Note: All parties signing the Consent Form must date their own signature

APPENDIX VII: Withdrawal forms for face-to-face interview

Withdrawal of Consent

Project Title: Infant feeding choices: Attitudes, decision-making processes and experiences among working women in Malaysia

---

I, ……, wish to WITHDRAW my consent to the use of data arising from my participation. Data arising from my participation must NOT be used in this research project as described in the Information and Consent Form. I understand that data arising from my participation will be destroyed provided this request is received within four weeks of the completion of my participation in this project. I understand that this notification will be retained together with my consent form as evidence of the withdrawal of my consent to use the data I have provided specifically for this research project.

Participant's name (printed):

……..

Signature:

Date:

APPENDIX VII: Withdrawal forms for diary/written method

Withdrawal of Consent

Project Title: Infant feeding choices: Attitudes, decision-making processes and experiences among working women in Malaysia

---

I, ……., wish to WITHDRAW my consent to participate in the research proposal described. Data arising from my participation must NOT be used in this research project as described in the Information and Consent Form. I understand that data arising from my participation will be destroyed provided this request is received within four weeks of the completion of my participation in this project. I understand that this notification will be retained together with my consent form as evidence of the withdrawal of my consent to use the data I have provided specifically for this research project.

Participant's name (printed):

…….

Signature:

Date:

APPENDIX VIII: List of health clinics (klinik kesihatan) for referral

In Selangor:

Klinik Kesihatan Daerah Gombak
Jalan AU2, Taman Keramat, 54200 Kuala Lumpur. Tel : 03-42579466

Klinik Kesihatan Daerah Hulu Langat
Batu 9. 43200 Chera, Hulu Langat Selangor, Tel : 03-90758046

Klinik Kesihatan Daerah Hulu Selangor
44010 Kuala Kubu Baru, Hulu Selangor Selango, Tel : 03-60461003

Klinik Kesihatan Daerah Klang
PT 6/62, Jalan Limbungan, 42000 Pelabuhan Klang, Klang Selangor, Tel : 03-31658459

In Penang:

Klinik Kesihatan Teluk Bahang,
11050 Teluk Bahang, Pulau Pinang.Tel: 04-8851951

Klinik Kesihatan Bayan Baru,
11900 Bayan Lepas,Pulau Pinang.Tel: 04-6425102

Klinik Kesihatan Bayan Lepas,
11900 Bayan Lepas,Pulau Pinang.Tel: 04-6467786

KKIA Ayer Puteh,
2761 Ayer Puteh,11000 Balik Pulau. Tel: 04-8668357

REFERENCES

Abdullah, A. B. (2010). *Kemudahan cuti bersalin pegawai perkhidmatan awam: Pekeliling perkhidmatan bilangan 14 tahun 2010*. Putrajaya: Jabatan Perkhidmatan Awam.

Aguayo, V. M., Ross, J. S., Kanon, S., & Ouedraogo, A. N. (2003). Monitoring compliance with the international code of marketing of breastmilk substitutes in west Africa: multisite cross sectional survey in Togo and Burkina Faso. *British Medical Journal, 326*, 127.

Ahluwalia, I. B., Morrow, B., & Hsia, J. (2005). Why do women stop breastfeeding? Findings from the pregnancy risk assessment and monitoring system. *Pediatrics, 116*(6), 1408 - 1412.

Ajzan, I. (2005). *Attitudes, Personality and Behavior*. England: Open University Press.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179-211.

Ajzen, I., & Fishbein, M. (2000). *Understanding Attitudes and Predicting Social Behavior*. New Jersey: Prentice-Hall.

Al-Madani, M., Vydelingum, V., & Lawrence, J. (2010). Saudi mothers' expected intentions and attitudes toward breastfeeding. *ICAN: Infant, Child, & Adolescent Nutrition, 2*(3), 187-198.

Al-Sahab, B., Lanes, A., Feldman, M., & Tamim, H. (2010). Prevalence and predictors of 6-month exclusive breastfeeding among Canadian women: a national survey. *BMC Pediatrics, 10*, 20.

Alaszewski, A. (2006). Diaries as a source of suffering narratives: a critical commentary. *Health, Risk & Society, 8*(1), 43-58.

Allen, D. E., & Anderson, P. F. (1994). Consumption and social stratification: Bourdieu's distinction. *Advances in Consumer Research, 21*, 70-74.

Allen, J., & Hector, D. (2005). Benefits of breastfeeding. *New South Wales Public Health Bulletin, 16*(4), 42-46.

Allen, K. R., & Walker, A. J. (1992). A feminist analysis of interviews with elderly mothers and their daughters. In J. F. Gilgun, K. Daly & G. Hande (Eds.), *Qualitative Methods in Family Research* (pp. 198-214). Newbury Park: SAGE Publications.

Amir, L. H. (2011). Social theory and infant feeding. *International Breastfeeding Journal, 6*, 7.

Amir, L. H., & Donath, S. M. (2008). Socioeconomic status and rates of breastfeeding in Australia: evidence from three recent national health surveys. *The Medical Journal of Australia, 189*(5), 254-256.

Aronson, J. (1994). A pragmatic view of thematic analysis. *The Qualitative Report, 2*(1), 1-3.

Arthur, C. R., Saenz, R. B., & Replogle, W. H. (2003). The employment-related breastfeeding decisions of physician mothers. *Journal of the Mississippi State Medical Association, 44*(12), 383-387.

Aspinwall, C. (2008). Breastfeeding difficult upon return to work. *McClatchy - Tribune Business News*. Retrieved from http://proquest.umi.com/pqdweb?did=1522308521&Fmt=7&clientId=20828&RQT=309&VName=PQD

Attride-Stirling, J. (2001). Thematic networks: an analytic tool for qualitative research. *Qualitative Research, 1*(3), 385-405.

Avery, A., Zimmermann, K., Underwood, P. W., & Magnus, J. H. (2009). Confident commitment is a key factor for sustained breastfeeding. *Birth, 36*(2), 141-148.

Avery, M., Duckett, L., Dodgson, J., Savik, K., & Henly, S. J. (1998). Factors associated with very early weaning among primiparas intending to breastfeed. *Maternal and Child Health Journal, 2*(3), 167-179.

Awang, H., & Salleh, A. L. (2000). Determinants of breastfeeding duration in Peninsular Malaysia. *Asia Pacific Journal of Public Health, 12*(2), 102-106.

Bäckström, C. A., Wahn, E. I., & Ekström, A. C. (2010). Two sides of breastfeeding support: experiences of women and midwives. *International Breastfeeding Journal, 5*, 20.

Bai, Y. K., Middlestadt, S. E., Peng, C. Y., & Fly, A. D. (2009). Psychosocial factors underlying the mother's decision to continue exclusive breastfeeding for 6 months: an elicitation study. *Journal of Human Nutrition and Dietetics 22*(2), 134-140.

Bai, Y. K., Middlestadt, S. E., Peng, C. Y., & Fly, A. D. (2010). Predictors of continuation of exclusive breastfeeding for the first six months of life. *Journal of Human Lactation, 26*(1), 26-34.

Baker, M., & Milligan, K. (2008). Maternal employment, breastfeeding, and health: evidence from maternity leave mandates. *Journal of Health Economics, 27*(4), 871-887.

Bakoula, C., Veltsista, A., Prezerakou, A., Moustaki, M., Fretzayas, A., & Nicolaidou, P. (2007). Working mothers breastfeed babies more than housewives. *Acta Paediatrica, 96*, 510-515.

Baxter, J., Cooklin, A. R., & Smith, J. (2009). Which mothers wean their babies prematurely from full breastfeeding? An Australian cohort study. *Acta Paediatrica, 98*, 1274-1277.

Bentley, M. E., Dee, D. L., & Jensen, J. L. (2003). Breastfeeding among low income, African-American women: power, beliefs and decision making. *Journal of Nutrition, 133*(1), 305S-309S.

Berger, L. M., Hill, J., & Waldfogel, J. (2005). Maternity leave, early maternal employment and child health and development in the US. *The Economic Journal, 115*(501), F29-F47.

Biagioli, F. (2003). Returning to work while breastfeeding. *American Family Physician, 68*(11), 2201-2208.

Biddle, B. J. (1986). Recent development in role theory. *Annual Review of Sociology, 12*, 67-92.

Boucher, Camille A, Brazal, Paola M, Graham-Certosini, Cynthia, Carnaghan-Sherrard, Kathryn, & Feeley, Nancy. (2011). Mothers' breastfeeding experiences in the NICU.*Neonatal Network: The Journal of Neonatal Nursing, 30*(1), 21-28.

Bourdieu, P. (1984). *Distinction: A Social Critique of the Judgement of Taste*. London: Routledge.

Bourdieu, P. (1996). Understanding. *Theory, Culture & Society, 13*(2), 17-37.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101.

Brayton, J. (1997). What makes a feminist research feminist? The structure of feminist research within the social sciences.

Broadfoot, M., Britten, J., Tappin, D., & MacKenzie, J. (2005). The baby friendly hospital initiative and breast feeding rates in Scotland. *Archives of Disease in Childhood-Fetal and Neonatal Edition, 90*(2), F114-F116.

Burdette, A. M., & Pilkauskas, N. V. (2012). Maternal religious involvement and breastfeeding initiation and duration. *American Journal of Public Health, 102*(10), 1865-1868.

Campbell, R., & Wasco, S. M. (2000). Feminist approaches to social sciences: epistemological and methodological tenets'. *American Journal of Community Psychology, 28*(6), 773-791.

Cardenas, R. A., & Major, D. A. (2005). Combining employment and breastfeeding: utilizing a work-family conflict framework to understand obstacles and solutions. *Journal of Business and Psychology, 20*(1), 31-51.

Carter, S. M., & Little, M. (2007). Justifying knowledge, justifying method, taking action: epistemologies, methodologies, and methods in qualitative research. *Qualitative Health Research, 17*(10), 1316-1328.

Chatterji, P., & Frick, K. D. (2005). Does returning to work after childbirth affect breastfeeding practices? *Review of Economics of the Household 3*(3), 315-335.

Chen, S., Binns, C. W., Liu, Y., Maycock, B., Zhao, Y., & Tang, L. (2013). Attitudes towards breastfeeding - the Iowa infant feeding attitude scale in Chinese mothers living in China and Australia. *Asia Pacific Journal of Clinical Nutrition, 22*(2), 266-269.

Chen, Y. C., Wu, Y. C., & Chie, W. C. (2006). Effects of work-related factors on the breastfeeding behavior of working mothers in a Taiwanese semiconductor manufacturer: a cross-sectional survey. *BMC Public Health, 6*, 160.

Chuang, C. H., Chang, P. J., Chen, Y. C., Hsieh, W. S., Hurng, B. S., Lin, S. J., & Chen, P. C. (2010). Maternal return to work and breastfeeding: a population-based cohort study. *International Journal of Nursing Studies, 47*(4), 461-474.

Cialdini, R. B., Kallgren, C. A., & Reno, R. R. (1991). A focus theory of normative conduct: a theoretical refinement and reevaluation of the role of norms in human behavior. In M. P. Zanna (Ed.), *Advances in Experimental Social Psychology* (Vol. 24, pp. 201-234). New York Academic Press.

Clays, E., Kittel, F., Godin, I., De Bacquer, D., & De Backer, G. (2009). Measures of work-family conflict predict sickness absence from work. *Journal of Occupational and Environmental Medicine, 51*(8), 879-886.

Cooklin, A. R., Donath, S. M., & Amir, L. H. (2008). Maternal employment and breastfeeding: results from the longitudinal study of Australian children. *Acta Paediatrica, 97*(5), 620-623.

Cooklin, A. R., Rowe, H. J., & Fisher, J. R. (2012). Paid parental leave supports breastfeeding and mother‐infant relationship: a prospective investigation of maternal postpartum employment. *Australian and New Zealand Journal of Public Health, 36*(3), 249-256.

Costello, A., & Sachdev, H. S. (1998). Protecting breast feeding from breast milk substitutes: The WHO code is widely violated and needs monitoring and supporting. *British Medical Journal, 316*(7138), 1103-1104.

Coveney, J. (2005). A qualitative study exploring socio-economic differences in parental lay knowledge of food and health: implications for public health nutrition. *Public Health Nutrition, 8*(3), 290-297.

Dabritz, H. A., Hinton, B. G., & Babb, J. (2009). Evaluation of lactation support in the workplace or school environment on 6-month breastfeeding outcomes in Yolo County, California. *Journal of Human Lactation, 25*(2), 182-193.

Daneault, S., Beaudry, M., & Godin, G. (2004). Psychosocial determinants of the intention of nurses and dietitians to recommend breastfeeding. *Canadian Journal of Public Health, 95*(2), 151-154.

Darmon, N., & Drewnowski, A. (2008). Does social class predict diet quality? *The American Journal of Clinical Nutrition, 87*(5), 1107-1117.

DaVanzo, J., Sine, J., Peterson, C., & Haaga, J. (1994). Reversal of the decline in breastfeeding in Peninsular Malaysia? Ethnic and educational differentials and data quality issues. *Biodemography and Social Biology, 41*(1-2), 61-77.

Del Bono, E., & Pronzato, C. (2012). *Breastfeeding support at work help mothers and employers at the same time?* : Institute for Social and Economic Research (ISER),University of Essex.

Dennis, C. L. (2002). Breastfeeding initiation and duration: a 1990-2000 literature review. *Journal of Obstetric, Gynecologic, & Neonatal Nursing, 31*(1), 12-32.

Department of Anthropology. (2012). *Anth206*. Retrieved 30 June, 2013, from http://www.vanderbilt.edu/AnS/Anthro/Anth206/pierre_bourdieu.htm

Dettwyler, K. A. (1995). Beauty and the breast: the cultural context of feeding in the United States. In P. Stuart-Macadam & K. A. Dettwyler (Eds.), *Breastfeeding: Biocultural Perspectives* (pp. 167-215). New York: Aldine de Gruyter.

Dettwyler, K. A. (1995). A time to wean: the hominid blueprint for the natural age of weaning in modern human populations. In K. A. Dettwyler & P. Stuart-Macadam (Eds.), *Breastfeeding: Biocultural Perspectives* (pp. 39-73). New York: Aldine de Gruyter.

DiGirolamo, A., Thompson, N., Martorell, R., Fein, S., & Grummer-Strawn, L. (2005). Intention or experience? Predictors of continued breastfeeding. *Health Education and Behavior, 32*(2), 208-226.

DiGirolamo, A. M., Grummer-Strawn, L. M., & Fein, S. B. (2003). Do perceived attitudes of physicians and hospital staff affect breastfeeding decisions? *Birth, 30*(2), 94-100.

Dodgson, J. E., Henly, S., Duckett, L., & Tarrant, M. (2003). Theory of planned behavior-based models for breastfeeding duration among Hong Kong mothers. *Nursing Research, 52*(3), 148-158.

Dodgson, J. E., Tarrant, M., Fong, D. Y., Peng, X., & Hui, W. C. (2003). Breastfeeding patterns of primiparous mothers in Hong Kong. *Birth, 30*(3), 195-202.

Donath, S. M., & Amir, L. H. (2003). Relationship between prenatal infant feeding intention and initiation and duration of breastfeeding: a cohort study. *Acta Paediatrica, 92*(3), 352-356.

Duckett, L., Henly, S., Avery, M., Potter, S., Hills-Bonczyk, S., Hulden, R., & Savik, K. (1998). A theory of planned behavior-based structural model for breast-feeding. *Nursing Research, 47*(6), 325-336.

Dykes, F. (2005). 'Supply' and 'demand': breastfeeding as labour. *Social Science & Medicine, 60*(10), 2283-2293.

Dyson, L., Green, J. M., Renfrew, M. J., McMillan, B., & Woolridge, M. (2010). Factors influencing the infant feeding decision for socioeconomically deprived pregnant teenagers: the moral dimension. *Birth, 37*(2), 141-149.

Earle, S. (2000). Why some women do not breast feed: bottle feeding and fathers' role. *Midwifery, 16*(4), 323-330.

Eder, D., & Fingerson, L. (2002). Interviewing children and adolescents. In J. F. Gubrium & J. A. Holstein (Eds.), *Handbook of Interview Research: Context and Method* (pp. 181-203). Thousand Oaks: SAGE Publications.

Ekanem, I. A., Ekanem, A. P., Asuquo, A., & Eyo, V. O. (2012). Attitude of working mothers to exclusive breastfeeding in Calabar municipality, Cross River State, Nigeria. *Journal of Food Research, 1*(2), 71-75.

Else-Quest, N. M., Hyde, J. S., & Clark, R. (2003). Breastfeeding, bonding, and the mother-infant relationship *Merrill-Palmer Quarterly, 49*(4), 495-517.

Endacott, R. (2005). Clinical research 4: qualitative data collection and analysis. *Intensive Critical Care Nursing, 21*(2), 123-127.

Ertem, M. (2011). Infant feeding beliefs and practices in Islamic societies: focusing on rural Turkey. In P. Liamputtong (Ed.), *Infant Feeding Practices: A Cross-cultural Perspective* (pp. 289-301). New York: Springer.

Esterik, P. V. (2002). Contemporary trends in infant feeding research. *Annual Review of Anthropology, 31*, 257-278.

Fatimah, S., Siti Saadiah, H. N., Tahir, A., Hussain Imam, M. I., & Ahmad Faudzi, Y. (2010). Breastfeeding in Malaysia: results of the third national health and morbidity survey (NHMS III) 2006. *Malaysian Journal of Nutrition, 16*(2), 195.

Fein, S., Mandal, B., & Roe, B. (2008). Success of strategies for combining employment and breastfeeding. *Pediatrics, 122*, S56-S62.

Fein, S., & Roe, B. (1998). The effect of work status on initiation and duration of breast-feeding. *American Journal of Public Health, 88*(7), 1042-1046.

Flacking, R., Wallin, L., & Ewald, U. (2007). Perinatal and socioeconomic determinants of breastfeeding duration in very preterm infants. *Acta Paediatrica, 96*(8), 1126-1130.

Foo, L., Quek, S., Ng, S., Lim, M., & Deurenberg-Yap, M. (2005). Breastfeeding prevalence and practices among Singaporean Chinese, Malay and Indian mothers. *Health Promotion International, 20*(3), 229-237.

Frone, M. R., Russell, M., & Cooper, M. L. (1992). Antecedents and outcomes of work-family conflict: testing a model of the work-family interface. *Journal of Applied Psychology, 77*(1), 65-78.

Furness, P. J., & Garrud, P. (2010). Adaptation after facial surgery: using the diary as a research tool. *Qualitative Health Research, 20*(2), 262-272.

Galtry, J. (2003). The impact on breastfeeding of labour market policy and practice in Ireland, Sweden, and the USA. *Social Science & Medicine, 57*(1), 167-177.

Gatrell, C. J. (2007). Secrets and lies: breastfeeding and professional paid work. *Social Science & Medicine, 65*(2), 393-404.

Gatti, L. (2008). Maternal perceptions of insufficient milk supply in breastfeeding. *Journal of Nursing Scholarship, 40*(4), 355-363.

Gesouli-Voltyraki, E., Deltsidou, A., Stamelaki, D., Karkageli, V., & Noula, M. (2009). Womens' attitudes towards breastfeeding in a province of Greece. *Health Science Journal, 3*(2), 88-94.

Gibbs, G. R. (2007). *Analyzing Qualitative Data*. London: SAGE Publications.

Giles, M., Connor, S., McClenahan, C., Mallett, J., Stewart-Knox, B., & Wright, M. (2007). Measuring young people's attitudes to breastfeeding using the theory of planned behaviour. *Journal of Public Health, 29*(1), 17-26.

Gill, J., & Liamputtong, P. (2009). 'Walk a mile in my shoes': researching the lived experience of mothers of children with autism. *Journal of Family Studies, 15*(3), 309-319.

Göksen, F. (2002). Normative vs. attitudinal considerations in breastfeeding behavior: multifaceted social influences in a developing country context. *Social Science & Medicine, 54*(12), 1743-1753.

Grant-Vallone, E. J., & Donaldson, S. I. (2001). Consequences of work-family conflict on employee well-being over time. *Work & Stress, 15*(3), 214-226.

Grbich, C. (2007). *Qualitative Data Analysis*. London: SAGE Publications.

Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. *Academy of Management Review, 10*(1), 76-88.

Grice, M. M., Feda, D., McGovern, P., Alexander, B. H., McCaffrey, D., & Ukestad, L. (2007). Giving birth and returning to work: the impact of work-family conflict on women's health after childbirth. *Annals of Epidemiology, 17*(10), 791-798.

Grice, M. M., McGovern, P. M., Alexander, B. H., Ukestad, L., & Hellerstedt, W. (2011). Balancing work and family after childbirth: a longitudinal analysis. *Women's Health Issues, 21*(1), 19-27.

Guendelman, S., Kosa, J., Pearl, M., Graham, S., Goodman, J., & Kharrazi, M. (2009). Juggling work and breastfeeding: effects of maternity leave and occupational characteristics. *Pediatrics, 123*(1), e38-e46.

Hammersley, M. (2007). The issue of quality in qualitative research. *International Journal of Research & Method in Education, 30*(3), 287-305.

Hannula, L., Kaunonen, M., & Tarkka, M. T. (2008). A systematic review of professional support interventions for breastfeeding. *Journal of Clinical Nursing, 17*(9), 1132-1143.

Hausman, B. L. (2004). The feminist politics of breastfeeding. *Australian Feminist Studies, 19*, 273-285.

Hawkins, S. S., Griffiths, L. J., Dezateux, C., & Law, C. (2007). The impact of maternal employment on breast-feeding duration in the UK millennium cohort study. *Public Health Nutrition, 10*(9), 891-896.

Hector, D., King, L., Webb, K., & Heywood, P. (2005). Factors affecting breastfeeding practices: applying a conceptual framework. *New South Wales Public Health Bulletin, 16*(4), 52-55.

Hesse-Biber, S. N., & Leavy, P. (2011). *The Practice of Qualitative Research*. London: SAGE Publications.

Heymann, J., Raub, A., & Earle, A. (2013). Breastfeeding policy: a globally comparative analysis. *Bulletin of the World Health Organization, 91*(6), 389-464.

Hill, E. J., Hawkins, A. J., Ferris, M., & Weitzman, M. (2001). Finding an extra day a week: the positive influence of perceived job flexibility on work and family life balance. *Family Relations, 50*(1), 49-58.

Hizel, S., Ceyhun, G., Tanzer, F., & Sanli, C. (2006). Traditional beliefs as forgotten influencing factors on breast-feeding performance in Turkey. *Saudi Medical Journal, 27*(4), 511-518.

Hoddinott, P., Tappin, D., & Wright, C. (2008). Breast feeding. *British Medical Journal, 336*(7649), 881-887.

Holbrook, K. E., White, M. C., Heyman, M. B., & Wojcicki, J. M. (2013). Maternal sociodemographic characteristics and the use of the Iowa Infant Attitude Feeding Scale to describe breastfeeding initiation and duration in a population of urban, Latina mothers: a prospective cohort study. *International Breastfeeding Journal, 8*, 7.

Horta, B. L., Bahl, R., Martines, J. C., & Victora, C. G. (2007). *Evidence on the long-term effects of breastfeeding: systematic reviews and meta-analysis*. Geneva, World Health Organization.

Humphreys, A. S., Thompson, N. J., & Miner, K. R. (1998). Intention to breastfeed in low-income pregnant women: the role of social support and previous experience. *Birth, 25*(3), 169-174.

Hurley, K. M., Black, M. M., Papas, M. A., & Quigg, A. M. (2008). Variation in breastfeeding behaviours, perceptions, and experiences by race/ethnicity among a low-income statewide sample of Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) participants in the United States. *Maternal and Child Nutrition, 4*, 95-105.

Institute for Public Health. (1998). *The second national health and morbidity survey (NHMS-II) 1997, infant feeding.* Ministry of Health Malaysia.

Institute for Public Health. (2005). *Ekslusif, Panduan Penyusuan Susu Ibu, 6 Bulan Pertama Hanya Susu Ibu*. Kuala Lumpur.

International Labour Organization. (2010). *Matenitry at work. A review of national legislation* (Second ed.). Geneva: ILO.

Ip, S., Chung, M., Raman, G., Chew, P., Magula, N., Trikalinos, T., & Lau, J. (2007). Breastfeeding and maternal and infant health outcomes in developed countries. Evidence report/technology assessment No. 153 (Prepared by Tufts-New England Medical Centre Evidence-based Practice Centre, under Contract No. 290-02-0022) *Evid Technol Asses (Full Rep)* (Vol. 153, pp. 1-186). Rockville, MD Agency for Healthcare Research and Quality.: AHRQ Publication No. 07-E007.

Jacknowitz, A. (2008). The role of workplace characteristics in breastfeeding practices. *Women and Health, 47*(2), 87-111.

Jansen, J., Weerth, C. d., & Riksen-Walraven, J. M. (2008). Breastfeeding and the mother–infant relationship - a review. *Developmental Review, 28*(4), 503-521.

Jessri, M., Farmer, A. P., & Olson, K. (2013). Exploring Middle-Eastern mothers' perceptions and experiences of breastfeeding in Canada: an ethnographic study. *Maternal and Child Nutrition, 9*, 41-56.

Kaewsarn, P., & Moyle, W. (2000). Cultural beliefs and breastfeeding duration of Thai working women. *Breastfeeding Review, 8*(1), 13-17.

Kaplan, A. (1964). *The Conduct of Inquiry: Methodology of Behavioural Science*. New York: Thomas Y. Crowell.

Keleher, H. M., & Verrinder, G. K. (2003). Health diaries in a rural Australian study. *Qualitative Health Research, 13*(3), 435-443.

Kelly, Y., & Watt, R. (2005). Breast-feeding initiation and exclusive duration at 6 months by social class–results from the Millennium Cohort Study. *Public Health Nutrition, 8*(4), 417-421.

Khassawneh, M., Khader, Y., Amarin, Z., & Alkafajei, A. (2006). Knowledge, attitude and practice of breastfeeding in the north of Jordan: a cross-sectional study. *International Breastfeeding Journal, 1*, 17.

Kimbro, R. T. (2006). On-the-job moms: work and breastfeeding initiation and duration for a sample of low-income women. *Maternal and Child Health Journal 10*(1), 19-26.

Kramer, M. S., Chalmers, B., Hodnett, E. D., Sevkovskaya, Z., Dzikovich, I., Shapiro, S., . . . Ducruet, T. (2001). Promotion of breastfeeding intervention trial (PROBIT). *The Journal of the American Medical Association, 285*(4), 413-420.

Kvale, S. (2007). *Doing Interviews*. London: SAGE Publications.

Lakati, A., Binns, C., & Stevenson, M. (2002). The effect of work status on exclusive breastfeeding in Nairobi. *Asia-Pacific Journal of Public Health, 14*(2), 85-90.

Leon-Cava, N., Lutter, C., Ross, J., & Martin, L. (2002). *Quantifying the benefits of breastfeeding: a summary of the evidence*. Washington, DC: Division of Health Promotion (HPP) of the Pan American Health Organization (PAHO).

Liamputtong, P. (2006). Motherhood and "moral career": discourses of good motherhood among Southeast Asian immigrant women in Australia. *Qualitative Sociology, 29*(1), 25-53.

Liamputtong, P. (2007). *Researching The Vulnerable: A Guide to Sensitive Research Methods*. London: SAGE.

Liamputtong, P. (2011). *Qualitative Research Methods* (3rd ed.). South Melbourne: Oxford University Press Australia and New Zealand.

Liamputtong, P., & Kitisriworapan, S. (2011). Good mother, infant feeding and social change in northern Thailand. In P. Liamputtong (Ed.), *Infant Feeding Practices: A Cross-cultural Perspective* (pp. 141-159). New York: Springer.

Lindberg, L. D. (1996). Women's decisions about breastfeeding and maternal employment. *Journal of Marriage and the Family, 58*, 239-251.

Ludlow, V., Newhook, L. A., Newhook, J. T., Bonia, K., Goodridge, J. M., & Twells, L. (2012). How formula feeding mothers balance risks and define themselves as 'good mothers'. *Health, Risk & Society 14*(3), 291-306.

Mandal, B., Roe, B. E., & Fein, S. B. (2010). The differential effects of full-time and part-time work status on breastfeeding. *Health Policy, 97*(1), 79-86.

Manderson, L. (1984). 'These are modern times': infant feeding practice in Peninsular Malaysia. *Social Science & Medicine, 18*(1), 47-57.

Mangasaryan, N., Martin, L., Brownlee, A., Ogunlade, A., Rudert, C., & Cai, X. (2012). Breastfeeding promotion, support and protection: review of six country programmes. *Nutrients, 4*(8), 990-1014.

Marinelli, K. A., Moren, K., & Taylor, J. S. (2013). Breastfeeding support for mothers in workplace employment or educational settings: summary statement. *Breastfeeding Medicine, 8*(1), 137-142.

Marshall, J. L., Godfrey, M., & Renfrew, M. J. (2007). Being a 'good mother': managing breastfeeding and merging identities. *Social Science & Medicine, 65*, 2147–2159.

McCarter-Spaulding, D. (2008). Is breastfeeding fair? Tensions in feminist perspectives on breastfeeding and the family. *Journal of Human Lactation, 24*(2), 206-212.

McFadden, A., & Toole, G. (2006). Exploring women's views of breastfeeding: a focus group study within an area with high levels of socio-economic deprivation. *Maternal and Child Nutrition, 2*(3), 156-168.

McInnes, R. J., & Chambers, J. A. (2008). Supporting breastfeeding mothers: qualitative synthesis. *Journal of Advanced Nursing, 62*(4), 407-427.

McIntyre, E., Pisaniello, D., Gun, R., Sanders, C., & Frith, D. (2002). Balancing breastfeeding and paid employment: a project targeting employers, women and workplaces. *Health Promotion International, 17*(3), 215-222.

McMillan, B., Conner, M., Green, J., Dyson, L., Renfrew, M., & Woolridge, M. (2009). Using an extended theory of planned behaviour to inform interventions aimed at increasing breastfeeding uptake in primiparas experiencing material deprivation. *British Journal of Health Psychology, 14*(2), 379-403.

Meedya, S., Fahy, K., & Kable, A. (2010). Factors that positively influence breastfeeding duration to 6 months: a literature review. *Women and Birth, 23*(4), 135-145.

Merriam, S. B. (2009). *Qualitative Research. A Guide to Design and Implementation*. San Francisco: Jossey-Bass.

Miller, N. H., Miller, D. J., & Chism, M. (1996). Breastfeeding practices among resident physicians. *Pediatrics, 98*(3), 434-437.

Milligan, C., Bingley, A., & Gatrell, A. (2005). Digging deep: using diary techniques to explore the place of health and well-being amongst older people. *Social Science & Medicine, 61*(9), 1882-1892.

Ministry of Health Malaysia. (2008). *Code of Ethics for the Marketing of Infant Foods and Related Products*. Kuala Lumpur.

Ministry of Women. (2008). Statistics on women, family and community. *Family and Community Development, http://www.kpwkm.gov.my*

Mohd Amin, R., Mohd Said, Z., Sutan, R., Shah, S. A., Darus, A., & Shamsuddin, K. (2011). Work related determinants of breastfeeding discontinuation among employed mothers in Malaysia. *International Breastfeeding Journal, 6*, 4.

Montaño, D. E., & Kasprzyk, D. (2008). Theory of reasoned action, theory of planned behavior, and the integrated behavioral model. In K. Glanz, B. K. Rimer & K. Viswanath (Eds.), *Health Behaviour and Health Education. Theory, Research, and Practice* (4th ed., pp. 67-95). San Francisco: Jossey-Bass.

Moore, E. R., & Coty, M.-B. (2006). Prenatal and postpartum focus groups with primiparas: breastfeeding attitudes, support, barriers, self-efficacy, and intention. *Journal of Pediatric Health Care, 20*(1), 35-46.

Mozingo, J. N., Davis, M. W., Droppleman, P. G., & Merideth, A. (2000). It wasn't working': women's experiences with short term breastfeeding. *American Journal of Maternal Child Nursing, 25*(3), 120-126.

Murphy, E. (1999). Breast is best: Infant feeding decisions and maternal deviance. *Sociology of Health & Illness 21*(2), 187-208.

National Employment Act Commission. (2006). *Employment Act 1955*. The Commision of Law Revision.

Nelson, Alison, & Sethi, Sarla. (2005). The breastfeeding experiences of Canadian teenage mothers. *Journal of Obstetric, Gynecologic, & Neonatal Nursing, 34*(5), 615-624.

Nelson, AM. (2006). A Metasynthesis of Qualitative Breastfeeding Studies. *Journal of Midwifery & Women's Health, 51*(2), e13-e20.

Noor, N. M. (2002). Work-family conflict, locus of control, and women's well-being: tests of alternative pathways. *The Journal of Social Psychology, 142*(5), 645-662.

Noor, N. M. (2003). Work- and family-related variables, work-family conflict and women's well-being: some observations. *Community, Work & Family, 6*(3), 297-319.

O'Neill, M. (1996). Researching prostitution and violence: towards a feminist praxis. In M. Hester, L. Kelly & J. Radford (Eds.), *Women, Violence and Male Power: Feminist Activism, Research and Practice* (pp. 130-147). Buckingham: Open University Press.

Ogbuanu, C., Glover, S., Probst, J., Liu, J., & Hussey, J. (2011). The effect of maternity leave length and time of return to work on breastfeeding. *Pediatrics, 127*(6), e1414-e1427.

Onyango, A., Koski, K. G., & Tucker, K. L. (1998). Food diversity versus breastfeeding choice in determining anthropometric status in rural Kenyan toddlers. *International Journal of Epidemiology, 27*(4), 484-489.

Opdenakker, R. (2006). Advantages and disadvantages of four interview techniques in qualitative research. *Forum: Qualitative Social Research, 7*(4), 11.

Ortiz, J., McGilligan, K., & Kelly, P. (2004). Duration of breast milk expression among working mothers enrolled in an employer-sponsored lactation program. *Pediatric Nursing, 30*(2), 111-119.

Osman, H., El Zein, L., & Wick, L. (2009). Cultural beliefs that may discourage breastfeeding among Lebanese women: a qualitative analysis. *International Breastfeeding Journal, 4*, 12.

Padgett, D. K. (2008). *Qualitative Methods in Social Work Research*. New York: SAGE Publications.

Patton, M. Q. (2002). *Qualitative Research and Evaluation Methods*. Thousand Oaks: SAGE Publications.

Payne, D., & James, L. (2008). Make or break. Mothers' experiences of returning to paid employment and breastfeeding: a New Zealand study. *Breastfeeding Review, 16*(2), 21-27.

Payne, D., & Nicholls, D. A. (2010). Managing breastfeeding and work: a Foucauldian secondary analysis. *Journal of Advanced Nursing, 66*(8), 1810-1818.

Persad, M. D., & Mensinger, J. L. (2008). Maternal breastfeeding attitudes: association with breastfeeding intent and socio-demographics among urban primiparas. *Journal of Community Health, 33*, 53-60.

Pisacane, A. (2000). Nestle's violation of international marketing code. Similar practices take place in Europe. *British Medical Journal (Clinical Research Ed.), 321*(7266), 960-960.

Prasad, P. (2005). *Crafting Qualitative Research: Working in the Postpositivist Traditions*. New York: M.E. Sharpe.

Raisler, J. (2000). Against the odds: Breastfeeding experiences of low income mothers. *Journal of Midwifery & Women's Health, 45*(3), 253-263.

Raven, J. H., Chen, Q., Tolhurst, R. J., & Garner, P. (2007). Nestle's violation of international marketing code. Similar practices take place in Europe. *BMC Pregnancy and Childbirth, 7*, 8.

Renfrew, M. J., McCormick, F. M., Wade, A., Quinn, B., & Dowswell, T. (2012). Support for healthy breastfeeding mothers with healthy term babies. *Cochrane Database Systematic Review*(5), CD001141.

Rice, P. L. (2000). *Hmong Women and Reproduction*. Westport, USA: Bergin & Garvey.

Robinson, C. O. (2003). *More mental than dental: the link between Bourdieu's concept of social habitus and nutrition*. American Sociological Association Annual Meeting Atlanta, GA.

Roe, B., Whittington, L. A., Fein, S. B., & Teisl, M. F. (1999). Is there competition between breastfeeding and maternal employment? *Demography, 36*(2), 157-171.

Rojjanasrirat, W. (2004). Working women's breastfeeding experiences. *The American Journal of Maternal and Child Nursing, 29*(4), 222-227.

Rothbard, N. P. (2001). Enriching or depleting? The dynamics of engagement in work and family roles. *Administrative Science Quarterly, 46*(4), 655-684.

Rubin, H. J., & Rubin, I. S. (2005). *Qualitative Interviewing: The Art of Hearing Data*. Thousand Oaks: SAGE Publications.

Ryan, A. S., Wenjun, Z., & Acosta, A. (2002). Breastfeeding continues to increase into the new millennium. *Pediatrics, 110*, 1103-1109.

Ryan, A. S., Zhou, W., & Arensberg, M. B. (2006). The effect of employment status on breastfeeding in the United States. *Women's Health Issues, 16*(5), 243-251.

Sattari, M., Serwint, J. R., Neal, D., Chen, S., & Levine, D. M. (2013). Work-place predictors of duration of breastfeeding among female physicians. *The Journal of Pediatrics, in press*.

Schmied, V., Beake, S., Sheehan, A., McCourt, C., & Dykes, F. (2011). Women's perceptions and experiences of breastfeeding support: a metasynthesis. *Birth, 38*(1), 49-60.

Schmied, V., & Lupton, D. (2001). Blurring the boundaries: breastfeeding and maternal subjectivity. *Sociology of Health & Illness, 23*(2), 234-250.

Schwandt, T. A. (1994). Constructivist, interpretivist approaches to human inquiry. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research* (pp. 118-137). Thousand Oaks: SAGE Publications.

Scott, J. A., Binns, C. W., Oddy, W. H., & Graham, K. I. (2006). Predictors of breastfeeding duration: evidence from a cohort study. *Pediatrics, 117*(4), e646-e655.

Scott, J. A., & Mostyn, T. (2003). Women's experiences of breastfeeding in a bottle-feeding culture. *Journal of Human Lactation, 19*(3), 270-277.

Sheehan, A., & Schmied, V. (2011). The imperative to breastfeed: an Australian perspective. In P. Liamputtong (Ed.), *Infant Feeding Practices: A Cross-cultural Perspective* (pp. 55-76). New York: Springer.

Sikorski, J., Renfrew, M. J., Pindoria, S., & Wade, A. (2003). Support for breastfeeding mothers: a systematic review. *Paediatric and Perinatal Epidemiology, 17*(4), 407-417.

Sittlington, J., Stewart-Knox, B., Wright, M., Bradbury, I., & Scott, J. A. (2007). Infant-feeding attitudes of expectant mothers in Northern Ireland. *Health Education Research, 22*(4), 561-570.

Skafida, V. (2011). Juggling work and motherhood: the impact of employment and maternity leave on breastfeeding duration: a survival analysis on growing up in Scotland data. *Maternal and Child Health Journal, 16*(2), 519-527.

Slusser, W. M., Lange, L., Dickson, V., Hawkes, C., & Cohen, R. (2004). Breast milk expression in the workplace: a look at frequency and time. *Journal of Human Lactation, 20*(2), 164-169.

Sokol, E., Thiagarajah, S., & Allain, A. (2001). *Breaking the rules. Stretching the rules. Evidence of violations of the code of marketing of breastmilk substitutes and subsequent resolutions*. Penang, Malaysia: International Baby Food Action Network.

Staehelin, K., Bertea, P. C., & Stutz, E. Z. (2007). Length of maternity leave and health of mother and child - a review. *International Journal of Public Health 52*(4), 202-209.

Statistic. (2008). Chart 1.1: Female Labour Force. Malaysia. Retrieved from http://www.kpwkm.gov.my.

Stevens, K. V., & Janke, J. (2003). Breastfeeding experiences of active duty military women. *Military Medicine, 168*(5), 380-384.

Stewart-Knox, B., Gardiner, K., & Wright, M. (2003). What is the problem with breast-feeding? A qualitative analysis of infant feeding perceptions. *Journal of Human Nutrition and Dietetics, 16*(4), 265-273.

Stuebe, A. (2009). The risks of not breastfeeding for mothers and infants. *Reviews in Obstetrics and Gynecology, 2*(4), 222-231.

Sulaiman, Z., Amir, L. H., & Liamputtong, P. (2013). Infant feeding practices: rates, risks of not breastfeeding and factors influencing breastfeeding. In D. Narváez, J. Panksepp, A. N. Schore & T. R. Gleason (Eds.), *Evolution, Early Experience and Human Development: From Research to Practice and Policy* (pp. 277-298). New York: Oxford University Press.

Swanson, V., & Power, K. G. (2005). Initiation and continuation of breastfeeding: theory of planned behaviour. *Journal of Advanced Nursing, 50*(3), 272-282.

Swartz, D. (1997). *Culture and Power: The Sociology of Pierre Bourdieu*. Chicago: University of Chicago Press.

Sweetman, P. (2009). Revealing habitus, illuminating practice: Bourdieu, photography and visual methods. *The Sociological Review of Economics of the Household, 57*(3), 491-511.

Tan, K. L. (2009). Knowledge, attitude and practice on breastfeeding in Klang, Malaysia. *The International Medical Journal, 8*(1), 17-22.

Tan, K. L. (2011). Factors associated with exclusive breastfeeding among infants under six months of age in Peninsular Malaysia. *International Breastfeeding Journal, 6*, 2.

Taylor, A. (1998). Violations of the international code of marketing of breast milk substitutes: prevalence in four countries. *British Medical Journal, 316*(7138), 1117-1122.

Taylor, S. J., & Bogdan, R. (1984). *Introduction to Qualitative Research Methods: The Search for Meanings*. New York: John Wiley & Sons.

Tengku Ismail, T. A., Sulaiman, Z., Jalil, R., Wan Muda, W. M., & Nik Man, N. N. (2012). Breast milk expression among formally employed women in urban and rural Malaysia: a qualitative study. *International Breastfeeding Journal, 7*, 11.

Thomas, F. (2006). Stigma, fatigue and social breakdown: exploring the impacts of HIV/AIDS on patient and carer well-being in the Caprivi region, Namibia. *Social Science & Medicine, 63*(12), 3174-3187.

Thompson, P. E., & Bell, P. (1997). Breast-feeding in the workplace: how to succeed. *Comprehensive Pediatric Nursing, 20*, 1-9.

Thulier, D., & Mercer, J. (2009). Variables associated with breastfeeding duration. *Journal of Obstetric, Gynecologic, & Neonatal Nursing, 38*(3), 259-268.

UNICEF. (2009). Early initiation of breastfeeding and infant and young child feeding. Retrieved from http://www.childinfo.org/breastfeeding_iycf.php.

van Rossum, C. T. , Buchner, F. L., & Hoekstra, J. (2006). *Quantification of health effects of breastfeeding: Review of the literature and model simulation*. Bilthoven.

Visness, C. M., & Kennedy, K. I. (1997). Maternal employment and breast-feeding: findings from the 1988 National Maternal and Infant Health Survey. *American Journal of Public Health, 87*(6), 945-950.

WABA. (2003). *Maternal protection at work campaign kit: ILO convention no. 183 and recommendation no. 191*. Penang, Malaysia: WABA.

WABA. (2013). *Mother Support Task Force (MSTF)*. Retrieved from http://www.waba.org.my/pdf/mstfnl_v11n1_eng.pdf

Wall, G. (2001). Moral constructions of motherhood in breastfeeding discourse. *Gender and Society, 15*(4), 592-610.

Wallace, L. E., & Chason, H. (2007). Infant feeding in the modern world: medicalization and the maternal body. *Sociological Spectrum, 27*(4), 405-438.

Wambach, K. A. (1997). Breastfeeding intention and outcome: a test of the theory of planned behavior. *Research in Nursing & Health, 20*(1), 51-59.

Wambach, K. R. N. & Cohen, S. (2009). Breastfeeding Experiences of Urban Adolescent Mothers. *Journal of Pediatric Nursing, 24*(4), 244.

Weber, D., Janson, A., Nolan, M., Wen, L. M., & Rissel, C. (2011). Female employees' perceptions of organisational support for breastfeeding at work: findings from an Australian health service workplace. *International Breastfeeding Journal, 6*, 1.

Weiss, R. S. (1994). *Learning From Strangers: The Art and Method of Qualitative Interview Studies*. New York: Simon & Schuster.

Whaley, S. E., Meehan, K., Lange, L., Slusser, W., & Jenks, E. (2002). Predictors of breastfeeding duration for employees of the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). *Journal of the American Dietetic Association, 102*(9), 1290-1293.

Wilkins, C., Ryan, K., Green, J., & Thomas, P. (2012). Infant feeding attitudes of women in the United Kingdom during pregnancy and after birth. *Journal of Human Lactation, 28*(4), 547-555.

Williams, S. J. (1995). Theorising class, health and lifestyles: can Bourdieu help us? *Sociology of Health & Illness, 17*(5), 577-604.

Willis, J. W. (2007). *Foundations of Qualitative Research Interpretive and Critical Approaches*. London: SAGE Publications.

Witters-Green, R. (2003). Increasing breastfeeding rates in working mothers. *Families, Systems, & Health, 21*(4), 415-434.

Wojnar, D. (2004). Maternal perceptions of early breastfeeding experiences and breastfeeding outcomes at 6 weeks. *Clinical Effectiveness in Nursing, 8*(2), 93-100.

World Health Organization. (1981). *International code of marketing of breastmilk substitutes*. Geneva: WHO.

World Health Organization. (2001). *The optimal duration of exclusive breastfeeding: report of an expert consultation*. Geneva: WHO.

Yilmaz, G., Gürakan, B., Akgün, S., & Ozbek, N. (2001). Factors influencing breastfeeding for working mothers. *The Turkish Journal of Pediatrics, 44*(1), 30-34.

Yimyam, S. (1998). Breastfeeding, work and women's health among Thai women in Chiang Mai. *Breastfeeding Review, 6*(1), 17-22.

Yimyam, S. (2011). Breastfeeding beliefs and practices among employed women: a Thai cultural perspectives. In P. Liamputtong (Ed.), *Infant Feeding Practices: A Cross-cultural Perspective* (pp. 125-140). New York: Springer.

Yimyam, S., & Morrow, M. (1999). Breastfeeding practices among employed Thai women in Chiang Mai. *Journal of Human Lactation, 15*, 225-232.

Yimyam, S., & Morrow, M. (2003). Maternal labor, breast-feeding, and infant health. In J. Heymann (Ed.), *Global Inequalities at Work: Work's Impact on the Health of Individuals, Families, and Societies* (pp. 105-135). Oxford, UK: Oxford University Press.

Yow, V. R. (1994). *Recording Oral History: A Practical Guide for Social Scientist*. Thousand Oaks: SAGE Publications.

Zafar, N., & Bustamante-Gavino, I. (2008). Breastfeeding and working full time: experiences of nurse mothers in Karachi, Pakistan. *International Journal of Caring Sciences, 1*(3), 132-139.