Exploration of Breastfeeding Promotion and Practices in Bhutan

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Submitted in fulfilment of the requirements for the degree of Doctor of Philosophy

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Acknowledgements

I am immensely grateful to Deakin University for awarding me the scholarship for my PhD degree, without which I would have never achieved my dream of undertaking a PhD course. In the course of my PhD journey, I have also sought support and guidance from many other organisations and individuals, to whom I am thankful. I would like to offer my special gratitude particularly to my magnanimous and erudite supervisors, Associate Professor Diane Phillips and Professor Alison Hutchinson. They are the best supervisors I could have ever wished for. I would not have been able to undertake this PhD journey without their staunch and unwavering support and guidance throughout my course. Associate Professor Diane Phillips always had time for me. I could go and knock on her door any time and be greeted with a welcoming smile! Her ‘onwards and upwards’ slogan kept me going! And with just one word from Professor Alison Hutchinson, who humanised the statement ‘less is more’, all my problems would fall into place! Thank you once again, my eminent professors.

I also like to thank from the depth of my heart Barbara Green, who is the international coordinator at Deakin University and a very close personal friend of mine in particular and for Bhutanese people in general. You are a person to whom I could run for help and support any time. Not to forget, I also thank you for going through my thesis despite your busy schedule.

Special thanks go to all my friends and colleagues in the Faculty of Nursing and Public Health, Khesar Gyalpo University of Medical Sciences of Bhutan, who encouraged me, especially my Dean, Dr Chencho Dorjee, Madam Sangay Pem, Madam Renuka Mothey and Dr Ripa; I thank you all for taking a personal interest in looking after my family when they needed medical attention back home. Many thanks to Tandin Pemo, Nursing Superintendent of Jigme Dorji Wangchuck National Referral Hospital, Dr Ugyen Sonam, Head of Department of Community Health, and Geeta Giri, Yangdon Paki and Tshering
Yangchen, in-charges of the Maternity Ward, Birthing Centre and Reproductive Health Unit, respectively. My unexpected source of support the past year has been my friend Russ Layman, a person who has taken it on himself to be my ardent supporter to see that I complete my PhD. Thank you, Russ, for your support and encouragement.

My thanks and everlasting gratitude to my father, Phuntsho, and my mother, Dawa Zangmo, who had to become parents yet again to look after my children. My warmest thanks to my siblings, Tashi Tshering, Choening Dorji, Kesang Dema and Sangay Zangmo, and their respective spouses, Dechen, Pema, Dorji and Thupten, for helping to take care of my children. My thanks to my father-in-law, Ugyen Namgyal, and mother-in-law, Namgay Wangmo, for all their support and encouragement.

Being a part of a large family, it is impossible to mention each and every one, but I would like to thank all my relatives and friends who have helped out in some way, and my special thanks and respect to my maternal uncle, Lhundrup Dorji, for his spiritual guidance and support. My love and thanks to my daughter, Sampem Yeshey Tshomo, and two sons, Pemachan Yeshey Dorji and Choying Yeshey Jigme, for staying healthy and happy despite their parents’ absence from their lives for the last four years. Mummy and Daddy are extremely sorry they were not there for you when you needed us, but we knew you all were in good hands if not better ones. And my love and thanks to my biggest critic, my punching bag, my cook and the person who has been with me through the highs and lows of the journey, my husband, Tshewang Yeshey.

Finally, I would like to thank all the women, midwives, obstetricians, paediatricians, health assistants and the Program Officer who participated in this study. Without their participation, this study would not have been possible.
This thesis has been professionally edited by Mary Josephine O’Rourke AE,
Accredited Editor, Institute of Professional Editors, Vice-President and Freelance Affairs
Officer, Editors Victoria.
Abstract

**Background**: Because of the protective properties of human breastmilk, the World Health Organization (WHO) recommends exclusive breastfeeding (EBF) of babies from soon after birth for six months and with continued breastfeeding along with appropriate complementary foods up to two years of age or beyond. Breastfeeding has been promoted by the Royal Government of Bhutan since 1990, but this has resulted in a suboptimal increase in EBF. Bhutanese women’s perceptions and intentions regarding breastfeeding and their breastfeeding practices, however, have not been explored. Health professionals and their role in breastfeeding education, promotion and support of women and their families has not been explored either.

**Purposes**: The first purpose of this study was to explore Bhutanese women’s perceptions of and their intentions related to their baby’s nutrition after birth, knowledge about EBF during pregnancy, and their perceptions, experiences and breastfeeding practices six weeks after birth. The second purpose was to explore health professionals’ knowledge and promotion of EBF and the level of breastfeeding support they provided to women.

**Design**: A Qualitative Exploratory Descriptive research design has been adopted for the study. Purposive sampling was used to include childbearing women (interviewed twice) and health professionals (interviewed once). The setting was Jigme Dorji Wangchuck National Referral Hospital (JDWNRH) in Thimphu, Bhutan. Because some of the women did not speak English, a semi-structured guide for the interviews with them was pre-tested to minimise the loss and misinterpretation of data. Most of the interviews with the women were conducted in Dzongkha, the national language of Bhutan, while all interviews with health professionals were conducted in English. The student researcher is fluent in both English and
Dzongkha. Framework analysis was used to identify the themes from the individual interviews.

**Methods:** Digitally recorded individual interviews were conducted with 25 multigravidae and 24 primigravidae women at the term of pregnancy. The women were interviewed again at six weeks following birth, when 22 multiparae and 22 primiparae participated in interviews. Five women, three multiparae and two primiparae, were unavailable for the second interview. A total of 38 semi-structured interviews were conducted with health professionals, consisting of 26 midwives, four obstetricians, four paediatricians, three health assistants and one Program Officer.

**Findings:** Five themes and 13 sub-themes emerged from the interviews with women at the term of pregnancy. The five themes that emerged from the interviews with pregnant women are: 1) previous breastfeeding experiences and influencing factors; 2) compulsory breastfeeding; 3) perceptions and knowledge about breastfeeding; 4) understandings and views on breastfeeding and exclusive breastfeeding; and 5) breastfeeding information provided by health professionals. Five themes, comprising 13 sub-themes, emerged from the interviews with women at six weeks following childbirth: 1) current breastfeeding practices; 2) Bhutanese women’s breastfeeding experiences and intention to continue; 3) culture, traditions and beliefs affecting breastfeeding practices; 4) hospital practices affecting breastfeeding; and 5) perceptions of breastfeeding support. Overall, the women exhibited positive attitudes towards breastfeeding and intended to breastfeed their babies because they knew about the benefits of breastmilk and were influenced by Bhutanese social, traditional and cultural norms.

The findings of the study indicate that factors such as a lack of breastfeeding information and support during pregnancy and following birth led to women having limited understanding of
the true meaning of EBF. They, therefore, turned to their family and friends for breastfeeding advice, information and support when they faced breastfeeding problems. Furthermore, they adopted cultural and traditional practices in the belief that such practices would not impede the exclusivity of breastfeeding. Most of the time, these cultural and traditional practices were encouraged and/or imposed by elders in the family. Women who planned to return to work were not informed about any options to support continuation of EBF and hence planned to apply non-exclusive breastfeeding by supplementing their breastmilk with formula and other commercial foods.

Seven themes with 24 related sub-themes emerged from the interviews with health professionals: 1) knowledge of EBF and current breastfeeding status in Bhutan; 2) breastfeeding is a social norm in Bhutan; 3) barriers to initiation of breastfeeding; 4) reasons for breastmilk supplementation; 5) barriers to breastfeeding promotion activities; 6) strategies to improve the EBF rate; and 7) breastfeeding support and promotion activities. They all understood and supported EBF. Although some of the health professionals were not aware of all ten steps, they were, however, supportive of the elements of the Baby-Friendly Hospital Initiative’s the Ten Steps to Successful Breastfeeding. All the health professionals reported staff shortages and heavy workloads. In particular, midwives, who were the frontline carers for women, reported a lack of ongoing professional development about breastfeeding, which reportedly hindered them from promoting and supporting breastfeeding in women. Other factors interfering with breastfeeding and EBF promotion included the loss of JDWRH’s Baby-Friendly designation and an outdated National Breastfeeding Policy.

**Conclusion and recommendations**: Childbearing women relied on family, elders and friends for guidance related to breastfeeding; therefore, a recommendation resulting from this study is that formalised programs on breastfeeding education and promotion should be made available to women during pregnancy and immediately after birth. Women require support
services related to breastfeeding and EBF in the face of possible breastfeeding problems and when they return to their workplace. It was commonly reported that lack of updates in breastfeeding knowledge and skills hampered midwives in providing effective breastfeeding promotion and EBF support. Thus, a further recommendation is that health professionals, in particular midwives, should be given regular and ongoing professional development.

Midwives are well placed to provide formal programs on breastfeeding and EBF across the childbearing continuum for women and their families, including elders. An organisational review of staffing and workloads for all health professionals, particularly for midwives, is also recommended, including the establishment of a model of maternity care that places emphasis on quality care for women, their babies and their families. Further recommendations include regular reviews and updates of the National Breastfeeding Policy, developed according to the WHO recommendation, and application by JDWNRH for re-designation and re-accreditation as a Baby-Friendly Hospital.
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# Abbreviations

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<tbody>
<tr>
<td>ANC</td>
<td>Antenatal Care</td>
</tr>
<tr>
<td>BFHI</td>
<td>Baby-Friendly Hospital Initiative</td>
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<tr>
<td>BHU</td>
<td>Basic Health Unit</td>
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<tr>
<td>BMIS</td>
<td>Bhutan Multi-Indicator Survey</td>
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<tr>
<td>CHU</td>
<td>Community Health Unit</td>
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<tr>
<td>EBF</td>
<td>Exclusive Breastfeeding</td>
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<tr>
<td>EPI</td>
<td>Extended Program on Immunization</td>
</tr>
<tr>
<td>FNPH</td>
<td>Faculty of Nursing and Public Health</td>
</tr>
<tr>
<td>GA</td>
<td>General Anaesthesia</td>
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<tr>
<td>GNH</td>
<td>Gross National Happiness</td>
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<tr>
<td>GNM</td>
<td>General Nurse Midwife</td>
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<tr>
<td>HA</td>
<td>Health Assistant</td>
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<tr>
<td>IYCF</td>
<td>Infant and Young Child Feeding</td>
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<tr>
<td>JDWRH</td>
<td>Jigme Dorji Wangchuck National Referral Hospital</td>
</tr>
<tr>
<td>MCH</td>
<td>Maternal and Child Health</td>
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<tr>
<td>NBP</td>
<td>National Breastfeeding Policy</td>
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<tr>
<td>NICU</td>
<td>Neonatal Intensive Care Unit</td>
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<tr>
<td>OPD</td>
<td>Out Patient Department</td>
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<tr>
<td>ORC</td>
<td>Outreach Clinic</td>
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<tr>
<td>OT</td>
<td>Operation Theatre</td>
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<tr>
<td>PBC</td>
<td>Perceived Behavioural Control</td>
</tr>
<tr>
<td>PIH</td>
<td>Pregnancy Induced Hypertension</td>
</tr>
<tr>
<td>QED</td>
<td>Qualitative Exploratory Descriptive Research</td>
</tr>
<tr>
<td>RGOB</td>
<td>Royal Government of Bhutan</td>
</tr>
<tr>
<td>RHU</td>
<td>Reproductive Health Unit</td>
</tr>
<tr>
<td>RIHS</td>
<td>Royal Institute of Health Sciences</td>
</tr>
<tr>
<td>SAARC</td>
<td>South Asian Association Regional Cooperation</td>
</tr>
<tr>
<td>TPB</td>
<td>Theory of Planned Behaviour</td>
</tr>
<tr>
<td>TRA</td>
<td>Theory of Reasoned Action</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
</tr>
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<td>WHO</td>
<td>World Health Organization</td>
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Glossary

Cerelace  
Cerelace is a brand of instant cereal made by Nestlé. It is promoted for babies of six months and older as a supplement to breastmilk.

Changkey  
Local alcoholic drink specially made from fermented rice or millet and usually served in and around occasions of childbirth in Bhutan.

Complementary/supplementary feeding  
Any food, whether manufactured or locally prepared, that is suitable as a complement to breastmilk or baby formula, when either become insufficient to satisfy the nutritional requirements of the baby. Such food is also commonly called ‘weaning food’ or ‘breastmilk supplement’ (World Health Organization, 1981).

Exclusive breastfeeding  
Exclusive breastfeeding means that an infant receives only breastmilk, from his or her mother or a wet nurse, or expressed breastmilk, and no other liquids (not even water) or solids, with the exception of oral rehydration solution, drops or syrups consisting of vitamins, minerals supplements or medicines. After the first six months, babies should be given nutritious complementary foods and breastfeeding should be continued up to the age of two years or beyond (World Health Organization, 2015).

Lactogen  
A commercial breastmilk substitute formula commonly used by women in Bhutan.

Multigravida  
A woman who is pregnant for the second time or more.

Multipara  
A woman who has given birth to more than one living child.

Nan  
Nan is a commercial breastmilk substitute formula available in Bhutan.

Non-Exclusive breastfeeding  
Giving infants other foods or fluids in addition with breastmilk during the first six months after birth.
Pre-lacteal feed  Pre-lacteal feeds are defined as any feeds given before the onset of lactogenesis stage II, which is the onset of copious lactation that occurs within 4 days of birth (National Health and Medical Research Council, 2012).

Primigravida  A woman who is pregnant for the first time.

Primipara  A woman who has given birth to her first child.

‘Sister’  In Bhutan female nurses and midwives are referred to as ‘sisters’ and male nurses and midwives are referred to as ‘brothers’.
CHAPTER 1: INTRODUCTION

1.1 Introduction

This chapter commences with an outline of my personal experiences of and professional motivation for studying breastfeeding. It then provides a brief background and elucidates the rationale for exclusive breastfeeding (EBF) as recommended by the World Health Organization (WHO), the state of breastfeeding promotion in Bhutan and the significance of this study. This is followed by an explanation of the study aims, purposes and potential impact, and finally the chapter concludes with a brief overview of the organisation of this thesis.

1.2 Experiences as a breastfeeding mother

I am Bhutanese and the mother of three children, who were all breastfed. Prior to my first pregnancy and becoming a new mother in October 2003, I worked as a midwife at Jigme Dorji Wangchuck National Referral Hospital (JDWNRH) in Thimphu, Bhutan. I had a caesarean section for the birth of my first child and in the immediate time after this procedure, I was lying flat on my back, unable to turn or sit up. My midwifery colleagues assisted me to attach my daughter to my breast initially, but although they checked on me from time to time, I was mostly left in the care of my family. I did not have any expectations of frequent visits from the midwives because, having worked in the unit, I knew there were only three to four staff caring for at least thirty women and babies. During that time, I remember my mother saying “Oh, right now she is producing only that watery milk (colostrum) and the milk has not come in yet.”

The first night after the caesarean was a blur of pain, sore nipples and a crying baby by my side. My mother asked if she could give my daughter some water, because she believed my daughter’s throat was dry from crying. I was aware that I was not yet producing
milk, but I do remember telling my mother not to give my daughter any water. The next day my daughter developed dehydration, fever and jaundice, and as a consequence was given formula feed for hydration and an intravenous injection (IVI) cannula was inserted for the administration of antibiotics. As a new mother, it was the most painful sight to see my tiny baby daughter with an IVI cannula inserted into the vein of her arm. I was filled with regret that I had not agreed to my mother’s suggestion of giving my daughter water. Thus, when I had my second child by caesarean section in 2006, my standing instruction to my family was to feed formula to my son right away so that he did not develop a fever or have a similar experience to that of my daughter.

1.3 Metamorphosis of my perceptions of breastfeeding and generation of interest in the study

As a midwife, I behaved as a typical Bhutanese midwife; I did not question any aspects of my practice, but instead blindly followed the practices I observed among my senior colleagues. As a typical Bhutanese mother, I did not request help with breastfeeding and did not question the midwives’ actions in the delivery of care or, at times, lack of care.

However, my perceptions about breastfeeding changed entirely when I successfully completed a Master of Midwifery in Melbourne, Victoria, Australia in 2008. In the first year of this course I completed a Graduate Diploma of Midwifery, which required the successful completion of not only the theory components, but also the clinical requirements. This led to endorsement as a midwife through the (then) regulating authority, the Nurses Board of Victoria. All of my clinical placements were undertaken at the Royal Women’s Hospital in Melbourne, one of the leading maternity service facilities in Australia.

During my placements at this facility, I learned that breastfeeding is taken very seriously in Australia. All midwives promoted and supported women with breastfeeding in accordance with the Baby-Friendly Hospital Initiative (BFHI), which later became known as
the Baby-Friendly Health Initiative (BFHI) to reflect the expansion of the initiative into community health facilities throughout Australia in 2006 (Australian College of Midwives, 2016). Midwives were knowledgeable and took a keen interest in promoting breastfeeding because breastfeeding was identified as an organisational priority of the Royal Women’s Hospital, not only to maintain its BFHI accreditation status, but also to support its aim of improved breastfeeding rates (Royal Women's Hospital, 2014). This priority was supported by the availability of continuing education programs not only for midwives, but also for mothers. As a consequence, women were well informed and supported in breastfeeding by midwives throughout pregnancy and after birth.

Equipped with new knowledge and a fresh outlook, I returned to my country in January 2009 after completing my course. Towards the end of 2009, I participated in an Infant and Young Child Feeding (IYCF) trainer program. After successfully completing this training program I, along with colleagues from the (then) Royal Institute of Health Sciences (RIHS) and JDWNRH, delivered a program on optimal breastfeeding practices annually to health care workers, including midwives working in hospitals and health assistants working in both hospitals and the community. This training was organised by the Nutrition Program, Ministry of Health. This education strategy for midwives and health assistants was important because they provide frontline care for women, babies and their families within a community-based model of primary health care.

After returning to Bhutan, I realised the attitudes of midwives and other health professionals towards breastfeeding were quite casual, in that promotion and education activities were almost non-existent. Bhutanese women were not informed about the importance of breastfeeding or given choices about modes of feeding their babies. Consequently, both mothers and babies were deprived of knowledge of the benefits of EBF. Even I, a health professional, was not aware until my experiences in the Royal Women’s
Hospital that painful breastfeeding can be avoided with appropriate support and guidance. This led me to question my practice and I reflected on the rights of women who sought our care with full faith and trust. This raised many questions for me: What do women in Bhutan know about breastfeeding? What and how do they view EBF? Furthermore, what do health professionals do to promote breastfeeding in Bhutan and what shapes their attitudes towards the practice, particularly towards EBF?

In March 2010, following the birth of my third baby, I believed that I had adhered to best practice because I exclusively breastfed my son for six months, however, my mother revealed during a conversation that she had fed him water when bathing him while I was at work. I am comforted by the fact that I managed to breastfeed both my eldest and youngest children for over two years. Sadly, I could not breastfeed my middle son beyond four months because I had to leave him with my parents in Bhutan when I travelled to Australia in 2007 to study.

After my maternity leave concluded in July 2010, I returned to work at RIHS. During my clinical supervision at JDWRH, I could see that little had changed; postnatal women were still left mostly by themselves, without support from midwives, the only help in breastfeeding their babies coming from family members. Infant formula feed was still available and used freely. Although students were taught about optimal breastfeeding practices in their midwifery course at RIHS, they did not practise what they had learned and instead perpetuated the practices of their senior colleagues. Similarly, health professionals who were trained in IYCF continued to use outdated practices when they returned to their clinical settings. In the midst of my observations, a national survey found that the EBF rate in Bhutan was 47.8% at six months. This was at significant odds with my experience, as most newborn babies were fed supplements in the hospital environment. Thus, my interest in finding answers to my questions about the views and experiences of breastfeeding of
Bhutanese women was rekindled. I was therefore determined to learn more about breastfeeding practices in my country.

My having explained how my interest in undertaking this study evolved, it should be noted that as a researcher I have been very careful in relation to researcher bias by not influencing the conduct of this study. Every step to avoid the influence of my personal beliefs and judgement has been undertaken during the course of this study.

1.4 Background

1.4.1 World Health Organization’s recommendation for EBF

The World Health Organization (WHO) recommends that mothers worldwide exclusively breastfeed their babies for six months after birth to achieve optimal growth, development and health. EBF is defined as babies receiving only breastmilk and no other liquids (including water) or solids, with the exception of oral rehydration solution, and drops/syrups containing vitamins, minerals and medicines (World Health Organization, 2015). After the first six months, babies should be given nutritious complementary foods and continuation of breastfeeding up to the age of two years or beyond (World Health Organization, 2015). Studies have shown the beneficial effects of breastfeeding for both mothers and babies, the benefits being greater when babies are exclusively breastfed until at least six months of age (Black et al., 2008; Kramer & Kakuma, 2002).

Today, the WHO recommends six months as the optimal duration for EBF (World Health Organization, 2015). Previously, the WHO recommendation for the optimal duration of breastfeeding was four to six months (Kramer & Kakuma, 2002) which differed from the United Nations Children’s Fund (UNICEF) recommendation of six months (Kramer & Kakuma, 2002). As a consequence of this discrepancy, the WHO commissioned a systematic review to determine the optimal duration of breastfeeding (World Health Organization,
Two small controlled trials and 17 observational studies were included in the review to assess the effects of EBF for six months versus EBF for three or four months, and compared with non-exclusive breastfeeding, on child health, growth and development, and on maternal health (Kramer & Kakuma, 2002). The review found that babies who were exclusively breastfed for six months experienced less morbidity from gastrointestinal infection than those who were non-exclusively breastfed for three or four months. The review also found no deficits in growth among babies from either developing or developed countries who were exclusively breastfed for six months or longer. It was also found that mothers of such babies had more prolonged lactational amenorrhea (Kramer & Kakuma, 2002) and for many women this could have been a desirable outcome to protect them against further pregnancy so soon after birth. Thus, the review resulted in the WHO recommending six months as the optimal duration of EBF, congruent with the UNICEF recommended duration.

In 2012, an update of the review was conducted on 23 independent studies: 11 from developing countries and 12 from developed countries (Kramer & Kakuma, 2012). These review findings reinforced the earlier WHO recommendation of EBF for six months. Further evidence indicated growth development deficits did not exist among babies from either developing or developed countries who were exclusively breastfed for six months or longer (Kramer & Kakuma, 2012). Thus, countries worldwide have adopted the WHO’s recommendation of EBF until at least six months of age and breastfeeding up to two years.

EBF until six months after birth offers higher protective effects for babies (Black et al., 2008). Breastfed babies have at least six times greater chance of survival in the early months than those who are non-breastfed. Further, an exclusively breastfed child is 14 times less likely to die in the first six months of life than a non-breastfed child (Black et al., 2008). Despite widespread knowledge about the benefits and recommended duration of breastfeeding, in low-income and middle-income countries such as those in Africa, Asia,
Latin America and the Caribbean, EBF rates remain low. In these countries, only 47–57% of babies younger than two months are exclusively breastfed, and the rate falls to 25–31% at two to five months (Black et al., 2008). Black et al. (2008) further assert that in these countries non-exclusive breastfeeding results in 1.5 million deaths and accounts for 10% of the disease burden in children younger than five years. These findings highlight the requirement for active breastfeeding promotion and awareness in low-and middle-income countries.

1.4.2 Breastfeeding promotion in Bhutan

Bhutan is one of the lower middle-income countries in Asia (World Bank, 2016). The Royal Government of Bhutan draws from the recommendations of the WHO for its breastfeeding promotion. The promotion of breastfeeding in Bhutan commenced in 1990 with the endorsement of the UN Convention on the Rights of the Child, in which it is stated that every child has the right to good nutrition and, therefore, the right to be breastfed (Ministry of Health, 2002). Article 24.2(f) of the Convention calls for “informing all segments of society about child health and nutrition including the advantages of breastfeeding” (United Nations, 1989, p. 7). In 1996, along with the South Asian Association for Regional Cooperation (SAARC) members, Bhutan adopted the SAARC Code for the Protection of Breastfeeding and Young Child Nutrition (Ministry of Health, 2002). Adoption of the Code supported the promotion of breastfeeding and was the turning point that led to the launch of the National Breastfeeding Policy in Bhutan in 2002 (Ministry of Health, 2002). This policy states that babies should be breastfed exclusively for four months and should continue to be breastfed until two years of age or beyond, while receiving nutritionally adequate and safe complementary foods after four months (Ministry of Health, 2002).

The Global Strategy for Infant and Young Child Feeding was launched in 2002 by the WHO and UNICEF to revitalise efforts to promote, protect and support appropriate IYCF,
building on past initiatives including the Innocenti Declaration in 1990 (World Health Organization, 1990) and the BFHI (World Health Organization, 2009). Since 2010, health workers in Bhutan have been trained in IYCF; however, there are no reports of evaluations or reviews of the effectiveness of the training. In Bhutan, one of the three hospitals with maternity services achieved BFHI designation through accreditation (International Baby Food Action Network Asia, 2012) during the 1990s. However, the student researcher could not locate any evidence of reaccreditation or evaluation of adherence to the guidelines, nor any ongoing activity in maintaining this status. Along a similar line, the latest report states that no hospitals in Bhutan in the last five years have been accredited or reassessed as Baby-Friendly (International Baby Food Action NetWork Asia, 2015).

1.4.3 Significance of the study

Despite the reduction in Bhutan’s infant mortality rate from 70.7% in 1994 to 30% in 2014, the rate remains high in the South East Asian region (Bhutan Health Management & Information System, 2015). In 2015, it was reported that a large number of babies under the age of one year still suffer from morbidities and, therefore, continue to contribute to a high infant mortality rate. For example, the national report of morbidities experienced by babies under one year of age indicates they suffered from diarrhoea (n=5382), dysentery (n=551), otitis media (n=783), pneumonia (n=3686) and/or skin infections (n=3783) (Bhutan Health Management & Information System, 2015). The literature provides evidence that breastfeeding, and specifically EBF, has protective effects against these morbidities.

Various surveys have been conducted over the years in Bhutan, with each consecutive survey showing an increase in EBF rates. A survey conducted in 2008 found that 81.5% of babies commenced breastfeeding within one hour of birth; however, only 37% and 10.4% were exclusively breastfeeding at four and six months following birth, respectively (Department of Public Health, 2008). Therefore, to increase national breastfeeding rates, the
Ministry of Health strongly recommended a review of the national breastfeeding policy, along with endorsement of the WHO and UNICEF recommendations (Department of Public Health, 2008).

The Bhutan Multiple Indicator Survey (BMIS), conducted in 2010 by the National Statistics Bureau (NSB), showed that 59% of babies were breastfed within one hour of birth and 92.9% within one day of birth. The EBF rate at six months was 48.7% (National Statistics Bureau, 2010). However, there are no reports on the reasons behind this sharp increase in the rate of EBF at six months from 10.4% to 48.7% in just two years. Both surveys found a similar median duration of breastfeeding, which was 23 months in the survey by the Public Health Department (Department of Public Health, 2008) and 24.2 months according to the National Statistics Bureau survey (National Statistics Bureau, 2010). The most recent survey conducted by the Nutrition Program within the Ministry of Health states the EBF rate at six months is 51% (Nutrition Program, 2015) representing a further, smaller increase in the EBF rate in the last eight years. However, the source of this data is not clear because the report does not specify whether the data on exclusivity of breastfeeding were collected for only babies of six months of age. In the report, it is stated that data on baby feeding practices were collected for the youngest child in the family, which could include those who were either not yet six months old or more than six months old. Although the EBF rates in Bhutan seem to be increasing, the reliability of the EBF data remains debatable. On the other hand, when the Cabinet of Bhutan recently endorsed the allocation of six months of maternity leave, the EBF rate of 10.4% was cited by the Ministry of Health as justification for the extension of this time for new mothers (Pokhrel, 2015b). This indicates that the Ministry of Health still stands by the EBF rate of 10.4% at six months.

There is very little literature related to breastfeeding in Bhutan. To date, other than the surveys conducted by the Ministry of Health (Department of Public Health, 2008; Nutrition
Program, 2015) and the National Statistics Bureau (National Statistics Bureau, 2010) only one qualitative study has been undertaken. A qualitative study conducted by Bohler and Ingstad (1996) was undertaken to explore factors affecting the duration of breastfeeding and weaning of babies among 37 women in a small rural community. The study’s participants were women who had already given birth and it thus focused on the reasons for the weaning of babies, rather than the duration of breastfeeding. In addition, experiences and practices that affect the exclusivity of breastfeeding were not investigated. Thus, in Bhutan, there is a dearth of research on breastfeeding, especially regarding women’s perceptions and experiences of breastfeeding practices, and the knowledge and perceptions of health professionals involved in providing breastfeeding support and promotion.

This study, therefore, has explored women’s intention to breastfeed, their knowledge of breastfeeding at the term of their pregnancy, and their perceptions and experiences of breastfeeding at six weeks after birth. Health professionals’ knowledge and their views and experiences of promoting EBF and supporting breastfeeding women have also been studied.

1.5 Study aims

The aims of this study were to explore Bhutanese women’s perceptions, intentions and experiences related to their babies’ nutrition at the term of pregnancy and at six weeks after birth; and to explore the roles of Bhutanese health professionals, including midwives, obstetricians, paediatricians, health assistants and a Program Officer (collectively referred to as health professionals in this study) in the promotion of EBF.

1.6 Study purposes

The purposes of the research study were to explore:

1. Bhutanese women’s perceptions of, intentions for and knowledge of EBF.
2. The perceptions, experiences and breastfeeding practices of Bhutanese women following birth.
3. Health professionals’ knowledge about EBF.
4. Breastfeeding information and support provided to women by health professionals.
5. How health professionals promote EBF during pregnancy, in the immediate postnatal period and at six weeks after birth.

1.7 Study questions

The questions addressed in this study were:

1. What influences Bhutanese women to breastfeed their babies?
2. What are Bhutanese women’s perceptions and experiences of breastfeeding and EBF practices at the term of pregnancy and at six weeks after birth?
3. What activities are carried out by health professionals to promote EBF during pregnancy and after birth?
4. What support do health professionals provide for women to promote breastfeeding?

1.8 Study impact

The expected outcomes of the study were:

1. Increased understanding of the reasons for non-compliance with EBF for six months.
2. Knowledge to inform promotion of EBF in Bhutan.
3. Understanding of the perceptions of Bhutanese women at term regarding breastfeeding and what influences them to breastfeed.
4. Identification of initiatives to support women to breastfeed their babies exclusively for six months.
5. Identification of health professionals’ understanding of breastfeeding (effectiveness, adequacy and relevance) and the initiatives for promotion of EBF.
1.9 Overview of the thesis

This thesis is presented in ten chapters. Chapter two provides a brief profile of Bhutan, including its cultural, traditional and societal values and practices, followed by a description of the hospital setting and the health care system. A literature review is presented in Chapter three, followed by the study methods in Chapter four. Chapter five reports the findings from the interviews with women at the term of pregnancy and at six weeks following birth, and Chapter six describes the themes that have emerged from the interviews with health professionals. Chapter seven presents a discussion of the findings from the interviews with women and Chapter eight provides a discussion of the findings from the interviews with health professionals. Chapter nine presents the application of the theory of planned behaviour to interpreting the findings and, finally, the study conclusion is presented in Chapter ten.

This thesis is presented according to the sixth edition of the Publication Manual of the American Psychological Association (American Psychological Association, 2012).

1.10 Conclusion

Breastfeeding confers immense benefits on mothers and children. It has protective effects for many disease conditions; however, in many low-and middle-income countries, EBF rates for babies under six months of age remain low, despite the recommendations of the WHO. This chapter has presented the rationale for the WHO’s recommendation for EBF until six months of age. An overview of breastfeeding rates and promotion in Bhutan, and the significance of the study has been presented. The study aims, purposes and research questions have been stated, and an overview of the organisation of this thesis has been provided.
CHAPTER 2: THE KINGDOM OF BHUTAN

2.1 Introduction

This chapter presents an overview of aspects of the Kingdom of Bhutan’s geography and profiles its demography, cultural practices and traditions. An outline of the Royal Government of Bhutan, including its maternity leave pledge and health care system, is given, followed by a description of the Jigme Dorji Wangchuck National Referral Hospital (JDWNRH) where the study was conducted. An explanation of midwifery training in Bhutan and maternity care pathway services offered at the hospital are included here.

2.2 Country profile

Bhutan is a small, landlocked country located between China in the north and India in the south, with a total area of 38,394 sq. km. A map of Bhutan is presented in Figure 2.1.

Figure 2.1 Map of Bhutan, reproduced from Maps of Bhutan, retrieved 15 January 2016 from http://www.maps.aridocean.com

The country is divided into 20 administrative districts known as Dzongkhags. It has a population of approximately 745,153 (National Statistics Bureau, 2014) characterised by
diverse ethnicities. The Bhutanese people are categorised into three broad ethnic groups: the Sharchops in eastern Bhutan, the Ngalongs in western Bhutan and the Nepali-speaking Lhotshampa in southern Bhutan. Twenty-four languages are spoken in the country and Dzongkha is the national language (Fleming, 2014). The majority of the Bhutanese population practises Buddhism, while people located in the southern part of the country mostly practise Hinduism.

Thimphu, the capital of Bhutan, is located in the western region within the district of Thimphu. It has a population of more than 100,000 (Bhutan Media Service, 2012) and is considered a metropolis by the Bhutanese. All government organisations, including the offices of the King and ministers, are located in Thimphu and the city is also a major business hub for the country. People from different parts of the country migrate to Thimphu for better economic circumstances (Namgyel, 2015), resulting in the city population comprising a mixed cultural group.

Gross National Happiness (GNH) is the developmental philosophy of Bhutan, underpinned by the conviction that humans want to search for happiness (GNH Centre Bhutan, 2016). GNH was adopted by the Royal Government of Bhutan and this philosophy was enshrined in the constitution of Bhutan in 2008 to shape the government’s policies and programs (Centre for Bhutan Studies & GNH Research, 2015). GNH is viewed as a holistic and sustainable approach to the development of Bhutan which seeks a middle path of balancing material with non-material values (GNH Centre Bhutan, 2016). At the core of GNH lie four major pillars: good governance; sustainable socio-economic development; cultural preservation; and environmental conservation. These are further classified into nine domains: psychological wellbeing; health; education; time use; cultural diversity and resilience; good governance; community vitality; ecological diversity and resilience; and living standards (GNH Centre Bhutan, 2016).
2.3 Understanding Bhutanese society

Although Bhutan is comprised of three different ethnic groups, with many different languages and cultural practices, its people are generally humble, amiable, kind and considerate. For most, their conduct and attitudes are generally influenced by their religion-driven social values. Three values have particular relevance in the context of the present study: *tha damtshig*, *le ju dre* and *driglam namzha*. *Tha damtshig* means ‘boundary of sacred oath’ and *le ju dre* means ‘law of karmic cause and effect’ (Dorji, 2009). *Driglam namzha* refers to a comprehensive framework of Bhutanese etiquette (Jadhav et al., 2013). Each of these concepts is described in the following sections.

*Tha damtshig* refers to the commitment and obligation of love, honour and loyalty in one’s relationships with other people (Kinga, 2001). These relationships are filled with obligation, respect, loyalty and gratitude towards religious leaders, from children to their parents, employees to employers, and care receivers to caregivers. *Tha damtshig* covers a wide range of referents including honesty, fidelity, moral integrity, moral rectitude, moral coherence, reciprocal affection, gratitude and filial piety (Phuntsho, 2004).

*Le ju dre*, according to Phuntsho (2004, p. 568), is the law of ‘karma’ and is viewed as an infallible law of virtuous actions leading to happiness and happy rebirth. Non-virtuous actions may, however, lead to suffering and unhappy rebirth. Furthermore, it is believed that *le ju dre* is the explanation for the past and present state of being, and the answer for the future. For example, Bhutanese people believe their current circumstances are a consequence of past conduct, with current behaviour determining their future state of being. Therefore, in accordance with this concept, people are usually fearful of the repercussions of their actions and mindful of how they conduct themselves. Bhutanese people receiving care are usually mild mannered and undemanding. Further, they do not question the actions of someone
considered superior to themselves, because questioning is believed to be either hurtful or offensive, resulting in the accumulation of bad merit for the person concerned.

*Driglam namzha* refers to etiquette. *Driglam* means ‘way or path having order and uniformity’, while *namzha* refers to a concept or system. Thus, *driglam namzha* is a system of ordered and cultured behaviour, and, by extension in Bhutanese society, its standards and rules dictate this effect (Phuntsho, 2004, p. 572). It governs the day-to-day life activities and etiquette pertaining to a hierarchical structure of position, power and respect (Jadhav et al., 2013). Therefore, in the context of *driglam namzha*, patients view health professionals as more knowledgeable, holding powerful positions compared to themselves, and so they are respectful of health professionals. Patients do not question the care they receive from health professionals, nor do they express their opinions freely, out of respect for them. Similarly, Bhutanese people do not defy the wishes of their family elders. Likewise, this culture of respect for seniority, power and position in the hierarchical structure within JDWNRH exists among health professionals, based on their qualifications, designations or positions. Thus, junior health professionals, out of respect for their seniors, do not express their own opinions freely or question the actions of their seniors.

### 2.4 Government and its pledge

The unification of Bhutan occurred with the enthronement of the first King on 17 December 1907, resulting in a government led by a hereditary monarch. However, in 2008 Bhutan adopted a democratic constitutional monarchy and the first elected government was formed by a political party called *Druk Phuensum Tshsopa*, meaning ‘Bhutan Harmony Party’, which was in power from 2008 to 2013. In the second election, its opponent, the People’s Democratic Party, won the election and formed the current government. One of the pledges of the present government (which came with a promise of delivery within the first 100 days
of their governance) remained unfulfilled at the time this study was conducted. This pledge is:

People’s Democratic Party will extend the maternity leave program for women bearing babies from the existing three months of paid leave to an additional nine months of relaxed service. The women will be given only 50% of workload to ensure that a newborn child gets enough attention (People's Democratic Party, 2013, p. 50).

2.5 Maternity leave in Bhutan

In Bhutan, women employed in government organisations receive paid maternity leave for three months for three consecutive children and their husbands are entitled to five days of paid paternity leave (Royal Civil Service Commission, 2012). On the other hand, according to the Labour and Employment Act, corporate and private sector employees are entitled to eight weeks of paid maternity leave (Ministry of Labour and Human Resources, 2012). True to their pledge but three years after the election, the cabinet of the current government of Bhutan endorsed six months of maternity leave, including six months of flexi-time for women. The flexi-time is aimed at allowing breastfeeding women in government organisations to work half-days (Pokhrel, 2015a). The newly endorsed six-month maternity leave came into effect on 1 March 2016. However, at this stage the extended maternity leave applies only to women working in government organisations.

2.6 Health services in Bhutan

All Bhutanese people have access to free public health care services. The right to free public health services is enshrined in the Constitution of Bhutan under Article 9, which states “The state shall provide free access to basic public health services in both modern and traditional medicine” (Constitution of the Kingdom of Bhutan, 2008, p. 18). An overview of health services in Bhutan follows.
Bhutanese health services are offered through two distinct systems of medicine: allopathic or modern medicine, and traditional medicine. Enthronement of the first king of Bhutan in 1907 saw the advent of an era of modern or allopathic medicine, and with subsequent monarchs allopathy gained traction and is now widely available in most parts of Bhutan (Dorji & Melgaard, 2012). Prior to the advent of allopathic medicine, Bhutanese health care and services were mostly based on religious beliefs and rituals, and later adopted Tibetan medicine, which is now known as ‘traditional medicine’ (Dorji & Melgaard, 2012).

Health services providing modern medicine have a formal three-tiered structure, with the three referral hospitals in Thimphu, Mongar and Gelegphu providing the highest level of complexity of services. The second level comprises all other district hospitals, and the third level is comprised of the Basic Health Unit (BHU) network (Dorji & Melgaard, 2012). Health care services are provided at health centres as well as in the community through Outreach Clinics (ORCs). Outreach services are provided monthly by health assistants from parent hospitals or BHUs and focuses mostly on preventive, promotive maternal and child care services (Human Resource Division, 2014). At present in Bhutan there are 28 hospitals, 156 BHUs and 654 ORCs (Ministry of Health, 2016).

2.7 Hospital profile

The JDWNRH was established in 1972 in the district of Thimphu as the Thimphu General Hospital. It was renamed in 1994 in honour of the late third King, His Majesty Jigme Dorji Wangchuck. In 2008, the hospital inaugurated its new complex with 350 beds, and the Birthing Centre and Maternity Ward became a separate entity with its own staff. The JDWNRH functions as a district hospital for Thimphu and the referral hospital for the western districts of Bhutan and, as the largest health care facility in the country, it also receives referrals from the two smaller referral centres.
As the premier hospital of the country, JDWNRH provides professional and technical assistance to all other hospitals and public health programs of the Government of Bhutan (JDWNRH, 2013). It also serves as the clinical training centre for students of the (then) Royal Institute of Health Sciences (RIHS), recently renamed the Faculty of Nursing and Public Health (FNPH), Khesar Gyalpo University of Medical Sciences. JDWNRH conducts seven outreach clinics every month.

2.8 Midwifery-trained personnel in Bhutan

The FNPH, in collaboration with JDWNRH, provides training for health assistants and a nursing course. Health assistants mostly work in BHUs in the community, while general nurse-midwives work in the hospitals.

Midwifery education is included in the health assistants’ course, which until recently was a two-year training program. It has been increased to three years to prepare graduates for primary health care roles in the community setting, including the care of childbearing women, for example, by providing support with breastfeeding issues. Health assistants are expected to refer patients to other health professionals when complicated health issues are identified.

The Diploma of General Nursing is a three-year course which incorporates midwifery education. Thus, all students who graduate as nurses are also qualified to practise midwifery. Apart from qualified graduates of the FPNH, midwifery is also permitted to be practised by nurses trained in foreign countries. The majority of these are graduates from India, Thailand and Australia (Human Resource Division, 2014).

The roles and responsibilities of midwives are specified in the guidelines in the ‘Standards for Midwifery Practice for Safe Motherhood’ developed by the Ministry of Health, which are consistent with the standards of the International Confederation of Midwives (International Confederation of Midwives, 2010) and Emergency Obstetrics Care
Guidelines of the World Health Organization (World Health Organization, 2003). The standards of the Ministry of Health specify that all nurse-midwife graduates can independently conduct births, perform and repair episiotomies, and assist obstetricians with instrumental births (Reproductive Health Programme, 2009). These standards also apply to health assistants.

2.9 Maternity services and staffing pattern in JDWNRH

Maternity services at the JDWNRH are provided in the Reproductive Health Unit (RHU) (within the Community Health Department), the Maternity Ward and the Birthing Centre. The organisation of these units is shown in Appendix A. These units are staffed by midwives who are also registered nurses, but are referred to as ‘midwives’ throughout the remainder of this thesis.

2.9.1 The Reproductive Health Unit of JDWNRH

The RHU is part of the Community Health Department at the hospital. This unit consists of an Antenatal Clinic, a Postnatal Clinic and a Well-Baby Clinic.

2.9.1.1 Antenatal Clinic

The Antenatal Clinic (ANC) aims to achieve a healthy mother and baby (JDWNRH, 2014). At the time of data collection for the current study, the clinic was staffed with two midwives. The activities undertaken by these midwives include history taking, physical examination, laboratory investigations, ultrasound, cardiotocography, follow-up care, birth planning, supplements, health education and referral in case of complication (Community Health Department, 2014a). In 2013, the clinic registered about six new women per day and provided continuing antenatal care for 45–50 clients in a day (Antenatal register, 2013). According to the Community Health Department (2014a), in 2013 the ANC provided care to 1521 new pregnant women patients and 7190 existing pregnant women.
2.9.1.2  Postnatal Clinic

Midwives working in the Postnatal Clinic conduct postnatal health assessments for postnatal women. They also offer services such as family planning and pap smear screening (Community Health Department, 2014a). This clinic was staffed by three midwives at the time of data collection.

2.9.1.3  Well-Baby Clinic

The Well-Baby Clinic consists of an Immunisation Clinic, a Neonatal Examination Unit and a Lactation Clinic. The Immunisation Clinic offers routine immunisation from the time of birth until five years of age. It also offers routine tetanus immunisation for pregnant women and sporadic immunisation for those planning trips outside of the country. The Neonatal Examination Unit and Lactation Clinic were both launched on 23 October 2013 with the mission statement:

Strengthen breastfeeding practices in JDWNHRH by encouraging, supporting, protecting, promoting and advocating breastfeeding through education, beginning in pregnancy and continuing until two years of age and to help families who choose to breastfeed to enjoy a satisfying and successful experience (Community Health Department, 2014b, p. 2).

Babies have routine postnatal check-ups at three days after birth, then at one, three and six weeks respectively. The aims of these frequent check-ups are to detect failure to thrive and danger signs so as to facilitate timely treatment, detection of common treatable conditions and local management according to protocols. The Lactation Clinic caters to mothers and babies with feeding problems (Community Health Department, 2014b).

At the time of data collection for the current study, the Immunisation Clinic was staffed with three midwives, the Neonatal Examination Unit with two midwives and the Lactation Clinic with one midwife.
2.9.2 Birthing Centre

The Birthing Centre at JDWNRH consists of five birthing suites, five beds in the ‘early stage’ room and five beds in the ‘immediate postnatal’ ward. Fourteen midwives staff the birthing suites across three shifts, seven days a week, with four to five midwives working morning shifts, three on evening shifts and three on night shifts at the time of data collection.

2.9.3 Maternity Ward

At the time of data collection, the Maternity Ward at JDWNRH was staffed by twelve midwives in total, with four rostered for morning shifts, three for evening shifts and three for night shifts. The Maternity Ward consists of 36 beds in total, six beds allocated to gynaecology cases and the rest assigned for obstetrics cases. Thus, the Maternity Ward admits: women with gynaecological problems; pre-caesarean and post-caesarean cases; antenatal cases where women have complications during pregnancy; and women with post-dated pregnancies.

2.10 The maternity care pathway at JDWNR Hospital

The maternity care pathway, which specifies the trajectory of care for women during pregnancy, childbirth and the postnatal period, is presented in Appendix B to illustrate the routine level of care obtained from JDWNRH.

2.10.1 Antenatal care

According to the antenatal care pathway, initial consultation and registration are recommended to occur before or around twelve weeks of pregnancy. Subsequent consultations are recommended at 18–22 weeks, 26–28 weeks, 32 weeks, 36 weeks, 38 weeks, 40 weeks and 41 weeks (Ministry of Health, 2014). During initial registration at the ANC and on subsequent visits, midwives are expected to provide women with information on the importance of breastfeeding and exclusive breastfeeding (EBF). For primigravidae
women, during their first antenatal visit and as part of preparation for lactation, the midwife is expected to examine each of the woman’s breasts for nipple protractility and inform the woman about the breast changes occurring during pregnancy (Reproductive Health Programme, 2009). This is an early opportunity for breastfeeding promotion and education.

2.10.2 Intranatal care

All care and assessments throughout labour, birth and immediately after birth are undertaken by midwives unless there are any complications. Women in labour are admitted either to the emergency room prior to birthing or directly to the Birthing Centre, according to the progression of labour. In the emergency room, midwives assess the women and fetuses to detect any aberrations from normal parameters. Women are assessed to identify whether they are in labour and if so they are transferred to the Birthing Centre, where they are reassessed. If women are in early labour, they are admitted to the ‘early stage’ room for observation; however, if they are in true labour they are admitted to the birthing suite. Following birth, they are transferred to the ‘immediate postnatal’ ward or the Maternity Ward, from where they are discharged home after six hours or on the following day. Midwives assist women with the initiation of breastfeeding in the labour room and continue to help women in the ‘immediate postnatal’ ward or Maternity Ward until their discharge home.

2.10.3 Postnatal care

Following discharge from hospital in Bhutan, women are expected to attend three postnatal visits for ongoing evaluation of their health and welfare, along with those of their baby. The first visit is scheduled at one week following discharge, while the second visit occurs at three weeks and the third visit at six weeks following discharge (Ministry of Health, 2014). During every postnatal visit, midwives examine women’s breasts and nipples, and assess breastfeeding. They also reinforce the importance of breastfeeding and provide support for
women who experience problems related to breastfeeding or health issues related to their baby.

2.11 Conclusion

This chapter has presented a brief profile of Bhutan and a description of Bhutanese society, the pledge of the current government and an overview of the health services in Bhutan. It has also described the function of JDWNRH and its role as the apex hospital of the country and provided a description of the personnel who deliver midwifery care. Finally, the chapter has presented an overview of maternity care and services at JDWNRH.

The next chapter presents a review of the literature related to breastfeeding as relevant to the current study. It will present the current international rates of EBF, provide an overview of the BFHI and examine the factors affecting initiation and duration of breastfeeding. Finally, the theory of planned behaviour, the theoretical model adopted in the current study, will be presented.
CHAPTER 3: LITERATURE REVIEW

3.1 Introduction

A critical review of the literature related to the current study is presented in this chapter, consisting of existing knowledge on breastfeeding in general and exclusive breastfeeding (EBF) in particular. The review focuses on the reasons women choose to breastfeed or not breastfeed and the factors affecting their decision, including the role of health professionals in breastfeeding support and promotion. The first part of the literature review consists of evidence of the benefits of breastfeeding for women and babies, current rates of EBF internationally, and an overview of the Baby-Friendly Hospital Initiative (BFHI) and effects of its implementation on EBF. The second part of this chapter presents a detailed and critical review of the evidence relating to maternal, baby, organisational, cultural and support factors affecting initiation and duration of breastfeeding. The third part of this chapter provides an overview of the theory of planned behaviour (TPB), which has informed the development of interview guides for this study and aided in data analysis. The chapter concludes with a description of the implications of the literature review for the current study.

The literature was searched using a systematic method to ensure that all relevant studies were included in the review. The date range for the literature search was restricted to the year 2000 onwards to ensure only research relating to most contemporary breastfeeding practices was included, with the exception of those pertaining to the theory of planned behaviour, research methodologies and the World Health Organization (WHO), where studies were included from 1980 onwards. A search was undertaken for literature published in English and indexed in the Scopus, CINAHL and PubMed databases and the Cochrane Database of Systematic Reviews. Reference lists of identified papers were also reviewed. The literature review was updated every three months over the course of the study. Keywords used to retrieve literature in relation to breastfeeding and BFHI were: ‘breastfeeding’,
3.2 An overview of breastfeeding, exclusive breastfeeding and their promotion

Studies have provided evidence that breastfeeding is the optimal nutrition for babies (Horta, Bahl, Martines, & Victora, 2007; Horta, de Mola, & Victora, 2015; Kramer & Kakuma, 2012) and that breastfeeding is beneficial for both mothers and their babies (World Health Organization, 2001). The benefits for mothers and babies are summarised below:

3.2.1 Maternal benefits

Breastfeeding has protective effects against:

- breast cancer (Babita, Kumar, Singh, Malik, & Kalhan, 2014; Chowdhury et al., 2015; Collaborative Group on Hormonal Factors in Breast Cancer, 2002; Zhou et al., 2015)
- ovarian and endometrial cancer (Chowdhury et al., 2015; Zhan, Liu, Li, & Zhang, 2015)
- postnatal depression, especially in multiparous women (Sibolboro Mezzacappa & Endicott, 2007)
- cardiovascular disease (Natland, Nilsen, Midthjell, Andersen, & Forsmo, 2012) and maternal hypertension (Schwarz et al., 2010; Stuebe et al., 2011; Zhang, Zhang, Liu, Li, & Wang, 2015)
- diabetes (Chowdhury et al., 2015; Schwarz et al., 2010; Stuebe et al., 2011; Zhang et al., 2015).

3.2.2 Benefits for babies

Breastfeeding has protective effects against:

- high blood pressure (Horta et al., 2007)
• accumulation of total cholesterol (Horta et al., 2007)
• respiratory infection and pneumonia (Chantry, Howard, & Auinger, 2006; Hajeebhoy, Nguyen, Mannava, Nguyen, & Mai, 2014)
• otitis media (Bowatte et al., 2015; Chantry et al., 2006; Heinig, 2001)
• diarrhoea and gastrointestinal infection (Hajeebhoy et al., 2014; Heinig, 2001)
• urinary tract infection (Hajeebhoy et al., 2014; Heinig, 2001; Marild, Hansson, Jodal, Oden, & Svedberg, 2004)
• asthma, atopic dermatitis and allergic rhinitis (Kull, Wickman, Lilja, Nordvall, & Pershagen, 2002)
• obesity in childhood (Harder, Bergmann, Kallischnigg, & Plagemann, 2005; Yan, Liu, Zhu, Huang, & Wang, 2014)
• acute lymphoblastic leukaemia and acute myeloblastic leukaemia (Kwan, Buffler, Abrams, & Kiley, 2004)
• immune-mediated diseases (Ragnedda et al., 2015).

In addition, breastfeeding is also found to be beneficial for:
• children’s cognitive development (Kramer et al., 2008)
• childhood intelligence (Horta et al., 2015; Oddy et al., 2003; Park et al., 2014; Victora et al., 2015).

3.2.3 Exclusive breastfeeding rates

EBF until at least six months of age has been proven to be advantageous compared to non-exclusive feeding of breastmilk with formula. Thus, the WHO recommends EBF until six months (World Health Organization, 2001, 2015) and many countries worldwide have adopted this recommendation based on evidence; however, the EBF rates in low-income and middle-income countries are generally low (Black et al., 2008).
A study examined the global and regional average rates of EBF using the global database of Infant and Young Child Feeding (IYCF) maintained by the United Nations Children’s Fund (UNICEF). The researchers reported the EBF rate in babies of less than six months of age in developing countries to have increased from 33% in 1995 to 39% in 2010 (Cai, Wardlaw, & Brown, 2012). There has been an increase in EBF rates in almost all developing countries, with the largest improvement seen in West and Central Africa, where the rate increased from 12% in 1995 to 28% in 2010 (Cai et al., 2012). In South Asia, the rate rose from 40% in 1995 to 45% in 2010 (Cai et al., 2012). However, the study showed that although there has been a rise in EBF rates, this is very modest and the practice is not widespread in the developing world.

In Australia in 2010, 90.4% of babies were exclusively breastfed soon after birth and 61.4% were exclusively breastfed for less than one month. An estimated 39.2% of all babies were exclusively breastfed for three months and 15.4% were exclusively breastfed for five months (Australian Institute of Health and Welfare, 2011).

In the USA in 2011, the initiation of breastfeeding soon after birth was 79.2%; however, at six months and twelve months only 49.4% and 26.7% respectively were breastfeeding. The EBF rate at three months was 40.7% and then at six months decreased further to 18.8% (Centers for Disease Control and Prevention, 2014).

In the UK, 69% of women were exclusively breastfeeding at birth (McAndrew et al., 2012). At one week, less than half of all women (46%) were exclusively breastfeeding, 23% by six weeks and just 1% by six months (McAndrew et al., 2012).

A survey of IYCF practices in 26 counties in China, with a total population of 11,000,000 in twelve central and western provinces, found that 59.4% of women initiated breastfeeding within one hour of birth (Guo et al., 2013). The rate of exclusive breastfeeding
at one month was 58.3%, at four months it reduced to 29.2% and at six months it was only 13.6% (Guo et al., 2013).

In Bhutan, multiple surveys conducted in the last ten years show varying EBF rates. A survey conducted in 2008 found 37% and 10.4% of women were exclusively breastfeeding at four months and six months, respectively (Department of Public Health, 2008). On the other hand, the Bhutan Multiple Indicator Survey (BMIS) conducted in 2010 by the National Statistics Bureau (NSB) showed the EBF rate for six months of age was 48.7% (National Statistics Bureau, 2010). The recent National Nutrition Survey by the Nutrition Program (2015) states that 51% of babies were exclusively breastfed during the first six months.

A review of the literature on EBF rates indicates that, even though there are some improvements in certain aspects of breastfeeding internationally, progress is very slow and in some locations the situation remains static, especially with respect to the duration of EBF, in both developing and developed countries. Although breastfeeding initiation rates can be considered very good, there is a tapering-off in breastfeeding duration. This finding indicates that women are not continuing to breastfeed according to the WHO recommendations, resulting in poor EBF rates internationally. The literature indicates that significant effort is required to advocate for the importance of breastfeeding to increase EBF rates and duration in both developing and developed countries.

3.3 Baby-Friendly Hospital Initiative

One of the strategies to achieve the optimal duration of EBF and breastfeeding is the adoption of the BFHI. In a worldwide promotion strategy, it was recommended that health professionals should protect, promote and support breastfeeding for improving both babies’ and maternal health (World Health Organization, 1989). For this reason, the BFHI was launched in accordance with the 1990 Innocenti Declaration on the Protection, Promotion,
and Support of Breastfeeding (World Health Organization, 1990). This declaration was to ensure that every facility providing maternity services applies all criteria designated as ‘Baby-Friendly’ (World Health Organization, 1989). For this designation to be applied, organisations are required to fulfilment of minimum global criteria outlined in the Ten Steps to Successful Breastfeeding (World Health Organization, 2009). The ten steps are given in Table 3.1.

Table 3.1 The Ten Steps to Successful Breastfeeding

<table>
<thead>
<tr>
<th>No.</th>
<th>Steps</th>
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<tbody>
<tr>
<td>1</td>
<td>Have a written policy that is routinely communicated to all health care staff</td>
</tr>
<tr>
<td>2</td>
<td>Train all health care staff in skills necessary to implement this policy.</td>
</tr>
<tr>
<td>3</td>
<td>Inform all pregnant women about the benefits and management of breastfeeding.</td>
</tr>
<tr>
<td>4</td>
<td>Help mothers initiate breastfeeding within half an hour of birth.</td>
</tr>
<tr>
<td>5</td>
<td>Show mothers how to breastfeed and how to maintain lactation even if they should be separated from their babies.</td>
</tr>
<tr>
<td>6</td>
<td>Give newborn babies no food or drink other than breastmilk, unless medically indicated.</td>
</tr>
<tr>
<td>7</td>
<td>Practise rooming-in—that is, allow mothers and babies to remain together 24 hours a day.</td>
</tr>
<tr>
<td>8</td>
<td>Encourage breastfeeding on demand.</td>
</tr>
<tr>
<td>9</td>
<td>Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding babies.</td>
</tr>
<tr>
<td>10</td>
<td>Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.</td>
</tr>
</tbody>
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Many hospitals with maternity services have adopted the BFHI strategy, with 21,328 designated facilities in 198 countries (Labbok, 2012), and several international studies have investigated the effects of the BFHI Ten Steps to Successful Breastfeeding. These were conducted in Australia (Brodribb, Kruske, & Miller, 2013), Brazil (Caldeira & Goncalves, 2007), China (Xu, Qiu, Binns, & Liu, 2009), Hong Kong (Tarrant et al., 2011), Scotland (Broadfoot, Britten, Tappin, & MacKenzie, 2005), Switzerland (Merten, Dratva, &
Acknowledging the importance of breastfeeding, numerous studies have explored its implementation in various settings. Among these, the Baby-Friendly Hospital Initiative (BFHI) has been particularly influential. Ackermann-Liebrich (2005), Turkey (Ipekci & Ertem, 2012) and the USA (Merewood, Mehta, Chamberlain, Philipp, & Bauchner, 2005; Parker et al., 2013). Although these studies have had mixed results, overall the evidence indicates that implementation of the BFHI has had predominantly positive effects on breastfeeding initiation, duration and exclusivity. It is acknowledged, however, that most of the above studies relate to developed countries.

### 3.3.1 Implementation of Baby-Friendly Hospital Initiative

Numerous studies provide evidence that implementing the BFHI has positive effects on all aspects of breastfeeding. Analysis of the benefits of its implementation is also based on the dose-response association. For example, where more of the BFHI steps were practised, more positive breastfeeding outcomes were achieved. A systematic review of 58 reports worldwide found that adherence to the BFHI strategy had a positive impact on short-term, medium-term and long-term breastfeeding outcomes (Perez-Escamilla, Martinez, & Segura-Perez, 2016).

Similarly, a study examining the relationship between BFHI and trends in EBF found a statistically significant rise in EBF rates for babies under two months and under six months of age (Abrahams & Labbok, 2009). However, in the latter study the researchers analysed data from only 14 developing countries and did not measure the extent of ongoing adherence to the program and the Ten Steps to Successful Breastfeeding. Therefore, considering that about 198 countries have adopted the BFHI strategy, further studies are required to investigate the wider global uptake.

Breastfeeding initiation rates have been found to be the same among women giving birth in BFHI hospitals and in non-BFHI hospitals. In a study undertaken in the US city of Maine, 11,723 women who gave birth in thirteen BFHI hospitals were compared with 13,604 from nineteen matched non-BFHI facilities (Hawkins, Stern, Baum, & Gillman, 2015). It was found that there was no overall difference in breastfeeding initiation rates between all of the facilities (Hawkins et al., 2015). However, it also showed that at four weeks or less after
birth, the breastfeeding rate among women with low education who gave birth in Baby-Friendly facilities increased by 3.8% and the EBF rate by 4.5% (Hawkins et al., 2015). Women with low education could have been provided with breastfeeding information and support during their antenatal as well as early postnatal period, as per the BFHI policies, thus explaining the improvement in their initiation and breastfeeding practices. On the other hand, attending BFHI designated facilities did not make any difference in women with higher education (Hawkins et al., 2015). There is no clear reason provided by this study, other than that BFHI policies may not affect all women equally. In addition, it is not clear whether BFHI designation alone brought about the changes or whether various other factors could have been involved, such as women being motivated, informed and prepared for breastfeeding.

Certain steps of the BFHI compared to others have been found to have a more protective effect on breastfeeding. A study of 1242 breastfeeding women in Hong Kong demonstrated that out of six practices included in the study: Step 4 (initiate breastfeeding within half an hour of birth), Step 6 (give no food or drink other than breastmilk), Step 7 (practise rooming in), Step 8 (encourage breastfeeding on demand), Step 9 (give no artificial teats or pacifiers) and Step 10 (foster breastfeeding support groups); only Step 4, Step 6, Step 9 and Step 10 had protective effects against early cessation of breastfeeding (Tarrant et al., 2011). In this study, it was found that Step 7 and Step 8 had no effect on breastfeeding duration (Tarrant et al., 2011). Tarrant et al. (2011) attributed this to women having already been exposed to both practices, of rooming in and being encouraged to breastfeed their baby on demand. The study further revealed that the fewer of the BFHI steps practised, the more likely it was for women to discontinue breastfeeding (Tarrant et al., 2011). This highlights the importance of following BFHI practices for successful breastfeeding outcomes. However, since these data were reported by women themselves, their personal bias and subjective opinions may have influenced the findings.
Non-compliance with certain BFHI steps is negatively associated with breastfeeding outcomes. A study comprising 1304 breastfeeding dyads in the USA was undertaken to determine how non-compliance with the Ten Steps to Successful Breastfeeding influenced breastfeeding duration. The researchers found that not following certain steps, such as Step 6 (give no food or drink other than breastmilk), Step 4 (initiate breastfeeding within half an hour of birth) and Step 9 (give no artificial teats or pacifiers), was associated with the greatest decrease in breastfeeding duration (Nickel, Labbok, Hudgens, & Daniels, 2013). However, the study was based on self-reporting and is, therefore, subject to each woman’s perception of care. The reasons that babies were given pacifiers or breastmilk supplements were not explored in this study. The sample was limited to older, highly educated women, who were more likely to be employed, had fewer children and were less likely to smoke, and is therefore not generalisable beyond this demographic group. Despite these limitations, the findings highlight the importance of health professionals focusing on steps that help women to breastfeed successfully.

In contrast, other studies have found that giving birth in BFHI-designated accredited hospitals did not have an effect on breastfeeding practices. A study of 6752 women in Queensland, Australia showed that those who birthed in BFHI hospitals had significantly lower odds of continued breastfeeding at one and four months (Brodribb et al., 2013). At the time of the study, 11 of the 41 birthing facilities in Queensland were BFHI accredited. Brodribb et al. (2013) argue that BHFI accreditation does not have a positive impact on short- and medium-term breastfeeding rates once initiation rates have reached a ceiling and BFHI has become embedded in the community (Brodribb et al., 2013). Rather than accreditation, it was found that experiencing Baby-Friendly practices improved breastfeeding rates at one and four months. Recommendations include that BFHI accreditation can play a role in quality improvement and other strategies to support breastfeeding in the community (Brodribb et al.,
2013). The findings of a study in South Australia found socio-demographic and cultural factors to be important determinants for the duration of breastfeeding (Pincombe et al., 2008). The researchers did not take into account instances where babies had medical interventions (Pincombe et al., 2008). In addition, they also seemed to undermine the importance of exclusivity of breastfeeding in stating that to prolong the duration of breastfeeding, “permitting a baby to receive anything other than breastmilk may not be as damaging as is commonly assumed” (Pincombe et al., 2008, p. 79).

The results of various studies show that implementation of the BFHI guidelines has a positive impact on breastfeeding outcomes. The literature has generally shown that following certain steps of the BFHI as stated above is positively associated with breastfeeding practices, whereas other sources highlight the need for a review of the Ten Steps to Successful Breastfeeding. It has also been identified that factors such as socio-demographic and cultural determinants should be included so that support can be provided.

3.4 Factors influencing initiation and duration of breastfeeding

A range of factors such as women’s intention, knowledge and understanding of human lactation can be influential in successful breastfeeding. In the following sections, these factors will be addressed in relation to maternal, baby, organisational, cultural and breastfeeding support factors.

3.4.1 Maternal factors

3.4.1.1 Women’s intention to breastfeed

Women’s intentions can determine their breastfeeding practices and outcomes. Studies have found that women’s intention to breastfeed is positively associated with the initiation and duration of breastfeeding and the practice of EBF (de Jager, Broadbent, Fuller-Tyszkiewicz, & Skouteris, 2014; Forster, McLachlan, & Lumley, 2006; Kronborg & Vaeth, 2004; Shaker,
Scott, & Reid, 2004). Women who planned to breastfeed for twelve months or more were significantly more likely to initiate breastfeeding than those who did not intend to breastfeed or who intended to stop breastfeeding when the child was up to two months old (DiGirolamo, Thompson, Martorell, Fein, & Grummer-Strawn, 2005). This was the finding of a study consisting of 1665 American women from a low socioeconomic group (DiGirolamo et al., 2005).

A study by Colaizy, Saftlas, and Morriss (2012) of 1839 women from three US states, Ohio, Michigan and Arkansas, made similar findings. These indicate that women who intended to breastfeed were 26.6 times more likely to initiate breastfeeding than those with tentative intention or those who were simply undecided. In addition, women who expressed their definite intention to breastfeed were 7.53 times more likely to breastfeed for at least four weeks and 2.75 times more likely to breastfeed for at least ten weeks, compared with those who expressed tentative intention (Colaizy et al., 2012). However, the data were collected through a self-administered mail questionnaire and there was no means of validating the responses against actual practices carried out by the participants. Since the data were collected when babies were ten weeks and older, this could also be subject to recall bias. Additionally, the researchers did not investigate what factors affected maternal intention to breastfeed.

Women’s intention to breastfeed exclusively is a strong predictor of EBF. Various studies have found that women’s antenatal intention to breastfeed exclusively is a strong predictor of EBF (Linares, Rayens, Gomez, Gokun, & Dignan, 2014; Tenfelde, Finnegan, & Hill, 2011; Yu et al., 2014). Tenfelde et al. (2011) assert women who declared their intention to exclusively breastfeed during pregnancy were more likely to do so than those who did not state this intention during their stay in hospital. Similarly, Linares et al. (2014) in their study of 99 Hispanic women found that women who stated their intention to breastfeed exclusively
during their pregnancy were engaged in EBF at the time of discharge from hospital after giving birth. However, in both studies there was no follow-up of whether women continued with EBF once at home and the exact duration of EBF was not measured. Both studies had a small sample size and included participants belonging to a low socioeconomic group only.

On the other hand, a study by Yu et al. (2014) in Bangladesh of 2178 rural women found that pregnant women who stated their intention to exclusively breastfeed were more likely to do this. Among 47.8% of women who stated this intention, 45.2% were still exclusively breastfeeding three months after birth (Yu et al., 2014). The data collection method for this study included a self-reported survey tool, with the potential for recall bias.

In contrast, a study of 125 pregnant women was conducted in Melbourne, Australia to follow up on their intention to breastfeed exclusively until six months after birth (de Jager et al., 2014). At 32 weeks of pregnancy, 52.8% of the women stated their intention to breastfeed exclusively, but only 12% were doing this at six months (de Jager et al., 2014). Thus, these results demonstrate that women’s intention towards EBF during pregnancy is not a predictor of EBF at six weeks. However, due to the small sample size and inclusion of both primigravidae and multiparae women, the generalisability of these findings is limited.

Despite limitations, the above studies overall have provided evidence that intention for breastfeeding among women is associated with positive breastfeeding outcomes. The intended duration as well as the exclusivity of breastfeeding affect the actual breastfeeding duration. These studies highlight the merit of discussion with women during pregnancy to prepare them for their baby’s nutrition. A key issue of these findings is the duration of EBF being considerably less than the WHO recommendation of six months. Therefore, increasing activities to raise levels of antenatal EBF intention are recommended in order to optimise baby feeding behaviours. In other words, women during pregnancy require formal programs
of education related to baby nutrition, particularly about the benefits of human breastmilk for the growth and development of babies, and the benefits of breastfeeding to women.

### 3.4.1.2 Maternal attitude towards breastfeeding

Maternal attitude has been shown to affect the breastfeeding outcomes. Women with positive attitudes were more likely to state their intention to exclusively breastfeed and to do so for a longer duration (Stuebe & Bonuck, 2011). They were also likely to be exclusively breastfeeding during the early postnatal period (Wojcicki et al., 2010). Furthermore, Vaaler, Stagg, Parks, Erickson, and Castrucci (2010) state that women with positive attitudes were likely to breastfeed until twelve months. A study undertaken in rural Western Australia followed 427 breastfeeding dyads from birth until twelve months. It was found women who had positive attitudes towards breastfeeding were twice as likely to breastfeed exclusively for at least six months than those with more negative attitudes (Cox, Giglia, & Binns, 2015). In addition, other factors such as breastmilk being cheaper than formula (Cox et al., 2015; Wojcicki et al., 2010), breastfeeding being convenient (Cox et al., 2015), a culture of breastfeeding (Wojcicki et al., 2010) and public approval for breastfeeding in public (Vaaler et al., 2010) influenced women to have positive attitudes towards breastfeeding. However, the most common reason that led women to have positive attitudes towards breastfeeding was their understanding of the health benefits of breastmilk to their babies (Cox et al., 2015; Stuebe & Bonuck, 2011; Vaaler et al., 2010; Wojcicki et al., 2010).

On the other hand, those women who found breastfeeding painful and uncomfortable were likely to have negative attitudes towards breastfeeding (Wojcicki et al., 2010). This was the finding of a study undertaken in San Francisco which included 363 women. Furthermore, factors such as embarrassment while feeding in public and having a social referent who did not approve of breastfeeding influenced women to have negative attitudes towards breastfeeding (Wojcicki et al., 2010).
A few limitations can be identified in the above studies. All the studies that are deemed relevant, except the one by Cox et al. (2015), were conducted in the USA among Women, Infants and Children (WIC) participants; therefore, the findings are not generalisable beyond those seeking WIC services. There was no follow-up of women’s intention to breastfeed after childbirth (Stuebe & Bonuck, 2011) and Wojcicki et al. (2010) followed up women’s breastfeeding status only until the early postnatal period, thus there is a gap in evidence about how long women were able to maintain exclusivity once they started breastfeeding. Although Cox et al. (2015) followed up participants until twelve months, their study was restricted to rural women only in Western Australia.

The above studies’ findings highlight the importance of informing women about the benefits of breastfeeding during pregnancy and reinforcing them in the later period to foster positive attitudes towards breastfeeding. Strategies should also be in place to address factors contributing to negative attitudes towards breastfeeding.

**3.4.1.3 Maternal self-efficacy and association with breastfeeding**

Evidence has shown that women with high self-efficacy and confidence are likely to initiate breastfeeding early, exclusively and for a longer duration. Loke and Chan (2013), in their study conducted in Hong Kong, found that high self-efficacy was associated with EBF six weeks after birth. Similarly, de Jager et al. (2014) found that high self-efficacy was associated with EBF at two and six months, while Semenic, Loiselle, and Gottlieb (2008) found that high self-efficacy was associated with EBF until six months. Loke and Chan (2013) associated women with high self-efficacy scores as being most likely to continue exclusive breastfeeding, than engage in complementary feeding. This finding is supported by another study which also found that higher maternal breastfeeding self-efficacy was significantly associated with a longer duration of EBF (Semenic et al., 2008). A study of 300 primiparae women in Taiwan demonstrated that self-efficacy was positively associated with
EBF during a hospital stay, at one, three and six months after birth (Tsai, Huang, & Lee, 2015). Thus, the above findings demonstrate that the self-efficacy of women has a positive influence on EBF and breastfeeding duration.

All these studies were quantitative in nature and comprised small samples of 125 (de Jager et al., 2014), 199 (Loke & Chan, 2013) and 189 (Semenic et al., 2008) women respectively, and data were collected through telephone interviews in the former two studies; therefore, it is possible that the women could have under-reported actual breastfeeding practices. Furthermore, Loke and Chan (2013) included only women who experienced a normal vaginal birth, while the study by Semenic et al. (2008) included only primiparous women, therefore limiting the generalisability of the findings.

Kronborg and Vaeth (2004), on the other hand, argue there are many other factors in addition to maternal self-efficacy which influence women’s breastfeeding outcome, such as women’s level of education, their intention and earlier breastfeeding experiences. Thus, according to these researchers, there is a need for an intervention to improve self-efficacy and resources of women, with a focus on practical knowledge.

Women with higher maternal self-efficacy and confidence were less likely to provide their babies with formula feed and more likely to continue with EBF. However, it is acknowledged that in addition to self-efficacy, their level of education, their intention and their earlier breastfeeding experiences may influence women’s breastfeeding practices.

3.4.1.4 Women’s understanding and knowledge of breastfeeding

Women’s understanding and knowledge of breastfeeding affect their breastfeeding outcomes. It was found that maternal understanding and knowledge of both breastfeeding and EBF are positively associated with the initiation and duration of breastfeeding and EBF intention. The findings of a study of 423 women in north-west Ethiopia demonstrate that women who had adequate knowledge about breastfeeding were 2.57 times more likely to exclusively
breastfeed (Mekuria & Edris, 2015). The women’s knowledge was elicited on the importance of breastfed babies’ and maternal health; whether babies should be encouraged to breastfeed on colostrum immediately after birth; pre-lacteal feeding; whether breastmilk alone is enough for babies during the first six months of life; and complementary foods after six months of age. It was found women who received breastfeeding counselling during pregnancy and after birth were also positively associated with EBF practice. It is therefore claimed that this type of support for women can increase EBF practice (Mekuria & Edris, 2015). The need for health education about breastfeeding was found in another study conducted in southern Ethiopia among 383 women, where delayed initiation of breastfeeding was significantly associated with lack of knowledge about the optimal duration of EBF (Adugna, 2014).

Ishak et al. (2014) argue that knowledge and beliefs about breastfeeding are not determinants for successful breastfeeding. Their study was undertaken to assess knowledge and attitudes toward breastfeeding of 213 women in a tertiary hospital in Malaysia and their influence on breastfeeding practices (Ishak et al., 2014). It was found that, although women who received counselling were more likely to breastfeed, counselling did not influence the duration of breastfeeding (Ishak et al., 2014). There were many factors affecting successful breastfeeding, such as ethnicity, mode of birth, existence of a support person and return to work. Thus, the researchers recommended that measures to improve breastfeeding should address issues surrounding culture and traditions, as well as improvement in the delivery of readily available support and its continuity (Ishak et al., 2014).

Knowledge about the benefits of breastfeeding and EBF may influence mothers to breastfeed. Such women may gain knowledge about practical aspects of breastfeeding and thus be able to initiate and breastfeed successfully. As seen in the preceding sections, maternal knowledge of breastfeeding can lead to development of positive attitudes towards breastfeeding, increase self-efficacy and influence women to intend to breastfeed. Thus, the
results of the studies above highlight the need for and importance of educating women and their families about breastfeeding.

3.4.1.5 Maternal demographic factors affecting breastfeeding

3.4.1.5.1 Age

The age of childbearing women has been found to influence breastfeeding practices. There is a difference between older women and younger women in how long they breastfeed their babies. It has been found in studies that older age is positively associated with longer duration of breastfeeding (Baxter, Cooklin, & Smith, 2009; DiGirolamo et al., 2005; Karkee, Lee, Khanal, & Binns, 2014b; Li, Zhang, Scott, & Binns, 2004; Yeneabat, Belachew, & Haile, 2014). Conversely, younger women are at risk of early cessation of breastfeeding at two weeks and two months (Ertem, Votto, & Leventhal, 2001), nine weeks (Hauck, Fenwick, Dhaliwal, & Butt, 2011a) and six months after birth (Forde & Miller, 2010). This could mean that older women are more informed about breastfeeding through previous experience.

Maternal age is also associated with EBF status. A cross-sectional community-based survey of 634 women in central Ethiopia with babies aged under twelve months was undertaken to explore factors associated with EBF practices (Asfaw, Argaw, & Kefene, 2015). It was found that women aged 25 to 35 years were 8.9 times more likely to practise EBF than women aged younger than 25 years (Asfaw et al., 2015). The reason identified in this study was that younger women may have had better job opportunities and lacked time and opportunity to exclusively breastfeed. Another possible reason could be that one-third of participants were primiparae women and it is possible they were in the age group younger than 25 years. Not having any previous breastfeeding experience, they would likely have faced breastfeeding problems, potentially leading to supplementary feeding of their babies. This is similar to the findings of another cross-sectional study in Ethiopia of 592 women, where it was found that women below the age of 20 were 1.4 times more likely to cease EBF.
than those who were 30 and above (Yeneabat et al., 2014). This could be for similar reasons to those mentioned above, because the study demonstrates that early cessation of EBF was nearly five-fold in primiparae women and they were possibly younger than multiparae women.

Forster et al. (2006) found that even among primiparae in Australia, older women of this cohort were associated with breastfeeding until six months. The same study also indicated other factors influenced EBF, such as a very strong desire to breastfeed, having been breastfed oneself as a baby and being born in an Asian country. A similar finding was reported in another Australian study where, regardless of parity by six months, the strongest predictors of ceasing breastfeeding were maternal age of less than 25 years, women without tertiary education and those with low-birthweight babies (Forde & Miller, 2010). The researchers do not provide clear reasons that such women ceased breastfeeding, however, they point to inadequate breastfeeding support by health professionals.

The literature indicates that no matter the age range, comparatively younger women are more likely to cease breastfeeding or initiate supplements early. Thus, it is likely that younger women require extra support with breastfeeding.

3.4.1.5.2 Parity

Parity of women affects breastfeeding initiation, duration and exclusivity. A study was conducted to examine baby feeding practices during the early postnatal weeks among 2669 Western Australian women (Hauck et al., 2011a). It was found that being a primiparae woman was a significant independent predictor of breastfeeding cessation by nine weeks after birth (Hauck et al., 2011a). No explanation is given of why primiparae women were at greater risk, but it is assumed that without prior breastfeeding experience, they would have faced more breastfeeding difficulties, resulting in early cessation of breastfeeding.
Similarly, secondary analysis of data collected in a randomised, controlled trial including 1099 women of whom 542 (49%) were primiparae found that they had a shorter duration of breastfeeding compared to multiparae. Primiparae women had a longer median time for their first breastfeeding attempt and were more likely to have eight or fewer feeding attempts in the first 24 hours (Hackman, Schaefer, Beiler, Rose, & Paul, 2015). These women also reported early breastfeeding problems and non-exclusive breastfeeding at hospital discharge. By contrast, multiparae women were more likely to breastfeed until their babies were six months of age. Those multiparae women who intended to breastfeed for twelve months had a significantly lower risk of stopping breastfeeding than primiparae (Hackman et al., 2015). Thus, these findings indicate that primiparae women may require more breastfeeding support.

A study conducted by Lok, Bai and Tarrant (2015) in Hong Kong included 2761 women. They examined factors associated with breastfeeding initiation and it was found that multiparity was associated with lower rates, but the researchers do not give possible reasons for this result. They conclude from other similar studies that women face greater time constraints in caring for multiple children, while second or subsequent babies are less likely to cause the same maternal anxiety and sense of novelty as compared with firstborn. Multiparae women may feel it is less necessary to prove their maternal skills and have more interaction with their firstborn than with subsequent children (Lok, Bai, & Tarrant, 2015).

Similarly, Forde and Miller (2010) argue that some multiparae women are more likely never to initiate breastfeeding soon after birth. This was because of their previous breastfeeding problems and negative breastfeeding experiences (Forde & Miller, 2010). This finding is supported by another study which found that women who had previous term or preterm babies had a slight decrease in the rate of EBF (McDonald et al., 2012). This
signifies that even multiparae women with previous breastfeeding experiences also require breastfeeding support and guidance from health professionals.

Parity has been shown to affect breastfeeding practices. Most researchers state that multiparae women are more successful in breastfeeding initiation, exclusivity and duration than primiparae. This is attributed to multiparae women having prior breastfeeding experience. However, a few studies show that multiparae women should not be assumed to be more knowledgeable than primiparae when it comes to breastfeeding initiation. Due to previous negative breastfeeding experience, where they may have faced breastfeeding problems leading to use of breastmilk supplements, some multiparae women may not even initiate breastfeeding.

3.4.1.5.3 Educational status

Studies have shown that women’s educational status affects breastfeeding practices. Numerous researchers report that low educational levels are associated with higher rates of discontinuation of breastfeeding (Cooklin, Donath, & Amir, 2008; Ertem et al., 2001; Hauck et al., 2011a; Kehler, Chaput, & Tough, 2009; Kronborg & Vaeth, 2004; Li et al., 2004; Rozga, Kerver, & Olson, 2015; Skafida, 2012).

Educated women are more likely to initiate breastfeeding. Findings from the Australian Longitudinal Study on Women’s Health indicate that women who were tertiary educated (degree or higher) were more likely to initiate breastfeeding and continue to breastfeed for six months as compared to lower-educated women (up to Year 10) (Holowko, Jones, Koupil, Tooth, & Mishra, 2016). This is attributed to higher-educated women being more receptive to advice from health professionals (Holowko et al., 2016). This study included 4777 women born 1973–78 in Australia with self-reported reproductive and breastfeeding histories. Similarly, a community-based survey of 383 participants in southern Ethiopia explored women’s perceptions and risk factors for delayed initiation of
breastfeeding (Adugna, 2014). It was found that women who had not attended any formal education were nearly twice as likely not to initiate breastfeeding in a timely manner as compared to those women who had attended primary school and higher education (Adugna, 2014). This could be attributed to failure to obtain knowledge regarding the benefits and importance of early initiation of breastfeeding, as well as the importance of breastfeeding.

Women who are educated were more likely to exclusively breastfeed their babies. The findings of a US study including 712 women show that women who had higher education (college or more) were 2.6 times more likely to exclusively breastfeed than those with high school diplomas or less (Pierro, Abulaimoun, Roth, & Blau, 2016). An explanation is not presented as to why women with low educational status would not exclusively breastfeed. Furthermore, breastfeeding practice beyond discharge from maternity care was not measured. Similarly, an Australian study of 4679 women found that women with lower educational status were more likely than those with a tertiary degree to go from full to no breastfeeding in the first month after birth (Baxter et al., 2009). Thus, these findings suggest that education levels are directly proportional to breastfeeding outcome.

In summary, women who are educated tend to perform well in the initiation, duration and exclusivity of breastfeeding compared to women who are less educated or not educated at all. This highlights the importance of health professionals focusing on women with low education attainment or no education and providing them with breastfeeding support and education.

3.4.1.5.4 Working women

Studies worldwide have found that returning to work after birth is negatively associated with exclusivity of breastfeeding and breastfeeding duration (Agunbiade & Ogunleye, 2012; Bandusena & Warnasuriya, 2009; DiGirolamo et al., 2005; Fischer & Olson, 2014; Ishak et al., 2014; Kehler et al., 2009; Khanal, da Cruz, Karkee, & Lee, 2014; Mirkovic, Perrine,
Scanlon, & Grummer-Strawn, 2014). An Australian study of 496 women found that of 259 women who had ceased breastfeeding at the time, 25% reported returning to work as the main reason for ceasing breastfeeding (Weber, Janson, Nolan, Wen, & Rissel, 2011). Furthermore, 66 women who had considered breastfeeding on return to work could not do so due to lack of breastfeeding or expressing facilities and a lack of workplace and managerial support (Weber et al., 2011).

Women who resume full-time employment are more likely to cease breastfeeding earlier than those working part-time. In an Australian study of 3697 women, it was found that the lowest proportion of babies receiving any breastmilk at six months of age included those belonging to women who had resumed full-time employment either before three months (42%) or between three and six months after birth (39%) (Cooklin et al., 2008). At nine months after birth, 26% of babies of women employed full-time were breastfeeding compared to 45% of non-employed women (Cooklin et al., 2008). This finding is supported by another Australian study which reveals that women employed full-time in the first three postnatal months were more likely to cease breastfeeding than women who were not employed in the first three months after birth (Baxter et al., 2009). In a study conducted in Scotland, it was found that women working part-time were less likely to wean their babies early than those working full-time (Skafida, 2012). Similarly, a study of 6917 British-Irish women found that those who worked part-time or were self-employed were more likely to breastfeed for at least four months than those who were employed full-time (Hawkins, Griffiths, Dezateux, & Law, 2007). Thus, these results demonstrate that women who work full-time are less likely to breastfeed for a longer duration than those who work part-time.

Women who return to work are more likely to cease EBF than those who do not return to work. A community-based cross-sectional study of 592 women in north-west Ethiopia found that women who were engaged in different jobs were over five times more
likely to cease EBF compared to housewives. Return to work was the main reason for introducing complementary foods such as cow’s milk, water, tea, cereal-based fluids such as porridge and others, mainly fresh butter, before six months (Yeneabat et al., 2014). Similarly, another study undertaken in north-west Ethiopia to explore EBF and associated factors of 423 women with babies less than six months old found that those who were unemployed were approximately two times more likely to practise EBF than employed women (Mekuria & Edris, 2015).

A US study including 4725 participants found that women who returned to work within three months were 27% less likely to breastfeed at six months, 37% less likely to breastfeed at twelve months and 51% less likely to breastfeed at 24 months than women who returned to work after seven postnatal months or later (Langellier, Pia Chaparro, & Whaley, 2012). In terms of EBF, women who returned to work within three months were also 54% less likely to exclusively breastfeed at six months than those who returned to work after seven months following birth (Langellier et al., 2012). However, these researchers did not examine whether or not the women were employed prior to giving birth and thus were unable to determine how this may have affected the timing of return to work or breastfeeding outcome.

Women who have support continue breastfeeding even when they return to work. Bozkurt, Gokdemirel, Gokcay, Bulut, and Karanisoglu (2012) argue that working women can continue breastfeeding if they find appropriate counselling support. This was the finding of a cross-sectional study of 54 working and 57 non-working women in Istanbul where the researchers claim that there was no significant difference in the duration of EBF and total breastfeeding between working and non-working women (Bozkurt et al., 2012). This was because, firstly, the women who participated were of a high educational level and, secondly, they received breastfeeding counselling, as the study was undertaken in a well-child unit of a
Baby-Friendly Hospital. Thus, these results demonstrate that if women receive good support and counselling, returning to work is not a barrier to breastfeeding.

The majority of studies worldwide have in common a finding that when women return to work, it adversely affects the exclusivity of breastfeeding and its duration. Recommendations include longer maternity leave and/or part-time return to work schedules, which may increase the proportion of women who plan to exclusively breastfeed; and for employers to provide supportive environments and flexible work arrangements to support breastfeeding women.

3.4.2 Influence of maternal breast conditions on breastfeeding

Maternal breast conditions that develop after initiation of breastfeeding affect breastfeeding practices. Breast conditions such as sore or painful nipples, trouble with latching-on of babies to the breast and perceptions of insufficient milk have been associated with early cessation of breastfeeding (Brown, Dodds, Legge, Bryanton, & Semenic, 2014; Gerd, Bergman, Dahlgren, Roswall, & Alm, 2012; Lamontagne, Hamelin, & St-Pierre, 2008; Li, Fein, Chen, & Grummer-Strawn, 2008; Lou et al., 2014; Teich, Barnett, & Bonuck, 2014; Wang, Lau, Chow, & Chan, 2014). In Nova Scotia, Canada a study was undertaken to explore reasons that women ceased breastfeeding before their babies were six months of age (Brown et al., 2014). Of the 500 women who ceased breastfeeding, the majority (73.6%) did so within the first six weeks after birth. The most common reasons cited for early cessation of breastfeeding were inconvenience or fatigue associated with breastfeeding (22.6%) and concerns about milk supply (21.6%) (Brown et al., 2014). The study highlighted that six weeks after birth is a critical time period when women are most likely to cease breastfeeding.

Congruent with the above, Gerd et al. (2012) state the first week after birth is a critical time for breastfeeding women, as found from their study including 2666 participants in Sweden. The findings show that at one week after birth 26.9% of women experienced
breastfeeding problems such as sore nipples (25.3%), poor sucking technique (13.7%), insufficient milk supply (8.9%), breast engorgement (8.3%) and difficulty in commencing breastfeeding (4.5%) or other breastfeeding problems (4.5%) (Gerd et al., 2012). The women who experienced problems ceased breastfeeding early even though they admitted to receiving support. Thus, this finding suggests that breastfeeding advice and help should be provided at the right time and should be consistent.

In the USA, a study including 1323 women was conducted to determine why breastfeeding was ceased at various times during the babies’ first year of life. It was found that 53.7% of women stopped breastfeeding at one month and 27.2% between the first and second months because of incorrect attachment (Li et al., 2008). Similarly, 49.7% stopped breastfeeding at one month and 55.6% stopped between one month and three months because the women perceived that breastmilk alone did not satisfy their babies. Additionally, 51.7% stopped breastfeeding at one month and 52.2% between the first and three months because of insufficient milk (Li et al., 2008). Breastmilk insufficiency was also one of the reasons for women stopping breastfeeding before six weeks in 24.4% of 593 women who took part in a study conducted in the United Arab Emirates (Radwan, 2013).

Thus, a common finding among these studies is that breast conditions such as painful and sore nipples contribute to ineffective attachment and positioning of the baby at the breast, and to women’s perception of inadequate breastmilk production. These are negatively associated with initiation, duration and exclusivity of breastfeeding. The findings of the above studies call for appropriate and timely support to women to help them overcome breastfeeding problems.

3.4.3 Influence of baby-related factors on breastfeeding

Various factors related to babies may affect breastfeeding. In the following sections, three baby-related factors relevant to the current study will be discussed.
3.4.3.1  **Sick babies and breastfeeding**

Admission of a baby to a hospital can be negatively associated with breastfeeding. Babies may require admission to hospital for various reasons and, according to evidence, admission puts them at possible risk of early supplement feeding and weaning. Supplement feeding and weaning can be due to various factors such as mother and baby separation, anxiety and stress following birth of a high-risk baby and difficulties with maternal milk production (Akerstrom, Asplund, & Norman, 2007; Davanzo, Monasta, Ronfani, Brovedani, & Demarini, 2013). In Ireland, admission of a baby to a Neonatal Intensive Care Unit (NICU) was found to be negatively associated with breastfeeding exclusivity and duration (Smith et al., 2015). The reasons for being admitted to NICU included, for example, infection, preterm birth, feeding problems, hypoglycaemia, cyanosis, birth asphyxia, small size for gestational age and congenital abnormality. The study included 1094 singleton babies born to primiparae women who were breastfeeding at the time of discharge from hospital. They were then followed up at two, six and twelve months after birth. It was identified that babies who were admitted to NICU were five times less likely to exclusively breastfeed than their healthy counterparts, at the time of discharge and at two months after birth. Further findings showed that babies who had left the hospital with formula supplementation were less likely to be breastfeeding at two, six and twelve months after birth (Smith et al., 2015).

A similar finding emerged from a study in rural Western Australia undertaken to explore factors associated with EBF at discharge from maternity care services (Cox, Giglia, Zhao, & Binns, 2014). The study found that the odds of non-exclusive breastfeeding at the time of discharge were more than four times higher for women whose babies did not require admission to the special care nursery (Cox et al., 2014). Similarly, in the USA, in a study including 100 women whose newborns were admitted to NICU for care, it was found at the time of their discharge from the unit 6 (11%) were breastfeeding, 35 (62%) were
breastfeeding and receiving complementary formula feeding, 13 (23%) were receiving expressed breastmilk from a bottle only, and 3 (5%) were receiving nasogastric feeds (Lessen & Crivelli-Kovach, 2007). Similarly, a multisite Italian study of 2948 babies from 13 NICUs found that baby feeding in the last 72 hours before discharge included low rates of breastfeeding and use of human milk, and at discharge only 20% of babies were exclusively breastfed with human milk (Davanzo et al., 2013).

Thus, these results show that admission of a baby to hospital is associated with delayed initiation, short duration and non-exclusivity of breastfeeding.

3.4.3.2 Jaundice and breastfeeding

Babies requiring phototherapy for jaundice are more likely to be given breastmilk supplements. A study was undertaken of 4441 babies in the USA, 220 of whom received phototherapy for jaundice (Waite & Taylor, 2016). It was found that babies exposed to phototherapy were more likely to receive formula supplementation on day one of life than those who did not undergo phototherapy. The researchers attribute this to women believing that health professionals assumed that mothers’ milk was not enough and thus either begin or continue to supplement with formula. Thus, the former group of babies was less likely to exclusively breastfeed through the first four months of life. The results further demonstrated little difference between the groups for duration of breastfeeding at nine months; however, at twelve months, babies who received phototherapy were less likely to be breastfeeding than those who did not receive phototherapy (Waite & Taylor, 2016).

Other studies have found similar results. A study in Singapore examined 952 dyads and their relationships, including breastfeeding technique and EBF initiation. It was found that jaundice in babies affected the exclusivity of breastfeeding (Lau, Htun, Lim, Ho-Lim, & Klainin-Yobas, 2015). However, the results are not clear on why babies, especially those undergoing phototherapy for jaundice, required supplements. It is understood that, as with
other sick babies, the condition can lead to mother-baby separation and anxiety, thereby affecting maternal breastmilk production. Furthermore, since babies are placed under a light which emits heat, in order to prevent dehydration which is one of the side effects of phototherapy (Demirel et al., 2010), babies might be given supplementary feeds.

3.4.3.3 Temperamental/fussy babies

The temperament of babies affects breastfeeding practices. For example, ‘fussy’ babies are associated with shorter breastfeeding duration according to the findings of an Irish study undertaken in a cohort of 5955 babies who were nine months old. The Infant Characteristics Questionnaire (Taut, Kelly, & Zgaga, 2016) was used by mothers as a temperament measure for their babies. It was concluded that fussing and crying might be misunderstood as babies being hungry, leading mothers to believe they were producing insufficient milk and thus leading to breastmilk supplements (Taut et al., 2016). However, the study may be limited by women’s retrospective reports, because the data were collected when babies were nine months of age. Similar findings were reported in a large cohort of 30,466 Norwegian babies, where those who were considered to be fussy were less likely to be fully breastfed at six months (Niegel, Ystrom, Hagtvet, & Vollrath, 2008).

Maternal perceptions of their baby’s temperament as being fussy were also found to be a reason for introduction of early solid foods in low-income black primiparae women (Wasser et al., 2011). This was the finding of a qualitative study of 65 low-income women in the USA, where the baby waking up and crying was perceived as an indication of hunger and led women to feed their babies with solid foods (Heinig et al., 2006).

Similarly in Australia, mothers of babies considered to be temperamental were more likely to report less awareness of their babies’ feeding cues and hence used solid foods to calm them. This was the finding of a study undertaken to investigate the association between temperament in Australian babies aged between two and seven months and feeding practices
in 698 primiparae women (McMeekin et al., 2013). Although the study was mostly focused on practices that led to childhood obesity, inclusion of babies within two to seven months of birth contributes to the evidence that temperamentally babies are at risk of early introduction of solid foods. The above findings demonstrate that babies considered temperamentally or fussy are less likely to receive breastmilk. This highlights the importance of educating women to understand the reasons for babies’ being fussy and crying, while at the same time reinforcing the importance of breastfeeding.

Babies who are admitted to hospital are at high risk of being given a breastmilk supplement, resulting in shorter duration of breastfeeding. Factors such as mother and baby separation resulting in reduced opportunity for early initiation of breastfeeding, anxiety and stress following separation, and difficulty in maternal milk production are associated with early breastmilk supplementation and weaning. Fussy babies are perceived to be hungry and in response there is an early introduction of solid food. Therefore, the findings highlight the importance of health professionals recognising and providing breastfeeding support to this particular cohort of breastfeeding dyads.

### 3.5 Organisational and hospital factors affecting breastfeeding

Studies have shown that certain antenatal, intranatal and postnatal practices affect breastfeeding practices. The practices relevant to the current study will be discussed in the following sections.

#### 3.5.1 Antenatal practices and their association with breastfeeding

Antenatal practices affect breastfeeding practice in women. More frequent attendance at antenatal clinics is positively associated with longer duration of EBF (Bandusena & Warnasuriya, 2009; Li et al., 2004; Semenic et al., 2008) and increased probability of giving colostrum and decreased risk of giving pre-lacteals feed (Munos, Mullany, Maiga, Baya, &
The strongest predictor of breastfeeding initiation is women who seek antenatal help and support (Forde & Miller, 2010).

Women who received individual counselling on breastfeeding were found to be practising EBF at six months after birth. A randomised controlled trial was undertaken to address the impact of simple antenatal educational interventions on breastfeeding practice in 401 women in Singapore where 123 women were assigned to Group A, 132 women to Group B and 146 women to Group C (Mattar et al., 2007). Group A received breastfeeding educational materials and individual coaching from a lactation counsellor, whereas Group B received breastfeeding educational materials with no counselling and Group C received routine antenatal care only (Mattar et al., 2007). It was found that women receiving individual counselling and educational material practised EBF more often than those receiving routine care alone, at three months and six months after birth (Mattar et al., 2007). The study was limited by not having the same number of participants in each group, the small number of participants and that contamination between groups was not strictly prevented. However, the finding is supported by the results of a study in north-west Ethiopia where women who received counselling about breastfeeding during antenatal care were two times more likely to exclusively breastfeed their babies compared to those who did not receive any counselling (Mekuria & Edris, 2015). Another study conducted in Ethiopia of 548 women demonstrates a similar finding, where lack of antenatal advice on breastfeeding was associated with late initiation, non-exclusivity and early cessation of breastfeeding (Gultie & Sebsibie, 2016). These findings highlight the importance of providing consistent breastfeeding education and information as part of antenatal care.

In contrast, Wong, Fong, Lee, Chu, and Tarrant (2014) argue that in a setting with a high breastfeeding initiation rate, one-to-one antenatal breastfeeding support and education did not increase the exclusivity or duration of breastfeeding. This was the finding from a
randomised controlled trial including 469 primiparae women who attended antenatal clinics of two geographically distributed public hospitals in Hong Kong. For this study 233 women were randomised to the intervention group and 236 to the standard care group (Wong et al., 2014). The intervention group, in addition to standard care, were given 20–30 minute, one-to-one antenatal educational and support sessions related to breastfeeding conducted by a registered nurse, followed by a 10–15-minute question-and-answer session and information handouts (Wong et al., 2014). The researchers, however, state that among first-time mothers planning to breastfeed, a single one-to-one professional antenatal education and support session had no significant effect on the rates of exclusive or any breastfeeding at six weeks, three months and six months after birth. However, the study was conducted in a setting with a high breastfeeding initiation rate and the intervention provided was brief, which would have affected the outcome of the study.

Similarly, a randomised controlled trial was undertaken to evaluate a Specialised Breastfeeding Peer Counselling intervention promoting EBF among 206 overweight/obese, low-income women in the USA (Chapman et al., 2013). The trial had no significant impact on EBF rates during the first six months after birth, but was associated with increased breastfeeding intensity at two weeks after birth and lower rates of baby hospitalisation at three and six months (Chapman et al., 2013). Even though the study was conducted in an accredited Baby-Friendly Hospital, there was a high loss of follow-up and the data were based on maternal self-report and limited to obese and low-income women only, which could be perceived as limitations.

Increased frequency of antenatal visits has been found to be positively associated with breastfeeding practices. However, there is mixed evidence regarding the effectiveness of one-to-one breastfeeding education during the antenatal period and most researchers in the field recommend further development to improve the efficacy of breastfeeding interventions.
Despite the mixed evidence, all the researchers highlight the importance of health professionals providing face-to-face breastfeeding support for expectant women.

3.5.2 Intrapartum practices associated with breastfeeding

Certain intrapartum practices are negatively or positively associated with breastfeeding. Studies have found that women who underwent planned or unplanned caesarean sections were less likely than those who experienced spontaneous vaginal births to exclusively breastfeed, while women without intrapartum complications and with no or minimal pain relief were more likely to do so (Joshi, Trout, Aguirre, & Wilhelm, 2014a; Karkee, Lee, Khanal, & Binns, 2014a; Lindau et al., 2014; McDonald et al., 2012; Raheem, Binns, Chih, & Sauer, 2014; Ramoo, Trinh, Hirst, & Jeffery, 2014).

Various intrapartum interventions have a negative association with breastfeeding duration and EBF. In Hong Kong, a study was undertaken to investigate the association between intrapartum interventions and breastfeeding duration in 1280 breastfeeding dyads in four public hospitals (Bai, Wu, & Tarrant, 2013). According to the findings, induction of labour, receipt of opioid pain medication and emergency caesarean births shortened the duration of any breastfeeding; and induction of labour and emergency caesarean births shortened the duration of EBF (Bai et al., 2013). Furthermore, multiple intrapartum interventions significantly increased the risk of cessation of any breastfeeding and EBF (Bai et al., 2013). The duration of EBF was self-reported by participating women and, as a consequence, the dosage and duration of administered medications are not known. However, the effect of intrapartum interventions on breastfeeding is an important finding and highlights the need for health professionals to carefully consider the impact of interventions on breastfeeding.
3.5.2.1 **Caesarean section**

Caesarean section is associated with breastfeeding outcomes. Caesarean section was the risk factor most consistently associated with non-breastfeeding in the first hour of life (Belachew, Kahsay, & Abebe, 2016; Berde & Yalcin, 2016; Esteves, Daumas, Oliveira, Andrade, & Leite, 2014). The Demographic and Health Survey conducted in Latin American and Caribbean countries between 2005 and 2010, consisting of 49,253 women with children younger than three years of age, demonstrates that birth by caesarean section was associated with significantly higher odds of introduction of milk-based pre-lacteals in all countries (Boccolini, Perez-Escamilla, Giugliani, & Boccolini Pde, 2015). In this study, pre-lacteal feeding is defined as foods other than breastmilk offered before the milk comes in (Boccolini et al., 2015). However, the study is limited because the pre-lacteal feeding intentions of the women before birth are not known and it does not capture the breastfeeding support they received. The data were also collected on feeding practices within the first three days of life from women whose children were up to three years of age; therefore, recall bias may have been present.

On the other hand, Orun et al. (2010) found that within the first three hours of a normal vaginal birth, the frequency of breastfeeding initiation was higher than for those women who experienced birth by caesarean section. Importantly, however, it was found that three hours after birth, the frequency of breastfeeding initiation was not affected by the route of birth at all (Orun et al., 2010). This study was undertaken in an accredited Baby-Friendly hospital in Turkey, including 577 women, and was designed to explore maternal, gestational and neonatal features associated with the early initiation of breastfeeding (Orun et al., 2010). The researchers do not explain why three hours after birth there were no differences in the rate of breastfeeding initiation. It could be due to the fact that these women gave birth in a Baby-Friendly designated hospital and thus would have had breastfeeding support after their
caesarean section. This finding also highlights the importance of health professionals in providing breastfeeding help during the first hour of a newborn’s life.

3.5.2.2 Analgesia during labour

Only the literature related to pethidine and tramadol is presented because they were the only analgesia available to Bhutanese women at the time of data collection for the current study. Pethidine administered during labour tends to remain in babies’ plasma, leading to delayed and depressed sucking and rooting behaviour (Nissen et al., 1995; Nissen et al., 1997). An Australian study consisting of 1280 women aged at least 16 years classified them into one of five labour analgesia groups: 1) non-pharmacological, such as breathing exercise, massage, moving about and hypnosis; 2) nitrous oxide; 3) pethidine; 4) epidural; and 5) general anaesthesia (Torvaldsen, Roberts, Simpson, Thompson, & Ellwood, 2006). It was found that women who had pethidine as analgesia during the first stage of labour were significantly more likely to stop breastfeeding in the first 24 weeks than those who used non-pharmacological methods of pain relief (Torvaldsen et al., 2006). The finding is supported by research by Wilson et al. (2010), who found that women who received pethidine reported a lower breastfeeding initiation rate than women receiving epidural analgesia.

While there is no specific or identified literature pertaining to the effect of administration of tramadol during labour and breastfeeding behaviour of newborn babies, a systematic review by Bloor, Paech, and Kaye (2012) found that its use appears unlikely to cause harm during early breastfeeding. However, tramadol analgesia was administered only after birth to manage pain in women and not during labour (Bloor et al., 2012).

To summarise, studies indicate that pethidine, with its effect on newborns, is negatively associated with breastfeeding initiation and duration. Literature on the effect of administration of tramadol during labour and its effect on newborn breastfeeding initiation could be not be identified.
3.5.3 Postnatal practices and their relationship with breastfeeding

This section will discuss postnatal practices such as early skin-to-skin contact, formula supplementation and early discharge, and their associations with breastfeeding.

Certain postnatal practices are either positively or negatively associated with breastfeeding. Baby-Friendly practices such as rooming-in at all times with the mother, attempting breastfeeding within one hour after birth, avoiding breastmilk supplementation in hospital and skin-to-skin contact have been associated with longer breastfeeding duration (Brodribb et al., 2013; Hongo, Nanishi, Shibanuma, & Jimba, 2015; Linares et al., 2016; Merten et al., 2005; Moore & Anderson, 2007).

In contrast, practices such as in-hospital formula supplementation are associated with early breastfeeding cessation. A study was undertaken by Parry, Ip, Chau, Wu, and Tarrant (2013) to describe the patterns of formula supplementation among healthy breastfeeding babies and to identify factors contributing to in-hospital formula supplementation use. The dose-response relationship between the amount of in-hospital formula supplementation and the duration of any breastfeeding was also assessed (Parry et al., 2013). The study included 1246 breastfeeding dyads from four public hospitals in Hong Kong. They were followed prospectively for twelve months or until they weaned (Parry et al., 2013). Babies who were exclusively breastfed in the first 24 hours of life had an overall longer duration of breastfeeding than those who received any amount of formula. The risk of breastfeeding cessation was significantly higher among those who received any baby formula in the first 48 hours of life. Even after controlling for key socio-demographic variables, babies who were supplemented with formula feed while in hospital were more likely to wean than those who left the hospital exclusively breastfeeding (Parry et al., 2013).

Early discharge from a maternity service after birth has been negatively associated with breastfeeding in terms of early weaning. With the introduction of early discharge from
hospital and the rising caesarean section rate, midwives face an increased workload in caring for women and their babies postoperatively (Gillies, Gilmour, Hall, Harrison, & McIntyre, 2009). Additionally, midwives are also required to provide women with sufficient knowledge to cope at home within a shorter timeframe than previously (Gillies et al., 2009). These are the findings of a study describing the reasons for early cessation of breastfeeding from the perspectives of 11 women (who ceased breastfeeding at three weeks after birth) and 13 midwives and maternal and child health nurses (Gillies et al., 2009). Likewise, the findings of a study comparing early discharge versus late discharge with the risk of readmission concluded that a length of stay of less than 48 hours was significantly related to readmission of babies to the maternity service due to breastfeeding difficulties (Farhat & Rajab, 2011).

Various postnatal practices such as rooming-in, skin-to-skin contact and initiation of breastfeeding within one hour are positively associated with breastfeeding, whereas practices such as in-hospital formula supplementation and early discharge are associated with shorter duration of breastfeeding. These findings highlight the practices that health professionals should encourage in order to improve breastfeeding practice, and the practices that are negatively associated with breastfeeding that they should be address and overcome.

### 3.6 Cultural factors associated with breastfeeding

This section will discuss existing evidence in relation to cultural factors that affect breastfeeding and EBF. The influences of culture, traditions and beliefs play strong roles in all aspects of breastfeeding and EBF (Chen et al., 2011; Geckil, Sahin, & Ege, 2009; Jessri, Farmer, & Olson, 2013; Osman, El Zein, & Wick, 2009; Scott, Binns, Li, & Zhang, 2005).

A study of 353 women in Lebanon was undertaken to investigate some common beliefs that may discourage breastfeeding (Osman et al., 2009). Participants believed that babies continuing to cry after breastfeeding was due to the women not producing enough milk. A few women believed that expressing breastmilk emptied their breasts and therefore
decreased the quantity of breastmilk (Osman et al., 2009). Another common belief was that maternal abdominal pain could be transmitted to the baby through the breastmilk and result in colic. This belief, researchers state, could be an important barrier to breastfeeding, as abdominal pain due to uterine involution is universally common (Osman et al., 2009), and they recommend addressing this belief before discharge from hospital. Additionally, some women expressed the belief that if the baby burped while breastfeeding, they would develop a breast infection (Osman et al., 2009). Such beliefs tended to affect breastfeeding duration, initiation and exclusivity.

In Turkey, breastfeeding women fed their babies with water containing sugar, a mixture of butter and honey, and dates just after birth in the belief that these foods were beneficial for the digestive system and would have a positive effect on their health (Geckil et al., 2009). These findings indicate that cultural practices and traditional beliefs influence breastfeeding, with the onus on health professionals to provide culturally appropriate support to breastfeeding women.

In some cultures, colostrum is thought to be bad for a baby’s health and is discarded. A study in a rural village in northern Ethiopia was carried out to identify specific cultural and behavioural factors that might increase colostrum feeding (Rogers et al., 2011). The researchers undertook background interviews of six community health workers and two traditional birth attendants, and semi-structured interviews of 20 women. Of 19 women who initiated breastfeeding, 15 reported that they discarded colostrum, saying that it was harmful to their babies. The women believed that it caused stomach ache, diarrhoea or a parasitic infection; it was “bad milk”; and it was in their culture to discard colostrum. Similar practices were carried out in Turkey where women expressed colostrum, which was referred to as “dirty milk” that causes stomach ache, bloating and jaundice in babies (Saka, Ertem, Musayeva, Ceylan, & Kocturk, 2005). They expressed colostrum until the mature milk came
in and until then their babies were fed with sugar water (Saka et al., 2005). These practices undermine the quality of nutrients available in colostrum specific for the needs of newborn babies.

Health professionals’ practices are also sometimes influenced by culture and beliefs. A study was undertaken to investigate 372 Thai nurses’ beliefs about breastfeeding, related postnatal care and their impact on nursing practice (Kaewsarn, Moyle, & Creedy, 2003). About 2.4% (n=9) of nurses advised women to discard colostrum and give boiled water (Kaewsarn et al., 2003). Therefore, the researchers recommend the introduction of professional development strategies to address inadequate knowledge and outdated practices of some health professionals, as well as continuity of care models to assess culturally appropriate quality outcomes (Kaewsarn et al., 2003) to promote consistency for standards of practice.

Evidence shows that cultural and traditional beliefs can have detrimental effects on breastfeeding. Many women supplement their breastmilk with a formula preparation because of their cultural beliefs and, as a consequence, discard colostrum because it is ‘bad milk’. Surprisingly, some of these beliefs are also upheld by the health professionals who assist women to breastfeed. Thus, these findings highlight the need for investigation of the advantages and disadvantages of traditional postnatal practices, and future study into how health professionals can be educated to ensure women adopt practices that are more likely to promote optimal breastfeeding practices.

### 3.7 Breastfeeding support

Breastfeeding support plays an important role in women’s breastfeeding practice. In this section, breastfeeding support provided by the partner/husband and family, and by health professionals will be addressed. Numerous literature sources have found that support by family members, partners and health professionals is positively associated with breastfeeding
outcomes (Clifford & McIntyre, 2008; Demirtas, 2012b; Lamontagne et al., 2008; Thulier & Mercer, 2009).

3.7.1 Partner and family support for breastfeeding

Partner and family support influence women’s intention and practice of EBF. A study undertaken in a sample of 4690 women aimed to examine the relationship between maternal perception of the baby feeding preferences of the baby’s father and maternal grandmother, and women’s intention to breastfeed (Mueffelmann, Racine, Warren-Findlow, & Coffman, 2014). Intention to exclusively breastfeed in the first few weeks after birth was found to be higher among women who perceived that the baby’s father or the maternal grandmother preferred EBF (Mueffelmann et al., 2014). The study, however, does not report whether the women were able to carry out their intention after the birth.

The findings of a study conducted in rural Western Australia to explore factors associated with EBF at hospital discharge in 489 women (Cox et al., 2014) are similar to the previous study. The researchers report that a factor positively associated with EBF at discharge was the breastfeeding history of maternal grandmothers, and the odds of EBF at the time of discharge from maternity care were more than four times higher for women whose own mothers had breastfed. In addition, the odds of EBF at discharge were more than two times higher for women who perceived their partners’ preference for breastfeeding, compared with women who perceived their partners to be uncertain about breastfeeding or to prefer bottle feeding (Cox et al., 2014).

Another study in the USA demonstrates that involvement and support from the babies’ fathers during the early postnatal period are associated with higher prevalence of EBF. The study examined the relationship between the father’s involvement and support for breastfeeding initiation and duration in 146 primiparae women (Hunter & Cattelona, 2014). Although the study does not specify the types of support given to breastfeeding women, its
findings highlight the importance of including significant family members in breastfeeding promotion activities.

Furthermore, studies have provided evidence that partners’ support with household chores is also positively associated with EBF and breastfeeding duration. A controlled clinical trial was conducted in southern Brazil to assess the impact of paternal inclusion in a breastfeeding education program (the intervention for this study) carried out in a maternity hospital (Susin & Giugliani, 2008). The study consisted of 586 families: 201 in a control group were not exposed to the intervention; 192 in a group with only women were exposed to the intervention; and 193 in a group with women and fathers were exposed to the intervention (Susin & Giugliani, 2008). Rates of breastfeeding in the first six months were measured (Susin & Giugliani, 2008). The intervention consisted of an educational session about breastfeeding conducted by a trained paediatrician, an 18-minute video on the subject, an open discussion and distribution of an explanatory handout (Susin & Giugliani, 2008). The video discussed some important aspects of breastfeeding such as the WHO recommendations; prevention and management of common breastfeeding problems; and the importance of paternal participation. It stated that fathers could support breastfeeding women by helping out with household tasks and childcare; it also showed several images of fathers helping with household tasks such as changing nappies, washing dishes and vacuuming the carpet (Susin & Giugliani, 2008). The results show that the frequency of EBF was 16.5% in the women-and-fathers intervention group, 11.1% in the women-only intervention group and 5.7% in the control group at four months (Susin & Giugliani, 2008). However, a single hospital setting and sequential rather than random allocation limit this study’s findings. Despite these limitations, the results of the study suggest that inclusion of babies’ fathers in breastfeeding interventions may enhance breastfeeding.
In contrast to the above findings, in Lebanon it was found that the presence of family members was negatively associated with breastfeeding. Women in the study who were concerned about their milk supply believed that their inability to breastfeed was inherited from their maternal line (Osman et al., 2009). Women who held those beliefs had been told by their mothers, sisters or both that they would not be able to breastfeed successfully because this was a problem that ran in the family (Osman et al., 2009). Other studies have found that support by ‘elders’, especially babies’ grandmothers, results in women supplementing breastmilk with water or food. In Vietnam, family members were found to encourage early feeding of water to babies (Nguyen et al., 2013), in the USA mothers had to negotiate with their elders to feed their babies (Lee & Brann, 2014), and in Egypt (El-Gilany & Abdel-Hady, 2014) and Mozambique (Arts et al., 2011) pre-lacteal feeds were encouraged by the babies’ grandmothers.

Appropriate support from partners and family members is positively associated with breastfeeding. In addition, studies indicate that the influence of family, especially babies’ grandmothers, adversely affects women’s breastfeeding outcomes. This is mostly because family elders enforce cultural practices that can impede exclusivity of breastfeeding. Therefore, the above findings highlight the importance of educating partners and family members about the benefits of breastfeeding and the ways in which they can support breastfeeding women.

3.7.2 Health professionals’ support

In this context, health professionals include nurses, midwives, doctors, lactation consultants and all health professionals in contact with women during breastfeeding. A Cochrane systematic review was conducted of 52 randomised controlled trials from 21 countries to assess support for healthy breastfeeding women with healthy term babies by professionals (Renfrew, McCormick, Wade, Quinn, & Dowswell, 2012). Professionals included medical
staff, nurses, nutritionists, lactation consultants and researchers, and trained or untrained laypeople such as mothers and peer support groups in the hospitals or the community (Renfrew et al., 2012). It was found that breastfeeding support interventions increased the number of women continuing to breastfeed as well as continuing EBF (Renfrew et al., 2012). The review also states that face-to-face support was more effective than telephone support for EBF and that interventions had an increased effect on areas where background breastfeeding initiation was high. The reviewers recommend that all women should be offered support to breastfeed their babies in order to increase duration and EBF, and that healthcare settings should provide professional support as standard practice (Renfrew et al., 2012).

Breastfeeding support by health professionals is associated positively with breastfeeding and EBF. A study has shown that the babies of women not able to access nurses for breastfeeding advice were three times more likely to receive breastmilk supplementation during the postnatal stay than the babies of women who did obtain such advice (Demirtas, 2012a). This is the result of a descriptive and cross-sectional study of 192 women prior to discharge from a maternity hospital in Turkey (Demirtas, 2012a). The researchers found that experiencing breastfeeding problems, not receiving practical support and lack of access to nurses were statistically significant predictors of breastmilk supplementation (Demirtas, 2012a). Similarly in Vietnam, support provided by health professionals during pregnancy, as well as during the early postnatal period, was associated with lower odds of giving pre-lacteal feeding and formula (Nguyen et al., 2013). These findings add to evidence that health professionals should provide women with breastfeeding support during pregnancy and the early postnatal period to discourage pre-lacteal feeding.

A study by Phillips (2011) of 19 women breastfeeding for the first time also supports the positive effect of health professionals’ support in breastfeeding. The sample included women who were unable to breastfeed their first child or subsequent children. In the study,
women were asked to describe their perceptions of their breastfeeding experiences. The women voiced that nurses’ patience and presence during feeding helped to obtain successful breastfeeding experience (Phillips, 2011). The women also reported that antenatal and postnatal education about all aspects of breastfeeding was crucial to feeling well-prepared for the breastfeeding experience (Phillips, 2011). Further, first-time breastfeeding women had no knowledge of the sorts of questions to ask and found that health professionals who anticipated their problems played a major role in success in their breastfeeding experience (Phillips, 2011). Although the study had a small number of participants, the findings provide women’s own voice on what support they want from health professionals.

Contrary to these findings, a study found that ‘hands-on’ breastfeeding support, that is, using hands to attach babies to breasts by health professionals during the first breastfeeding experiences, was associated with negative breastfeeding experiences (Cato, Sylven, Skalkidou, & Rubertsson, 2014). Women reporting their first breastfeeding session as a negative experience were more likely to report postponed breastfeeding, breastfeeding problems and the need for formula supplements. Postponed breastfeeding in this study was defined as the first breastfeed not occurring in the delivery ward (Cato et al., 2014). This was the finding of a population-based longitudinal study of 879 women conducted in Sweden (Cato et al., 2014). The study may be subject to recall bias because participants answered the study questions about the first breastfeeding session six months after birth.

A grounded theory study was undertaken to explore 30 English midwives’ views and experiences of supporting women with feeding their newborn babies and found that, due to staff shortages and increased workloads, midwives did not have sufficient time to support women in feeding their babies (Furber & Thomson, 2007). This finding is similar to the findings of a study in the UK which compared health care professionals’ and women’s perceptions of factors that influenced the decision to breastfeed or formula-feed a baby
Health professionals stated that a lack of knowledge, support and help with difficulties with breastfeeding led women to wean and use formula feed instead. Although health professionals were keen to provide support, lack of time and resources to support women were significant barriers (Brown et al., 2011).

The findings of these studies highlight the importance of health professionals in providing relevant and timely breastfeeding support to women. Researchers indicate that breastfeeding support by health professionals has positive effects on breastfeeding initiation, duration and exclusivity, but some women considered hands-on support in breastfeeding by health professionals a negative experience. It is also recognised that health professionals report being too busy, due to excessive workloads and lack of time, resulting in inadequate provision of breastfeeding support.

### 3.8 Theory of planned behaviour

The theory of planned behaviour (TPB) developed by Ajzen is an extension of the theory of reasoned action (TRA) developed by Ajzen and Fishbien (Ajzen, 1991). The TRA suggests that behaviours which are under volitional control can be predicted by the individual’s attitudes towards expected outcomes or results of a behaviour and by subjective norms (Ajzen, 1985; Fishbein & Ajzen, 1975). However, the predictive accuracy of the TRA diminishes when the behaviour is influenced by factors over which the individual has limited control (Ajzen, 1985). Thus, the TPB was developed with the addition of Perceived Behaviour Control (PBC) to predict behaviours which are not within an individual’s volitional control (Ajzen, 1985; Armitage & Conner, 2001).

Central to the TPB is the intention of an individual to perform a behaviour. The intention is underpinned by three determinants. The first determinant is ‘attitude towards the behaviour’, which refers to the degree to which someone has a favourable or unfavourable evaluation or appraisal of the behaviour in question. The second determinant, ‘subjective
norms’, refers to the perceived social pressure to perform or not perform the behaviour. The third determinant is PBC, which refers to the perceived ease or difficulty of performing the behaviour (Ajzen, 1991, p. 188). PBC is similar to the concept of ‘self-efficacy’ used in social cognitive theory, where, according to Bandura (1986), self-efficacy is a person’s belief in her or his ability to succeed in a situation.

Beliefs held by individuals are precursors for each of these three determinants. For example, one antecedent to an attitude towards a behaviour is beliefs about the consequences of the behaviour (Ajzen, 2005). Underlying normative beliefs underpin subjective norms, which reflect beliefs about whether specific individuals or groups will approve or disapprove of behaviours (Ajzen, 2005; Armitage & Conner, 2001). Ajzen (2005) asserts that control beliefs are the antecedents of PBC. PBC is, therefore, influenced by internal factors such as information, skills and abilities, emotions and compulsions, and external factors such as situational and environmental factors, including opportunity and dependence on others (Ajzen, 2005). Further, individuals have greater PBC when they think they have more resources and opportunities and, therefore, will tend to exercise more control over behaviours related to decision-making (Ajzen, 2005).

The three determinants, either together or independently, may predict an individual’s intention depending on the situation and behaviour. Intention to perform a behaviour will be stronger if an individual has favourable attitudes and subjective norms, which will contribute towards greater PBC. In some situations only attitudes may influence intention, while in other situations it may be both attitudes and PBC, and in some cases, all three determinants may make independent contributions to intention (Ajzen, 1991). Further, PBC alone can bring about the behavioural outcome independent of behavioural intention; however, the broken line in Figure 3.1 indicates that this is possible only if PBC reflects actual control with some degree of accuracy and there is some agreement between PBC and actual control over the
behaviour (Ajzen, 2005). Thus, Ajzen (2005) asserts that people intend to perform a behaviour when they evaluate it positively, when they experience social pressure to perform it and when they have the confidence to do so. In addition to the three determinants, TPB recognises the multitude of factors that influence beliefs; referred to as background factors, these include age, gender, socioeconomic status, religious beliefs, moral values, personality, mood and emotions. These factors are grouped into personal, social and informational categories (Ajzen, 2005). The broken line in Figure 3.1 signifies that, although background factors may influence beliefs, Ajzen (2005) states there is not a necessary connection between background factors and beliefs.

![Diagram of Theory of Planned Behaviour](image)

**Figure 3.1 Theory of Planned Behaviour, reproduced from Ajzen (2005)**

The TPB is one of the most frequently used theories for predicting social human behaviour, and it has been found to be effective in predicting individual behaviours and
intentions (Armitage & Conner, 2001; Davis et al., 2016). A review of 56 studies related to health that adopted TPB was undertaken to verify the efficacy of the theory in predicting health-related behaviour (Godin & Kok, 1996). The review found that application of TPB was effective in explaining intention and predicting behaviour, and that PBC was as important as attitudes across health-related behaviour categories (Godin & Kok, 1996). In a more recent systematic review of 78 studies to determine factors influencing health professionals and their behaviours, it was found that TPB had been widely used to predict behaviour (Godin, Belanger-Gravel, Eccles, & Grimshaw, 2008). Furthermore, the reviewers conclude that TPB was an appropriate theory to predict behaviour compared to other social cognitive theories (Godin et al., 2008).

3.8.1 Theory of planned behaviour and breastfeeding studies

The TPB has been widely used in studies to predict breastfeeding intention and duration. A study undertaken to evaluate the cross-cultural application of TPB for breastfeeding duration among 209 new mothers in Hong Kong found that use of the theory significantly predicted the duration of breastfeeding (Dodgson, Henly, Duckett, & Tarrant, 2003). The researchers found a correlation between intended and actual duration of breastfeeding and, therefore, conclude that the TPB variables predicted the duration of breastfeeding in first-time mothers in Hong Kong (Dodgson et al., 2003).

Similarly, a study undertaken in Canada used TPB to explain the intended and actual breastfeeding duration of 80 participants who were breastfeeding nine-month-old babies (Rempel, 2004). The findings show that TPB can be used to explain the psychosocial factors that are relevant to long-term breastfeeding (Rempel, 2004). Rempel (2004) further states that women’s sense of control over breastfeeding and perceived social approval can affect their intention and behaviour regarding continued breastfeeding. Despite the sample size
limitation, the study provides evidence that TPB is successful in predicting breastfeeding intention and outcomes. Various other studies have applied TBP to predict breastfeeding intention, including in India (Behera & Anil Kumar, 2015), Africa (Walingo & Mutuli, 2014), the USA (Dick et al., 2002), Ireland (Giles et al., 2007) and the UK (McMillan et al., 2008).

Studies have also adopted TPB to predict EBF intention and behaviour. In Malaysia, 200 women were interviewed during pregnancy and again at one month after birth to identify the predictors of EBF intention and behaviour (Ismail, Muda, & Bakar, 2014). In addition to the TPB variables, the researchers included measures of postnatal support and breastfeeding difficulty. While the findings show that PBC was the strongest predictor of intention during pregnancy, after birth intention, postnatal support and breastfeeding difficulty were significant predictors of EBF behaviour, accounting for 51% of the variance (Ismail et al., 2014).

Similarly, a study by Bai, Middlestadt, Peng, and Fly (2010) of 78 participants in the USA found that, among the three determinants of the TPB, attitudes and subjective norms were important factors in understanding the intention to continue EBF for six months. However, women were already exclusively breastfeeding when they were recruited and therefore their intention for EBF for six months was considered to measure the continuation of EBF, rather than initiation of EBF (Bai et al., 2010). The findings of the above studies demonstrate that women need relevant support during pregnancy to improve their intentions, and similar support after birth to improve and sustain breastfeeding behaviours.

Similarly, TPB was successful in identifying factors that affected women’s EBF intention and their underlying beliefs according to race and ethnicity (Bai, Wunderlich, & Fly, 2011). This is the finding of a study of 236 women in the USA where 93 were non-
Hispanic African-American, 72 were non-Hispanic white and 71 were Hispanic, and intention to exclusively breastfeed differed by race and ethnicity. For Hispanic mothers PBC was the strongest predictor, while for non-Hispanic African-American and white women attitudes and subjective norms were the strongest predictors (Bai et al., 2011). This study demonstrates that health professionals need to focus on specific predictors according to race or ethnicity to promote EBF until at least six months after birth.

Ajzen (1991) states that the relative importance of attitudes, subjective norms and PBC in the prediction of intention is expected to vary across the situation and behaviour; however, among the three determinants of TPB, subjective norms have been deemed to be the weakest factor in prediction. A study was undertaken to test the TPB for prediction of antenatal intention and postnatal breastfeeding outcomes in 135 childbearing women in the USA (Wambach, 1997). The findings demonstrate that attitudes and PBC predicted intention; however, subjective norms did not predict breastfeeding intention. The study also found that prediction of breastfeeding duration by antenatal intention was weak and perceived breastfeeding control did not predict breastfeeding duration (Wambach, 1997). However, the study was limited due to its small sample size and being limited to white, well-educated and middle-class women; therefore, it is not generalisable to other populations.

In contrast, a study was conducted to investigate the subjective norms in relation to both breastfeeding and formula-feeding babies among 203 primiparae women in Scotland. The study found that subjective norms were important determinants of initiation and continuation of breastfeeding as well as formula feeding (Swanson & Power, 2005). Further, the researchers found that social normative pressure varied at different time points after birth. For example, women found their mothers more supportive of breastfeeding at birth than six weeks after birth. For those women who stopped breastfeeding, they perceived their partners, own mothers, friends and nurses to favour formula feeding, while those who continued
breastfeeding perceived that their partners were supportive of breastfeeding (Swanson & Power, 2005). However, this study was limited by a small sample size and the follow-up sample was over-represented with breastfeeding women (60% breastfeeding as opposed to 38% bottle-feeding and 2% non-exclusive breastfeeding). Intention was measured retrospectively and, since the study had both women who breastfed and women who bottle-fed, control was assessed in relation to the feeding decision.

A study conducted of 250 women in Bradford, England found similar results, where attitudes (emotional reactions to breastfeeding) and moral norms (reactions about whether breastfeeding is right or wrong) were the strongest predictors of intention (Lawton, Ashley, Dawson, Waiblinger, & Conner, 2012). Intentions and attitudes were predictive of breastfeeding initiation, and attitudes alone were predictive of maintenance of breastfeeding (Lawton et al., 2012). The data were obtained from a self-reported survey of women and exclusivity of breastfeeding was not measured. However, these findings highlight the importance of health professionals educating and informing women about breastfeeding so they can develop attitudes that favour breastfeeding.

On the other hand, Mutuli and Walingo (2014) found in their study that attitudes, subjective norms and PBC were significantly associated with behavioural intention to practice EBF behaviour. This was the finding of a study of 220 women in Kenya whose babies were one day old, in a postnatal environment (Mutuli & Walingo, 2014). The finding highlights the importance of health professionals providing relevant breastfeeding information and support at appropriate times so that women can establish and uphold positive attitudes towards breastfeeding.

With the exception of one quantitative study, studies using the TPB to understand health professionals' behaviour in relation to promoting breastfeeding could not be identified.
The identified study, undertaken in Canada, applied TPB to effectively predict the intention of nurses and dieticians in recommending breastfeeding (Daneault, Beaudry, & Godin, 2004). This study included 166 participants, of whom 66% were dieticians and 40% were nurses. Although the study had poor response rates, the findings help in the identification of strategies to recommend breastfeeding by nurses and dieticians.

However, only a limited number of qualitative studies could be identified in which the TPB has been applied to study breastfeeding behaviour. Furthermore, qualitative studies using the TPB to explore health professionals’ behaviour to promote breastfeeding could not be located, despite literature searches conducted over the time period between 1990 and March 2016. In total, the researcher could locate only six qualitative studies that applied TPB to studying breastfeeding behaviour, three of which applied TPB to guide their interviews. In an Australian study, Walsh, Kearney, and Dennis (2015) applied TPB to develop interview guides to identify first-time mothers’ salient beliefs about the introduction of complementary foods, specifically behavioural, normative and control beliefs. The researchers also explored first-time mothers’ knowledge of and attitudes towards the National Health and Medical Research Council and WHO recommendations for EBF until six months (Walsh et al., 2015). The application of TPB was successful in the identification of a number of modifiable factors that influenced women to introduce complementary foods (Walsh et al., 2015).

The TPB was used to guide focus group interviews to explore barriers to compliance with feeding recommendations among 65 low-income women in the USA (Heinig et al., 2006). It was found that factors such as the women’s beliefs about the importance and difficulty of feeding practices (behavioural beliefs), their perceptions of the opinions of family and health care providers (normative beliefs), and their perceptions of their ability to comply with baby-feeding guidance, depending on their circumstances (control beliefs), affected their feeding practices (Heinig et al., 2006).
Similarly, the TPB-guided questions were applied to report on a study about making feeding decisions for babies by adolescent mothers (Wambach & Koehn, 2004). The findings from the study further confirm the reliability of TPB in identifying the factors that directed the attitudes, social influences and PBC which influenced adolescent mothers’ feeding choices for their babies (Wambach & Koehn, 2004). This finding highlights areas in which health professionals can assist women to develop a positive attitude, support subjective norms that favour breastfeeding and assist women with factors that increase their PBC over breastfeeding generally and EBF specifically.

TPB has also been adopted in studies to explore women’s EBF experience. In Vietnam, TPB was used as a conceptual framework for a descriptive qualitative study to explore the breastfeeding attitudes and practices of 23 women (Lundberg & Ngoc Thu, 2012). The findings demonstrate that women had a positive attitude towards breastfeeding because of the perceived benefits of breastmilk for their babies. Beliefs of relevant others, such as grandmothers and husbands, were found to be favourable towards breastfeeding. On the other hand, beliefs that colostrum was bad for babies, breastfeeding problems, media and advertisement promoting formula feeds, and having to return to work influenced women’s PBC. Thus, even though women were breastfeeding, they were not practising EBF (Lundberg & Ngoc Thu, 2012).

In the USA, the TPB was applied in a study to identify factors in 25 women’s decision to breastfeed exclusively until six months following birth (Bai, Middlestadt, Joanne P, & Fly, 2009). The study findings show the existence of a belief structure among women who favoured EBF until six months after birth (Bai et al., 2009). These findings highlight the areas where women need guidance and information to help them to breastfeed exclusively.

Research evidence shows that TPB is effective in predicting breastfeeding intention and behaviour. Utilisation of the TPB helps in identifying factors influencing the three
determinants of intention to perform a behaviour. Therefore, health professionals can use TPB to identify the factors that are favourable to promoting breastfeeding and encourage these factors in order to support and promote breastfeeding.

3.8.2 Role of the theory of planned behaviour in the current study

TPB has been predominantly used in quantitative studies, to predict and explain human social behaviour. However, according to Azjen (Ajzen, 2016), the TPB can also be used as a framework to guide questions to be raised in qualitative research for the elicitation and coding of readily accessible behavioural, normative and control beliefs.

The current study has used the TPB to inform development of the interview guides for interviews with childbearing women and health professionals and to aid in data analysis. The adoption of the TPB has enabled identification of the factors affecting attitudes, subjective norms and PBC in relation to intention to breastfeed and exclusively breastfeed in women. The behavioural outcome was defined as women’s breastfeeding status at six weeks after birth and intention was defined as their intention to breastfeed and exclusively breastfeed their babies. In the case of health professionals, the expected outcomes were EBF promotion and support behaviour. The intention was represented by health professionals’ intention to support and promote breastfeeding and EBF.

3.9 Conclusion and the implications of the review for the study

This chapter has presented a critical review of literature relevant to and informing the direction of the current study. As a starting point, this review has addressed the WHO recommendation for EBF of babies until at least six months of age and up to two years (World Health Organization, 2001) and in reference to the Ten Steps to Successful Breastfeeding by the BFHI, launched by the WHO and UNICEF. Initiation of and factors that interfere with breastfeeding initiation, EBF and duration of breastfeeding have been
examined. These included issues experienced by women and their baby in developed and developing countries, the level of support available to women, and the impact of organisational and cultural elements on successful breastfeeding and EBF. Literature addressing the level of support provided by health professionals, partners and family members has also been reviewed. This extensive literature review has provided a strong direction for the current study.

An overview of Ajzen (1991) theory of planned behaviour, one of the most common theories used to predict human behaviour, has been provided. TPB enables identification of factors affecting attitudes, subjective norms and PBC in relation to behavioural intention; in the case of this research, it is being used to understand women’s intention to breastfeed and exclusively breastfeed. It has been found, however, that few qualitative studies exist using TPB to explore breastfeeding intent. Furthermore, no studies of health professionals’ intent to provide breastfeeding promotion and support have been located.

The following chapter will discuss the significance of the study, the study design and study methods, and will address the trustworthiness of the data, the process of data analysis and the ethical considerations.
CHAPTER 4: STUDY METHODS

4.1 Introduction

This chapter presents the research design used to answer the research questions, the setting in which the study was conducted, and the sampling and data collection processes. A description is provided of the study participants, explaining: the inclusion and exclusion criteria; process of recruitment; pre-testing of interview guides; timing and duration of data collection; and data collection tools. Finally, application of the field diary, methods of data analysis, strategies used to promote trustworthiness of the data and ethical aspects of the study are explained.

4.2 Study aims

The aims of this study were to explore Bhutanese women’s perceptions, intentions and experiences related to their babies’ nutrition at the term of pregnancy and at six weeks after birth; and to explore the roles of Bhutanese health professionals, including midwives, obstetricians, paediatricians, health assistants and a Program Officer, in the promotion of exclusive breastfeeding (EBF).

4.3 Study purpose

The purposes of the research study were to explore:

1. Bhutanese women’s perceptions of, intentions for and knowledge of EBF
2. The perceptions, experiences and breastfeeding practices of Bhutanese women following birth
3. Health professionals’ knowledge about EBF
4. Breastfeeding information and support provided to women by health professionals
5. How health professionals promote EBF during pregnancy, in the immediate postnatal period and at six weeks after birth.

4.4 Study questions

The questions addressed in this study were:

1. What influences Bhutanese women to breastfeed their babies?

2. What are Bhutanese women’s perceptions and experiences of breastfeeding and EBF practices at the term of pregnancy and six weeks after birth?

3. What activities are carried out by health professionals to promote EBF during pregnancy and after birth?

4. What support do health professionals provide for women to promote breastfeeding?

4.5 Research design

A Qualitative Exploratory Descriptive (QED) design has been adopted to explore the adoption and promotion of breastfeeding and EBF practice in Bhutan, and women’s perceptions of, intention for and experiences of breastfeeding. In addition, this design has been adopted to explore health professionals’ knowledge of, support for and promotion of breastfeeding and EBF in Bhutan.

A QED design explores participants’ understandings and interpretations of social phenomena in a way that captures their intrinsic nature. This design allows for exploration of an attitude, belief or perception; the motivation that leads to decisions, actions or non-actions; the origins of formation of an event, experience or occurrence; and the context in which phenomena occur (Ritchie & Lewis, 2003). This method is a form of social inquiry that focuses on the way people interpret their experiences to make sense of the world in which they live. It is used to explore people’s behaviour, perspectives, feelings and experiences (Holloway & Wheeler, 2013).
Ormston, Spencer, Barnard, and Snape (2014) explain that the purpose of QED is to both explore and describe the interpretations of social phenomena experienced by participants. This method refers to the exploratory nature of the research, exploring the nature of phenomena, the manner in which phenomena are manifested and other factors to which phenomena are related. QED is, therefore, used to study the process by which a phenomenon evolves or is experienced (Polit & Beck, 2004). Polit and Beck further state that the purpose of descriptive research is to observe, describe and document aspects of a situation as it naturally occurs.

For this study, the phenomena pertain to the practice and experiences of breastfeeding and EBF by women, and the promotion of breastfeeding and EBF in Bhutan by health professionals. The QED approach, therefore, has allowed for exploration and description of influences on decision-making processes, and women’s adaptation to their experiences of breastfeeding. It has also been adopted to explore the nature of social transactions among health professionals and women in relation to stability and change related to breastfeeding and its promotion as an exclusive process for babies’ benefits related to growth and development, with additional benefits for mothers.

### 4.6 Settings

The study was conducted in the national capital of Bhutan, Thimphu, within the Reproductive Health Unit (RHU) comprising the Community Health Unit (CHU), Antenatal Clinic, Postnatal Clinic, Well-Baby Clinic, Birthing Centre and Maternity Ward of the Jigme Dorji Wangchuck National Referral Hospital (JDWNRH). An average of 380 births per month take place in the JDWNRH Birthing Centre (Birth register, Labour room, 2015). According to the Annual Health Bulletin of the Ministry of Health, there were 3122 births at JDWNRH in 2014 (Bhutan Health Management & Information System, 2015).
4.7 Sampling

A sample is defined as a subset of a population selected to participate in a study (Polit & Beck, 2004). In qualitative research, sampling is done with the purpose of defining a sample that is representative of the population to which it is desired to transfer the findings (Lincoln & Guba, 1985). Green and Thorogood (2014) state that for qualitative research, researchers select participants who will generate appropriate data; this is called purposive sampling and has been applied in this QED study. Purposive sampling is based on certain criteria in the selection of participants, settings or unit of time (Holloway, 2005) to facilitate the collection of detailed and rich experiences from participants related to the topic of interest. A heterogeneous purposive sampling approach seeks to include individuals or groups who differ from each other in a major aspect (Holloway, 2005). In this study, participants consisted of childbearing women seeking maternity care at the JDWNRH and health professionals who promoted breastfeeding and provided education and support.

In qualitative research, an appropriate sample size is one that adequately answers the research questions (Marshall, 1996). Marshall (1996) asserts that the number of participants required usually becomes obvious as the study progresses and no new categories, themes or explanations emerge from the data, reaching what is known as data saturation. According to the experiences of most qualitative researchers, interview data saturation is generally achieved after 20 or so interviews (Green & Thorogood, 2014). This is further supported by Saldaña (2011), who explains that a minimum of 10 to 20 participants is needed to ensure credible and trustworthy findings. Thus, for this study, women and health professionals were recruited until data saturation was reached for each category of participants. The categories included two groups of women (primigravidae and multigravidae) during pregnancy and two groups of the same women six weeks after birth (primiparae and multiparae); and health
professionals, who comprised midwives, obstetricians, paediatricians, health assistants and a Program Officer.

4.7.1 Study participants

4.7.1.1 Childbearing women

Primigravidae and multigravidae women were interviewed at the term of pregnancy (the time period from 38 weeks until 41 weeks gestation) when they attended antenatal care at JDWNRH. These women were interviewed again six weeks after birth and both groups were identified at this time as primiparae and multiparae women when they attended their third postnatal visit. After discharge from hospital, both groups of women were required to attend three postnatal visits: at one week, three weeks and six weeks (Ministry of Health, 2014; Reproductive Health Programme, 2009). Primigravidae women have been included in the study because they did not have any prior breastfeeding experience. It was expected that learning about women’s perceptions unbiased by previous experience of breastfeeding would help identify factors that promote or hinder breastfeeding. Similarly, multigravidae women were included in the study to explore how their previous breastfeeding experience affected their breastfeeding decisions for their current babies.

4.7.1.2 Health professionals

The categories of health professionals who work closely with mothers and babies were recruited to explore their knowledge about EBF and the breastfeeding information and support they provided to women. Of particular importance was to explore how they promoted EBF during pregnancy, in the immediate postnatal period and six weeks after birth. Health professionals included in the study were:
• Midwives working in the antenatal and postnatal department of the RHU, the Birthing Centre and Maternity Ward, in the provision of care for childbearing women and their babies from pregnancy until six weeks after birth

• Health assistants conducting outreach clinics (ORCs) within the community, under the auspices of the JDWNRH. They provide preventative, curative, health promotion and education services, including maternal and child care

• Obstetricians working in the maternity department of JDWNRH, who make contact with childbearing women and their babies during pregnancy and until six weeks after birth. This contact occurs when maternal or fetal risk factors require their expertise and intervention, such as caesarean sections to expedite birth

• Paediatricians, who come into contact with women and babies after birth and are responsible for the health of babies who are born pre-term or are unwell at full term. In JDWNRH, babies are assessed by paediatricians before they are discharged

• The Program Officer working in the Ministry of Health, who is responsible for framing policy and guidelines for breastfeeding and for organising training and workshops to update health professionals’ knowledge of breastfeeding. The Program Officer was included to provide information about policies and plans related to breastfeeding at the ministry level.

4.8 Data collection

Data collection for this study started on 11 March 2014 and concluded on 22 June 2014. Prior to data collection, the student researcher met with the Nursing Superintendent of JDWNRH and explained the purposes of the study. The Nursing Superintendent stated that health professionals were aware of the study and what was expected of them. She promised her help and advised that the student researcher could contact her any time if the need arose. In the absence of the Medical Director and Medical Superintendent, the student researcher then
gained approval from the acting Medical Superintendent to commence data collection. The organisational consent form for JDWNRH is presented in Appendix K. The student researcher also met with the head of the Department of Community Health, who is responsible for the units within the Department, and with the midwife-in-charge of the Birthing Centre and the Maternity Ward, to explain the study and data collection procedure. Flyers inviting women and health professionals to participate in the study were posted on noticeboards in the Maternity Ward, Birthing Centre, Antenatal Clinic and Well-Baby Clinic. The flyers for women and health professionals are presented in Appendices I and J, respectively.

4.8.1 Pre-testing of interview guides

Qualitative researchers usually do not perform pilot studies (Holloway & Wheeler, 2002; Perry, 2001) but can conduct pre-testing of interview guides to assess the acceptability of an interview or an observation protocol or both (Holloway, 2005). A pre-test can be useful to novice researchers when they are assessing and preparing their interview and observation techniques (Schwarz et al., 2010). In this study, some women did not speak English; therefore, interviews for them were conducted in Dzongkha, the national language of Bhutan. Because it is acknowledged there is a possibility of loss of meaning and essence during transcription and translation into English, a pre-test of the interview guide was done to minimise loss and misinterpretation of data. Pilot interviews of three non-English-speaking antenatal women at the term of pregnancy and three non-English-speaking women at six weeks after birth were conducted. These interviews were transcribed and translated into English. It was concluded that no major changes were required for the two interview guides.
4.8.2 First interviews with women at term of pregnancy

The student researcher examined patient records to identify women who met the inclusion criteria to participate in this study, after obtaining permission from the midwife-in-charge. Once women were identified, they were approached by the student researcher and invited to participate in the study. A verbal explanation and Plain Language Statement (PLS) in English (Appendix C) or Dzongkha (Appendix D) were provided to facilitate understanding and support informed decision-making. Women who could not read or write in English were provided with verbal explanations so they could make informed decisions about providing consent for participation in the study. Confidentiality was assured and it was made clear that if women consented to the study, they would be interviewed again at six weeks following birth. They were asked to sign the consent form after they agreed to participate in the study. Their contact numbers were also requested in order for the researcher to arrange the second interview. All participants were informed that their participation in the study was voluntary and that they could withdraw from the study any time if they wished to do so.

4.8.3 Second interviews with women six weeks after birth

A few days prior to the participants’ due dates for their six-week postnatal appointment, phone calls were made to the women to remind them about their six-week postnatal visits and to determine whether they were able to attend the second interview. To undertake the second interviews, the student researcher reported to midwives in the Well-Baby Clinic, Lactation Unit and Immunisation Clinic, all located in the same building where the interview room was situated. Women were once again reminded about the purpose of the study, and their consent for participation and confidentiality of their details were reiterated. They were also reminded that their participation in the study was voluntary and that they could withdraw any time if they wished to do so.
The data collection procedure is illustrated in Figure 4.1

Figure 4.1 Flow chart illustrating data collection procedure
4.8.4 Interviews with health professionals

For health professionals, the student researcher approached them at their workstations, at a mutually convenient time, to introduce and explain the study. They were given a PLS (Appendix E) and invited to participate in the study. If convenient, some health professionals who agreed to participate were interviewed immediately, while for others an interview time was arranged for a later date. Figure 4.2 shows the timeline for data collection for the study.

![Figure 4.2 Timeline for data collection](image)

4.9 Timing and duration of data collection

Interviews with women were undertaken between 9 am and 3 pm when they attended their scheduled antenatal appointments. This timing was linked to the opening hours of the Community Health Unit in JDWNRH. Similarly, for the second round of interviews conducted six weeks after birth, the same time schedule was followed.

The timing for the first round of interviews was set at the term of pregnancy because it was expected that by this stage of pregnancy women would have made their decisions regarding the mode of nutrition they desired for their newborn babies. These women would have also attended regular antenatal visits with midwives, where it was expected that there
would have been some discussion about breastfeeding and related nutritional benefits.

Follow-up interviews were conducted at six weeks postnatally for women because by then they would have had breastfeeding experience, both at the hospital and at home. In addition, the last postnatal visit scheduled at six weeks after birth was considered to be the most suitable time for the second interviews because it would have been very difficult to follow the women up in the community at a later stage. For the health professionals, appointments were made according to their availability and their interviews occurred any time they were available during their working hours.

4.10 Inclusion and exclusion criteria

4.10.1 Inclusion criteria for women

In the antenatal period: pregnant women at term residing in the Thimphu district who gave consent to participate and were seeking care at JDWNRH.

At six weeks postnatal: all women interviewed during the antenatal period were eligible to participate in the second round of interviews, except for women who experienced fetal loss or perinatal death.

4.10.2 Exclusion criteria for women

Women with infectious diseases such as HIV were excluded because breastfeeding by HIV-infected women is not recommended according to the Ministry protocol (Ministry of Health, 2009).

One of the conditions monitored strictly by the student researcher was that the women who participated in the study resided in the Thimphu district and their health care was being provided by JDWNRH. Thus, women from other districts were not included in the study, even if they met the other inclusion criteria, because they usually attend JDWNRH for short visits and only if they experience complications. Also, it would have been difficult to follow
these women up for interviews at six weeks after birth because they would have returned to
their permanent place of residence in other districts.

4.10.3 Inclusion criteria for health professionals
All health professionals providing maternity care at JDWNRH hospital were eligible for
inclusion in the study.

4.11 Participant identification procedure

4.11.1 Women

4.11.1.1 Antenatal period
Women who attended antenatal care and fulfilled the aforementioned inclusion criteria were
approached and invited to participate in the study. In study documentation such as transcripts,
codes were used to identify participants. For multigravidae women, the letters ‘MWO’ were
assigned along with a two-digit number according to the order in which interviews were
conducted, starting from ‘01’ and increasing consecutively. Therefore, the first multigravida
woman is identified by the code MWO 01, the second multigravida woman by MWO 02 and
so on. Similarly, the primigravidae women were identified by the letters ‘PWO’ with two-
digit numbers assigned according to interview order. Thus, the first primigravida woman was
identified by the code PWO 01, the second by PWO 02 and so on.

4.11.1.2 Postnatal period
The student researcher kept a diary for the purpose of records, such as the approximate dates
women were due to give birth and the predicted dates of their postnatal health assessments at
six weeks after birth. The women were contacted by phone a few days prior to their six-week
and final postnatal visits. Appointments for interviews were scheduled to coincide with their
attendance at the postnatal unit of JDWNRH when they attended for their final postnatal
check-ups. The same identification codes as described for the antenatal interviews but with
‘6W’ as the prefix are used on files to denote that interviews had taken place at six weeks after birth.

4.11.2 Health professionals

All midwives working in the Maternity Ward, Birthing Centre, Antenatal Clinic, Well-Baby Clinic and Postnatal Clinic, and obstetricians, paediatricians and health assistants working at JDWNRH, as well as the Program Officer from the Ministry of Health, were eligible to participate in the study. They were approached at their workplace, and given the PLS and a verbal explanation of the purposes of the study and the requirements of participation. If they indicated they were willing to participate, their written consent was obtained. The format for identification of the health professionals comprised letters representing their discipline with two-digit numbers assigned according to the order of interviews starting from 01 and increasing consecutively. The code format for each of the participant groups is presented in Table 4.1.

Table 4.1 Participant identification codes

<table>
<thead>
<tr>
<th>Participant</th>
<th>Identification code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primigravida woman</td>
<td>PWO (at term)</td>
</tr>
<tr>
<td></td>
<td>6W PWO (at six weeks)</td>
</tr>
<tr>
<td>Multigravida woman</td>
<td>MWO (at term)</td>
</tr>
<tr>
<td></td>
<td>6W MWO (at six weeks)</td>
</tr>
<tr>
<td>Midwife</td>
<td>MID</td>
</tr>
<tr>
<td>Obstetrician</td>
<td>OBS</td>
</tr>
<tr>
<td>Paediatrician</td>
<td>PED</td>
</tr>
<tr>
<td>Health assistant</td>
<td>HA</td>
</tr>
<tr>
<td>Program Officer</td>
<td>PRO</td>
</tr>
</tbody>
</table>

Note: A serial number was designated to each participant.

Interviews with midwives, obstetricians, paediatricians and health assistants were conducted in the Continuing Medical Education room in the Birthing Centre, the tea room in
the Lactation Clinic and the office of the Immunisation Clinic. The interview with the Program Officer was conducted in the library of the Ministry of Health. All participants were informed that their participation in the study was voluntary and that they could withdraw from the study any time if they wished to do so.

4.11.3 Field diary

In order to minimise personal bias, a diary or personal log was maintained to record experiences in the field. This recorded events and conversations in the field, detailing how the student researcher utilised her time and was used for planning purposes and for review of the research process (Polit & Beck, 2004). The log was also used to document problems, important facts and matters of minor importance, interpretation process, generalisation, assessment and presentation of results (Flick, 2009). A sample of the field diary which was used to aid in the analysis of the research data is shown in Figure 4.3.

Date: 13 March 2014 PWO 02

Venue: Health Education room. It is dark and cold. No heater.

Primigravida, nearing her due date and no breastfeeding information has been given!!

Primigravida, very young and shy. She blushes and smiles shyly when she is told that the interview is about breastfeeding. However, she relaxes over the period of the interview. No knowledge about breastfeeding at all. Are Bhutanese women not curious about breastfeeding at all? She seems to have an understanding that she will know about breastfeeding when it happens when she has given birth and has to breastfeed her baby. She seems to have absolutely no idea about breastfeeding and instead she asked me. She wanted to know what EBF was. Why did she not put that question to the health professionals? Was she frightened to approach them? Is it because of the Bhutanese nature of talking only when talked too? Why weren’t health professionals putting in an effort to help women especially young first-time mothers with breastfeeding education and information? I must be aware of all these feelings and let them not affect my analysis. I need to find out more about what breastfeeding support they provide during the antenatal visit.

Primigravida, nearing her due date and no breastfeeding information has been given!!
She seems to be searching for correct answers. I think she wants to answer what she imagined I would like to hear.

Figure 4.3 Sample of field diary memo

4.11.4 Semi-structured interviews

Among interview approaches, the semi-structured interview approach is the most widely used format for qualitative research (Saldaña, 2009). A semi-structured interview approach is utilised to understand the range of individual perceptions in relation to an issue and to identify the commonalities and differences among individual participants on one or more topics (Lapan, Quartaroli, & Riemer, 2012). Face-to-face interviews are convenient, uncomplicated and an effective means to collect an extensive and rich amount of data within a reasonable period of time (Carey, 2012).

Face-to-face interviews were conducted as a single interview with each participant, each held in a private room and recorded using a digital recording device. The recording device enabled the researcher to listen to the interviews repeatedly so that data were able to be transcribed without losing information (Abrams, 2000). The recordings captured the exact words of the interviewees and allowed the researcher to have eye contact with them and observe their body gestures and expressions (Holloway & Wheeler, 2013). It also ensured that interview data were the actual verbatim responses of study participants (Polit & Beck, 2004).

In using a semi-structured interview approach, the relevant questions were contained within an interview guide. The interview guide ensured that the researcher collected similar types of data from all participants and saved time by keeping the amount of unnecessary data collected to a minimum (Holloway & Wheeler, 2013). Interview guides were designed for interviews with women at the term of pregnancy (Appendix F) and six weeks after birth (Appendix G), and for health professionals (Appendix H). The theory of planned behaviour
(explained in Chapter three) was used to develop the interview guides and the questions were based on the three theoretical determinants of behaviour: behavioural beliefs, normative beliefs and control beliefs.

**4.11.4.1 Interviews at term of pregnancy**

During the interviews conducted at the term of pregnancy, to elicit behavioural beliefs both primigravidae and multigravidae women were encouraged to discuss their feeding plans for their baby and the reasons for their decisions. Questions were asked to elicit their views and knowledge about breastfeeding and EBF. They were asked about their understanding of Bhutanese culture in relation to EBF and the giving of colostrum. Their plans to observe Bhutanese cultural and traditional practices and knowledge and understanding of the Royal Government of Bhutan’s policy and WHO’s recommendations were also addressed. In addition, multigravidae women were asked about their previous breastfeeding experience.

With regard to normative beliefs, both primigravidae and multigravidae women were invited to discuss the influences of their family, friends and partners on their feeding decisions for their baby. In addition, they were asked how breastfeeding information and support from health professionals influenced their decisions to breastfeed. Multigravidae women were asked about cultural practices they might have observed in the postnatal period for their previous baby or babies and how those practices affected their breastfeeding practice.

With respect to control beliefs, women were encouraged to discuss how they had come to their decisions about feeding their baby, who had helped them make these decisions and why they had made their decisions. They were also asked about their confidence in their choices for feeding their baby.
4.11.4.2 Interviews at six weeks after birth

Interviews at six weeks after birth were conducted with the same women who were interviewed at the term of pregnancy. Interviews were again based on the three determinants of the theory of planned behaviour: behavioural beliefs, normative beliefs and control beliefs. With respect to behavioural beliefs, women were asked about their breastfeeding experiences while in hospital. They were encouraged to describe the breastfeeding support provided by health professionals in the hospital, at the time of discharge and during each of their three postnatal visits until six weeks after birth. They were also asked to talk about their breastfeeding experiences at home, breastfeeding difficulties and the help they had sought. Lastly, they were asked how these experiences had affected their attitudes towards breastfeeding.

Regarding normative beliefs, all women discussed how their family, friends and community had affected their breastfeeding choices. Women were asked about cultural and traditional practices that had determined their breastfeeding practices, the level of support from health professionals and their expectations of them, and the influence of the Royal Government of Bhutan and WHO recommendations on their breastfeeding practices.

With respect to control beliefs, women were encouraged to talk about their current breastfeeding status, how they had come to their decisions and their confidence in making their decisions about modes of feeding. They were also asked about their plans for feeding if and when they returned to work, their thoughts regarding breastfeeding experience and support, and whether their expectations about their baby’s feeding had been met or not.

4.11.4.3 Interviews with health professionals

With respect to behavioural beliefs, health professionals were invited to discuss their understanding of EBF, the benefits of breastfeeding and EBF in particular, and their thoughts on the current status of breastfeeding in Bhutan. They also discussed their knowledge of and
adherence to the Baby-Friendly Hospital Initiative (BFHI) and the Ten Steps to Successful Breastfeeding. They were encouraged to share their views and opinions on what factors might prevent women from exclusively breastfeeding babies until at least six months of age. The health professionals were asked their views on how they promote breastfeeding and EBF, and the care they provided to women who breastfeed and their families. They were encouraged to talk about the barriers and strategies health professionals use to help women to exclusively breastfeed babies until at least six months of age.

With regard to normative beliefs, health professionals were asked about the recommendations of the WHO on EBF until six months of age (World Health Organization, 2001) and how that could be achieved. They were encouraged to discuss the cultural beliefs and practices they used to promote breastfeeding, the roles of families and friends, and the breastfeeding advice and support they provided to women.

Regarding control beliefs, health professionals were asked about their perceptions of the barriers to promotion of breastfeeding and related education programs. They were also invited to describe their perceptions of the barriers to providing support to women and their families during pregnancy, immediately after birth, at six weeks postnatally and during Out Reach Clinic (ORC) visits. They were also asked to assess their level of confidence in assisting and advising women on breastfeeding and providing assistance for problems such as damaged or painful nipples. Health professionals were encouraged to discuss factors they perceived would enable them to provide effective support to breastfeeding women.

### 4.12 Structure of research instrument

It was estimated that 211 semi-structured interviews of 45 minutes to one hour would be conducted. For the first round, the following numbers of interviews for each category of women were estimated:

- up to 15 primigravidae women intending to breastfeed
• up to 15 primigravidae with no intention to breastfeed
• up to 15 primigravidae women who had not yet made a decision about whether to breastfeed
• up to 15 multigravidae women intending to breastfeed
• up to 15 multigravidae women with no intention to breastfeed
• up to 15 multigravidae women who had not yet made a decision about whether to breastfeed.

However, all women who agreed to participate in the study intended to breastfeed. Midway through the recruitment period, when the student researcher had not been successful in recruiting participants who had not intended to breastfeed or who had not decided whether to breastfeed, email discussions were carried out with the research supervisors. Because there were no data available in Bhutan related to decisions by pregnant women about mode of providing their baby’s nutrition, this resulted in the student researcher and supervisory team reconsidering the categories of women participants. A decision was made to continue recruiting participants who intended to breastfeed until data saturation was reached. Participants fitting either of the other two categories could not be recruited. Thus, 25 multigravidae and 24 primigravidae who intended to breastfeed were recruited. The 25th primigravida woman who had consented to participate was overcome with shyness and embarrassment when asked about breastfeeding. She was not able to answer the questions and withdrew from the study midway through the interview.

The second round of interviews was conducted with the same group of women at six weeks after birth to learn about their experiences of breastfeeding. However, only 22 women in each group could be interviewed for the following reasons. One multiparae woman had agreed to meet for the interview but failed to keep the appointment and subsequently could not be contacted. A second woman stated she was in her village due to personal problems and requested to be excused from the study. A third woman attended the postnatal assessment;
however, she refused to participate in a follow-up interview, saying she was too busy. Of the primiparae women, one was in a different district, staying with her husband for the duration of her maternity leave, and said that she would not be able to attend the scheduled interview. One of the primipara women did not respond to the student researcher’s phone calls.

Although the length of the interviews was expected to be 45 minutes to one hour, women typically provided brief responses. It was noted that women of both groups provided brief responses during both rounds of interviews. The duration of interviews ranged from 15 minutes to 30 minutes and the likely reason for such brevity by women can be attributed to the nature of Bhutanese women, who are typically shy and retiring, as explained in Chapter two. The women were reticent to elaborate during interviews, despite the student researcher also being a Bhutanese national. Most of the women participants of this study were interviewed using Dzongkha, the national language, and all other participants were interviewed using English.

Strategies applied by the student researcher for the interviews with women included conducting each interview in a private room to minimise any potential for embarrassment. Other strategies included using a warm but polite welcome, providing an overview of the study and the use of open-ended questions delivered in a respectful manner so that each woman could respond to questions in their own way. Despite these actions, the majority of women remained silent for many questions and presented responses only when examples were presented by the student researcher. An excerpt from an interview is provided in Figure 4.4.
I: So you know that until six months you have to exclusively breastfeed and after that continue for two years. So what is your plan for feeding your baby?
PWO 13: Right now I think I can do that.
I: What is your plan when you return to work?
PWO 13: (no answer)
I: Yes, how are you planning to breastfeed when you rejoin your work?
PWO 13: I am thinking of taking time off.
I: You mean take leave?
PWO 13: No, I mean go in between during the breaks.
I: O.K. can you tell me about Bhutanese cultural and traditions regarding breastfeeding?
PWO 13: (silence)
I: You said you have observed your friends and relatives breastfeeding; have you seen what they ate to produce milk or what they did not eat during breastfeeding?
PWO 13: (silence)
I: Cultural beliefs. Our traditions and culture?
PWO 13: I don’t know.
I: What do you eat to produce breastmilk?
PWO 13: In our culture, we take some masala.
I: What masala?
PWO 13: I don’t know the name.
I: How do you take this masala?
PWO 13: We fry it and put it in the curry.
I: And other practices to produce milk?
PWO 13: We take plenty of soup.
Figure 4.4 Excerpt from an interview

Similarly, semi-structured interviews of approximately 45 minutes each were planned for 31 health professionals, comprising 20 midwives, three obstetricians, five paediatricians, two health assistants and a Program Officer from the Ministry of Health, while the actual numbers of health professionals interviewed depended on the numbers available at the time of interviews at JDWNRH. Table 4.2 shows the anticipated number of participants to be recruited and the actual number recruited.
Table 4.2 Predicted and actual numbers of participants

<table>
<thead>
<tr>
<th>Participants</th>
<th>Intended number of participants (n)</th>
<th>Actual number of participants recruited (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Women (antenatal)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primigravidae women intending to</td>
<td>15</td>
<td>24</td>
</tr>
<tr>
<td>breastfeed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primigravidae women with no</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>intention to breastfeed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primigravidae women who had not</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>yet decided</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multigravidae women intending to</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>breastfeed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multigravidae women with no</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>intention to breastfeed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multigravidae women who had not</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>yet decided</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Women (postnatal)</strong></td>
<td></td>
<td>44 (22 primiparae &amp; 22 multiparae women)</td>
</tr>
<tr>
<td><strong>Health professionals</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Midwives</td>
<td>20</td>
<td>26</td>
</tr>
<tr>
<td>Obstetricians</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Paediatricians</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Health assistants</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Program Officer</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>211</td>
<td>131</td>
</tr>
</tbody>
</table>

Twenty-six midwives participated in the study and, since these midwives were working in different units at the same research site, more midwives were recruited than originally estimated in order to gain a breadth of views from the variety of units. Table 4.3 presents the number of midwives recruited from different units.
Table 4.3 Distribution of midwives interviewed across different units in JDWNRH

<table>
<thead>
<tr>
<th>Units</th>
<th>No. of midwives (n=26)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antenatal Unit</td>
<td>2</td>
</tr>
<tr>
<td>Postnatal Clinic</td>
<td>1</td>
</tr>
<tr>
<td>Well-Baby Clinic</td>
<td>2</td>
</tr>
<tr>
<td>Lactation Clinic</td>
<td>1</td>
</tr>
<tr>
<td>Immunisation Clinic</td>
<td>1</td>
</tr>
<tr>
<td>Birthing Centre</td>
<td>10</td>
</tr>
<tr>
<td>Maternity Ward</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>26</strong></td>
</tr>
</tbody>
</table>

Five obstetricians and four paediatricians were working at the hospital during the time of data collection. All paediatricians consented to participate in the study. Of the five obstetricians, one declined to participate, citing a busy work schedule. The length of interviews varied greatly among the health professionals. Some were willing to talk beyond what was asked, while others restrained their responses to brief answers. The interview duration ranged from 30 minutes to more than one hour.

While the student researcher considered conducting focus group interviews with midwives, it was felt that midwives in a group might not be as open and forthcoming as they would like to be. This could be for reasons such as consideration of other persons, respect for seniors, the hierarchical nature of jobs and fear of retribution. Therefore, a decision was made to undertake individual face-to-face interviews with all health professionals.

### 4.13 Data analysis

The framework analysis process was adopted for the data analysis.
4.13.1 Framework analysis

The process of framework analysis incorporates seven steps, as presented in Figure 4.5 (Ritchie & Spencer, 1994). It uses systematic and visible stages in the analysis process, providing clarity about the stages by which the results have been obtained. Further, it allows the researcher to either collect all data and then analyse it or engage in data analysis during the data collection process (Srivastava & Thomson, 2009). Framework analysis is also useful when more practiced investigators are supporting those new to qualitative research because it provides clear guidance on how to extract and synthesise data from interviews to establish themes, with summaries in charts enabling researchers to discuss emergent ideas (Ward, Furber, Tierney, & Swallow, 2013). Framework analysis is a complementary approach to the QED research design.

Figure 4.5 Process of framework analysis, reproduced from Ritchie & Spencer (1994)
The Framework Analysis process consists of five key stages (Ritchie & Spencer, 1994): familiarisation, identifying a thematic framework, indexing, charting, and finally mapping and interpretation. These stages are described in the following sections.

4.13.1.1  **Familiarisation**

The stage of familiarisation consists of whole or partial transcription and reading of the data. In this study, the student researcher transcribed all 131 interviews herself in order to be close to the data. While transcribing, the student researcher noted down any ideas or thoughts that occurred to her that could be useful at later stages of analysis.

4.13.1.2  **Identifying a thematic framework**

This is the initial coding framework developed both from a priori issues and issues emerging from the familiarisation stage. The thematic framework is developed and refined during subsequent stages. During the familiarisation process, the main points that recurred were coded by the student researcher and two supervisors of the study. For the first sets of transcription for the multigravidae women, the first supervisor undertook initial coding for all the 25 women and the second supervisor undertook coding for 5 women. The purpose of the two supervisors undertaking coding was to guide and direct the student researcher in her first coding experience. This approach also assisted in identifying ambiguities and guided the student researcher in a step-by-step process of data analysis. As the student researcher became more confident with coding, for later transcripts each of the two supervisors coded a random number of interviews to contribute to an agreed thematic process. The number of interviews coded by the supervisors are provided in Table 4.4. Once completed, the codes identified by the student researcher were compared for consistencies, similarities and differences with the codes identified by the supervisors. Appendix N shows a sample of initial coding of an interview.
Table 4.4 Initial coding undertaken by supervisors

<table>
<thead>
<tr>
<th>Categories</th>
<th>Supervisor 1</th>
<th>Supervisor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multigravidae women</td>
<td>25 interviews</td>
<td>First five interviews</td>
</tr>
<tr>
<td>Multiparae women</td>
<td>16 interviews</td>
<td>First six interviews</td>
</tr>
<tr>
<td>Primigravidae women</td>
<td>First five interviews</td>
<td>Last five interviews</td>
</tr>
<tr>
<td>Primiparae women</td>
<td>Last three interviews</td>
<td>First three interviews</td>
</tr>
<tr>
<td>Midwives</td>
<td>Last five interviews</td>
<td>First three interviews</td>
</tr>
<tr>
<td>Other health professionals</td>
<td>OBS 01</td>
<td>OBS 02</td>
</tr>
<tr>
<td></td>
<td>PED 01</td>
<td>PED 03</td>
</tr>
<tr>
<td></td>
<td>HA 03</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PRO 01</td>
<td></td>
</tr>
</tbody>
</table>

4.13.1.3 **Indexing**

Indexing refers to the process whereby a thematic framework or index is systematically applied to data in textual form. It consists of a process of applying the thematic framework to the data using numerical or textual codes to identify specific pieces of data which correspond to different themes. In the study, textual codes were applied. After the completion of indexing, the student researcher and supervisors scrutinised the indexed data, and discussions were conducted until mutual agreement was reached about the soundness and relevance of the indexing. A sample of the indexing process is presented in Appendix O.

4.13.1.4 **Charting**

In this stage, charts are devised with headings and subheadings drawn from the thematic framework based on the a priori research questions and according to considerations about how best to present and write up the findings. Charts can be either thematic for each theme across all participants (cases) or by case for each participant across all themes. After coming to agreement with supervisors on the thematic labels for charting, the student researcher charted the data. The charting was then discussed with supervisors. For this study, all data
were imported to NVivo (QSR International Pty Ltd, 2012) and charted case-wise for each participant across all themes. An example of the charting of the data is presented in Appendix P.

4.13.1.5 Mapping and interpretation

When the above steps were complete, the student researcher synthesised the data to identify key characteristics in order to map and interpret the data set as a whole. Themes were generated by reviewing the matrix and connections between the participants and categories. Field notes were also referred to during the analysis. Finally, thematic analyses were carried out. The process of thematic analysis and the themes generated were discussed with supervisors to come to consensus on the final themes. As examples, the process of identifying themes for interviews with the women at term is presented in Appendix Q, for interviews with women at six postnatal weeks see Appendix R and for interviews with health professionals see Appendix S.

4.14 Trustworthiness of findings

In qualitative research, trustworthiness means methodological soundness and adequacy (Holloway & Wheeler, 2013). The criteria for trustworthiness in qualitative research are credibility, dependability, conformability and transferability (Lincoln & Guba, 1985). Credibility refers to confidence in the truth of the data and their interpretation (Polit & Beck, 2004). According to Lincoln and Guba (1985), credibility can be achieved by five major techniques: prolonged engagement; persistent observation and triangulation; peer debriefing; negative case analysis; and referential adequacy and member checking. Dependability refers to the stability of the data over time and over conditions (Polit & Beck, 2004). This is achieved by a stepwise replication whereby research teams are divided into two groups and each group conducts separate research processes and enquiry audits (Lincoln & Guba, 1985). Confirmability refers to the objectivity or neutrality of the data. This is achieved by
maintaining an audit trail, which is a process of recording the steps taken from the start of research until the reporting of findings (Lincoln & Guba, 1985). Lastly, transferability means that findings in one context can be transferred to a similar situation or participants (Holloway & Wheeler, 2013). This is achieved through thick description of the times and contexts in which the research is carried out (Lincoln & Guba, 1985).

4.14.1 Strategies to promote trustworthiness of findings

Various criteria were used to enhance the trustworthiness of the study findings:

4.14.1.1 Prolonged engagement and persistent observation

Prolonged engagement involves spending sufficient time in the field to achieve the purposes of a study, building trust, learning and blending into the environment, and testing for misinformation and distortion (Lincoln & Guba, 1985). Persistent observation requires the researcher to identify and focus on the details that are most relevant to the phenomenon being studied. Before the student researcher commenced the interview phase of the study, she spent a few days in the clinical areas providing hands-on support for staff and women. This enabled the student researcher not only to become familiar with the routine activities at the hospital, but also to establish trust and build rapport with the staff and women. Being at the research site every day, even when an interview was not scheduled, also enabled observation of the research setting, especially with respect to breastfeeding practices.

4.14.1.2 Triangulation

Triangulation refers to the use of multiple referents to draw a conclusion about what constitutes truth (Polit & Beck, 2004). According to Denzin (1989), triangulation aims to overcome the intrinsic bias that comes from a single method, single observer and single theory. Time triangulation was utilised for this study, whereby data were collected on the
same phenomenon at different times (Denzin, 1989). In the case of this study, data from women were collected at the term of pregnancy and again at six weeks after birth.

Space triangulation was also utilised, whereby the data were collected on the same phenomena in multiple departments (Denzin, 1989). For example, the views related to breastfeeding knowledge and support were collected from midwives in the Antenatal Clinic, Immunisation Clinic, Lactation Clinic, Postnatal Clinic, Maternity Ward and Birthing Centre. Data on women’s breastfeeding intentions and experiences were collected in the Antenatal Clinic and later in the Postnatal and Lactation Clinics.

Person triangulation, where data are collected from different levels of participants, was also utilised (Denzin, 1989). For example, data were collected from women seeking care and from health professionals delivering care, including midwives, health assistants, paediatricians, obstetricians and a Program Officer.

4.14.1.3 Auditing of data
Auditing of data involves scrutiny of the data and relevant supporting documents by external reviewers (Polit & Beck, 2004). All transcribed interviews conducted in Bhutan were sent to the two supervisors in Australia for scrutiny and feedback. Each step of the process of data analysis was discussed with the supervisors until consensus was reached on each task.

4.14.1.4 Audit trail
An audit trail provides an account of steps taken during the entire process of research and related activities throughout a study (Carcary, 2009). In this study, the student researcher maintained records of all of the raw data for every stage of the research process, from the conception of the study to data collection and data analysis, until completion of the study. Correspondence with supervisors was filed for reference as well as all written work,
documentation of conceptual thinking and notes. A field diary of the student researcher’s reflections was also maintained throughout this study.

4.14.1.5 Thick description

Thick description refers to both describing and interpreting observed social actions and behaviours within a particular context (Ponterotto, 2006, p. 543). Holloway (2005) describes thick description as a detailed account of field experiences in which the researcher makes explicit the patterns of cultural and social relationships and puts them in perspective. In this study, thick description of the research process was maintained through detailed descriptions developed and recorded by the student researcher.

4.14.2 Reflexivity

Reflexivity refers to a continuous process of self-evaluation and critical thinking that researchers engage in to generate awareness about their actions, feelings and perceptions. The ongoing process of reflexivity helps to make a research process open and transparent (Jootun, McGhee, & Marland, 2009). Jootun et al. (2009) recommend various ways of ensuring reflexivity, some of which were utilised in this study: keeping a research diary; recording descriptions of the research context; recording and transcribing of the interviews by the student researcher; constructing decision trails; and making sure the process of interpretation was explained explicitly and articulated clearly. For this study, after every interview the student researcher documented her observations and the reactions of participants in her field diary. She also noted her personal feelings about the interviews and reflected on any personal bias she may have unconsciously adopted. This helped her to approach subsequent interviews with more reflexivity. All processes and decisions were noted down with reasons as to why they were done.
All 131 interviews were transcribed by the student researcher in English, supported by discussions with the two supervisors, who also cross-checked them following transcription. In addition, cross-checking of transcripts translated from Dzongkha to English was conducted to identify nuances related to the Bhutanese sociocultural, political and traditional elements affecting childbearing women, specifically for breastfeeding, EBF and the services provided by health professionals. This was an important process, as there were not at that time any Bhutanese midwives holding doctoral qualifications available to participate in this process.

4.15 Ethical considerations

4.15.1 Informed consent

Informed consent means that participants have adequate information regarding the research, are capable of comprehending this information and have the power of free choice, enabling them to provide consent or voluntarily decline participation (Polit & Beck, 2004). For this study, a Plain Language Statement (PLS) presenting an explanation of what the study was about was given to each participant with a consent form that was completed by the individuals who participated in the study. Since a PLS needs to be clear and explicit and must be written in a language understood by participants (Holloway & Wheeler, 2013), it was made available both in English and Dzongkha, thereby catering to women who could not read and write in English. Participants were also provided with verbal explanations and support by the student researcher, and were given the opportunity to ask questions and have them answered to their satisfaction.

As there was one Program Officer employed by the Ministry of Health, this individual could easily be identified. Although this individual was given a PLS and provided consent for participation in the study, a letter was sent by the Principal Supervisor to the Program Officer, dated 2 September 2015, explaining the potential for identification and to seek his understanding of this and approval for data to be used from the interview. A letter of reply
was obtained, dated 7 September 2015, reaffirming the Program Officer’s consent and willingness to participate in this study and for his data to be reported in this thesis, even if it was identifiable.

4.15.2 Data protection and confidentiality

Interviews were undertaken after consent forms were signed by participants. Data obtained from interviews were digitally recorded and copied to a password-protected computer. Data on the recording device were deleted following transfer to the computer. The data are stored in a secure, password-protected, specifically designated share file on the Deakin University School of Nursing and Midwifery drive. Access to the file is only available to the student researcher and the two supervisors. Paper-based data are stored in a locked cabinet at the School of Nursing and Midwifery at Deakin University.

All the data, including audio recordings, transcripts and notes, were kept confidential, de-identified with an ID number and stored separately from the participants’ contact details. The identity of participants was not recorded or revealed. Pseudonyms were used for the transcripts and direct quotes. Through email correspondence, permission was sought from and given by the (then) only Program Officer, who was identifiable by the virtue of his position, despite using a code. According to the University’s policy, the data will be stored for a minimum of 5 years after the final publication of the research, after which time the data will be destroyed.

4.15.3 Ethics approval

Approval to conduct this study was sought and granted by the Deakin University Human Research Ethics Committee and the Ministry of Health, Royal Government of Bhutan. Copies of these approvals are in Appendix L and Appendix M respectively.
4.16 Conclusion

A QED research design has been adopted to explore the perceptions, intentions and experiences of childbearing women related to EBF and breastfeeding, and health professional knowledge, support and promotion of breastfeeding in Bhutan. The study comprised 131 semi-structured interviews consisting of 24 primigravidae and 25 multigravidae women at the term of pregnancy, and 22 primiparae and 22 multiparae women six weeks after birth. Thirty-eight health professionals were interviewed. The theory of planned behaviour was utilised to develop interview guides according to its three determinants. The study was conducted in the JDWNRH hospital located in Thimphu, the capital city of Bhutan.

A purposive sampling approach was applied and women and health professionals meeting the inclusion criteria were recruited until data saturation was reached. Framework analysis was adopted for analysis of the data and NVivo was utilised in the organisation of the data. In this study, prolonged engagement and persistent observation, triangulation, auditing of data, maintenance of an audit trail and thick description were adopted to promote trustworthiness of the findings. The ethical aspects of the study, including obtaining written informed consent, data protection and security, maintenance of confidentiality, and obtaining ethical approval, have been addressed.

The next chapter will present the findings of the interviews with women at the end of their pregnancy.
CHAPTER 5: CHILDBEARING WOMEN – FINDINGS

5.1 Introduction

This chapter presents findings from semi-structured interviews conducted with women at term of pregnancy (between 38 and 41 weeks gestation) and six weeks after birth. The presentation of these findings follows a process of analysis and interpretation of the data obtained from the interviews, to identify themes and sub-themes to build a rich description of the women’s experiences. There are two main sections in this chapter, the first one presenting findings of women’s experiences during pregnancy, and then at six weeks after birth when they attended a Jigme Dorji Wangchuck National Referral Hospital (JDWNRH) clinic for their final postnatal health assessment.

A total of 93 interviews were conducted with women, 49 interviews undertaken at the term of pregnancy. During this first interview, women were identified as either a ‘primigravida’ or ‘multigravida’ because of their pregnancy. Six weeks after birth, 44 interviews were undertaken, with women identified as ‘multiparae’ and ‘primiparae’ because they had given birth. Specific codes were applied to ensure that these two groups were differentiated. As far as possible, in order to maintain the originality of messages conveyed during the interviews and to prevent loss in translation, direct verbatim quotes have been presented. It is acknowledged, therefore, that quotes may not be grammatically correct.

5.2 Demographic characteristics of participants during pregnancy

Twenty-five multigravidae women at the term of pregnancy who met the inclusion criteria were recruited for this study. The average age of these participants was approximately 30 years (range 20–40 years) and all were married. Nine women had never attended school. Of the multigravidae women, 48% were working; 56% were in their second pregnancy, 36% in
their third pregnancy and 8% in their fourth pregnancy. For the current study, all participating women were pregnant with a singleton fetus.

Twenty-four primigravidae women at the term of pregnancy were recruited for this study. The women’s ages ranged between 19 and 30 years. All were married and two had not attended any form of education. Thirteen were housewives, while 11 worked in various government and private agencies. The demographic characteristics of the women participants are shown in Table 5.1.

Table 5.1 Demographic characteristics of women participants

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Multigravidae</th>
<th>Primigravidae</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Women (%)</td>
<td>Women (%)</td>
</tr>
<tr>
<td></td>
<td>(n=25)</td>
<td>(n=24)</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; 20 years</td>
<td>2 (8.33)</td>
<td>2 (8.33)</td>
</tr>
<tr>
<td>20–25 years</td>
<td>6 (24)</td>
<td>14 (58.33)</td>
</tr>
<tr>
<td>26–30 years</td>
<td>12 (48)</td>
<td>8 (33.33)</td>
</tr>
<tr>
<td>31–35 years</td>
<td>6 (24)</td>
<td></td>
</tr>
<tr>
<td>36–40 years</td>
<td>1 (4)</td>
<td></td>
</tr>
<tr>
<td><strong>Education level</strong></td>
<td></td>
<td></td>
</tr>
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### Characteristics

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### 5.3 Pregnancy

#### 5.3.1 Findings of interviews with women at term of pregnancy

Five themes comprising 13 sub-themes emerged from the interviews with women at the term of pregnancy. Three themes were common to both groups. The first theme emerged from interviews with multigravidae women only, because this group referred to previous breastfeeding experiences, and the third theme emerged only from interviews with primigravidae women, who were going to breastfeed for the first time. The themes and sub-themes that emerged from the interviews during pregnancy are presented in Figure 5.1.

**Theme 1: Previous breastfeeding experiences and influencing factors (multigravidae only)**
- Sub-theme 1: Multigravidae women’s practice of exclusive breastfeeding
- Sub-theme 2: Culture, traditions and beliefs affecting breastfeeding practices

**Theme 2: Compulsory breastfeeding (both multigravidae and primigravidae women)**
- Sub-theme 1: Directed to breastfeed
- Sub-theme 2: Being responsible for one’s actions

**Theme 3: Perceptions and knowledge about breastfeeding (both multigravidae and primigravidae women)**
- Sub-theme 1: Women’s perceptions of potential factors influencing their capacity for exclusive breastfeeding
- Sub-theme 2: Situation of working women
**5.3.1.1 Theme 1: Previous breastfeeding experiences and influencing factors**

This theme was unique to multigravidae women and relates to their previous breastfeeding experiences and the factors that influenced their decisions about future feeding plans for their unborn baby. The two sub-themes within this theme are presented in the following sections.

**5.3.1.1.1 Sub-theme 1: Multigravidae women’s practice of exclusive breastfeeding**

This sub-theme represents multigravidae women’s views about their previous breastfeeding practices. These women reported they had practised exclusive breastfeeding (EBF) for their previous baby because they refrained from feeding them solid food. Although they initially claimed not to have given their previous baby solid food, the women revealed on further questioning that they had given them water and other fluids. They had an understanding that giving water and other fluids did not conflict with the concept of exclusivity of breastfeeding. For example, an educated (university graduate) working woman stated that for her first baby she practised:

*EBF with a little bit of water in between, I don’t know how exclusive that is.* (MWO 19)
Many other women revealed that for their previous baby or babies, not only had they breastfed but they had also given a little water in between feeds. For example, when a woman was asked how she had breastfed her earlier baby, she answered:

*EBF until six months and I also gave a little bit of water in between as I thought the baby will be thirsty.* (MWO 02)

Multigravidae women defined breastfeeding problems as their baby’s refusal to breastfeed and/or their inability to produce adequate breastmilk for their baby. They perceived breast pain and sore and cracked nipples as normal while breastfeeding, and therefore they believed they should endure the pain that comes with breastfeeding. While most of the women denied having any problems with breastfeeding because they produced sufficient milk and their baby suckled readily, on further discussion some acknowledged having sore and cracked nipples, and breast engorgement. One multigravida woman stated:

*Other than the first night of not being able to produce milk, I had no other problem. Sore nipples? Oh, I had them, but it’s not a problem.* (MWO 18)

A mother of three claimed that she did not have any problems with breastfeeding because she had produced sufficient milk for her baby:

*I did not face any problem, like not being able to produce milk or anything like that. Three kids grew up breastfeeding. There was no problem at all.* (MWO 14)

**5.3.1.2 Sub-theme 2: Culture, traditions and beliefs affecting breastfeeding practices**

Multigravidae women discussed the factors that influenced their previous breastfeeding practices. Traditional practices such as giving babies butter soon after birth or feeding drops of water when babies were immersed in the bath were frequently described by multigravidae women. They reported many reasons for carrying out such practices, but primarily it was reported to be due to the influence of their family elders (family members such as the
maternal or paternal grandmothers), who enforced such practices. Some women conscientiously followed their elders’ instructions without ever questioning the rationale for such practices, because these practices had been carried out for generations and had become everyday habits. One multigavida woman stated:

*I don’t know why butter was given to my baby. They did not tell me. It’s probably because of culture and traditions.* (MWO 05)

Women also indicated that they carried out the practice of giving drops of water to their baby before a bath. They were told by their elders that the baby would be thirsty if not given water, as stated by one multigavida woman:

*I gave water while giving a bath to my baby. They [elders] say the baby will be thirsty so we give water for that reason.* (MWO 10)

Some women believed that giving drops of water would prevent a baby from being startled when suddenly immersed in bath water, while others, influenced by their family elders, believed that babies would suppose that their parents did not love them if they had not been given even a drop of water:

*The elders in my village said the baby will think my mother and father are not even being understanding and giving me drops of water. So, therefore, we should give drops of water no matter what.* (MWO 13)

Some women indicated that they were told by elders that colostrum was bad for babies and if fed to them, babies would become sick. Therefore, women expressed out and discarded the colostrum, as is evident in the following statement:

*I expressed out the first bit and then gave the rest to my baby. I felt scared to give it to the baby as he might become sick. The elders told me to [express the colostrum].* (MWO 04)

5.3.1.2 Theme 2: Compulsory breastfeeding

This theme, common to both multigravidae and primigravidae women, reflects their understanding that breastfeeding is compulsory for mothers. These women considered
breastfeeding a natural task delegated to them by virtue of being mothers and believed they should carry out the task. The sub-themes within the theme Compulsory breastfeeding will be presented in the following sections.

5.3.1.2.1 Sub-theme 1: Directed to breastfeed

Multigravidae women knew they ‘had to’ breastfeed because they had been told by health professionals while in hospital for the birth of their previous babies. Thus, on the basis of their previous experiences, these women decided to breastfeed their yet-to-be-born baby based on the earlier directions of health professionals. According to multigravidae women, the recommendation of EBF until six months after birth was especially emphasised by the health professionals during their stay in hospitals for their earlier births:

*During the first baby, they (health professionals) told me I have to breastfeed exclusively for the first six months and not give anything else.* (MWO 02)

Deciding not to breastfeed or looking for an alternative form of feeding was not an option for multigravidae women because they had been told to breastfeed ‘no matter what’, as is evident in the following statement:

*They [midwives] told me that no matter what, we have to breastfeed. That breastmilk is important.* (MWO 20)

Interestingly, none of the primigravidae women reported having been directed by health professionals to breastfeed. Instead, they reported that elders, family members and friends, drawing from personal experiences of breastfeeding, directed them to breastfeed. The beneficial effects of breastfeeding, as stated by the elders and friends who had breastfed, was one of the reasons for primigravidae women’s intention to breastfeed. Despite the different source of influence, both groups of women understood that breastfeeding is good for the health of babies and could build a baby’s immunity against disease and, as a consequence, all women intended to breastfeed. According to one primigravida woman:
Those who have breastfed before and elders say breastfeeding is beneficial. That breastfeeding is the best until six months. That’s why I have decided to breastfeed. (PWO 03)

A young primigravida woman claimed that she was told to breastfeed by her mother and mother-in-law. Although she did not understand the reasons for giving mother’s milk, she decided to breastfeed:

My in-law plus my mother also told me mother’s milk is the best. I don’t know why mother’s milk has to be given, but I have decided to breastfeed. (PWO 12)

The belief that nutrients derived from the foods that mothers eat would be passed to their babies through breastmilk influenced multigravidae women to breastfeed. The following quote is typical of women’s understanding:

Baby will be healthy. And if we don’t give other things and just breastfeed, all the healthy nutrients will go through breastmilk to the baby. (MWO 13)

Similarly, one primigravida woman said:

Whatever mother has eaten, all the nutrition will be in that milk. The baby will get nutrition from here [breastmilk] only and not from anywhere else. (PWO 03)

However, none of the women in either group mentioned any breastfeeding benefits related to themselves.

5.3.1.2.2 Sub-theme 2: Being responsible for one’s actions

The second sub-theme highlights acceptance of breastfeeding as the consequence of being a mother and being responsible for one’s baby. Not breastfeeding was not an option for these women because it was deeply ingrained in them that it was their responsibility to breastfeed their babies soon after birth. Therefore, for them, breastfeeding was instinctive, natural and part of a mother’s duty of care to her baby:

I think it is a natural instinct that you want to do that, like you want to breastfeed your own child. (MWO 15)
Women perceived that it is natural for human beings to produce breastmilk to nurture their babies. Moreover, women felt that they should be capable of breastfeeding following all the physiological changes that occurred within their bodies in preparation for lactation while they were pregnant. Due to such an understanding, women claimed that they did not even have to think about plans for how to feed their babies. One primigravida woman claimed:

*I don’t have a plan also. It’s natural so I think I can do [breastfeed]. It’s natural.* (PWO 06)

Similarly, one multigravida woman asserted:

*Once you have given birth, we have to naturally breastfeed. Yes. It will not do, not to breastfeed your own child.* (MWO 17)

Many women from both groups expressed the view that not breastfeeding had not occurred to them for they believed that breastfeeding was the best and most natural form of nurturing offspring. For that reason, many women perceived breastfeeding as an act of taking care of a baby and fulfilling the obligation of being a mother:

*Not breastfeeding never occurred to me. It’s the best and it is natural.* (PWO 01)

*It’s my child and I have to take care of it. I have to do for my child. Being a mother, we have to feed our baby.* (PWO 18)

*I just decided by myself to breastfeed. I thought to myself, since I am going to give birth, I should be able to breastfeed the baby.* (PWO 23)

A multigravida woman expressed the same claim:

*Since it is my own baby, it is natural to breastfeed him or her.* (MWO 12)

**5.3.1.3 Theme 3: Perceptions and knowledge about breastfeeding**

This theme emerged from both multigravidae and primigravidae women’s interviews and reflects their perceptions and knowledge about breastfeeding. The theme contains two sub-themes common to both multigravidae and primigravidae women.
5.3.1.3.1  Sub-theme 1: Women’s perceptions of potential factors influencing their capacity for exclusive breastfeeding

This sub-theme reflects women’s perceptions of factors that might not allow them to exclusively breastfeed. Women in both groups reported that they hoped to breastfeed exclusively when they gave birth, but acknowledged that their plan to do this could be thwarted for various reasons. For example, women generally perceived babies were hungry or thirsty when they cried. In such situations, women reported they were likely to give other foods to their baby, thinking that crying was due to insufficient breastmilk:

Some babies are not satisfied like other babies so I will see and decide. The hospital does say we have to breastfeed until six months; however, it depends on us. Sometimes we are not able to produce enough milk. Then baby cry and we have no choice than to give other foods. (MWO 09)

Similarly, a primigravida woman, after observing her sister breastfeeding, stated that EBF would depend on her ability to produce adequate milk to satiate her baby:

I have seen my elder sister’s children being given foods because breastfeeding did not satisfy their hunger as they were crying all the time and stopped when we give solid foods, and they stayed quiet. So I am planning on doing the same. (PWO 11)

The intention for EBF also depended on women’s perception of whether babies were healthy enough to be sustained by breastfeeding alone:

I am thinking of trying hard to exclusively breastfeed for maybe 3–4 months. We also need to look at the health of the baby. I will see the health of the baby and decide. (MWO 01)

One primigravida woman professed that she was not sure if she would be exclusively breastfeeding her baby because she had the feeling that she might not produce enough milk:

I am not sure. I feel like I may not produce enough milk. I don’t know. I just feel that way (PWO 11)
5.3.1.3.2 **Sub-theme 2: Situation of working women**

Another common perception among women in both groups was that those who would not return to work could exclusively breastfeed, in contrast to those women who would return to work. Thus, women who planned to return to work had already decided not to exclusively breastfeed:

*We get two months or three months, and until that time I can breastfeed, but after three months I am planning to give substitute because the duty is very tight. I can breastfeed only in the morning and evening.* (MWO 25)

Primigravidae women had made similar plans. One primigravida woman stated:

*When I return to work, I may not get time to breastfeed. I get only two months maternity leave so I am going to give water and cerelac.* (PWO 10)

Another woman who planned to work after her maternity leave claimed that she would get two months maternity leave only. Therefore, to settle her baby she would be compelled to resort to other foods apart from her breastmilk, as she would have no other choice:

*I have to give, I have no choice once I join my duty. I think baby will not settle so I have to.* (MWO 25)

A woman who stayed at home shared her belief about working women’s situation:

*But the problem is working mothers. I don’t think they can breastfeed for six months because they, I think, they get maternity leave for two months.* (MWO 15)

A few women stated they observed others who had returned to work while still breastfeeding and at the same time giving supplements to their baby, and so they planned to follow the same practice on their return to work. One primigravida woman explained:

*I have seen my aunt breastfeed in the morning, go to the office, come back during lunch, feed the baby and go back. Baby was fed powdered milk until lunch time. If I get a job, I will have to do that way only.* (PWO 12)
5.3.1.4  **Theme 4: Understandings and views on breastfeeding and exclusive breastfeeding**

This theme addresses primigravidae understandings and views on breastfeeding.

5.3.1.4.1  **Sub-theme 1: Primigravidae women’s definition and understanding of exclusive breastfeeding**

This sub-theme emerged from the interviews with primigravidae women and relates to their understanding of what constitutes EBF. Similarly to what multigravidae women had practised for their earlier babies, primigravidae women had an understanding that EBF was the practice of giving fluids along with breastmilk but not giving solid foods. Therefore, most primigravidae women reported that they intended to exclusively breastfeed and also supplement with drops of water:

*This EBF for six months as recommended by the government is only breastmilk and I think we have to give drops of water.* (PWO 11)

The majority of primigravidae women intended to carry out non-exclusive breastfeeding because they had been told by their elders that it was not enough to provide only breastmilk and they should also give water to their babies. One woman stated that her mother had told her to give water once her baby was born and so she intended to follow her mother’s advice. She trusted her mother, who had given birth many times. The woman believed mothers would know best about feeding babies:

*I will do EBF until six months and I am thinking of giving little water too. As my mother was saying, it is not enough only to give breastmilk to the baby but you need to give water too. I think I should listen to her as she has given birth to eight children, so parents would know more about all these.* (PWO 14)

Similar to the findings from multigravidae women, where they had expressed and discarded colostrum thinking it was harmful milk, most primigravidae women perceived...
colostrum as either ‘dirty or rotten’ or ‘stale’ and ‘off’. This was because they believed that colostrum had been in their breasts for a long time. Therefore, a few primigravidae women declared that they intended to express and discard colostrum. This again was done usually on the advice of their elders. A primigravida woman stated:

*I was told we have to throw the colostrum away. That we should not give to the baby, it is said to be a rotten milk. My parent and elders tell me every time we have to express a little out before breastfeeding.* (PWO 23)

5.3.1.4.2 Sub-theme 2: Discussion of breastfeeding is embarrassing

One of the common views among primigravidae women who participated in this study was that discussing breastfeeding with other people is embarrassing. They stated that they were not able to ask anyone about breastfeeding because they were too shy to talk about it:

*I don’t know about EBF and since I was never pregnant before, I am too embarrassed to ask my family and friends since this is the first child.* (PWO 09)

Instead, they said when they get together with friends they talked mostly about growth and movement of babies, and about labour pains:

*When we are together, we usually don’t talk about breastfeeding but we talk about what happens during the childbirth. We don’t talk about breastfeeding at all.* (PWO 23)

They enunciated that in addition to being too shy to ask about breastfeeding, they thought that once they gave birth they would be helped by their mothers:

*No, I did not ask about breastfeeding because I thought my mum will teach me when I give birth.* (PWO 18)

They also hoped that the midwives in the hospital would help educate them about how to breastfeed once the baby was born

*I have not asked the staff now about breastfeeding because I think they will teach us once the baby is born.* (PWO 15)
A few primigravidae women reported that initially they were too shy to ask about breastfeeding, but when they did muster up the courage to ask someone who had already given birth, they were told that breastfeeding is learned by doing. One primigravida woman stated:

*When I asked those who had children and who had experience, they said we will learn as we keep on breastfeeding. It’s only for the first time that we don’t know how to breastfeed.*

(PWO 04)

5.3.1.4.3 **Sub-theme 3: Acceptance that first breastfeeding is painful**

Most of the primigravidae women in the study were resigned to the fact that they would experience pain while breastfeeding. They claimed they had been told by their family and friends that initial breastfeeding would be painful. Despite the pain, women were advised by their family to persist with breastfeeding until their milk came in. One primigravida woman stated:

*My mother said the first time breastfeeding will be painful. Breastmilk will not come, and we have to try again and again until it comes.* (PWO 18)

One woman stated when she asked her parents, she was told that if breastfeeding was painful, it would be so for only a short time and then she would become used to the pain:

*When I ask my father and mother, they say it is better to continue breastfeeding as the pain will be there until one week or so and then it will become a habit.* (PWO 16)

Nobody questioned the likelihood of finding a solution for painful breastfeeding or that breastfeeding could be a painless experience. All primigravidae women accepted the fact that they too would have to undergo the pain their friends and family experienced:

*My elder sister told me when we breastfeed for the first time, it is painful as if filled with pus, but later we get used to it as we keep on breastfeeding.* (PWO 19)
5.3.1.4.4 Sub-theme 4: Plans to observe cultural and traditional practices recommended by elders

Most of the primigravidae women indicated that they wanted to practise EBF; however, at the same time they also intended to follow some of the cultural and traditional practices recommended by their elders. They affirmed that because their elders had told them to, they would be carrying out these practices:

My parents say when they are small, babies will not know when they are being bathed, and so when we give three drops of water, they will know they are being given a bath. I think I have to do the same [give three drops of water]. (PWO 23)

Primigravidae women had been told by their elders that maternal love for their babies would be demonstrated by giving drops of water. This correlates with what multigravidae women reported. The belief that the baby’s throat would be dry when they were immersed in bath water also influenced primigravidae women’s intention to practise the tradition of giving drops of water:

I was told when we give baby bath, we have to give them water. They said when we immerse the baby in water, their throat will become dry. I think I will do that. (PWO 24)

Primigravidae women reported they were aware that giving water was not ‘good’ for babies, but said their elders had dictated this practice and therefore they had to comply with their instructions, as evident in the following statement:

If she [her mother] does give water before bath I might have to allow her to do. I can tell her giving water is not good but she may not listen because her belief is quite different. (PWO 09)

Some primigravidae women also intended to carry out the practice of giving butter at the time of birth as a gesture of welcoming a baby into the world. This practice was again due to the influence of elders in the family and women were intending to comply with the wishes of their elders:
Giving of butter to the baby as soon as the baby is born is practised by elders. If we take our newborn to a new house as a gesture of welcome, they give butter to the newborn. I don’t mind if they do. (PWO 23)

5.3.1.4.5 Sub-theme 5: Observation of breastfeeding experiences

Primigravidae women described their observations of those who were already breastfeeding. They said they had observed others or had been told that breastfeeding was very painful. One of the women observed her niece experiencing painful breastfeeding. Her niece did not seek help from anyone, as she just tolerated the pain and breastfed exclusively for six months:

*My niece was saying her breasts were painful. She kept putting the breast in the baby’s mouth and withdrawing as the pain got too intense. She did not ask sisters [midwives] for help. She bore the pain and breastfed. I have not seen her giving anything [other than breastmilk] to the baby. Until six months she was giving breastmilk to her baby. (PWO 16)*

On the other hand, the majority of primigravidae women asserted that despite the recommendations of health professionals to exclusively breastfeed until six months, they saw many women giving foods to their baby. One primigravida woman exclaimed:

*Just give breastmilk? No food? But I have seen many giving other foods. I know hospitals tell us not to give anything like food and water, but I have seen others giving foods. (PWO 07)*

Most primigravidae women had observed others breastfeeding without any problems, but had not observed anyone breastfeeding exclusively. They reported observing other women giving solid foods in the belief that breastmilk alone does not satiate babies:

*I have seen them breastfeeding without difficulties. But I have not seen them giving only breastmilk, they had given babies foods. They said when the baby is given only breastmilk, it cries a lot. (PWO 24)*

A few women determined that although they had seen others feeding babies with formula, they still intended to practise EBF:
My friends tell me to breastfeed. That it is good to breastfeed. But when they faced breastfeeding problem, some of them have given lactogen when they come to duty. However, I am planning to take leave every two hours and go and feed the baby. (PWO 13)

5.3.1.5 Theme 5: Breastfeeding information from health professionals

This theme emerged from the data of both groups of women and highlights women’s perceptions of breastfeeding information and advice provided by health professionals.

5.3.1.5.1 Sub-theme 1: Inadequate breastfeeding support and advice from health professionals

Many women in both groups reported receiving inadequate breastfeeding support and advice from health professionals. The majority of women in the multigravidae group claimed that although they were approaching their due dates, they did not receive any breastfeeding information in the antenatal phase of the current pregnancy:

For this pregnancy, I am nearing my delivery. Nobody has told me anything regarding breastfeeding. (MWO 09)

One woman explained that she was shown how to breastfeed while in hospital during her previous childbirth experiences, but for her current pregnancy she was not provided with any breastfeeding information:

The sisters [midwives] in the hospital showed me how to breastfeed for the first baby. Regarding current pregnancy, until now they haven’t told me anything yet. (MWO 16)

In one case, a multigravida woman without any experience of breastfeeding due to a neonatal loss after birth was not given any breastfeeding information at all. She believed that she might have been given some information during her previous pregnancy, but not for the current one:
Maybe they told me during the earlier pregnancy. I must have forgotten. For this, they did not say anything probably because I told them it is my second pregnancy. (MWO 07)

Similarly, most of the primigravidae women revealed that although they were nearing the expected due date of birth of their baby, they were not given any breastfeeding information by health professionals:

*Doctors and sisters [midwives] did not tell me anything about breastfeeding right now. No, until now I have been doing monthly antenatal check-ups. They haven’t told me anything until now.* (PWO 12)

Some primigravidae women acknowledged they felt they could not seek information about breastfeeding because they perceived health professionals to be too busy. A primigravida woman stated:

*They [health professionals] haven’t told me anything. I thought of asking them but there are so many patients. We don’t get time to interact with each other. Just check up, go, just check up, and go.* (PWO 18)

However, some women were hopeful that once they gave birth, their family, especially their mothers, and health professionals would help and teach them about breastfeeding. A primigravida woman stated that she had placed high hopes on her mother teaching her about breastfeeding:

*Until now sisters [midwives] have not told me anything regarding breastfeeding, but my mother is coming next week so I am hoping she will teach me as there are five of us. So I feel she will know more and teach me how to breastfeed.* (PWO 21)

*Sisters [midwives] and doctors haven’t told me anything about breastfeeding yet. I think once we deliver only, then they tell us.* (PWO 10)

Furthermore, both primigravidae and multigravidae women were not given information regarding the recommendations of the WHO and Royal Government of Bhutan on breastfeeding. Hence, this lack of information led women to draw their own conclusions.
about the meaning of EBF, which they interpreted to be giving other fluids with breastmilk. One of the women declared that there is a need for more publicity about the policy recommendations:

*I think they still need to do some more publicity because [laughs] there is not much. It’s only people who go onto the internet and do their research who take breastfeeding seriously.* (MWO 19)

One woman, however, acknowledged that although she was aware of the recommendations, she felt that her milk would not be sufficient for the recommended breastfeeding duration of at least six months, citing her previous experience:

*The government says we have to exclusively breastfeed until six months and not give anything else, solid foods or anything. For my first baby, I felt my milk was not enough and the baby cried all the time. If I don’t give solids from two–three months, the baby cries all the time. And he settled down when we give foods. My milk is not sufficient for six months.* (MWO 23)

5.3.1.5.2 Sub-theme 2: Informal sources of breastfeeding knowledge

The majority of multigravidae and primigravidae women claimed to have received some breastfeeding information from sources other than health professionals. Primigravidae women described not receiving any breastfeeding information from health professionals and instead stated that they had learned about breastfeeding from their family, neighbours and friends who had already given birth. They reported that these friends had been given some breastfeeding information by health professionals in hospitals when they were admitted for birth:

*Oh! Last time my friend who gave birth before me, she told me we have to breastfeed the first breastmilk to the baby.* (PWO 18)

Similarly, multigravidae women confirmed that their limited knowledge about breastfeeding was mostly acquired from mass media such as national television – Bhutan
Broadcasting Services (BBS), posters, banners and the internet, which assisted them in making their decisions for feeding their baby. They rarely mentioned health professionals as a source of breastfeeding information:

*These days, wherever you go, in hospitals or anywhere, there are posters pasted about breastfeeding, plus there are lots of programs on TV.* (MWO 01)

Similarly, the majority of primigravidae women said they had learned about breastfeeding from medical and health-related television programs shown on BBS. One primigravida woman stated:

*Breastfeeding recommendation? I don’t know but when I see on the TV sometimes, television, BBS interviews, I heard it is good for a mother to give breastmilk for their baby, not by bottle feeding. I heard that only.* (PWO 06)

Some women reported that they had gained information about breastfeeding by reading posters put up around hospitals and the Maternal and Child Health book that was given to them during registration of their pregnancy. One woman revealed that she had decided to breastfeed after she had explored the internet and found that breastfeeding was a complete food:

*I intend to breastfeed as soon as the baby is born because ... It’s like, when I browse Google, they say breastfeeding is a complete food so I thought I will breastfeed.* (MWO 22)

### 5.4 Six weeks after childbirth

Each woman who was interviewed during pregnancy was requested to be interviewed a second time approximately six weeks after the birth. For the second interview, 22 out of 25 multiparae women and 22 out of 24 primiparae women who participated in the first interview were available for the second one. Five themes comprised of 13 sub-themes emerged from the second interviews with primiparae and multiparae women, as shown in Figure 5.2.
Theme 1: Current breastfeeding practices
Sub-theme 1: Effectiveness of breastfeeding advocacy during previous birth experiences (multiparae only)
Sub-theme 2: Women’s practice, definition and understanding of exclusive breastfeeding practice
Sub-theme 3: Reasons for supplementation of breastmilk

Theme 2: Bhutanese women’s breastfeeding experiences and intention to continue
Sub-theme 1: Women’s experiences of breastfeeding
Sub-theme 2: Women’s perception of barriers to exclusive breastfeeding
Sub-theme 3: Not prepared for the reality of breastfeeding (primigravidae only)

Theme 3: Culture, traditions and beliefs affecting breastfeeding practices
Sub-theme 1: Cultural and traditional practices to increase breastmilk production
Sub-theme 2: Cultural and traditional practices affecting exclusivity of breastfeeding

Theme 4: Hospital practices affecting breastfeeding
Sub-theme 1: Hospital routines
Sub-theme 2: Appropriate timing for breastfeeding information and support

Theme 5: Perceptions of breastfeeding support
Sub-theme 1: Multiparae women should know about breastfeeding
Sub-theme 2: Breastfeeding support provided by health professionals
Sub-theme 3: Breastfeeding support from the family

Figure 5.2 Themes and sub-themes from interviews at six weeks after birth

5.4.1 Findings from the interviews at six weeks

5.4.1.1 Theme 1: Current breastfeeding practices

This theme reflects women’s perceptions in relation to breastfeeding practices six weeks after giving birth. Women discussed their feeding methods for their babies and their reasons and decisions for feeding their babies. They also discussed reasons for supplementation of breastmilk and their understanding of EBF.

5.4.1.1.1 Sub-theme 1: Effectiveness of breastfeeding advocacy during previous birth experiences

This sub-theme emerged from the data of multiparae women only. It highlights how breastfeeding advocacy and information provided by health professionals following previous childbirths had influenced their breastfeeding decisions. A common view expressed by the
Multiparae women was that they had wanted to adhere to certain cultural and traditional practices, such as giving their baby butter after birth or giving drops of water. They had stopped these practices after health professionals had asked them to cease them during their previous stay in hospital:

*Earlier I planned to give water to my baby, but I did not as the hospital told me not to.*  
(6W MWO 11)

The women explained that because they lacked knowledge about EBF for their previous babies, they could have adopted traditional practices such as giving drops of water to their baby while bathing them:

*I think, we might have given drops of water for my previous baby as we bathed the baby, but now I understand we should not do that. So I have not done so far for this baby.*  
(6W MWO 02)

A multipara woman claimed she had been encouraged by friends and elders to give her baby some foods and water. She had not, however, heeded their advice, arguing that she had been advised by health professionals not to give her baby anything other than breastmilk until six months of age:

*When I tell my friends sometimes he cries at night, they say he might be hungry so I should feed him [solids]. I told them I won’t do that until six months. The hospital here told us not to and that it is not good to give anything else until six months.*  
(6W MWO 02)

Some women asserted that although they felt their baby was not settling due to what they perceived as hunger, they had still decided to follow the advice of health professionals:

*I can carry out EBF until six months. When the baby cries, yawn and do not sleep during the night, I feel she might be hungry. But still then the hospital has advised me not to give foods, so I just carry on breastfeeding.*  
(6W MWO 04)
One woman stated that none of the family or friends around her had recommended she feed other foods to her baby because she felt that now everybody was aware of the importance of EBF. It was also stated that family, friends and the urban community in general were also aware of the recommendation from the hospital and therefore rarely suggested supplementation, instead encouraging breastfeeding:

*My friends and relatives did not try to influence me to give baby other foods; as now all of them know we should not do that as they stay here [in Thimphu].* (6W MWO 18)

5.4.1.1.2 *Sub-theme 2: Women’s practice, definition and understanding of exclusive breastfeeding practice*

This sub-theme illustrates the EBF practices described by women in both groups at six weeks after childbirth and their definition and understanding of EBF. Women lacked clarity in their understanding of EBF. They believed that as long as they were not giving solid foods to their babies, they were practising EBF. While most women claimed they were exclusively breastfeeding, on further discussion they acknowledged giving water to their babies. They explained this action because they believed that breastmilk only would not satiate the thirst or hunger of their baby. Further, they revealed that they had already fed their babies with baby substitute breastmilk (lactogen) or had given drops of 10% glucose to help their baby latch on to their nipples during the initiation of breastfeeding while in hospital.

According to the majority of the women, they had adhered to traditional Bhutanese practices such as giving their babies butter, bath water or holy water as a means of cleansing and blessing. Despite adopting such practices, they still claimed that they had been exclusively breastfeeding and had not given any other foods to their babies. A few multiparae women stated (in sub-theme 1) that they had not adopted certain traditional and cultural practices after being advised by health professionals to avoid such practices with a previous
baby. However, a significant number of multiparae women were still adopting certain
traditional practices. One multipara woman declared:

*I am not giving anything except I and my mother while giving baby bath are giving a few
drops of water to the baby.* (6W MWO 21)

Women believed that as long as solid foods were not given, they were practising EBF.
One multipara woman stated:

*He [her husband] has given bath water to the baby. However, we have not given any solid
foods. I feel it won’t matter.* (6W MWO 16)

Thus, even though babies had been supplemented at least once, most women claimed
that they had been applying EBF and planned to continue with what they had been doing until
their babies were six months old. Similarly, one primipara woman said:

*I gave small bits of butter right after birth and I am giving drops of water when I give a
bath, other than that I am exclusively breastfeeding.* (6W PWO 10)

5.4.1.1.3 Sub-theme 3: Reasons for supplementation of breastmilk

This theme reflects women’s reasons for supplementation of breastmilk. Most women in both
groups stated they had experienced breastfeeding problems such as sore nipples, breast
engorgement and cracked nipples. However, a common reason for supplementation was their
perception of inadequate breastmilk production. They interpreted a baby’s crying as a sign of
hunger due to inadequate breastmilk production:

*We don’t know how many hours, so almost the whole day the baby was with no milk and
was crying, crying and crying. I probably gave birth in the morning, probably about 9
something, sometime in the late afternoon they [midwives] said we can give something
and then we gave formula.* (6W MWO 15)

A primipara woman explained her behaviour in response to her perception that her
breastmilk was not adequate, which led her to give the baby water when the baby cried:
Until now, I have been breastfeeding. Even now it is not adequate. Yes, I have given water because my milk was not enough. She was crying so much because of that, so I gave her water. (6W PWO 04)

Another common reason for supplementing was to treat babies suffering from jaundice. Babies can develop jaundice and dehydration when they receive insufficient breastmilk, usually resulting in an admission to the Neonate Ward. The care in this environment includes formula feeding during the process of phototherapy to prevent dehydration. The recommendation of formula feeding for a medical condition is in accordance with Step 6 of the Ten Steps to Successful Breastfeeding (World Health Organization, 1989). A multipara woman described the experience of her baby’s jaundice and care:

I kept giving watery milk, but later the baby got jaundice. And the sisters [midwives] said if a baby passes urine and stools, jaundice will go away. However, the baby wasn’t passing urine, so from Neonate Ward they gave her lactogen. (6W MWO 12)

Women in both groups also claimed that another reason for supplementing their babies was the influence of their family and friends. Women were advised to give water to their babies by their family who believed that breastmilk alone would not satiate thirst in babies:

I told her [mother] not to give water to the baby. But mother said at least once we have to give water in a day as the breastmilk will not quench the thirst for water and baby’s throat will be dry. And although I told her not to, she still gives one spoonful at least once a day. (6W PWO 05)

Most primiparae women were also encouraged by friends who were breastfeeding and supplementing with formula to settle a crying baby. One primipara woman stated:

I asked everybody. I was scared to give but everybody told me they were feeding lactogen and Nan as babies were still hungry. They told me to try giving it once. I did and after that
baby did not cry. He sleeps so well at night now. Before that, he used to get so angry and pull at my nipples because I think he was still hungry. (6W PWO 07)

According to the women, other reasons babies are commonly supplemented include traditional and cultural practices such as giving butter and giving drops of water while bathing babies. These traditional practices are usually carried out by elders or relatives and so women learn to do the same and carry on such practices:

When my mother gave baby a bath, she started giving that drop of water. It seems we have to give that, as baby will be thirsty. Yes, I dipped my hand in the water and give drop from there. (6W MWO 10)

Babies were also supplemented with formula feed in response to the practice and advice of health professionals. Other practices by midwives included smearing 10% glucose on a woman’s nipples to assist her baby to latch on:

I had problem of flat nipples so I was not able to latch my baby on. So they [midwives] brought something in the syringe and applied it to my nipples, and then the baby started to suckle. They said it was something sweet. They put a little bit on my nipple and let the baby suckle. (6W PWO 23)

Furthermore, when women were not able to produce breastmilk, they were told by health professionals to supplement their babies with a formula feed:

He was suckling, but then I was not producing milk. So, I gave him lactogen as the sister [midwife] told me to do so while in the hospital. (6W PWO 14)

5.4.1.2 Theme 2: Bhutanese women’s breastfeeding experiences and intention to continue

This theme reflects women’s views about breastfeeding after having breastfed for six weeks (from birth until the day of interview).
5.4.1.2.1 Sub-theme 1: Women’s experiences of breastfeeding

Six weeks after birth, most multiparae women claimed that for them, breastfeeding was both easy and convenient. They admitted that in the first few days, when their milk had not come in, or when they suffered nipple sores and breast engorgement, they had found breastfeeding to be difficult. However, once breastfeeding was established, they found it easier:

*It is easy except for the first few days before the milk came in, but I think it is easy and that is the only thing that bonds you to the baby.* (MWO 15)

Most primiparae women indicated that they found breastfeeding painful, so much so that they cried each time their babies latched on. However, despite the pain, they did not consider providing a supplement and persisted with breastfeeding:

*When I faced breastfeeding problems, I did not think of giving anything, I bore the pain and with tears streaming down my face, breastfed. It was so painful, I used to cry every time I breastfed.* (6W PW0 11)

Women persisted with breastfeeding, despite it being painful. This was because they were told by their family members and friends that at first breastfeeding would always hurt, which they accepted as fact:

*Sore nipples developed as soon as he was born and started suckling, as I was giving him just my nipples. I did not seek help for that because my friend said for the first child it is natural to develop sores. One of my friends told me she had terrible sores. In fact, one of the nipples fell off, but still she persisted giving. She told me even if I cry, I have to keep on breastfeeding as baby suckling will heal the sores. So, I kept on breastfeeding. It was painful and I cried too. But I endured the pain and breastfed.* (6W PWO 14)

As advised by family and friends, primiparae women assumed that breastfeeding pain should be expected and accepted as a natural occurrence:

*My husband, my mother-in-law and sister-in-law, they told me it was natural to have painful nipples for the first baby, and they experienced the same too. So, I just stayed like that [without seeking help].* (6W PWO 23)
Besides their family and friends, health professionals provided the same advice, further reinforcing women’s expectation of pain when learning to breastfeed. One primigravida stated:

_I developed sore nipples and started to bleed from nipples too while in the hospital only. Sisters [midwives] told me such things will occur for the first-time mother when the baby suckles. They said it was o.k. So I thought it was natural._ (6W PWO 20)

Multiparae women, on the other hand, held a more favourable perception of breastfeeding. One of the women said that breastfeeding was more convenient for her because when her baby cried, she did not have to prepare formula:

_Breastfeeding is easy. As soon as the baby cries, we don’t have to do anything, we just pick the baby up and breastfeed. I think this is the easiest thing to do. If it was the other thing, we have to get up, cook something on the gas and all._ (6W MWO 25)

Another multipara woman added that breastfeeding was natural and she believed all women would want to breastfeed their own children. She also added that she had no qualms about breastfeeding in public:

_Breastfeeding is good. And breastfeeding is easy when the baby is with the mother. Breastfeeding is natural and no one will want not to breastfeed. There are some women who feel embarrassed to breastfeed in public. I don’t have any such inhibitions. You have given birth, so why feel embarrassed? I for one can sit down anywhere and breastfeed._ (6W MWO 05)

Women in the primiparae group felt that they were not given control over their choice of feeding method due to the influence of their elders. Although some of them had intended to carry out EBF, they were not able to control the actions of elders, especially their mothers, who went against their wishes despite explaining the recommendations of the health professionals to them. As evident in the quote below, women were influenced by their own mothers in giving water to babies:
Yes, my mother is giving drops of water to the baby while giving baby’s bath. I told her hospital told us not to do that, but she wouldn’t listen. She said when we put the baby in the water, his throat will be dry. (6W PWO 24)

Women in both groups viewed breastfeeding as a natural and instinctive act of a mother after giving birth. When the women were asked if they had been able to meet the breastfeeding expectations they might have had, many said they had not given a thought to breastfeeding because it was something they should do. Six weeks later, most of them stated that they were happy and content with how they were feeding their baby at present:

I did not have any thought about breastfeeding as we have to breastfeed no matter what once the baby is born, and I did not have any hope or expectation or such. (6W MWO 12)

Similarly, a primipara woman affirmed:

Now my expectation has been met. At first, I had lost all hope. I was a bit unhappy thinking my baby did not get colostrum, but now I am producing my milk abundantly. (6W PWO 21)

5.4.1.2.2 Sub-theme 2: Women’s perception of barriers to exclusive breastfeeding

This sub-theme reflects both groups of women’s views on barriers to EBF. While they understood that giving their baby solid food would affect EBF, most women did not perceive giving drops of water, other fluids or butter as barriers to EBF. Similar to their views during pregnancy, women still felt they would not be able to practise EBF if working after their maternity leave:

I feel just EBF may not be enough to satiate baby’s hunger because when we go to work, the baby will be hungry and they will cry, they won’t settle. I am getting three months maternity leave. If he settles that’s o.k., but if he doesn’t, I am planning to give other foods. (6W MWO 25)

On the other hand, most women who stayed at home stated that they would be able to exclusively breastfeed. One multipara women stated:
Breastfeeding is easy. I stay at home only so it is easy, maybe for those who has to go to work maybe it is difficult. (6W MWO 07)

This view was similarly expressed by women in the primiparae group. One primipara said:

I don’t go anywhere. I have no job and I stay at home only. If we have jobs, then I think it will not be possible to breastfeed our babies exclusively. (6W PWO 22)

Another barrier was women identifying whether their crying baby was either thirsty or hungry when refusing to settle. They believed they should feed supplements to satiate the baby’s hunger and thirst to help them to settle. Thus, a crying or unsettled baby was a key reason for supplementation of breastmilk:

I don’t know right now. The baby is not crying. Maybe later when the baby is 4 or 5 months old, if he cries, I may have to give, no, just water, but I am not sure. (6W MWO 18)

Many of the women in both groups claimed that if they produced enough milk, they would continue EBF without giving other foods. However, they were not committed to their plans. On further discussion, women revealed without hesitation that they intended to supplement breastmilk if their baby cried or they thought their breastmilk supply was not sufficient:

Until now I am breastfeeding only. I have not given anything and I am producing adequate milk, so I am thinking of continuing the same. However, if the baby cries, then I will buy commercial milk and feed that to the baby. (6W MWO 16)

A primipara woman had already decided not to adopt EBF because she felt that she was not producing enough milk:

I think I won’t be able to exclusively breastfeed until six months. I am facing difficulty with my breastmilk being not enough. I am planning to feed cerelace. I asked my friends too,
and they told me that some of them started at two and half months and some at three months. I want to give now, but I am a bit scared. (6W PWO 08)

One woman stated that although she was happy to have followed the EBF recommendations until six weeks after birth, she was doubtful about whether she could continue EBF until six months:

I had hoped to follow whatever the hospital recommend and until now I have been able to do that, so I am happy about that, but I still have to continue until six months and just now it is only six weeks! (6W MWO 08)

Lastly, a barrier to EBF commonly reported by women was administration of supplements to the baby by family elders, especially the grandmothers. Women stated that family elders insisted on following the practice of giving solid foods within a few days of birth for reasons rooted in beliefs held by the elders:

Well, yes, my mum just kept insisting and she gave a small piece of butter to the baby and smeared a little on his forehead. She said if we don’t do that, rats will destroy things in the house. I asked her not to do that as baby will be sick, but she said it is just a small piece. So it is O.K. She said before that was how she brought up her kids. (6W MWO 01)

5.4.1.2.3 **Sub-theme 3: Not prepared for the reality of breastfeeding**

This sub-theme pertains only to primiparae women and illustrates how they were unprepared for the reality of the breastfeeding experience. These women during pregnancy had been told by their families and friends who had breastfed that breastfeeding would be painful. Despite this insight, they were not prepared for the reality of breastfeeding their own baby. A few women had not been aware that problems could arise while breastfeeding. One primipara woman did not know that the wrong breastfeeding technique could lead to sore nipples:

Before birth, I wasn’t aware and I did not know we get sore nipples. And I had no thought that I would face such difficulties. I have seen other mothers breastfeeding without any problems and I thought I would be doing the same, but when I got sore nipples I then
realised that breastfeeding was not easy. And I did not know we get sore nipples at all.  
(6W PWO 04)

Most of the primiparae women found breastfeeding difficult and quite different from what they had expected. One primipara woman stated:

*Breastfeeding is not what I expected. I thought it would be easy. I faced difficult times the first time. My breast was engorged; the baby was unable to latch on. And she cried and then I become worried whether she was having pains somewhere. So, it is not easy as I thought it would be.*  
(6W PWO 06)

Primiparae women had assumed that breastfeeding would be easy because health professionals had not informed them about the potential for breastfeeding problems, nor had they advised them of preventive measures if such problems arose. Women felt that they should have been instructed on positioning and attachment before the development of breastfeeding problems:

*Breastfeeding was not easy. I did not know how to breastfed being a first-time mother. I found that difficult. It would have been good if the sisters [midwives] told us from the beginning itself what to expect; it would have been easier. They did not tell me anything.*  
(6W PWO 24)

5.4.1.3 Theme 3: Culture, traditions and beliefs affecting breastfeeding practices

This theme illustrates the cultural and traditional practices and beliefs that women had adopted for their babies from birth until six weeks. It comprises two sub-themes.

5.4.1.3.1 Sub-theme 1: Cultural and traditional practices to increase breastmilk production

This sub-theme relates to traditional practices that women in both groups adopted to increase breastmilk production. This pertains mainly to foods that women were encouraged to consume or avoid in order to promote breastmilk production. Most women claimed they had soup, dry meat and eggs to rebuild their strength and help increase their milk production:
To produce milk, I drank salted butter tea, ate dried meat, and my mother said just dried meat will not be enough, so they gave me chicken and fish soup. (6W MWO 23)

Most women reported they had eaten or been advised to consume a locally made fermented-rice alcoholic drink called changkey to increase breastmilk production. It was understood that drinking alcohol would help women to relax and increase breastmilk production. Some women stood by this claim:

When people came to see my baby, they said I have to take changkey and I will produce more milk. So I had a cup each day and I was producing milk. (6W PWO 03)

However, some women reported that it was just a belief and it did not work:

To produce more milk, I even took changkey, but I was not able to produce milk. Not at all. It is just a belief. (6W PWO 20)

Most women did not eat green leafy vegetables, and they avoided chilli because it was thought the taste of chilli would pass through breastmilk to the baby and the baby would get diarrhoea:

I did not take chilli and vegetables. They told me baby will get diarrhoea if I take those. And yes, baby kept getting diarrhoea. (6W PWO 16)

Women also restricted the consumption of fats if their baby was afflicted with jaundice because it was thought oil would aggravate it:

I just did not take chilli. And when baby gets jaundice it seems fats will affect him, so I did not take much oil. (6 PWO 11)

One woman consumed local ingredients such as carom seeds to help with milk production and recovery from childbirth:

It is called juwano [carom seeds]. It is a spice and we have to put it in soup and that produces more milk and also heals the body from the aches and pains of childbirth. (6W MWO 06)
5.4.1.3.2 **Sub-theme 2: Cultural and traditional practices affecting exclusivity of breastfeeding**

This sub-theme reflects the cultural and traditional practices that women in both groups adopted in the weeks following birth that affected EBF. A few multiparae women reported that they did not follow a number of traditional and cultural practices after they were made aware by health professionals of the negative effects of the practices. However, there were still a significant number of multiparae women who carried out practices which affected EBF. These practices were longstanding and akin to rituals that are performed without a second thought, and as stated by one multipara woman:

*This practice of giving bathwater has been there for many years, so it has now become a habit.* (6W MWO 01)

There were many other reasons for adopting cultural and traditional practices. Similar to multiparae women, some primiparae gave drops of water because they believed that if they did not, their baby would think their mother did not love them. Sometimes babies were given drops of water so as not to startle them when immersing them in bath water:

*I give little water whenever I give a baby bath. It seems when a baby is suddenly immersed in water, she will be startled and choke, so in order to prevent that I gave drops of water.* (6W PWO 20)

These practices were usually enforced by family elders. It was said that elders may express displeasure towards women if the practices were not being carried out. One multipara woman stated:

*It is the cultural practice of our village that once baby is born, he or she has to be given water bath [to drink]. If I don’t, my parents and relatives scold me saying it is our traditional practice.* (6W MWO 05)
The majority of primiparae women appeared to have carried out the cultural and traditional practices under the influence of their elders. Even after explaining to elders the recommendations from health professionals, elders insisted on following traditional practices:

Yes, when we went to Haa, my mother-in-law gave butter to the baby. Yes, and by the time I realised it, my mother-in-law had already put the butter inside the baby’s mouth. When I told her hospital did not encourage such things, she said it is an age-old tradition and when the baby first come to a house, his or her mouth should not be empty. (6W PWO 21)

Similarly, babies were given butter after birth for various reasons. One reasons was the belief that if babies are given butter when they are first brought home from hospital, they will never go hungry in their life. One primipara women explained:

As soon as we were discharged, we went directly to mother-in-law’s house and she gave butter to the baby. And then we went to our own house and there to my mother, she gave a tiny piece of butter to the baby. It seems that baby will then never go hungry in his life! (6W PWO 12)

Other cultural and traditional practices adopted included giving holy water while visiting a temple and in some ethnic groups, during a ritual on the seventh day after the baby’s birth cow’s urine is given to the baby.

5.4.1.4 Theme 4: Hospital practices affecting breastfeeding

This theme highlights the hospital routines and other practices that affected breastfeeding behaviour.

5.4.1.4.1 Sub-theme 1: Hospital routines

In accordance with the Baby-Friendly Hospital Initiative promoted by the WHO (World Health Organization, 1990), most women reported they had been unable to initiate breastfeeding within half an hour of birth. Many reported that although their baby was put briefly on their chest soon after birth, they had been removed for other routines or procedures
such as cleaning, weighing, administering Vitamin K and repair of perineal or vaginal tears or episiotomies. Women stated their baby had been put to their breast only after all these non-urgent routines were completed. These procedures conducted by midwives had limited skin-to-skin contact between mothers and babies and, more importantly, interfered with the early initiation of breastfeeding:

*Well, they did keep him on my chest but did not allow me to touch him. They took him away, cleaned him and gave him back to me.* (6W MWO 02)

One primipara woman described a significant delay in initiating breastfeeding:

*Right after the birth, sisters [midwives] cleaned up the baby and gave the baby to me, and after two to three hours they told me to breastfeed her.* (6W PWO 05)

Another common routine was women, including both multiparae and primiparae, being discharged from hospital without breastfeeding information. One multipara woman stated that she did not receive breastfeeding advice or information at all prior to her discharge from the postnatal ward:

*For the second child, they did not tell me anything during the discharge. They just asked me, “Do you know about breastfeeding?” And I said yes and that’s all.* (6W MWO 05)

Similarly, many primiparae women reported not receiving any breastfeeding advice from midwives. One woman described her experience:

*I was discharged the next day [after birth]. No advice on breastfeeding. They told me to go home after the immunisation of the baby.* (6W PWO 16)

Anecdotal evidence shows that in JDWNRH, women experiencing normal birth are usually discharged the next day. Some women are discharged even sooner, six to eight hours after childbirth. Women who require a caesarean section for birth are discharged on the third day after the procedure. Because of the short postnatal stay, even for women who had successfully initiated breastfeeding during their hospital stay, women reported breastfeeding
problems after reaching home. In Bhutan at present, a domiciliary home-visiting service is not available for women after birth. The only resource available is for women is to revisit the hospital to obtain assistance:

_I was discharged the next day and that evening onward I developed sores. So I came back to the hospital after one week and then they showed me how to breastfeed. So after that breastfeeding improved and my sores became better._ (6W MWO 02)

Most primiparae women reported developing breastfeeding problems once they returned home:

_I was discharged the very next day. I had nipple pain in the hospital, but it continued even at home. However, I kept on breastfeeding. Baby was breastfeeding fine. I had nipple pain, but I still persisted and breastfed._ (6W PWO 23)

5.4.1.4.2 _Sub-theme 2: Appropriate timing for breastfeeding information and support_

This sub-theme relates to women’s opinions about the best time for receiving breastfeeding information. Women stated that it was only when they had developed sore nipples and breast engorgement that they were taught how to attach their baby correctly. They felt the best time to be taught about correct attachment was during pregnancy. This is consistent with opinions expressed during their pregnancy, when women claimed they had not been given any breastfeeding information or support during their pregnancy:

_The sisters [midwives] here [Lactation Clinic] told me I have to put all the black part of my nipples into the baby’s mouth. Then it seems while suckling baby will not suckle on the nipples and then I will not develop sores. I did not know such things before. Sisters in the Antenatal Clinic did not tell me._ (6W MWO 02)

Lack of breastfeeding information was more significant for primiparae women, who did not understand that incorrect breastfeeding technique could lead to sore nipples. They also stated that information regarding breastfeeding positioning and attachment should have been given during pregnancy:
During pregnancy, nobody told me and I did not know about all these either. It seems we have to put all the back part of the nipple inside. I wish I had known about this from before only while I was pregnant. Sisters [midwives] did not tell me either. (6W PWO15)

Women described receiving more breastfeeding information from health professionals in the Maternity Ward and Lactation Clinic following birth than they did during pregnancy:

The sisters [midwives] above [Lactation Clinic], they tell us about breastfeeding. And right after childbirth also in the ward, they tell us too. During pregnancy, I don’t know whether they told me or not [laughs]. (6W MWO 03)

5.4.1.5  Theme 5: Perceptions of breastfeeding support

This theme reflects women’s perceptions of the breastfeeding support provided by health professionals and support persons.

5.4.1.5.1  Sub-theme 1: Multiparae women should know about breastfeeding

This sub-theme pertains only to multiparae women and reflects health professionals’ assumptions that multiparae women know about breastfeeding because of previous experience. This assumption resulted in the delivery of very little or no breastfeeding instructions or assistance to these women during their admission in hospital:

Well, when I said this is second child, they [health professionals] did not seem to bother that much then [about breastfeeding]. (6W MWO 25)

For some women, health professionals helped only at the initiation of breastfeeding and they did receive any further help:

Actually, they helped only when the baby was refusing to suckle in the labour room, but once back in the ward they did not come to see us at all. (6W MWO 02)

One woman who had given birth by caesarean section reported that she was not provided with any assistance at all soon after this surgical procedure. A midwife came just to help put her baby to her breast and she had received no further help after that:
Sister [midwife] just put the baby to breast for the first time. After that, they did not do anything. I was brought into the ward by the ward boy and he also helped me to transfer to the hospital bed. (6W MWO 07)

However, many multiparae women claimed that since they had breastfed previously, they did not need help. Following a normal birth, multiparae women were independent and started breastfeeding immediately (after the midwife completed the non-urgent tasks such as weighing and giving their babies a Vitamin K injection) and those who had had a caesarean section were able to breastfeed more independently once they were up and about:

They checked on me to see whether I know how to breastfeed or not, and since I have given plenty of births I know how to. They observed me once breastfeeding. They do that, you know, and said I was doing fine. (6W MWO 08)

5.4.1.5.2 Sub-theme 2: Breastfeeding support provided by health professionals

This sub-theme represents how primiparae and multiparae women viewed the level of breastfeeding support provided by health professionals. They had mixed feelings about the support they received. While primiparae women stated they had received some assistance with breastfeeding during their stay in the Maternity Ward, the experience of multiparae women was quite different. Multiparae women, instead, reported that they had not received any assistance once they had informed health professionals the baby was not their first child.

Further, a few primiparae women said they had been advised about EBF after birth and even received some help with breastfeeding, including hands-on support. This suggests that, rather than explaining and guiding women so they could learn about the correct attachment, the midwives were performing the attachment. This may be because explanations can take longer and if the midwife is busy, then a hands-on approach is quicker for them to manage. Most women expressed dissatisfaction with such help because they had found it inadequate and desired more help in the form of instructions:
I wished they could help me more. I was not producing milk and she was not able to latch onto my nipple, so that time I wished they could help me more. I did ask for help and the sisters [midwives] told me, “You don’t know anything, no matter how many times we teach you”. So, after that, I did not ask for help at all. I wished then they would help me during that problem. (6W PWO 08)

A few primiparae women claimed that by the time health professionals came to their aid, they had already latched their babies on and started breastfeeding. One primipara reported:

*By the time sisters [midwives] came she was already latched on and breastfeeding. They asked me if I have any problem and I said I had no problem. After that, they did not do anything.* (6W PWO 06)

In addition, multiparae women reported that midwives were too busy to provide assistance to them:

*I thought the breastfeeding help was adequate. It is not like they look after 1 or 2 patients; they have to look after many.* (6W MWO 13)

Similarly, primiparae women affirmed that midwives were too busy to give them adequate assistance; therefore, they were satisfied with whatever help they had received:

*I am satisfied [laughs] with their help. They were also very busy.* (6W PWO 04)

Despite encountering some breastfeeding problems, the women remained grateful for whatever support and help they had received from health professionals in the hospital. They felt the support of health professionals was necessary and without it they could have faced difficulties:

*They do so much for us [makes appreciative noise]. I am so thankful to them. They have to work with blood and all other dirty things. If it is at home, we have problems, with no one to look after us, but here they do everything. I am ever so grateful to them.* (6W MWO 14)
Some women stated they were content with whatever support they had received from health professionals, and that if they experienced major breastfeeding difficulties they would ask for more help from health professionals:

*If I had any big difficulties, I might wish for more help, but since I did not face any such difficulties, I find that it is O.K.* (6W MWO 20)

On the contrary, a few women in both groups felt the midwives were rude and unapproachable. They stated that midwives had attended to them only when they had asked for help, and that midwives should have provided far more support than they did. A multipara woman explained:

*Only when we asked, they came, and we said the milk is not coming. There was one sister [midwife] who was really, how I put it, like, very harsh, seem to be rough. No, they didn’t come to us; we had to go to them, and when they came, “Oh! The milk will come; you are already a mother, so you will know how to breastfeed and so you know this happens.” And then they said, “Oh! Some even went on for a week without milk coming out so it’s nothing; yours is just a couple of hours, it will just happen.” And they just went like that. Yes, they need to do more than what they are doing now. They are not doing anything, the staff in the delivery room.* (6W MWO 15)

5.4.1.5.3 **Sub-theme 3: Breastfeeding support from the family**

Other than health professionals, women’s family and husbands also provided breastfeeding support. At home, support could vary from helping to express breastmilk to helping with positioning, bathing a baby and doing household chores so women could concentrate on breastfeeding. Again, there were differences of opinions between multiparae and primiparae women regarding the level of breastfeeding support provided by their families. Multiparae women generally felt that they did not require any breastfeeding help from their families or husbands, and stated that they would not even know about breastfeeding. A multipara woman asserted that her husband accepts whatever she decides:
Like most men, he has no botheration at all about breastfeeding. He will be okay with whatever I decide [laughs]. (6W MWO 01)

Another multipara woman similarly stated that her husband also did not know anything about breastfeeding and she had managed to breastfeed by herself. Moreover, she claimed that having breastfed her previous children, she did not need help with breastfeeding:

_He does not know anything about breastfeeding. I do everything myself. Frankly speaking, I don’t need any help or support since I know how to breastfeed. If it was my first child, then maybe I might have, but now I have given birth to many [children], so I know now._ (6W MWO 08)

In contrast, primiparae women claimed that they had received breastfeeding support from their husbands and families. One primipara woman said that her husband had supported her in positioning her baby so that she could breastfeed:

_At home, my husband helped by putting a pillow beneath the baby while breastfeeding._ (6W PWO 14)

Women in both groups had expected their husbands and family to help with household chores while they attended to the business of breastfeeding. Multiparae women particularly voiced the view that their husband’s help with holding the baby, cooking meals and doing washing for them was sufficient:

_He [her husband] helped me in the hospital, but once back at home I could breastfeed by myself. He helped me by doing household work and giving baby bath, cooking._ (6W MWO 16)

_My husband supported me by doing other work; I don’t need help for breastfeeding._ (6W MWO 18)
5.5 Conclusion

Five themes, consisting of 13 sub-themes, emerged from the interviews with multigravidae and primigravidae women. In summary, Bhutanese women understood EBF as giving breastmilk along with other fluids and not giving any solids. They believed the development of sore nipples and breast engorgement were a natural part of breastfeeding and viewed a baby’s refusal to suckle and inadequate milk production as breastfeeding problems. Women in both groups considered breastfeeding to be compulsory and had no plan for not breastfeeding their babies.

Women in both groups planned to breastfeed their babies exclusively as long as they perceived themselves as producing adequate breastmilk; however, women in both groups believed that women who return to work cannot exclusively breastfeed. Primigravidae women had already planned to follow certain traditional and cultural practices that were detrimental to EBF. Primigravidae women considered discussions about breastfeeding embarrassing and had also been told by families and friends that initially breastfeeding would be painful and, therefore, were resigned to the fact that breastfeeding would be painful. Women in both groups were not given any breastfeeding information by health professionals although they were nearing birth. Women in both groups cited breastfeeding programs on the national television and information from other mass media as their alternative source of breastfeeding information.

Five themes consisting of 13 sub-themes were identified from the interviews conducted six weeks after birth. A few of the multiparae women had not adopted certain traditional practices because they had been told not to by health professionals following previous childbirth experiences. However, many multiparae and primiparae women still gave their babies fluids and adopted certain traditional practices which hindered the exclusivity of breastfeeding, based on an erroneous understanding that these practices would not affect the
exclusivity of breastfeeding. Such practices were usually carried out on the advice of family elders. Women in both groups felt that breastfeeding was easy and convenient once it was established. Certain hospital routines, such as taking the baby away as soon as it was born to be weighed and administered Vitamin K, delayed skin-to-skin contact and initiation of breastfeeding. Early discharge left women who experienced breastfeeding problems at home with no health professionals from whom to seek help in the community.

Multiparae women stated that health professionals did not offer assistance with breastfeeding, whereas primiparae were given some assistance but it was not adequate. Women also reported that information, such as about correct attachment and positioning, would have been appropriate if it was provided during pregnancy. Similarly, some women’s family members assisted women to breastfeed by helping position and attach the baby to the breasts and by doing other household activities.

The next chapter will present the findings of the interviews with health professionals.
CHAPTER 6: HEALTH PROFESSIONALS – FINDINGS

6.1 Introduction

This chapter presents the findings emerging from the process of analysis and interpretation of the data obtained from semi-structured interviews conducted with health professionals working at Jigme Dorji Wangchuck National Referral Hospital (JDWNRH). This process was critical in identifying themes and subthemes so that the richness of the participants’ experiences are presented. In total, 38 interviews were conducted with 26 midwives, four obstetricians, four paediatricians, three health assistants and one Program Officer employed by the Ministry of Health. A total of seven themes have emerged from the data, with 24 related sub-themes. All quotes are presented verbatim, to maintain the originality of the message conveyed during the interviews, and to prevent loss in translation, no attempt has been made to grammatically correct them.

6.2 Demographic characteristics

All midwives interviewed were female and aged between 21 and 59 years. Midwives were recruited from the Birthing Centre, Maternity Ward, Well Baby Clinic, and Antenatal, Postnatal and Immunisation Clinics in the JDWNRH. Their years of experience in midwifery ranged from less than 1 year to more than 15 years.

In total, four obstetricians, three female and one male, took part in the study. Their ages ranged from 30 to 60 years, with professional experience ranging from less than 5 years to more than 15 years. Three of the obstetricians worked in all areas of maternity services at JDWNRH, including the Birthing Centre, Maternity Ward and Outpatient Department, while one worked in a clinic in the Community Health Unit.

Four paediatricians, one male and three female, with their ages ranging between 30 and 50 years, participated in the study. Their years of work experience ranged from 5 years
to 15 years and all worked in the Paediatric Ward, the Neonatal Ward and the Paediatric
Outpatient Department.

Three health assistants, comprising one female and two males, participated in the
interviews. They were aged between 30 and 50 years, and all conducted outreach clinics
(ORC) and all had more than 15 years of experience in their areas. The Program Officer had
been in his role for over 1 year.

The demographic characteristics of the health professionals are shown in Table 6.1.

Table 6.1 Demographic characteristics of health professionals (n=38)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Midwives (%)(n=26)</th>
<th>Obstetricians (%)(n=4)</th>
<th>Paediatricians (%)(n=4)</th>
<th>Health assistants (%)(n=3)</th>
<th>Program Officer (%)(n=1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>Female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>0 (0)</td>
<td>26 (100)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>26 (100)</td>
<td>3 (75)</td>
<td>3 (75)</td>
<td>1 (33.33)</td>
<td></td>
</tr>
<tr>
<td>Age in years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21–29</td>
<td>11 (42.31)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30–39</td>
<td>10 (38.46)</td>
<td>2 (50)</td>
<td>2 (50)</td>
<td>1 (33.33)</td>
<td></td>
</tr>
<tr>
<td>40–49</td>
<td>3 (11.54)</td>
<td>1 (25)</td>
<td>2 (50)</td>
<td>2 (66.6)</td>
<td>1 (100)</td>
</tr>
<tr>
<td>&gt;50</td>
<td>2 (7.69)</td>
<td>1 (25)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Years of work experience</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>&lt;1</td>
<td>2 (7.69)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1–5</td>
<td>4 (15.38)</td>
<td>2 (50)</td>
<td>1 (25)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6–10</td>
<td>7 (26.92)</td>
<td>1 (25)</td>
<td>1 (25)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11–15</td>
<td>2 (7.69)</td>
<td>2 (50%)</td>
<td></td>
<td>1 (100)</td>
<td></td>
</tr>
<tr>
<td>&gt;15</td>
<td>11 (42.31)</td>
<td>1 (25)</td>
<td></td>
<td>3 (100)</td>
<td></td>
</tr>
<tr>
<td>Area of work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Birthing Centre</td>
<td>10 (39.46)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternity Ward</td>
<td>9 (34.62)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Characteristic</td>
<td>Midwives (%) (n=26)</td>
<td>Obstetricians (%) (n=4)</td>
<td>Paediatricians (%) (n=4)</td>
<td>Health assistants (%) (n=3)</td>
<td>Program Officer (%) (n=1)</td>
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</tr>
<tr>
<td>Well Baby Clinic</td>
<td>3 (11.54)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antenatal Clinic</td>
<td>2 (7.69)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postnatal Clinic</td>
<td>1 (3.85)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ImmuniClinic Clinic</td>
<td>1 (3.85)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPD*/Community Health Unit</td>
<td></td>
<td>1 (25)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternity Ward/Birthing Centre/OPD</td>
<td>3 (75)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paediatric Ward/Neonate Ward/OPD</td>
<td>4 (100)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outreach Clinic</td>
<td></td>
<td></td>
<td></td>
<td>3 (100)</td>
<td></td>
</tr>
<tr>
<td>Headquarter, MoH</td>
<td></td>
<td></td>
<td></td>
<td>1 (100)</td>
<td></td>
</tr>
</tbody>
</table>

*Outpatient Department

6.2.1 Health professionals’ qualifications

The majority of midwives had received a diploma (n=13) as their highest level of education. The remaining midwives had obtained a certificate (n=8) or bachelor’s degree (n=4) and one had obtained a graduate diploma as their highest level of education. All obstetricians had obtained their qualifications from institutes outside Bhutan, as had all the paediatricians. All obstetricians and paediatricians had specialised in their respective fields of obstetrics and paediatrics, except for one obstetrician who had completed a postgraduate diploma in Family Medicine. All health assistants had a certificate as their highest level of qualification, while the Program Officer had a bachelor’s degree in Public Health. Table 6.2 presents the health professionals’ qualification and the country from which the qualification was obtained.
Table 6.2 Health professionals’ qualifications

<table>
<thead>
<tr>
<th>Health professional</th>
<th>n=38</th>
<th>Country of qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Midwives</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certificate</td>
<td>8</td>
<td>Bhutan</td>
</tr>
<tr>
<td>Diploma</td>
<td>13</td>
<td>Bhutan (11)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>India (2)</td>
</tr>
<tr>
<td>Bachelor</td>
<td>4</td>
<td>Bhutan (2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>India (2)</td>
</tr>
<tr>
<td>Graduate diploma</td>
<td>1</td>
<td>Australia</td>
</tr>
<tr>
<td><strong>Obstetricians</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postgraduate diploma</td>
<td>1</td>
<td>India</td>
</tr>
<tr>
<td>Medical doctor in obstetrics</td>
<td>3</td>
<td>Thailand (1)</td>
</tr>
<tr>
<td>and gynaecology</td>
<td></td>
<td>India (2)</td>
</tr>
<tr>
<td><strong>Paediatricians</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical doctor in paediatrics</td>
<td>4</td>
<td>India (2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thailand (1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Japan (1)</td>
</tr>
<tr>
<td><strong>Health assistants</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certificates</td>
<td>3</td>
<td>Bhutan</td>
</tr>
<tr>
<td><strong>Program Officer</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor</td>
<td>1</td>
<td>Bhutan</td>
</tr>
</tbody>
</table>

6.2.2 Breastfeeding training

Eleven midwives out of 26 who participated in the study had attended breastfeeding-related training at some point during their careers. Among the four obstetricians, two had attended breastfeeding-related training, while two others had never attended any training. Among the paediatricians, only one out of four had not attended any training. Among the three health assistants, only one had attended breastfeeding training. The Program Officer had attended
training on breastfeeding. Table 6.3 presents the training attended by health professionals and the countries in which the training was conducted.

Table 6.3 Breastfeeding training

<table>
<thead>
<tr>
<th>Health professional</th>
<th>Breastfeeding training</th>
<th>Country of training</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Attended</td>
<td>Not attended</td>
</tr>
<tr>
<td>Midwives</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obstetricians</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paediatricians</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health assistants</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Program Officer</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

6.3 Themes from interviews with health professionals

Seven themes consisting of 24 sub-themes emerged from the interviews with health professionals. Five themes were common to all groups of health professionals including the Program Officer, while one theme emerged from interviews with paediatricians, obstetricians and midwives only, and one theme emerged from interviews with midwives only. Most sub-themes were similar across the groups; however, the number of sub-themes differed between groups. The themes and sub-themes are presented in Figure 6.1.
<table>
<thead>
<tr>
<th><strong>Theme 1:</strong> Knowledge of EBF and current breastfeeding status in Bhutan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sub-theme 1:</strong> Knowledge of benefits of breastfeeding and EBF practices (all health professionals)</td>
</tr>
<tr>
<td><strong>Sub-theme 2:</strong> Knowledge of and adherence to the Ten Steps to Successful Breastfeeding (all health professionals)</td>
</tr>
<tr>
<td><strong>Sub-theme 3:</strong> Current breastfeeding and EBF status in Bhutan (all health professionals)</td>
</tr>
<tr>
<td><strong>Sub-theme 4:</strong> Lapse in BFHI designation and breastfeeding-related activities (Program Officer only)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Theme 2:</strong> Breastfeeding is a social norm in Bhutan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sub-theme 1:</strong> Culture of breastfeeding in Bhutan (midwives, obstetricians and paediatricians)</td>
</tr>
<tr>
<td><strong>Sub-theme 2:</strong> Influence of the joint family (obstetricians and paediatricians)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Theme 3:</strong> Barriers to initiation of breastfeeding (midwives only)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sub-theme 1:</strong> Primiparity</td>
</tr>
<tr>
<td><strong>Sub-theme 2:</strong> Mode of birth and other complications</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Theme 4:</strong> Reasons for breastmilk supplementation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sub-theme 1:</strong> Cultural and traditional practices (all health professionals)</td>
</tr>
<tr>
<td><strong>Sub-theme 2:</strong> Return to work (all health professionals)</td>
</tr>
<tr>
<td><strong>Sub-theme 3:</strong> Socioeconomic and educational status of women (all health professionals)</td>
</tr>
<tr>
<td><strong>Sub-theme 4:</strong> Breastfeeding problems (midwives, obstetricians and paediatricians)</td>
</tr>
<tr>
<td><strong>Sub-theme 5:</strong> Advice from health professionals (midwives, obstetricians and paediatricians)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Theme 5:</strong> Barriers to breastfeeding promotion activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sub-theme 1:</strong> Shortage of staff in a busy maternity service (all health professionals except health assistants)</td>
</tr>
<tr>
<td><strong>Sub-theme 2:</strong> Lack of breastfeeding training (midwives and health assistants)</td>
</tr>
<tr>
<td><strong>Sub-theme 3:</strong> Lack of interest from women (midwives only)</td>
</tr>
<tr>
<td><strong>Sub-theme 4:</strong> Breastfeeding support not being conducted actively in ORCs (health assistants only)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Theme 6:</strong> Strategies to improve the EBF rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sub-theme 1:</strong> Increase advocacy about the importance of breastfeeding (all health professionals)</td>
</tr>
<tr>
<td><strong>Sub-theme 2:</strong> Maternity leave and flexibility of time (all health professionals except Program Officer)</td>
</tr>
<tr>
<td><strong>Sub-theme 3:</strong> Expression of breastmilk (paediatricians and midwives)</td>
</tr>
<tr>
<td><strong>Sub-theme 4:</strong> Policy level plans to increase EBF rate (Program Officer only)</td>
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</table>

<table>
<thead>
<tr>
<th><strong>Theme 7:</strong> Breastfeeding support and promotion activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sub-theme 1:</strong> Breastfeeding advice and support (all health professionals except Program Officer)</td>
</tr>
<tr>
<td><strong>Sub-theme 2:</strong> Delegation of responsibilities (obstetrician, paediatricians and health assistants)</td>
</tr>
<tr>
<td><strong>Sub-theme 3:</strong> Fragmentation of midwives’ education role (midwives only)</td>
</tr>
</tbody>
</table>

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Figure 6.1 Themes and sub-themes from interviews with health professionals
6.3.1 Theme 1: Knowledge of EBF and current breastfeeding status in Bhutan

This theme reflects health professionals’ knowledge of the benefits of breastfeeding and EBF. It also reflects their knowledge of and adherence to breastfeeding guidelines, and their perceptions of current breastfeeding and EBF status. This theme is comprised of four sub-themes.

6.3.1.1 Sub-theme 1: Knowledge of benefits of breastfeeding and EBF practices

This sub-theme reflects health professionals’ knowledge of EBF and their perceptions of the benefits of breastfeeding and EBF practices. The sub-theme was common to all groups of health professionals. All of them knew the definition of EBF and the benefits of EBF and breastfeeding. A midwife described the benefits of breastfeeding as:

[The] baby is protected from a lot of diseases. The baby grows up to be a healthy child, productive citizen of the country. If the baby is breastfed well, we see bilirubin gets cleared up from baby’s gut. He doesn’t develop lifestyle-related diseases, like he doesn’t turn up to be obese or whatever and he grows up to be a healthy citizen. (MID 06)

In addition to the abovementioned benefits, breastfeeding helps in prevention of diarrhoea and pneumonia by reducing the danger of contamination and results in a reduction in neonatal mortality and morbidity:

There are a lot of reductions in the mortality and morbidity among the under-five children if a child is exclusively breastfed for the first six months of their age. (PRO 01)

Health professionals, however, were more knowledgeable about the benefits of human breastmilk for babies than the breastfeeding benefits for women. Reported benefits to babies included acquired immunity, reduced chances of illness, increased IQ and increased bonding with mothers. Except for six midwives and two paediatricians, health professionals did not mention the benefits of breastfeeding for women. Reflecting on the benefits of breastfeeding for women, one midwife stated:
For mothers, as soon as the baby is put to breast right after the birth, the mother will not bleed more, and due to lactation amenorrhea, it is also a useful method of preventing pregnancy. (MID 11)

A health assistant summed up the benefits of breastfeeding in the following way:

The baby will get all the balanced diet what mother is getting and there will be bond, attachment with the mother. And breastfeeding is ready-made from the mother’s breast. It is not expensive, it is very cheap. The milk is at the right temperature, the child can have any time. (HA 03)

6.3.1.2 Sub-theme 2: Knowledge of and adherence to the Ten Steps to Successful Breastfeeding

This sub-theme relates to health professionals’ knowledge about the Baby-Friendly Hospital Initiative (BFHI) Ten Steps to Successful Breastfeeding and their adherence to this strategy.

Most health professionals were aware that JDWNRH was no longer a BFHI-designated hospital due to its inability to fulfil the BFHI criteria for accreditation. A midwife who had more than 15 years of work experience stated:

Earlier, yes, you know, when I was a student in RIHS, 15, 16 years ago, we used to see all these Baby-Friendly initiatives, and the ten steps to successful steps of breastfeeding posters pasted everywhere. I think during that time, it was once called as Baby-Friendly Hospital. But it’s very sad to know we are no more a Baby-Friendly Hospital, because I have been told last year when I was attending the Infant and Young Child Feeding our hospital is no more a Baby-Friendly Hospital because we don’t fulfil the ten successful steps. (MID 06).

Most health professionals were aware of most of the Ten Steps to Successful Breastfeeding; however, many were not aware of Bhutan’s National Breastfeeding Policy, which had been in place since 2002. On questioning about the existence of a written breastfeeding policy, one paediatrician promptly said:

There is no written policy. Is there a policy? I haven’t seen any policy. (PED 01)
Similarly, one midwife claimed that she was not aware of a breastfeeding policy and had not utilised it in her Maternity Ward:

_No, I am not aware of that policy and we haven’t used it until now in the Maternity Ward._ (MID 12)

In contrast to the opinions of other health professionals, the Program Officer stated that the National Breastfeeding Policy had been in existence since 2002 and all health professionals had been informed of it during breastfeeding training programs. Furthermore, he argued that if health professionals were not aware of the policy, then it was their responsibility to familiarise themselves with it:

_We have trained health workers several times on Infant and Young Child Feeding practices, whereby we also inform there is a national breastfeeding policy, so in a way what they are saying could be right, but sometimes, I would also say it is their duty to learn themselves._ (PRO 01).

Various factors posed barriers to health professionals in following Step 4 of the Ten Steps, which states that mothers should be helped “to initiate breastfeeding within half an hour of birth” (World Health Organization, 1989, p. iv). Procedures such as caesarean sections or complications with babies such as birth asphyxia immediately following birth delayed initiation of breastfeeding. One midwife stated:

_This is if the mother is like after OT, they cannot gain consciousness because of general anaesthesia, some undergo GA because of severe PIH so it takes more than half an hour to recover from OT itself. So we cannot initiate breastfeeding within half an hour. And baby’s condition like asphyxia, we have to monitor under the oxygen. After that only either we shift or if only baby becomes better, then we start breastfeeding._ (MID 15)

A paediatrician also indicated that it is not possible to help initiate breastfeeding in women within half an hour because of staff shortages:

_Sometimes, not within, half an hour, no, half an hour no, it’s not being done, maybe within one to two hours. There is no staff, there is a staff shortage._ (PED 01)
The Program Officer, because of the nature of his work, did not work in the clinical areas. He reported that he believed all health professionals working with women and babies in the hospital were following the Ten Steps:

As of now I personally never had time to go, but I am very confident it is always there because our nurses [midwives] who are involved in conducting deliveries for the mothers are very much aware of the advantages of EBF, so this is one of the components of optimal breastfeeding, so I can say it is there in practice [to initiate breastfeeding within half an hour]. (PWO 01)

Most health professionals, especially the midwives and health assistants, had a misconception about Step 8, which stipulates that mothers are encouraged to breastfeed their babies on demand (World Health Organization, 1989). Most were of the understanding that the baby should receive timed breastfeeding, instead of breastfeeding on demand as per the recommendation. They stated that they observed newborn babies and their tendency to sleep for a long duration, hence the need for them to be woken to be breastfed. A midwife justified why she recommended timed breastfeeding:

Actually, I advise timed breastfeeding because newborns and new babies tend to sleep for a longer duration and hardly like, only a few babies, they demand the breastmilk, so I advise them to give every two hourly. (MID 22)

Similarly, a paediatrician stated that she recommended timed breastfeeding so that babies can become used to breastfeeding:

We actually advise on a timed basis, so they will become habituated, they will get disciplined, so two hourly and three hourly. (PED 02)

One health assistant misunderstood the phrase “encourage breastfeeding on demand” and said that breastfeeding cannot be demanded:
I think breastfeeding in demand or ordering is not in the practice. I think breastfeeding automatically. Breastfeeding we don’t go on demand basis. It comes automatically, I should say. (HA 03)

Similarly, the majority of the health professionals reported they were not aware of Step 10, “Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic” (World Health Organization, 1989, p. iv). The first breastfeeding group was formed in one area of Thimphu to commemorate World Breastfeeding Week in 2013. One midwife stated:

I don’t know whether such groups exist or not. I have no idea. In maternity ward, we have no idea about such groups. (MID 25)

A few of the health professionals stated they were aware of the formation of the breastfeeding group but were not sure if it was still functioning. This claim was confirmed by the Program Officer, who said that the program, because of limited staff, had not received official support or follow-up:

As of now at least in our country, in Thimphu in Changjiji, we have established, we have identified about 10–12 mothers who are supposed to be called as mother support group, we identified and trained them during the last World Breastfeeding Week. So but again since Nutrition Program being manned by one person or one Program Officer, so there is a lapse where we cannot, we are not able to make follow-up. (PRO 01)

Other than for the steps discussed above, the majority of health professionals claimed to have adhered to the BFHI’s Ten Steps. It was, however, reported that it was not possible to practise Step 9, which states “give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants” (World Health Organization, 1989, p. iv), when babies were admitted with complications to a Neonatal Intensive Care Unit (NICU). The babies in NICU are given pacifiers for medical reasons or when they are kept nil by mouth. One
paediatrician expressed her fears that the public might get the wrong message when pacifiers are used in hospitals for medical reasons:

*Pacifiers are used for sick babies in the NICU who are kept NPO [nil per orally] which might, however, send the wrong message to the public that hospital is doing it so they might do the same.* (PED 04)

6.3.1.3 **Sub-theme 3: Current breastfeeding and EBF status in Bhutan**

This sub-theme reflects the health professionals’ perceptions of the current status of breastfeeding and EBF in Bhutan. This theme was common to all groups. Health professionals agreed that although the breastfeeding rate and duration were exemplary among Bhutanese women, with most women feeding up to and beyond two years, the rate of EBF was very low. One paediatrician stated:

*Of course, EBF rate is very low, though breastfeeding per se I think is very good. They do, but EBF for the first six months is very low because there are many other issues to address.* (PED 01)

Her views were shared by an obstetrician, who said that the rate of breastfeeding in general was quite high, but she was not sure about how many women breastfed exclusively. This was because she had seen many women return to hospital with breastfeeding problems following discharge from hospital. Women were readmitted to hospital for conditions such as mastitis resulting in abscess formation, which, for many, resulted in a surgical intervention to facilitate discharge drainage and to promote recovery:

*From the hospital we start breastfeeding and send them, but I think many women are getting into a problem when they reach home, because so many seem to be coming back with breast abscess that needs even drainage, so I think although the percentage of breastfeeding is high, I do not know how many are doing EBF, and we don’t know how many are turning to bottle [feeding] because of the problem they have.* (OBS 03)

The Program Officer, the majority of the midwives and the paediatricians questioned the validity of a survey conducted in 2010 which shows the EBF rate at six months as 48.7%,
a large rise from 10.4% in 2008. On the other hand, the obstetricians and health assistants did not offer a clear opinion but accepted the survey result without question. The Program Officer was sceptical about the large difference between the two breastfeeding rates because there was a drastic increase within a span of two years. He attributed the discrepancy to the differing methodologies used in the studies. He claimed that such a difference was not achievable within two years because the increase would entail a great change in people’s attitudes and behaviours:

*Since breastfeeding or EBF is something to do with behaviour change, it takes longer time, so within just two years of the period, I think it is impossible to have such a high rate of discrepancies for EBF rate because of behaviour change. (PRO 01)*

There were many reasons provided by health professionals for the low EBF rate. The low EBF rate was also attributed to certain traditions and cultural practices that women follow after birth, the low literacy rate and return to work.

However, a few of the health professionals felt the rate of EBF was increasing. They attributed this increase to the fact that many women were becoming more educated and thereby aware of the importance of breastfeeding. They also observed that educated women took the initiative to find out about breastfeeding. A midwife stated that:

*Mostly the educated women, they exclusively breastfeed but most of the people, those who are not educated, they don’t tend to exclusively breastfeed. Since they are educated, they also go through the internet, they browse and then they get more knowledge. (MID 24).*

6.3.1.4 **Sub-theme 4: Lapse in BFHI designation and breastfeeding-related activities**

This sub-theme reflects the Program Officer’s perceptions about why JDWNRH was not able to maintain its Baby-Friendly Hospital designation and why lapses related to breastfeeding promotion occurred. JDWNRH was once designated a Baby-Friendly Hospital but failed to adhere to the criteria set by the WHO and UNICEF, and as a consequence lost its accreditation status. The Program Officer reasoned that because of regular changes in staff at
management level within the Nutrition Program, the loss of focus on maintaining the hospital as a Baby-Friendly Hospital may have been a reason for the failure to seek reaccreditation. He also speculated that hospital management were also negligent in its failure to communicate with the Nutrition Program about the Baby-Friendly Hospital status and ongoing requirements in maintaining its accreditation.

In addition, the Program Officer stated that the outdated National Breastfeeding Policy, which had been in place since 2002, could have contributed to JDWNRH’s loss of designation as a Baby-Friendly Hospital. In reference to this policy, EBF is recommended until four months, whereas the WHO recommendation has been extended to six months (World Health Organization, 2015). The Program Officer referred to other possible factors affecting breastfeeding promotion. Every year, health workers are trained in Infant and Young Child Feeding, including breastfeeding skills and knowledge. Due to a lack of monitoring and supervision by qualified health professionals, this program does not include an assessment of the effectiveness of care delivered by health workers in the community:

*This is one area where the program needs to be strengthened that of course, we do make some follow-up, but then there are no such concrete monitoring and supervision tools developed. If the program finds the time or the program developed the relevance, the program always try to monitor or supervise or make a follow-up on the training, whether it is being implemented in the field.* (PRO 01)

In addition, the Program Officer argued that lapses in the program were due to the Nutrition Program being staffed by an inadequate number of people:

*Since Nutrition Program being manned by one person or one Program Officer, so there is a lapse where we cannot, we are not able to make follow-up.* (PRO 01)

6.3.2 **Theme 2: Breastfeeding is a social norm in Bhutan**

This theme emerged only from the interviews with midwives, obstetricians and paediatricians. It reflects their perceptions that breastfeeding is part of everyday social norms
for people in Bhutan. Related to this theme, one sub-theme was common across the three groups, while one emerged only from interviews with paediatricians and obstetricians, and one sub-theme emerged only from interviews with paediatricians.

6.3.2.1 Sub-theme 1: Culture of breastfeeding in Bhutan

This sub-theme represents the views of the paediatricians, midwives and obstetricians about the unique breastfeeding culture in Bhutan. They reported that breastfeeding was accepted by women and had become a social norm in Bhutan. One paediatrician claimed that as soon as a baby is born, women ‘happily breastfeed’ and they breastfeed everywhere. Women breastfeed openly in public, without fear or embarrassment, as it is socially acceptable:

_This is a social norm that they breastfeed the baby and they don’t bother and even in town I see the shopkeepers are breastfeeding even when they are working._ (PED 04)

One midwife commented about breastfeeding in public:

_In our society, once a girl and woman become a mother it is culturally accepted she can breastfeed anywhere, any places she wants. She can open up [expose] her breast and feed in the public places. She really need not hesitate. That is in us and I think it is a good thing in Bhutanese society. That is what make women encouraged to feed even through our personal experiences. Even in front of male relatives. Till we get married and have a child we always cover our body and things, but as soon as, the moment you become a mother, that is all gone from your mind and brain. I think that is a good thing._ (MID 13)

However, the health professionals claimed that in Bhutan, a culture of non-exclusive breastfeeding exists too. Women believed in non-exclusive breastfeeding, which they understood to be EBF. According to a paediatrician, a culture of non-exclusive breastfeeding has been in existence for a long time:

_In our culture, the mixed feeding has been going on since time immemorial. So it’s very difficult to convince people and they feel when they are doing breastfeeding as well as feeding other things, they still think that they are exclusively breastfeeding, but in fact they are not._ (PED 03)
Similarly, one obstetrician described women breastfeeding soon after birth and not considering use of formula (bottle) feeding. It was also acknowledged that women were of the understanding they should give other foods in addition to breastmilk:

_Bhutanese think the babies should be breastfed, I don’t think they ever think of bottle feeding. But on the other hand, our Bhutanese people also feel when the babies cry, there may be other reasons also, but they invariably feel babies may be hungry._ (OBS 03).

### 6.3.2.2 Sub-theme 2: Influence of the joint family

This sub-theme emerged from the interviews with paediatrician and obstetricians. Bhutan has a culture of the joint family or extended family where all family members live together, and this was perceived as a powerful influence on breastfeeding women. One paediatrician stated that family members influence women by giving other foods and arguing that breastmilk alone is not enough for babies. New mothers were reportedly made to give other foods to their babies depending on who the authority figure in the family was; typically it was the baby’s grandmothers:

_Again the family influence, we all live in a joint family, because of that, in a joint family, grandparents, they are of the opinion only milk is not enough._ (PED 01)

Similarly, an obstetrician affirmed that:

_Grandmothers, because they have certain beliefs they have been brought up by feeding early butter and so those engagement is passed down to the daughters as well. And then because depending on who is the real authority in that family, whether the grandmother has a lot of say in the mother, she decides what is to be done even though the mother may be knowing breastmilk is the best._ (OBS 01).

Women, following birth, were subjected to the advice and influence of family members. One paediatrician acknowledged that as long as the culture of joint family exists, the influence of family members will persist. He argued that people are social beings and
when living together in a joint family, looking after each other and this cohesiveness are just as important as breastfeeding a baby:

*I think this problem will continue to exist of course, and why not? If you are looking only at the point of breastfeeding, then it’s a bad influence, but if you look at it holistically, all these are required, isn’t it? You don’t exist just for the breastfeeding, you exist as a human, I mean social animal, you have to exist together.* (PED 03)

However, living in a joint family has advantages too, because the female family members are able to provide breastfeeding support to new mothers:

*After delivery, the families are there to support each other so they have, the mother-in-law is there, usually, the mother is always there to support the mother and thereby increasing the breastfeeding.* (PED 02)

Another reported advantage of living in a joint family includes when a female member of the family is educated and that person can share information, knowledge and skills about breastfeeding with other family members:

*The cultural factors that would help is, in so many things, we have a joint family and we live in a society which is very, very close. So I think if we can educate one or two women there. That would take us in a very long way.* (PED 03)

### 6.3.2.3 Sub-theme 5: Role of husbands in breastfeeding

This sub-theme reflects only the paediatricians’ views regarding the role of husbands in breastfeeding. Although Bhutan has a culture of joint-family living, it was reported that fathers or partners contributed little, if at all, to decisions about breastfeeding made by women:

*In Bhutan, fathers have no role in breastfeeding, in pregnancy, child rearing and it’s going to take a generation to change this.* (PED 01)

A paediatrician expressed the view that husbands do not feature at the top of the hierarchy in a joint family because, generally, when they become a father they are either
young or do not possess authority in their family. Thus, their views and opinions are not sought by elders in the joint family:

Well, [a] husband doesn’t play much role by the way. Husband, I mean, unless he is a very big guy in the, in the, you know, husband generally when they start having the children are not in a bureaucratic system where they reach the ladder, where they can order everybody in the family to listen to him. So it’s not like, so childbearing age is around, the husband must, around 25, 30, like 35. So he has not reached a level. So no one gives much shit to what he says, I mean in a joint family. (PED 03)

However, one paediatrician stated that she believed husbands play important roles in supporting women in breastfeeding. This is because most men are now more educated, can get information easily from mass media such as the internet and as a consequence understand more about the importance of breastfeeding and its advantages:

The fathers, I personally feel, I mean, they will always encourage breastfeeding, yes, and then I mean education level and then understanding will be better now because of the proper education and they also see on their website, the internet, you know, what are the breastfeeding, what are the advantages. (PED 02)

6.3.3 Theme 3: Barriers to initiation of breastfeeding

This theme reflects midwives’ perceptions of the barriers they face while helping to initiate breastfeeding in women during their admission in hospital.

6.3.3.1 Sub-theme 1: Primiparity

Most of the midwives reported that initiating breastfeeding within half an hour of birth, in accordance with the recommendation of the WHO, is not possible. This is because some women giving birth for the first time face problems with initiation. One midwife attributed such problems to new mothers’ lack of experience and skills in breastfeeding:

For new mothers, primi mothers, I have helped them breastfeed and since they have never fed before and they don’t know how to feed. (MID 05)
Most primiparae women are subjected to procedures such as an episiotomy or sustain perineal or vaginal injuries as a result of birth and require repair as soon as possible. The midwives, therefore, claimed that when they performed a repair of an episiotomy, perineal or vaginal injury, these procedures took time, resulting in a delay in midwives initiating breastfeeding within half an hour after birth:

*In primi case we give episiotomy and it takes the time to stitch and by that time it is already one hour. By one hour we are able to initiate breastfeeding.* (MWO 18)

In addition, the midwives stated that primiparae women faced difficulties in breastfeeding, even though these women might have received breastfeeding education during pregnancy. Thus, one midwife felt that women should be given education about breastfeeding after birthing as well as prior to delivery:

*Usually the primi mothers, they will just understand the theory, but then after delivery when relating to practical it is completely different than theory. So it is very difficult for them. So I think there should be some education classes here too.* (MID 15)

### 6.3.3.2 Sub-theme 2: Mode of birth and other complications

According to midwives, another reason women were not able to initiate breastfeeding within half an hour of birth was the mode of birth such as a caesarean section. They argued that it takes about an hour for women to be brought back to the ward from the operating theatre, after which they lie flat. This postoperative maternal positioning makes it very difficult for midwives to help attach a baby to the mother’s breast:

*Sometimes it is difficult for us also to put the baby onto the breast as the mother is lying flat and sometimes the baby is very tiny. We have quite a number of mothers who are unable to breastfeed because after the caesarean they cannot walk, they cannot turn, so what we do is one of the sisters [midwives] stay with the mother and they help with breastfeeding.* (MID 14)
Midwives found it difficult to encourage women to initiate breastfeeding immediately following birth because of pain associated with the process of birthing, epistotomy repair, perineal or vaginal injury and/or related repairs. While they tried to assist women in feeding their baby, some refused help:

Some mothers, they complain of pain even after giving analgesia and they don’t breastfeed comfortably and they want to rest. So the baby is left out. Some mothers we try to feed, but some mothers they don’t want. They are having pain and all and they don’t want to breastfeed, they want to sit comfortably and only then give [breastfeed]. (MID 10).

Delay in initiation of breastfeeding was reported to be caused by some family members who discouraged immediate breastfeeding because they perceived the woman needed to rest and take time to recover following a difficult labour:

And the relatives especially, they don’t encourage. They say she is having pain and let her take rest and they give [breastmilk] supplements. (MID 12)

Other maternal conditions such as postpartum haemorrhage or retained placenta were also reported to cause a delay in initiating breastfeeding within half an hour of birth:

If the patient has PPH, retained placenta, so we take them to OT and that time it is a problem while feeding. Otherwise, normal childbirth we do breastfeeding within one hour of delivery. (MID 06)

Similarly, a baby’s condition such as birth asphyxia or low birthweight could hinder or delay initiation of breastfeeding:

No, some mothers, those babies, we have problems like asphyxia, low birth, and then we have to shift to NICU. In such cases, we don’t get time to do [initiation]. (MID 24)

In contrast to reports by women, none of the midwives cited hospital routines such as taking the baby away to be cleaned, weighed and administered Vitamin K as barriers to initiation of breastfeeding, which according to the women took longer than half an hour.
6.3.4 Theme 4: Reasons for breastmilk supplementation

This theme is common to all the groups and reflects the health professionals’ perceptions of reasons for feeding supplements to babies other than breastmilk. It is comprised of five sub-themes, the first three are common to all the groups of health professionals. Sub-themes four and five emerged from the interviews with the midwives, obstetricians and paediatricians.

6.3.4.1 Sub-theme 1: Cultural and traditional practices

Cultural and traditional practices adopted by women were perceived to hinder EBF. It was reported by health professionals that babies were being supplemented because of the cultural and traditional practices women followed after their baby’s birth. One paediatrician indicated that he observed varying practices in Bhutan. In the eastern part of the country both mothers and babies are given alcohol to drink, while in the western part of the country food made out of rice powder is given to babies. In both regions, colostrum was not given because it was considered to be stale and ‘off’ and would cause diarrhoea, and until the ‘white milk’ is produced babies are given other drinks and foods:

If you go to the east of Bhutan, you see a newborn baby is fed with alcohol, some of them do feed alcohol, isn’t it? The mother takes alcohol, the baby takes alcohol. If you come to the west, you will find they are being fed rice powder also, thinking the initial milk they produce is not good, so we started, probably started like this from before, isn’t it? And there is a myth surrounding colostrum. They think colostrum is bad and therefore they resort to feeding butter. (PED 03)

Butter was believed by women and their family to be a healthy food. It was considered food for the rich and it was fed as the first food, with the underpinning belief that babies would continue to have butter throughout their lives. Another belief was that butter is far more nutritious than breastmilk and should be the first food soon after birth because a baby would be hungry after separation from the umbilical cord. As a consequence, women believed that the first food should be butter:
This is a belief in our community, in our society that newborn should be fed with butter before the breastmilk. I heard my mum saying if you feed the baby with butter baby will always be fed throughout his life. Butter is considered to be very good and very rich food and baby will always be having that in life. Another thing is in our Bhutanese society butter is said to be very nutritious, I think more than the breastmilk. I think that belief is still there. (MID 13)

According to one midwife, honey is given for a similar reason:

Our grandmothers, what they think is honey and the butter are the best things to be given to the baby, so this is the culture. So they think whatever sweet thing they have taken in the first time, the baby will be like that. (MID 14)

Other practices, such as giving drops of bath water to a baby before immersion in the bath, were cited as common by most of the health professionals. The reason, according to a health assistant, is:

Before they start to wash, they dip the fingers and make baby drink the water. In our belief, it is said when we immerse the baby in hot water they will feel thirsty. (HA 02)

Family elders were reported to encourage women to follow such practices because breastmilk alone was perceived as insufficient to satisfy babies’ hunger and thirst. Elders, therefore, were reported to pressure women to give solid foods to newborn babies in order to promote health and faster growth. One midwife reported:

It might be due to culture. The older people, they feel if the baby is only breastfed, they are not getting enough food, they will not grow well, they will not be healthy, the baby should be given other food to grow faster and be healthy. I think it is the culture. (MID 24)

It was also reported that elders justified giving other foods to babies by claiming they had done so and new mothers should continue the same practice. Therefore, women were reported to give in to the pressure applied by elders, and in deference to their elders women gave solid foods to their babies:
Older people, they think baby should be fed more so. They always doubt babies having enough from the mother. (OBS 03)

6.3.4.2 Sub-theme 2: Return to work

Returning to work was frequently cited by all groups of health professionals as a reason for women to supplement their babies. It was reported by the health professionals that an increasing number of women, in government and private sectors, return to work after completing their maternity leave and for various reasons cannot practise EBF, as illustrated in the following quote:

Government employee there is no leave, maternity leave, civil servants get only three months, private employees they get only one month. Then for the women who live in the villages, they have to attend to the fields, farm work, so babies get left behind with grandparents. (PED 01)

A paediatrician supported this claim:

Some of them are working in a private sector where they get only two months of maternity leave and in government sector also, we have only three months. So it’s very difficult for women to balance their career as well as breastfeeding to go to work and therefore they do resort to other formula feeds. (PED 03)

This view was also supported by an obstetrician:

With the current trend of the mothers who are working, I think problem is because of their inconvenience, they may not be able to engage in full-time in breastfeeding so that’s why supplementary breastfeeding is coming into play. (OBS 01)

Factors such as lack of time, lack of flexibility in working hours and lack of provision for women to bring their baby to workplaces to breastfeed or to express breastmilk hindered EBF until six months:

Six months, I think mothers they can’t do EBF due to the inflexibility of the time for the mothers and there is no place or secret place for expressing breastmilk. They can’t express their milk. They don’t have like high pumping facilities. (MID 23)
Due to the lack of breastfeeding-friendly facilities within the workplace, women have no choice but to leave their baby at home with other people and then feed with supplements:

*After three months they have to go back to their office and during their absence, their nanny or their mother, they give water and/or something with milk, and is not exclusively breastfeed. They think the baby is hungry. And they give supplements.* (MID 10)

6.3.4.3 **Sub-theme 3: Socioeconomic and educational status of women**

This sub-theme reflects the views of the health professionals about how the socioeconomic and educational status of women influence EBF. It was noted that women who worked in private firms or companies were disadvantaged in comparison with those working in government organisations because they had shorter maternity leave. Health professionals reported that women would not be able to ask for an extension of their maternity leave due to fear of losing their jobs. One midwife stated:

*But for the poor people, like I told you, in the private sectors one month and after that, they lose their job if they don’t go back to work.* (MID 06).

In addition, it was reported that women’s workplaces may be far from their homes and typically they did not have the luxury of their own private vehicles. This limited women’s ability to go home during their work breaks to breastfeed their babies and return to work on time. One midwife stated:

*Maybe the economic status. Maybe if they have a car of their own, maybe the family support is very good and they can bring the baby to their job places and breastfeed, which is sort of difficult for some mothers.* (MID 12)

Similarly, one paediatrician asserted that in urban areas not all working women can afford to take time off work to stay at home to breastfeed. He reasoned that for some women, earning a livelihood comes first before worrying about EBF:
Some of them do not have enough to eat, some of them do not have enough [clothes] to wear. (PED 03)

The paediatrician’s views were echoed by a health assistant:

One thing is this, in Thimphu, most women are working, they are in service and frankly speaking of sustainability. When I talk about sustainability, we have to look at income, they don’t get income if they don’t go to work, and that’s why I feel they go for artificial feeding. (HA 02)

To work in the fields, women leave their babies with grandparents and they are then fed with other foods:

In the rural setting, what I find again is very difficult. There is no support, nothing. They are always working in the field and it’s very difficult to take the baby to the field, so they are keeping [babies] at home with Angay [grandmother] and Agay [grandfather]. That’s how they land up to supplementing babies even butter, cow’s milk, whatever, so in the community in the rural setting also very challenging, as well as in an urban setting, those who are working in office, do not get sufficient maternity leave, that’s how it is. (PED 04)

One midwife asserted breastmilk supplementation needs to be considered by women living in poverty because they can be anaemic or weak following pregnancy, labour and birth, resulting in reduced milk production and an unsatisfied baby:

Some are poor and because they think breastmilk is not enough and they are very anaemic also, weak and they have so many works to do, so they thought their milk is not that enough for the baby. (MID 14)

A common perception held by all of the health professionals was that most uneducated women supplement their baby with formula milk or even solid food. They perceived that these women lacked knowledge about the importance of breastfeeding and, as a consequence, did not practise EBF. On the other hand, educated women who had knowledge about breastfeeding were perceived as more likely to practise EBF. An obstetrician claimed:
Especially those who are educated or aware of benefits of breastfeeding, I think they do EBF. Whereas if you talk to one who may be uneducated, who have no information, most of them, even right after delivery, they give supplements. Besides the supplements they even start feeding solid food also. (OBS 02)

Similarly, midwives felt that uneducated women fed their babies with breastfeeding supplements once they were discharged from hospital:

*Mothers who are uneducated, once they go from the hospital they feed other things once they are at home like Lactogen. And they feed wheat flour.* (MID 20)

*Most of the people are not so educated, that’s why they don’t understand the benefits of breastfeeding. That’s why the status is not so good.* (MID 17)

The Program Officer perceived illiteracy as an obstacle to women practising EBF. He argued that unless women were educated, it would be difficult to change their behaviours or attitudes, even if their family members wanted to assist them with breastfeeding:

*I think to improve something or to change the behaviour and attitude of the people, I think there should be education. To have a good family or to take care of the health of the family members, a mother has to be educated. Unless the mother is educated, no matters how the other members implement or try to do good things, there are some obstacles in implementing or carrying out if she does not accept the things or if she does not understand the benefits of all those good manners or good practices.* (PRO 01)

Furthermore, the Program Officer perceived women to consider EBF unnecessary and attributed this to women’s lack of education and knowledge. He noted that women care less about EBF because they are reassured by common knowledge that people have survived for many years prior to the existence of the breastfeeding recommendations

*Bhutanese mothers take it for granted [EBF] is not required by the children because especially the people who are not literate, they do not understand all the benefits of EBF. So they consider that when someone survived a long time back, why not the present child can survive without EBF?* (PRO 01)
6.3.4.4 **Sub-theme 4: Breastfeeding problems**

This sub-theme emerged from the interviews with midwives, obstetricians and paediatricians and relates to how breastfeeding problems posed barriers to EBF. It was reported that breastfeeding problems such as cracked nipples, sore nipples, breast engorgement and even mastitis were among the reasons for women supplementing their breastmilk with formula feeds. Furthermore, health professionals argued that breastfeeding problems were experienced because of variations in nipple shape and size, or flat, inverted and small nipples.

One midwife stated:

*They have inverted nipples, and nipples are very small. Then they find it very difficult in breastfeeding. And they tend not to give, they don’t give proper breastfeeding. And that develops sore. Then it hampers their breastfeeding.* (MID 24)

Women developed these problems due to their lack of knowledge about correct positioning and attachment of the baby to the breast. As a consequence of these problems, one paediatrician stated:

*Mother’s give up and go for Lactogen and then has difficulty re-establishing direct breastfeeding.* (PED 02)

According to health professionals, women who supplement their baby with formula feeds perceive their breastmilk supply to be inadequate. This perception of an inadequate milk supply was reinforced by baby crying and interpreted as a sign of hunger. Moreover, health professionals reported that some women did not consider colostrum breastmilk and so their baby was given other feeds until ‘white milk’ came in:

*Well, again, here, it’s the notion that, we know that first few three or four days only colostrum is available in the mothers, you know. And because of the fact that colostrum is not produced in large quantities, you know, they expect magic to occur, you know, milk should be flowing. And so the baby starts crying. And then the first reason they think is baby is not getting enough milk and therefore they resort to formula.* (PED 03)
A midwife related how she would find parents giving formula feed to babies while they were in hospital. These women explained that they were giving formula because of their inability to produce sufficient milk. The midwife argued that women remained sceptical about the sufficiency of their milk production even when health professionals reassured them they were producing enough milk:

*When the mother’s [milk] production is less, they think it is not enough for the baby and they start supplementing without asking us. Some they asked us. Even if we say it is enough, they are not convinced.* (MID 07)

Paediatricians also reported that the majority of Bhutanese women experienced either no breastmilk production or a delay in production which were not related to any underlying medical condition. Instead, they argued the delay was most likely to be due to a lack of skin-to-skin contact between a mother and her baby. This lack of contact was perceived to occur because of a cultural belief that a baby is an impure being at birth. A further explanation for the lack of skin-to-skin contact was a shortage of health professionals to provide women the support they need with breastfeeding:

*Actually, since this skin-to-skin contact is not yet implemented, so I observed some of the cases of delayed milk production without any reasons e.g. anaemia, thyroid problems. If there is the medical reason [it is] reasonable. This delayed milk production is definitely also because of lack of support if there is no medical reason.* (PED 04)

6.3.4.5 Sub-theme 5: Advice from health professionals

This sub-theme reflects the views of midwives, paediatricians and obstetricians. One of the barriers to EBF is advice from health professionals to supplement breastmilk with formula feed. Health professionals reported that they gave this advice if they assessed a woman as having inadequate breastmilk production. Midwives stated that they reported inadequate breastmilk production to doctors after all support strategies for a woman had been exhausted.
In response, doctors usually recommended supplementation of breastmilk with a formula feed until the ‘milk comes in’ and breastfeeding is established. One obstetrician stated:

*Where there is no milk at all or when the lactation is not established, we advise, at least for the first two days but once breastmilk has come or is established, then we tell them [women] to discontinue or switch over to breastfeeding.* (OBS 02)

Similarly, a paediatrician reported recommending breastmilk supplements when a baby is sick or not gaining weight:

*We advise supplements only when they are too sick, sometimes mother’s milk is not good, sometimes when the baby is not gaining weight adequately with mother’s milk then we add on top, top up.* (PED 01)

It was reported that some midwives do not wait for a doctor’s order and proceed to advise women to supplement their breastmilk with formula. This was because the benefits far outweighed the risk of not giving this additional feed to babies. The potential risks for babies include dehydration, development of a fever and sepsis:

*Usually, babies, they develop dehydration fever and we have to send blood for sepsis, so I think it is better to supplement if there is no breastmilk production at all. If there is breastmilk production then we don’t supplement.* (MID 19)

Another midwife stated:

*For the first few days, some mothers do not have breastmilk production so some staff advise them to give them Lactogen. Of course, we try to feed them, also we try to help them breastfeed, but if there is no breastmilk I think that is the best step. Otherwise the baby will be dehydrated.* (MID 05)

Midwives from the Postnatal Clinic and the Lactation Clinic claimed that when women come to them they have already supplemented their baby on the advice of midwives from the Birthing and Maternity Wards:

*Here in the Postnatal Clinic, where mothers come after one week, three weeks and six weeks, when I advise them not to give anything but only breastmilk until six months, they
said hospital staff themselves have introduced the artificial feeds because they have the problems of not enough milk. They said they already advised them before they are discharged only. (MID 04).

One practice reportedly being carried out by midwives to get a baby to attach to the breast is feeding 10% glucose or smearing it onto the mother’s nipples. A midwife acknowledged that she carried out this particular practice:

When a baby is not sucking or opening their mouth we give dextrose 10% but when we were not there they were using water. Yes, we are. We give few drop for putting the baby to breast. (MID 17)

6.3.5 Theme 5: Barriers to breastfeeding promotion activities

This theme addresses health professionals’ perceptions regarding barriers to breastfeeding promotion.

6.3.5.1 Sub-theme 1: Shortage of staff in a busy maternity service

This sub-theme reflects the perceived shortage of health professionals. Health professionals reported that whenever possible they tried to promote breastfeeding, but because of the limited staff number and the large number of women seeking care, they lacked sufficient time to provide comprehensive breastfeeding education. For example, in the Antenatal Clinic it was reported that two midwives cater to 50 to 60 women per day, and they briefly inform women about EBF but are not able to provide any other information to pregnant women due to time constraints. Similarly, the Birthing Centre consists of the first-stage room with five beds, five birthing suites and an ‘immediate’ postnatal ward with five beds, for which three to four midwives are rostered each shift. Midwives claimed that they were always occupied with conducting births and did not get time to provide breastfeeding information and support. In the Maternity Ward, three midwives on each shift provide care for 36 women admitted for induction of labour, complications during pregnancy (such as hypertensive disorders), postnatal women and babies, women admitted for pre-and post-caesarean section care and
gynaecological cases. These midwives reported that due to these various constraints, they were unable to provide women with breastfeeding information or education:

*We have multiple cases like gynae, we have to give care for all. Pre-operative, post-operative and sometimes we have so many babies, more than twenty, and because of a shortage of staff we are not able to provide effective breastfeeding support.* (MID 17)

The acute shortage of midwives was also acknowledged by a paediatrician, who recommended that midwives were required, especially in the postnatal area:

*We should have dedicated staff, more nurses [midwives] to look after the postnatal areas. Because at the moment what is happening is, I think we have three staff in the morning. And all of them, maybe 80% of them, they are looking after the mother, and maybe one is kept as a baby nurse and her duty is just to see the baby is feeding well.* (PED 03)

A staff shortage and busy workloads were also found to affect paediatricians’, obstetricians’ and the Program Officer’s breastfeeding promotion activities. Paediatricians claimed that due to the nature of their work (where they looked after only sick babies) they were not able to promote breastfeeding. Further, they claimed that due to a large workload, they were not able to provide adequate breastfeeding education to women, even when they were providing care for their babies. Similarly, one obstetrician stated they:

*Tend to focus on the primary work and when there are plenty of patients we don’t get time to discuss breastfeeding. We even forget to do breast examinations while doing our work.* (OBS 04)

The Nutrition Program was run by one Program Officer and as a consequence there were lapses in delivering program activities including follow-up processes:

*Since Nutrition Program being manned by one person or one Program Officer, so there is a lapse where we are not able to make a follow-up of programs implemented.* (PRO 01)

It was reported by health professionals that staff shortages, especially among midwives, resulted in them being overworked. Their very demanding workloads resulted in
lack of motivation and initiative in the workplace, and led them to compromise on best practice, particularly for breastfeeding:

First thing is the bottleneck of a shortage of staff, they are overworked, and that’s how they land up compromising on the ideal [practice]. This kind of motivation is lacking in here. If the motivation is there, maybe we can initiate within our local things, but they have got used to being given by others. Otherwise, the proactive initiative is very much lacking in this setting, because of the work overload. And they are getting used to compromising on practices. (PED O4)

6.3.5.2 Sub-theme 2: Lack of breastfeeding training

This sub-theme emerged only from the interviews of midwives and health assistants, where their lack of knowledge and skills about breastfeeding were reported as barriers to effective breastfeeding promotion. Of the 26 midwives who took part in the study, 11 had breastfeeding-related training, while one of the three health assistants had undertaken the training. Most of the midwives and health assistants identified that they did not have the required knowledge and skills to support breastfeeding women. Even one midwife who had undergone the training stated:

I think I need more training, I am not confident. I am just trained in IYCF and I am not much confident in helping with breastfeeding. (MID 04)

It was reported that due to a lack of professional development in breastfeeding knowledge and skills, midwives and health assistants had little confidence to assist women who sought their help with breastfeeding. In light of this deficit, midwives stated they frequently drew on their own breastfeeding experiences to help women. Health assistants added that whatever advice and information they provided on breastfeeding might not be enough. One health assistant argued that he could provide more education about breastfeeding if he had received formal training:
They [women] come and ask something about breastfeeding knowing I am the health worker and I am not able to clearly help them, that’s the problem. I had no formal training. So I face a tough time when I have to deal with breastfeeding issues. (HA 02)

Midwives described how they felt in relation to the importance of breastfeeding training programs and opportunities to extend their practice knowledge. They referred to a misinterpretation of their scope of practice, involving only care of women but not babies, at Ministry level. They argued that it is in the Birthing Centre and the Maternity Ward where initiation of breastfeeding occurs, midwives are the ones working with babies in these areas; hence, they believed they should receive continuing professional development through breastfeeding training programs. One of the midwives made the following eloquent statement:

Other thing I wanted to tell was whoever is at the policy level or whoever is at program level, these people should understand and know Birthing Centre and Maternity Ward staff play a great role in breastfeeding and almost, I think national data shows initiation of breastfeeding is quite high and I think this, they should, it is being done from the birthing place. And they should also involve people not only in the country, they should also involve people for international conferences and all. So this will empower the staff working here and also the people will be more committed to work. Just now there is no recognition, wherever you work it’s the same thing you get the same salary. Whether you work in the day clinic or night, or whether you work in the Birthing Centre where we deal with two lives, it’s the same thing, there is no recognition. Sometimes it is really disheartening. (MID 13)

6.3.5.3 Sub-theme 3: Lack of interest from women

This sub-theme emerged only from the interviews with midwives and reveals that one of the perceived barriers to breastfeeding promotion and education refers to women and their lack of interest. It was reported that staff shortages and busy work schedules prevented midwives from providing comprehensive breastfeeding support, and women themselves did not take the initiative to seek information from them. Formalised breastfeeding education programs were
not available for women during pregnancy, but sometimes there were ad hoc opportunities for health professionals to provide education. Midwives described their perception that women were not interested in attending these breastfeeding education classes or programs. One midwife stated:

_They give health education to the mothers in a day, but what I saw was most mothers were reluctant to come. They wanted to get their antenatal check-up done fast and go home. So that’s how they miss breastfeeding information. I saw some sisters [midwives] educating the mothers. But everyone was in a hurry to leave._ (MID 12)

Midwives attributed the unwillingness of pregnant women to attend breastfeeding education as based on their assumption that breastfeeding was a concern to be considered after birth:

_During pregnancy, they don’t come to Lactation Clinic or elsewhere. They just visit Antenatal Clinic. I think they focused more on antenatal, not on breastfeeding. So maybe they think breastfeeding will only happen after delivery. So they are more focused on before delivery complication._ (MID26)

However, even after birth, it was reported that women displayed no interest in learning about breastfeeding. It was also reported that women were eager to be discharged from hospital as soon as possible:

_That’s because most of the patients do not like to stay in the hospital. They are eager to go home. I think they are all busy, mothers are busy, so they don’t like to listen to health education._ (MID 08)

**6.3.5.4 Sub-theme 4: Breastfeeding support not being conducted actively in ORCs**

This sub-theme emerged only from the interviews with health assistants, who conduct outreach clinics. Contrary to the function of ORCs, where one of the services is provision of maternity and child services (Human Resource Division, 2014), health assistants claimed that they had not been able to promote breastfeeding. In addition, they reported that they were limited to providing occasional health education on breastfeeding and referring women with
problems to hospital. It was reported by health assistants that clear written guidelines did not exist within their standard operating procedures on how to assist women with breastfeeding. They also described a lack of resources, such as shelter and privacy, to provide hands-on support to breastfeeding women. Most of the ORCs are conducted in open space or under a tree and are not only an inconvenient setting for women and health assistants but lacking privacy and limiting their ability to maintain confidentiality of information:

*The problem is we don’t have sheds, we do [ORC routines] in open air. So people cannot wait for so long. First and foremost what we do is immunisation, and then we go for treatment, and so breastfeeding mothers cannot wait for a long time. That is the problem. And because of no shed, it is very difficult even to give a health education. (HA 02)*

Health assistants stated that most women presumed the ORCs did not offer antenatal services and instead they went to hospital. Therefore, one health assistant, who had received training and skill development for breastfeeding assistance, rarely had a chance to practise hands-on skills due to this misinformation:

*We hardly come across these pregnant women, because ORCs as such I told you earlier we do EPI session, family planning and then the treatment part, so people are aware ANC activities are not going to take place in ORCs. That’s why I think they are coming all the way from their place to hospital only. (HA 03)*

6.3.6 **Theme 6: Strategies to improve the EBF rate**

This theme was common to all the groups of health professionals and identifies the strategies offered by health professionals to improve the EBF rate.

6.3.6.1 **Sub-theme 1: Increase advocacy about the importance of breastfeeding**

This sub-theme was common to all health professionals and reflected their views on how increasing advocacy about the importance of breastfeeding would help improve the EBF rate. Health professionals reported a need for increased advocacy for breastfeeding because it was assumed that women and their families supplemented babies because of their lack of understanding of the importance of EBF. One midwife stated:
We need to do more awareness on this. And we have to share about the benefits of breastfeeding. We have to educate mothers more on breastfeeding. I think that can help to improve EBF. (MID 17)

The Program Officer advocated for increased awareness about the importance of EBF:

*To me, EBF is very important and we need to scale up or promote or create awareness among the public so they understand the benefits of EBF.* (PRO 01)

It was argued that breastfeeding promotion and education programs should target not only women but also their support persons, family including grandmothers, husbands and friends, because of their influence on new mothers and breastfeeding:

*Target relatives and spouse as they tend to influence the mother and at home she has more time with her families, so we have to target them also.* (MID 04)

It was recommended by health professionals that a special effort be made to include women’s partners in the education. One midwife stated:

*I think there should be health education together, with husband and wife together, during antenatal and postnatal, I think that would be better.* (MID 15)

Health professionals asserted that if women were to be given breastfeeding information, the best timing would be during their pregnancy. It was argued that if breastfeeding information was provided while women were in either the Maternity Ward or birthing suite, they were more likely to be in pain and not receptive to this information:

*We have to educate the mothers, maybe during pregnancy, how we establish breastfeeding, what you need to do right after delivery to produce milk, so this kind of things which we need to do so both educate mothers and the staff.* (PED 04)

When people come for ANC, ANC staff could talk on these, on the importance of breastfeeding, so it could reduce the problem when you go for Maternity Ward, to delivery rooms. Otherwise, it’s a problem if you give a talk in the Maternity Ward after delivery, patients are already in pain, so I think they should train during the ANC period and this may reduce the supplementation, so they don’t go for Lactogen. (HA 02)
Furthermore, paediatricians and obstetricians described that the importance of breastfeeding should be advocated including to relevant stakeholders and policymakers. For example, promoting breastfeeding was considered to be the responsibility of not only the Ministry of Health but also other ministries. Ministries such as the Royal Civil Service Commission, which frames the rules for people employed in government agencies, the Ministry of Agriculture, the Ministry of Education, the Ministry of Trade and Economic affairs, and the Ministry of Labour and Human Resources, which frame the rules for people working in the private sector, should also be responsible for improving breastfeeding practice. The inclusion of these ministries would be beneficial in a strategic approach to not only promote breastfeeding but also provide support for working women to continue breastfeeding:

*This has to be discussed with all the stakeholders, not only from health, maybe education, even companies and commercial sectors. Breastfeeding is a very interesting topic which is related to many stakeholders and cannot stand alone only by health but also other sectors.*
(PED 04)

The obstetricians added that involvement of relevant important stakeholders and policymakers in breastfeeding promotion would be beneficial because they could influence EBF practice through legislation, policy changes, rules and regulations. It was also reported that stakeholders and policymakers have the power to promote EBF by extending the duration of maternity leave, establishing crèche facilities to support working women and introducing more flexible working hours:

*I think we need to emphasise what is the importance of EBF. If they understand, then I think in the later date, even if you drag it to the highest level, our policymakers in the parliament there will be fathers, there will be brothers, there will be husbands, so when they understand there is a need to it, I think it [maternity leave extension] will come in automatically.*
(OBS 01)
6.3.6.2 Sub-theme 2: Maternity leave and flexibility of time

This sub-theme was common to all the health professionals with the exception of the Program Officer, and relates to the notion that increasing maternity leave and allowing flexible working hours could improve EBF rates. At the time of interviews with the health professionals, the longest available maternity leave option was three months of paid leave, available in government organisations only. It was mandatory for women to return to their work immediately following maternity leave, unless they took unpaid leave. Therefore, the health professionals argued that EBF until six months after birth was not possible. One midwife claimed:

*What I think right now is the working mother, we get only three months maternity leave. If the government can give six months maternity leave, I think she can exclusively breastfeed for six months.* (MID 20)

Health professionals suggested that one way to help increase EBF rates was to increase maternity leave to six months: a promise previously made by the current government. They stated that without an extension of maternity leave, the chance of improving EBF rates was low. It was reported that even though government policy recommended six months of EBF, there was a disparity, with maternity leave of only three months for those working in government service and only one to two months for those in corporate or private firms:

*One is no maternity leave, it's not adequate, no maternity leave, civil servants we get only three months of leave these days, right, though we advocate for six months of maternity leave for EBF, but there is no policy that supports that. Second, also in the private sector, they get only one month.* (PED 01)

One of the paediatricians said that the very act of increasing maternity leave to six months after childbirth would demonstrate to people the importance of EBF of babies until six months of age:
This change itself can educate the public that you should be exclusively breastfeeding at least six months. (PED 04)

Midwives also claimed that more flexibility in working hours should exist and provisions should be made to enable women to breastfeed their babies during working hours. At the time of this study, women working in the public sector or government organisations had breastfeeding breaks of one hour each working day. However, most women were not able to utilise this time because of the distance between their homes and their workplaces. This issue was further complicated by many women not having their own means of transport to meet the one-hour timeline granted for breastfeeding their babies:

If mothers have the flexibility of time, if they can go anytime to feed the baby, and some like lactation unit, if they express their milk and preserve for baby, that would be good for the baby. (MID 23)

Another suggestion to help promote EBF until six months was to provide facilities such as crèches in workplaces so that women could work and also breastfeed. At the time of conducting this study, only one organisation in Bhutan had established a crèche system for its employees. This initiative could save time and money for women and help promote breastfeeding of babies and EBF:

Office-going mothers, if they plans for any rooms or room for feeding, then they can bring their babies and get the place to feed. (MID 09)

An obstetrician also recommended the provision of a crèche facility:

If there are many employees, we are supposed to have crèches where babies are kept. Internationally, that’s what they practise, if there are more than 50 women employed, I think there is supposed to have a crèche where the babies are kept. Daycare sort of things, this could like. (OBS 02)
6.3.6.3 Sub-theme 3: Expression of breastmilk

This sub-theme emerged from the interviews with midwives and paediatricians. A strategy recommended by midwives and paediatricians in order to promote breastfeeding was to teach women how to express and store breastmilk, which could then be given to babies when their mothers were at work. Eleven midwives working in the Lactation Clinic and Well Baby Clinic were trained in breastfeeding skills and reported that women planning to return to work could seek their assistance at six weeks after birth to be taught how to express and store breastmilk:

_We counsel her on expression, we teach her manual expression of breastmilk, how to store it, when to store it, how much to give it, and yes, in between she can take out time, well and good, but then if she doesn’t have time, someone, caregiver, whoever is back home can feed the baby, so we teach this to the mother. When she comes at six weeks of age, if that day is very busy, then we tell her to come back just before she goes back to her work._ (MID 06)

However, most midwives in the Maternity Ward and Birthing Centre admitted that although they were aware that expressing and storing breastmilk was one way of continuing EBF, they had never been approached for such advice and nor had they provided it. One midwife stated:

_They could express their milk and store in the fridge for giving to babies when they are away for work. However, mothers have not approached me, nor have I given any such advice._ (MID 25)

However, views about storage of breastmilk differed among the paediatricians. They reported that expressing and storing breastmilk was not feasible, especially for women who had rigid working rules and/or did not possess any means of private transportation because the workplace was typically distant from their homes:

_This is okay for a woman who goes to job regularly and who has a means of transportation, but as you know there are so many women where offices are so far, some_
of them 5 km, 6 km away, it becomes quite tiresome for them, especially teachers, where they have rigid rules, you know, they have to take classes, so it becomes quite difficult for them. (PED 03)

Based on personal experience, a paediatrician rejected the notion of expressing and storing breastmilk, arguing that it was impractical:

Expressing? That is not really practical, it’s not practical. I myself have gone through that, it’s not practical even if I live just nearby, so it doesn’t work, I know. (PED 01)

One of the paediatricians commented that although she had given advice about expressing breastmilk to women, she had not known anyone to follow it. Possible reasons for women not following this advice were speculated to be failure to teach them how to express and safely store breastmilk and lack of access to facilities for safe storage of breastmilk:

I have never seen. Actually, and then, but I think if the educated people who are working in offices and if the facility is available, I am sure that they are willing to express. The reason why they are not doing is that facility is not there, so I think if the facility is available they might do. (PED 04)

6.3.6.4 Sub-theme 4: Policy level plans to increase EBF rate

This theme emerged only from the Program Officer interview. The Program Officer reported he had presented plans at ministry level to improve the EBF rate, which included reapplying for the BFHI designation for JDWNRH. He stated that he felt the revival of JDWNRH as a Baby-Friendly Hospital could improve EBF rates, because of the importance of this accreditation status:

I am not sure about exactly the revitalisation of this JDW hospital as a Baby-Friendly Hospital for at least this 2014 but we are considering, it needs to be revitalised because it is very important, this is one area where we can promote or create awareness among the mothers of the importance of EBF. (PRO 01)
Another strategy to improve the breastfeeding program in Bhutan was to update the National Breastfeeding Policy formulated in 2002, which recommends EBF for four months while the WHO recommends EBF for six months (World Health Organization, 2015). The Program Officer stated that the policy has a provision to make the work environment friendlier for breastfeeding women, such as providing crèches in workplaces. He also explained that the program had submitted a proposal to the Cabinet of Ministers of the Royal Government of Bhutan seeking approval for an extension of maternity leave from three months to six months for government employees. He stated these changes would help to improve EBF and its rates:

_We have been already working on the extension of maternity leave from three months to six months. And this is where mothers can, especially the working mothers, can stay at home for the first six months and exclusively breastfeed their child. The other thing is in the upcoming policy, also there, supporting the mothers, in working environment. I think so far it has not materialised, I think the upcoming policy, and we are going to review and revise and get endorsed by the government. We need to create like maybe crèches in workplaces. This way we can encourage mothers to exclusively breastfeed or continue breastfeeding till two years or beyond._ (PRO 01)

6.3.7 Theme 7: Breastfeeding support and promotion activities

This theme reflects health professionals’ perceptions of the breastfeeding support activities provided to women.

6.3.7.1 Sub-theme 1: Breastfeeding advice and support

This sub-theme presents the findings in relation to how health professionals support women with breastfeeding. Despite being busy, health professionals claimed that whenever possible they advised women about the importance of EBF. One paediatrician said that she advised women about breastfeeding in the following way:

_Breastfeeding is very important. It’s a kind of first immunisation to the baby. So these are the things which I inform them. And after delivery you should put [the baby] on the breast_
frequently, and then give good attachment, positioning, that’s how we have to teach. (PED 04)

When health professionals educate women about EBF, they reported that this included advice about not giving newborn babies any other foods and visiting health facilities for any breastfeeding problems:

We say after the baby is born, you should feed the baby at least within one hour, give only mother’s breastmilk, no water, no milk powder, nothing else, any problems with the breastfeeding come to the health worker, don’t just look for the solution within home, come to the health centres. (PED 01)

Health assistants reported that the ORC environment was not conducive to providing practical assistance such as hands-on help with breastfeeding women. When possible they provided health education about breastfeeding if there were enough pregnant and lactating women attending the ORC. The content for this health education related mostly to the importance and duration of breastfeeding and immunisation of babies at six weeks and thereafter:

For breastfeeding, we look after babies who are six weeks old, so that time we talk about breastfeeding, the importance of breastfeeding, for how long they have to breastfeed and advantages of breastfeeding. That’s all we talk about related to breastfeeding. (HA 02)

Similarly midwives, despite being busy due to staff shortages, reported that when possible they gave breastfeeding advice as well as hands-on support to help women to attach and position their baby correctly, required for successful breastfeeding:

We inform about the benefits for the baby, EBF and we give hands-on like we put the baby, and we insert [latch] baby, I think that’s hands-on. We put the baby and we help her how to put the baby to the breast. And we advise her to do the breastfeeding continually. (MID 23)
During postnatal ward rounds, obstetricians described how they also informed women about the importance of frequent feeding and expressing of milk to avoid breast engorgement. For women with breastfeeding problems, obstetricians liaised with paediatricians and did not discharge women until breastfeeding was properly established. All obstetricians prescribed medication (metoclopramide) to promote lactation along with fluids to ensure adequate hydration:

We give metoclopramide to help produce milk. And then we make them drink a lot of fluids and eat food and all, especially those who have had caesarean as they were kept without food for overnight. So we try to help produce the milk and then we repeatedly put the baby to breast, because if we don’t do that lactation will never be established. (OBS 03)

6.3.7.2 Sub-theme 2: Delegation of responsibilities

This sub-theme reflects the views of health assistants, paediatricians and obstetricians. Paediatricians and obstetricians claimed that other than cursorily advising women about breastfeeding and EBF, they were too busy with their primary responsibility of looking after their respective specialty practice to engage in comprehensive breastfeeding support and education. They argued that time constraints and excessive workloads did not allow them to promote breastfeeding. These medical practitioners stated that they delegated breastfeeding promotion activities to midwives. Midwives were described as the doctors’ ‘eyes and ears’ and were expected to report any breastfeeding problems to either the paediatricians or obstetricians for further medical intervention. One obstetrician stated:

For us is the time constraint, I would say, we don’t have if you are seeing about 40 patients in 2 hours, so we wouldn’t have enough, that much time to talk about all these things, so we tend to give more attention to people who are having a problem. So others are generally taken care of by nurses [midwives]. (OBS 03)

Okay, so immediate postnatal when we go on the rounds, we can’t look after every baby, can we? Supposing we see about 90 patients in a day and that’s very hard to us. So what we do is we have our ears and eyes. These are our nurses [midwives] in the ward. So they
would generally tell us what the problems with this baby are or what the problems with the mother are. (PED 03)

One obstetrician admitted that she had not given any breastfeeding advice to women because she assumed midwives would undertake this role. Further, the obstetrician admitted she had not seen a midwife providing breastfeeding advice. Despite this, the obstetrician stated that she felt the midwives in the Lactation and Postnatal Clinic should be responsible for providing general care of women’s breasts:

*I don’t show mothers how to breastfeed and how to maintain lactation, maybe sisters [midwives] may be doing. They must be showing, I haven’t seen them do it. Postnatal Clinic has to advise them how to care for the breast.* (OBS 03)

Health assistants reported that, other than occasional talks on the importance of breastfeeding, women were not given breastfeeding assistance or support during ORC visits. The health assistants explained that they referred women with breastfeeding issues to the hospital, where they believed women were shown how to breastfeed by midwives. According to one health assistant, midwives located in the Antenatal and Postnatal Clinics should inform women about the benefits and management of breastfeeding, and also show them how to express and store breastmilk:

*Most of the time I have seen my friends informing benefits and management of breastfeeding in the Antenatal part. And I have seen those mothers who go for PNC check-up there, sisters [midwives] are advising them to express their milk, store it and feed the expressed breastmilk. We used to refer those with breastfeeding problem to the Lactation Clinic. So for us, we have to refer them only.* (HA 01)

6.3.7.3 **Sub-theme 3: Fragmentation of midwives’ education role**

This sub-theme emerged from the midwives’ interviews only. It reflects midwives’ views about who should be responsible for promoting breastfeeding and educating women and their families about breastfeeding. This responsibility was described as part of the role of the
midwife, but this view was not upheld by all midwives. For example, midwives from
different departments indicated that breastfeeding education and promotion were the
responsibility of their colleagues in other units. Midwives within the Birthing Centre argued
that because they lacked staff and time due to staffing issues at the Birthing Centre, the
antenatal midwives should be responsible for providing breastfeeding education and
information when women attended for antenatal check-ups. Similarly, midwives in the
Maternity Ward claimed that breastfeeding education should be provided during the antenatal
period. Midwives argued that if this education was provided at the time of admission to the
Maternity Ward, the women would be preoccupied with the immediate process of giving
birth and not able to absorb and process this information. It was argued by midwives in both
the Birthing Centre and Maternity Ward that breast problems, such as retracted or flat
nipples, should be addressed during the antenatal period, because by the time women reached
the hospital to give birth it was too late to implement a plan of care:

*In the Birthing Centre only after delivery we initiate breastfeeding education. So before
that, we don’t. I feel this should be initiated from ANC from antenatal check-up only. Here
most of the time it is very difficult to manage, we don’t get time to initiate all these before
the delivery.* (MID 18)

*Some factors that we can’t change, I think they [midwives] from the Antenatal Clinic give
advice for inverted nipples. When they come to our ward we can’t do anything. For such
type of cases, it is very difficult to change at the last moment like flat nipples, inverted
nipples and all, we can’t do anything at the last moment.* (MID 16)

Claiming that breastfeeding education and information should have been provided
during pregnancy, midwives in the Birthing Centre and Maternity Ward argued that, despite
receiving antenatal care, women lacked adequate breastfeeding knowledge. They also
described primiparae women as facing greater problems with breastfeeding than their
multiparae counterparts:
I don't think they have been informed because some mothers we have to assist with breastfeeding all the time, especially primi mothers. They don’t know how to hold their babies, how to breastfeed, and they don’t know the frequency of the feeds. (MID 20).

Further, midwives in the Maternity Ward and Birthing Centre contended that when babies were separated from their mothers it was the responsibility of the NICU staff to educate the women about how to breastfeed and how to maintain lactation:

When the baby is shifted to NICU mothers are kept in Birthing Centre but when the baby is wanting milk, the staff in NICU, they call and give the EBM or direct breastfeeding. (MID 09)

In addition, midwives argued that there had never been a practice of giving breastfeeding information to pregnant women admitted to hospital for birth and therefore nobody was assuming this responsibility:

In the Maternity Ward, we never inform women about benefits and management of breastfeeding because we never do and we are not used to. There is no plan and we never made any plans. (MID 14)

An antenatal midwife claimed that women during pregnancy are presented with advice about EBF, but acknowledged that there was not enough time to provide comprehensive breastfeeding education. The midwife also explained that after birth, midwives from other units such as the Lactation Clinic should assume responsibility for looking after women with breastfeeding issues:

When they come for the first time we advise them, especially EBF, and after delivery they are taken care of by the Lactation Unit and other units. Health education sometimes in the morning and sometimes while making new cards; however, it is not enough due to lack of time and because of busy hours. (MID 02)

A midwife from the Lactation Clinic perceived the focus of care provided by midwives in the Birthing Centre and Maternity Ward related to birthing only. She argued that
all midwives had a responsibility for supporting breastfeeding and providing breastfeeding education, and claimed she was aware that some staff in the Maternity Ward and Birthing Centre had undertaken training to support breastfeeding:

> You know, that is the biggest problem we have right now. I told you, like, we have staff who have been trained in infant, young child feeding program. So I have a feeling this birthing or the maternity staff, they always work with mother and they fail to take care of the baby’s part. Everybody focuses on his or her job and then we feel the breastfeeding part is not ours, it’s taken care of by somebody else. (MD 06).

It was reported that any breastfeeding information given to women at any stage of pregnancy and the postnatal period was inadequate and, therefore, a need exists for delivery of more education to women. Additionally, more infrastructure, such as Lactation Clinics, to better impart breastfeeding education and knowledge was recommended:

> All heath education we give from the ward, from ANC and from Birthing Centre is not adequate. I think we still need to give more. There should be more clinics like recently opened one, Well-Baby Clinic. Like that type of clinic, we have to have one. (MID 16)

### 6.4 Conclusion

The findings from the interviews with health professionals consist of seven themes and 24 sub-themes in total. All health professionals reported they knew about EBF and its benefits for babies. However, few health professionals reported the benefits of breastfeeding for mothers. Most were aware that JDWRH was no longer a Baby-Friendly designated hospital and were aware of the existence of the BFHI Ten Steps to Successful Breastfeeding. The majority of health professionals, however, were not aware of the existence of the National Breastfeeding Policy or the formation of a breastfeeding support group. Most of the midwives and health assistants had not received professional development regarding breastfeeding. Other factors identified by health professionals as preventing breastfeeding promotion
activities included a shortage of staff and busy workloads. In addition, midwives perceived that women themselves did not seek breastfeeding advice.

Health professionals identified barriers for women in delay in breastfeeding initiation, which included primiparity, mode of birth such as caesarean section and other complications such as haemorrhage or infection. Barriers to EBF were: a prevailing culture of non-exclusive breastfeeding; living in joint-family arrangements where elders influenced non-exclusive breastfeeding; cultural and traditional practices upheld by women; returning to work soon after birth; low socio-education status; and breastfeeding problems. Health professionals identified possible strategies to improve the EBF rate, including the extension of maternity leave, flexible work hours, and teaching women how to express and safely store their breastmilk.

The next chapter will present a discussion of the findings emerging from the women’s interviews at the term of pregnancy and six weeks after birth.
CHAPTER 7: DISCUSSION OF FINDINGS OF INTERVIEWS WITH WOMEN

7.1 Introduction

The aim of the study was to explore Bhutanese women’s perceptions, intentions and experiences related to their babies’ nutrition at term of pregnancy and six weeks after birth. Five themes, consisting of 13 sub-themes, have been identified from the analysis and interpretation of interviews with two cohorts of women, primigravidae and multigravidae at the term of pregnancy. Data obtained from these two cohorts of women at six weeks after birth also include five themes consisting of 13 sub-themes.

In an examination of the themes and sub-themes, four key issues have been identified from the experiences of women during pregnancy and after birth:

1. Breastfeeding intention during pregnancy compared with actual feeding mode six weeks after birth

   There are three subcategories of issues:
   - Breastmilk is best for babies
   - Breastfeeding is natural
   - Exclusive breastfeeding intention

2. Challenges faced by women striving for successful breastfeeding:

   - Women’s views, opinions and experiences of breastfeeding at the term of pregnancy
   - Women’s views, opinions and experiences of breastfeeding at six weeks after birth
   - Breastmilk supplementation: a hindrance to exclusive breastfeeding

3. Women’s need for breastfeeding education and support

   - Women’s need for breastfeeding information during pregnancy
   - Women’s need for breastfeeding education and support after birth
4. Impact of traditional and cultural Bhutanese practices on exclusive breastfeeding:
   
   - Traditional cultural practices associated with breastfeeding
   - Traditional practices and exclusive breastfeeding
   - Family cultural influences

   This chapter will present each of the above issues with reference to contemporary literature to highlight the particular needs of childbearing women during pregnancy and after birth. It also covers the need for preparation and learning about newborn nutrition; and the breastfeeding support women need with their babies following birth.

7.2 Discussion

7.2.1 Breastfeeding intention during pregnancy compared with actual feeding mode six weeks after birth

7.2.1.1 Breastfeeding intention during pregnancy

The findings regarding women’s breastfeeding intention during pregnancy and their actual breastfeeding practice six weeks after birth are presented in the following sections.

7.2.1.1.1 Breastmilk is best for babies

Knowledge of the beneficial effects of breastfeeding influenced both primigravidae and multigravidae women’s intention to breastfeed. Their decision to breastfeed had been made at term of pregnancy. Nine primigravidae and seven multigravidae women intended to breastfeed on the grounds that it would make their babies healthy and strong and prevent them from acquiring certain diseases. Other reasons provided by two multigravidae and four primigravidae women included their belief that breastfeeding was the best nutrition for their baby, and three primigravidae and eight multigravidae women intended to breastfeed because breastmilk was ‘good’. Other than saying breastfeeding was good or best for their babies, the
women did not elaborate on why and how breastfeeding was good for their baby, despite being requested to explain their decisions.

A descriptive cross-sectional study of 200 Jordanian women found that slightly more than half of the women (53%) reported the main factor that influenced them to breastfeed was the natural immunity that breastmilk provides (Oweis, Tayem, & Froelicher, 2009). A number of studies report similar research findings in relation to decisions by women to breastfeed because of the perceived benefits for their babies (Brown & Lee, 2011; Cabieses, Waiblinger, Santorelli, & McEachan, 2014; Joshi et al., 2014a; Plagens-Rotman et al., 2014; Radzyminski & Callister, 2016; Tully & Ball, 2014; Uchendu, Ikefuna, & Emodi, 2009; Wang et al., 2014; Wojcicki et al., 2010).

In the current study, five primigravidae and eight multigravidae women decided to breastfeed because they perceived that breastmilk was nutritious and was the means by which nutrients could be transferred to their baby. Other studies have revealed similar perceptions among women about breastfeeding being nutritious (Daly, Pollard, Phillips, & Binns, 2014; Tully & Ball, 2014; Ware, Webb, & Levy, 2014). However, the findings of the current study differ from those of other studies in that women believed whatever they consumed would be transmitted to the baby through breastmilk. In the current study, other than two multigravidae women who described breastfeeding as convenient and inexpensive, none of them referred to the benefits of breastfeeding for themselves.

7.2.1.1.2 Breastfeeding is natural

Furthermore, eight multigravidae and six primigravidae women decided to breastfeed because it was perceived as a natural process to meet the nutritional requirements of their babies. None of the childbearing women in the current study stated they did not want to breastfeed their baby. A study of 35 women with breastfeeding experiences was undertaken in a small village in the eastern part of Bhutan (Bohler & Ingstad, 1996). The researchers claim that in Bhutan,
due to their vulnerability and special needs, breastfeeding babies had an undeniable right to access their mother’s breasts. Hence, Bhutanese women did not consider feeding options other than breastfeeding when their babies were born (Bohler & Ingstad, 1996).

An interpretive qualitative study of 15 Chinese women found they perceived breastfeeding as the natural role of the mother; they believed mothers were responsible for providing the best possible care for their babies and this was demonstrated by breastfeeding their babies (Chen, 2010). A study conducted in Colombia found that women also viewed breastfeeding as a natural process and an expression of love for their babies (Hernández & Vásquez, 2010). In the UK, women viewed breastfeeding as a natural option and an expected responsibility of women (Brown & Lee, 2011).

7.2.1.1.3 Directed breastfeeding

Results of the current study demonstrate that, at term of pregnancy, one of the reasons that all women in both groups intended to breastfeed their babies was because they were directed to do so. Multigravidae women reported that during their previous childbearing experiences they were directed to breastfeed by health professionals. On the other hand, the majority of the primigravidae women did not describe health professionals directing them to breastfeed; this could be because they were yet to be admitted to hospital to give birth. Instead, they were influenced to breastfeed by their family and friends who possessed prior breastfeeding experience.

Similar to the findings of this study, focus group interviews among 86 African-American women in Tennessee in the USA found that 57% of participants were personally influenced by their family or friends who had breastfed before (Ware et al., 2014). In Spain, a focus group and interviews of both primiparae and multiparae women were conducted and it was found that friends and relatives who had breastfed influenced women to do the same (Barona-Vilar, Escriba-Aguir, & Ferrero-Gandia, 2009). Although the participants differed
from those in the current study in terms of geographical location, health care delivery
services and developmental status of the countries, these similar findings suggest that the
influence of family and friends is the same.

7.2.1.1.4 **Exclusive breastfeeding intention**

In the current study, at the term of pregnancy both primigravidae and multigravidae women
understood EBF to be the practice of giving fluids along with breastmilk. Their understanding
of EBF was they should not give babies solid foods. Multigravidae women, on the basis of
previous childbearing experiences, had practised EBF according to this notion. Similarly,
primigravidae women intended to practise EBF by supplementing other fluids but not giving
solid foods.

Women at term who planned to return to work stated they had no intention of
exclusively breastfeeding beyond their maternity leave, but planned to continue breastfeeding
in combination with breastmilk supplementation. In Bhutan at the time of conducting this
research, government employees were entitled to maternity leave of three months with pay,
while for private and corporate employees their leave could extend from one to three months,
dependent on their employers. Women employed in government, corporate and private firms
stated they did not wish to exclusively breastfeed because it was difficult for them to
breastfeed their baby during their one-hour break, especially if they lived a long distance
from their workplace. In contrast, women with their own businesses did not state an intention
of not exclusively breastfeeding because they had more flexibility in their workplace to take
their baby to work with them so they could breastfeed as needed.

7.2.2 **Breastfeeding practices six weeks after birth**

Congruent with their intentions as stated at the term of pregnancy, all women were
breastfeeding six weeks after birth, with the majority claiming to be exclusively
breastfeeding. They reported that they had already given other fluids along with breastmilk and had in principle supplemented their babies. The women, however, continued to believe they were actually engaged in EBF for their baby. Similarly, an explorative qualitative study conducted in Zimbabwe found that women, as long as they did not give solid foods, considered themselves as practising EBF even if they gave babies water and fruit (Nduna, Marais, & van Wyk, 2015). A study conducted in Sao Paulo, Brazil of 309 women found 30% had a misconception about EBF because they reported feeding their babies with other liquids as well (Campos, Chaoul, Carmona, Higa, & do Vale, 2015). These findings are consistent with findings of a study conducted in Ghana, where it was found that women believed if the water was ‘neat’ and clean, it would not affect EBF (Otoo, Lartey, & Pérez-Escamilla, 2009). Jordanian women also stated they gave supplements, including water. They did not consider this practice as breastmilk supplementation that could affect EBF or have any influence on the discontinuation of breastfeeding (Oweis et al., 2009). Similarly, a study of 107 women in Turkey by Saka et al. (2005) found that water was not perceived by women as a supplementary food, but as a necessity for maintenance of the baby’s health.

When interviewed at six weeks after birth, none of the women in the current study had returned to work except for one multipara and one primipara woman. The multipara woman had her own shop and took the baby with her, while the primipara woman conducted business from her own home. The rest of the women had stated during pregnancy their intention to only engage in EBF until their maternity leave expired and they remained committed to this. This was because, during their working day, they did not have breaks of sufficient length to breastfeed or their workplace was a considerable distance from their home, meaning they could not leave the workplace and return home to breastfeed their babies. In Bhutan, a system of workplace breastfeeding rooms, crèches or other facilities for women to express and store breastmilk does not exist.
This is supported by findings of a study in the USA of 160 women whose intention to breastfeed was related to their intention to work. They conveyed concerns that on returning to work they would be unable to continue breastfeeding because they would no longer have sufficient access to their baby or because there was not sufficient time or a suitable location to express milk during their working day (Thomas-Jackson et al., 2015). Similarly, a study in the USA of 2348 women found that those who planned to return to work were less likely to plan to exclusively breastfeed (Mirkovic et al., 2014). A finding of another study of 42 pregnant women in the USA indicated that return to work was the greatest barrier to EBF, resulting in supplementation of breastmilk (Fischer & Olson, 2014). Similar findings have emerged in various studies worldwide, including in Australia (Baxter et al., 2009; Magarey, Kavian, Scott, Markow, & Daniels, 2015), Brazil (Vieira et al., 2014), Canada (Brown et al., 2014; Kehler et al., 2009), China (Tang, Lee, & Binns, 2015), Ethiopia (Yeneabat et al., 2014), Ghana (Otoo et al., 2009), Iran (Roostae et al., 2015), Malaysia (Ishak et al., 2014), Nigeria (Agunbiade & Ogunleye, 2012), Scotland (Skafida, 2012), Timor-Leste (Kanal et al., 2014), the United Arab Emirates (Radwan, 2013) and the USA (Fischer & Olson, 2014; Rozga et al., 2015).

7.2.3 Challenges faced by women striving for successful breastfeeding

Women faced various challenges that hampered their plans for successful breastfeeding. Perceptions of the breastfeeding challenges faced by women during pregnancy and six weeks after birth are discussed in the following sections.

7.2.3.1 Women’s views, opinions and experiences of breastfeeding at term of pregnancy

Multigravidae women with previous breastfeeding experience defined breastfeeding problems as the baby’s refusal to breastfeed and inadequate milk production. They considered breast pain and sore, cracked or damaged nipples as issues that occurred naturally while breastfeeding. Further, the women considered pain was to be endured while
breastfeeding. This is similar to the findings of a Nigerian study by Agunbiade and Ogunleye (2012, p. 7), who stated women were found to “struggle to appropriate the physical and spiritual bonds and benefits” associated with EBF.

Primigravidae women accepted that the first breastfeeding episode would be very painful because they had been told so by family elders and friends who had breastfed. They were also told that breastfeeding was learned through experience. Hence, women were prepared to endure the pain of the first breastfeeding episode and did not understand that it could be a painless and fulfilling experience. Until women are given professional support and information about the correct attachment required for successful breastfeeding, they will continue to experience pain and damage to their breasts and nipples, and accept that these come naturally with breastfeeding and should be endured.

Primigravidae women rarely sought breastfeeding information from other people. This is firstly because of the modest nature of Bhutanese women, who consider discussing breastfeeding an embarrassing subject during pregnancy. Similarly, women in Ireland stated they did not talk about breastfeeding because it was viewed as taboo and something that was not discussed. Therefore, they rarely sought information related to breastfeeding from others (Shortt, McGorrian, & Kelleher, 2013). However, in the current study women’s views differed once the baby was born.

7.2.3.2 Women’s views, opinions and experiences of breastfeeding at six weeks after birth

Many multiparae women and all the primiparae women faced breastfeeding problems such as nipple soreness or tenderness and breast engorgement. Despite the discomfort they experienced, the women persisted with breastfeeding for the health benefits of breastmilk for their baby. Four primiparae women found breastfeeding so painful they cried each time their baby latched on and became fearful of the next breastfeed. A study conducted in Australia revealed similar findings, where women persisted with breastfeeding despite the difficulties
In Denmark, a study of 108 first-time mothers found that despite sore and cracked nipples, women ‘swallowed’ the pain and persisted with breastfeeding their babies (Kronborg, Harder, & Hall, 2015).

Despite their readiness to accept pain, the majority of primiparae women in the current study reported being unaware, prior to the birth, of the painful reality of breastfeeding and stated, with the benefit of breast feeding experience, that it was ‘not easy’. Thirteen primiparae women found breastfeeding ‘very difficult’ and not what they had expected as they had assumed that they would know how to breastfeed. In other words, breastfeeding was expected to be a naturally occurring process. Similarly, a study conducted in Hong Kong of 24 women found the women expected breastfeeding to be easy because it was natural and would happen naturally once the baby was born (Tarrant, Dodgson, & Wu, 2014). A qualitative study in the Netherlands investigated perceptions regarding breastfeeding of eight primiparae women from middle and high socioeconomic backgrounds, and yielded a similar finding. The women stated they expected instinctively to know about breastfeeding once their babies were born and that it would be a natural process (Oosterhoff, Hutter, & Haisma, 2014). Further, a study of 170 Australian women revealed similar findings, where the women expected breastfeeding to be easy, yet the reality was unexpectedly different (Hall et al., 2014). A phenomenological study of 22 women in the UK produced similar findings, where the women expected breastfeeding to be natural but were taken aback by the realities (Spencer, Greatrex-White, & Fraser, 2014).

All multiparae women in this study found breastfeeding to be easy, even though five of them reported inadequate milk production in the first few days, two experienced nipple soreness and one had a baby that refused to settle due to difficulty in attaching correctly. However, once the initial breastfeeding problems were overcome, both primiparae and multiparae women found breastfeeding easy and pain-free.
Women in both groups stated they had wanted to know during their pregnancies what to expect when breastfeeding. Even some of the multiparae women were not aware that having a baby incorrectly attached would lead to nipple soreness and trauma. A similar finding emerged from a descriptive study in Victoria, Australia where women were unprepared for the experience of full breasts, frequent feeds and sleepless nights. They stated they needed to be told what to expect while breastfeeding (Gilmour, Hall, McIntyre, Gillies, & Harrison, 2009). Similar findings were revealed in a study of 585 women in the UK where women described being unprepared for the reality of breastfeeding and that they would also have liked more information before their baby was born about what to expect after the birth (Graffy & Taylor, 2005).

As stated above, while the Bhutanese women viewed breastfeeding as an embarrassing topic of discussion during pregnancy, this was not the case once they gave birth. It has been observed by the student researcher and confirmed through the interviews with health professionals that once the women gave birth, embarrassment related to breastfeeding dissipated and women breastfed openly.

7.2.3.3 Breastmilk supplementation: a hindrance for EBF

This section discusses the reasons babies were supplemented six weeks after birth. One multiparae woman fed her baby formula due to her perception of inadequate milk production, whereas two other women gave water to settle their crying babies. Similarly, six primiparae women supplemented their babies with water and formula due to perceived inadequate milk production causing their babies to cry and fail to settle. Similarly in Colombia, women perceived that babies were getting insufficient milk when they continued to cry after feeding (Hernández & Vásquez, 2010). In Tanzania, among the most common reasons for feeding babies supplements was the perception that breastmilk was insufficient because babies were
crying and, further, that after three months babies need other foods in order to gain strength or attain good health and to thrive (Maonga, Mahande, Damian, & Msuya, 2015).

One study in the USA found that women continued breastfeeding their babies when the baby was quiet and alert, while most babies were weaned if they cried (Brandt, Andrews, & Kvale, 1998). In another study in the USA of 532 primiparous women, the most common breastfeeding concern leading to breastmilk supplementation and ultimately breastfeeding cessation was inadequate milk supply. A study of 491 women in Australia revealed similar results, where the main reason for stopping breastfeeding at nine weeks after birth was insufficient breastmilk supply. In India, insufficient breastmilk and perceptions that babies were not satisfied after feeds were reasons for not breastfeeding exclusively (Oommen, Vatsa, Paul, & Aggarwal, 2009).

These perceptions of inadequate breastmilk production and babies continuing to be hungry after feeds were also consistent with findings of studies of EBF practices among breastfeeding women leading to women giving supplements to their baby in Australia (Scott, Binns, Graham, & Oddy, 2009), Bangladesh (Joshi et al., 2014b; Yu et al., 2014), Canada (Brown et al., 2014), China (Lou et al., 2014), Egypt (El-Gilany & Abdel-Hady, 2014), Indonesia (Afiyanti & Juliastuti, 2012), Nigeria (Agunbiade & Ogunleye, 2012), Turkey (Demirtas, 2015), the USA (Teich et al., 2014) and Vietnam (Nguyen et al., 2013). These studies indicate that perception of inadequate milk production hindering EBF is a widespread issue.

Other issues pertaining to feeding difficulties were babies being fussy or frustrated at the breast and problems with correct attachment (Wagner, Chantry, Dewey, & Nommsen-Rivers, 2013). Other reasons for supplementation included, for example, an unsettled baby, inadequate infant weight gain, reflux and troublesome sleeping patterns (Hauck, Fenwick, Dhaliwal, Butt, & Schmied, 2011b).
Women participating in this study reported their babies were also supplemented with formula feed when admitted to the Neonatal Ward for the treatment of jaundice. One multipara woman’s baby had jaundice and was fed formula by a health professional and among primiparae women four babies were supplemented with formula feeds for the treatment of jaundice. In the current study, women stated that jaundiced babies were supplemented for rehydration during phototherapy. A study conducted in Singapore examined the relationships among maternal and baby characteristics, breastfeeding technique and EBF initiation in 952 breastfeeding dyads. Jaundice in babies was found to have a negative impact on EBF (Lau et al., 2015) and this supports the findings of the current study. Similarly, a study conducted in Ireland of 1094 singleton babies of primiparae women found that admission to a NICU where phototherapy was administered for jaundice was associated with women not breastfeeding exclusively at the time of discharge (Smith et al., 2015).

In the current study, health professionals including midwives recommended breastmilk supplementation when women were not able to produce breastmilk during their stay in the Maternity Ward and Birthing Centre. One multipara woman’s baby was given formula by a health professional because she had inadequate milk production. Among primiparae women, four babies were given supplements by health professionals because the mothers were perceived to have inadequate breastmilk production, one baby was given supplements because the woman had painful breasts, and one baby was given supplements for fever. These findings differ from those of a UK study, where health professionals supplemented babies to protect the mothers from tiredness and fatigue (Cloherty, Alexander, & Holloway, 2004). Health professionals in the current study, however, were more concerned about babies not getting enough breastmilk and resultant dehydration, fever and jaundice.

In the current study, a multipara and a primipara reported that health professionals had smeared their nipples with 10% glucose to assist the baby with attachment. Although this
practice is not supported by the hospital, it has been handed down by one generation of midwives to another. In a study of 247 breastfeeding dyads in China, 19 women (7.7%) fed glucose water for their baby’s first feed and the main reason given by women was insufficient breastfeeding production (Zhao, Niu, Xu, Garrett, & Greiner, 2003). Similarly, in a study conducted in Canada of 74 women, 59 women reported their babies were fed glucose water; however, no explanation was given as to why it was done (Glover & Sandilands, 1990).

7.3 Women’s need for breastfeeding education and support

The level of support provided by health professionals at the antenatal phase and after birth is presented in the following.

7.3.1 Women’s need for breastfeeding information during pregnancy

Currently, Bhutan’s health care system does not provide a formalised program of antenatal classes for pregnant women, specific for breastfeeding promotion and education. Occasionally, 10–15 minute group health education sessions are offered before the start of routine work, but are not formal arrangements designed to provide a comprehensive education program. They address issues ranging from danger signs such as bleeding during pregnancy, high fever, prolonged labour, severe vomiting or abdominal pain, severe headache, blurred vision and convulsions to breastfeeding. Women who are waiting to have an antenatal appointment are gathered in a room or corridor and health education is delivered. This environment is not conducive to either a formal presentation or answering questions women may have. During the first antenatal visit, women may be given advice about the importance of EBF for six months, and for primigravida women their breasts may be examined for erectile nipple status. These activities, however, have traditionally been managed around the delivery of care in a busy maternity service environment. Therefore,
opportunities for pregnant women to receive education about breastfeeding in the antenatal period are limited and occur on a relatively ad hoc basis.

Thus, at the term of pregnancy, multigravidae women indicated they had been given some breastfeeding information during their previous pregnancies (in the postnatal period), but they did not receive any breastfeeding information during the present pregnancy. Primigravidae women reported that they did not receive any breastfeeding information at all. Thus, despite the evidence that provision of breastfeeding information by a health professional during pregnancy is positively associated with longer duration of EBF (Mattar et al., 2007; Mekuria & Edris, 2015; Pannu, Giglia, Binns, Scott, & Oddy, 2011), a standard approach to providing Bhutanese pregnant women with education about breastfeeding did not exist.

Similarly, in the neighbouring country of Nepal, a study of 200 women to explore knowledge and practices regarding breastfeeding revealed that none of the women had been given any breastfeeding information during their pregnancy (Chaudhary, Shah, & Raja, 2011). In the USA, a study of 75 women discovered similar findings, where women stated their health professionals did not mention breastfeeding during pregnancy (Cross-Barnet, Augustyn, Gross, Resnik, & Paige, 2012). Thus, despite promotion of breastfeeding by the WHO for the wide-ranging benefits for babies and mothers, there is a low uptake by health professionals from many countries to support and prepare pregnant women for breastfeeding.

### 7.3.2 Women’s need for breastfeeding education and support after birth

Six weeks after birth, according to the multiparae women in the present study, they had not been given breastfeeding support. They attributed this to health professionals’ reliance on women’s previous breastfeeding experience and an assumption that multiparae women would not require any support or education. One multipara woman who had experienced a neonatal loss and therefore did not have any breastfeeding experience to draw from did not receive any
education or support. This particular woman was, therefore, disadvantaged because of the assumptions made by health professionals.

A similar finding resulted from a study of 278 multiparae women in Turkey, who stated that they could not access midwives for breastfeeding support because of the assumption that their previous experiences supplied the necessary knowledge required (Demirtas, 2015). Similarly, multiparae women in a study conducted in England were reportedly left alone and no one checked on them to see how they were coping with breastfeeding (Redshaw & Henderson, 2012). In the current study, a few primiparae women claimed to have received minimal support but desired more assistance, while others were left to initiate breastfeeding themselves. Therefore, the current study consistently shows women received minimal help and information about breastfeeding from health professionals. This is similar to the findings of a qualitative study undertaken in Ireland where women described receiving little or no support (Shortt et al., 2013) and a study in England where primiparae women expected extra support but were left alone to take care of breastfeeding by themselves (Redshaw & Henderson, 2012).

The dearth of breastfeeding information provided to Bhutanese women was exacerbated when women refrained from asking for breastfeeding information because they perceived health professionals to be too busy to provide them with the information. This is similar to the findings of a study conducted in Ireland in which women did not want to ask health professionals for help because they were perceived to be either busy or understaffed (Shortt et al., 2013; Whelan & Kearney, 2015). Similar findings emerge from studies conducted in Australia (Gilmour et al., 2009), England (Redshaw & Henderson, 2012), Hong Kong (Tarrant et al., 2011) and Turkey (Demirtas, 2012a).
7.3.3 Other sources of breastfeeding information

In the current study, due to provision of minimal breastfeeding information by health professionals, the limited knowledge possessed by women was mostly acquired from the mass media. This included, for example, programs televised on national television, Bhutan Broadcasting Services (BBS), posters, banners and the internet. Women in other countries also obtained breastfeeding information from the media according to the findings of studies of mothers from Jordan (Oweis et al., 2009), Sri Lanka (Bandusena & Warnasuriya, 2009) and Vietnam (Ramoo et al., 2014). A study of 594 women in Ethiopia also found that having television or radio at home was associated with an increased chance of initiating breastfeeding, whereby it was presumed that women’s exposure to different sources of breastfeeding information helped them to adopt optimal breastfeeding practices (Hailemariam, Adeba, & Sufa, 2015).

7.3.4 Impact of traditional and cultural Bhutanese practices on EBF

Cultural and traditional practices affecting women’s breastfeeding intention during the antenatal phase and breastfeeding practice after birth are discussed in this section.

7.3.4.1 Traditional cultural practices associated with breastfeeding

The people of Bhutan are deeply rooted in age-old customs, and traditional and cultural practices encompassing birth and breastfeeding. One traditional practice known to the student researcher and commonly referred to by women in this study requires women to refrain from consuming fresh vegetables, especially chilli, immediately following birth. This is based on the belief that the taste of these vegetables will be transmitted through breastmilk and cause diarrhoea and stomach pain in the baby. A similar belief is held in Jamaica, where women believe the food they consume could enter the baby’s stomach and cause harm to the baby (Harrison, Fletcher-Groves, Gordon-Strachan, & Thame, 2015).
Beliefs about certain foods assisting with breastmilk production are also held by Bhutanese people. Bhutanese women are encouraged to drink a locally fermented alcoholic drink called changkey and also soup to help in breastmilk production. Beliefs about consuming foods to promote breastmilk production also exist in other countries. In Colombia, women are encouraged to drink fennel water and brown sugar in water with milk, alone or with the peel of a ripe banana, in the belief that consuming these will make milk thick and help in breastmilk production (Hernández & Vásquez, 2010). In Turkey, women consume sweet drinks and food such as grape molasses and butter to help with breastmilk production (Geckil et al., 2009).

### 7.3.4.2 Traditional practices and EBF

At term of pregnancy, traditional practices such as giving babies butter or honey soon after birth and feeding drops of water as babies are immersed in the bath were frequently described by the multigravidae women. Similarly, primigravidae women wanted to exclusively breastfeed their babies and at the same time follow these traditions. Traditional practices frequently placed women in a difficult situation in terms of their decision-making related to whether or not they adopt or reject such practices.

Six weeks after birth, thirteen multiparae women reported that they had not adopted traditional practices following the births of their previous children after being told by health professionals not to apply them. The remaining women from both groups had adopted traditional and cultural practices, which had an impact on EBF. Five multiparae women reported giving drops of bathwater to their babies, two multiparae women had given butter to their babies and one multiparae woman gave both butter and bathwater to her baby. Similarly, among the primiparae women seven had given bathwater to their babies, seven had fed both butter and bathwater, while two had given holy water to their babies.
In Bhutan, butter is considered a food that only the rich can afford and is given as the first food in the belief that the baby will get to eat it lifelong. Babies are given holy water when parents visit temples. In one ethnic group in Bhutan, babies are fed cow’s urine on the seventh day after birth during their naming ceremony. Similarly, babies are given honey in the belief that they will become strong and as sweet as honey throughout their lives.

In Colombia, it is believed that a newborn baby’s stomach is weak and so boiled bean water is given to protect, strengthen and seal the stomach to prevent future problems such as diarrhoea, colic and vomiting (Hernández & Vásquez, 2010). The cultural practice of giving pre-lacteal foods in response to traditional beliefs has also been reported by Chinese-American women in New York, USA. Solid foods were introduced to babies prior to six months of age because it was perceived they would strengthen bone development, promote learning in how to swallow foods other than milk, prolong satiety, promote faster growth and promote an improved digestive system (Lee & Brann, 2014). Similarly in the Maldives, babies were given ritual pre-lacteal feeds such as honey and dates (Raheem et al., 2014), and in Egypt babies are given a sugar/sugar water and herb decoction (a liquid medicine) (El-Gilany & Abdel-Hady, 2014). In the Democratic Republic of Congo, babies are given sugar water, tea, milk formula or porridge in addition to human milk (Yotebieng, Chalachala, Labbok, & Behets, 2013); butter and honey are fed to babies in Nepal (Khanal, Lee, Karkee, & Binns, 2015); and water containing a sugar mixture, butter and dates are fed to babies after birth in Turkey (Geckil et al., 2009).

7.3.4.3 Family cultural influences

Family played a major role in women’s breastfeeding practices. Women at term of pregnancy stated they felt confident about their level of control over their choices for feeding their babies. It was noted, however, at six weeks after birth that their choices for feeding were actually determined or influenced mostly by female elders, usually the grandmothers of the
baby, especially in the case of primiparae women. Early breastmilk supplementation was usually enforced by family elders who believed breastmilk alone would not be enough for the baby. The elders, according to women, as drawn from their own parenting days fed babies solid foods from birth and as a consequence imposed its continuation.

A study of 756 women in the UK found that one of the reasons for feeding solid foods was pressure from elders (Brown & Rowan, 2015). A qualitative study in Mozambique demonstrated that fathers and grandmothers did not believe that EBF until six months of age was enough to nurture babies. Babies needed, therefore, to be given water, traditional medicine and porridge to appease the elders (Arts et al., 2011). In the same study, mothers and fathers reported it was difficult to deter elders from giving babies traditional medicines because then they had to take responsibility if something happened to them (Arts et al., 2011). This can be difficult for new parents who try to appease elders and yet heed advice given by health professionals against traditional practices. Similarly, a study conducted in Cameroon, Africa of 320 women found that 42.5% were pressured to give supplements by their family and elders in the belief that breastmilk was an incomplete food and babies were still hungry. When their babies cried, women believed the babies needed something solid in their stomachs (Kakute et al., 2005).

Although the study women claimed to be exclusively breastfeeding, the majority had already adopted certain cultural practices that undermined this. The majority of women at six weeks after birth had technically applied breastmilk supplementation through the use of other substances such as water or butter. Only four primiparae women and eight multiparae women out of a total of 44 women claimed they had not given supplements to their babies. This study, although limited by its small sample size, provides evidence to explain the low EBF rate of 10.4% at six months demonstrated by a survey conducted in 2008 by the Ministry of Health (Department of Public Health, 2008). A positive finding of the study is that none of
the women had ceased breastfeeding at six weeks. Another study conducted in Bhutan has shown the duration of any breastfeeding by Bhutanese women is 23 to 24 months (Zangmo, de Onis, & Dorji, 2012), with another study finding that women in Bhutan continue to breastfeed even beyond three years (Bohler & Ingstad, 1996). These findings indicate that although Bhutanese women are committed to breastfeeding their babies, they do not apply EBF according to its definition.

7.4 Conclusion

This study has demonstrated women’s limited understanding and practice of EBF at six weeks after birth, and identified the lack of planned or formal programs on breastfeeding promotion and education during pregnancy and, importantly, the lack of support from health professionals after birth. Information was, however, presented as an unplanned activity both during pregnancy and following birth.

It was identified during pregnancy that women had intended to breastfeed their babies because of the benefits of breastmilk and being told to do so by family, friends and, specifically for multigravidae women, by health professionals during their previous births in hospital. After birth when women attempted to breastfeed without support, they experienced a range of issues such as poor attachment resulting in nipple damage or unsettled babies.

Women misunderstood EBF, claiming they were exclusively breastfeeding because they did not give solid foods but believing administration of water or other fluids was acceptable. The application of EBF was also either misunderstood or disregarded with the adoption of cultural and traditional practices. In addition, perceptions of insufficient breastmilk supply resulted in the supplementation of breastmilk with formula feeds, which was also promoted by health professionals.

The next chapter will present a discussion of the findings that have emerged from the interviews with health professionals.
CHAPTER 8: DISCUSSION OF FINDINGS OF INTERVIEWS WITH HEALTH PROFESSIONALS

8.1 Introduction

This chapter presents a discussion pertaining to the findings of the interviews with health professionals. They comprised midwives, obstetricians, paediatricians and health assistants providing care in the outpatient, inpatient or outreach services operated by Jigme Dorji Wangchuck National Referral Hospital (JDWNRH). Another participant included was the Program Officer, a representative of the Ministry of Health whose role was to guide policy development in a Nutrition Program that included breastfeeding promotion. These participants offered a wide representation of views from those providing or overseeing maternity services.

In this study, health professionals’ knowledge of exclusive breastfeeding (EBF), whether or not they engaged in promotion and education about breastfeeding, and the level of support they provided women during pregnancy and soon after birth have been explored. A total of seven themes, consisting of 24 sub-themes, have been identified from the analysis and interpretation of the data obtained from the interviews. The discussion in relation to the findings resulting from the health professionals’ interviews will be presented in the following sections and will address five key issues that also contain subcategories:

1. **Limited knowledge and understanding about breastfeeding**
   a. Knowledge of benefits of breastfeeding and EBF
   b. The Baby-Friendly Hospital Initiative (BFHI)

2. **Health professionals’ breastfeeding promotion, education and support of women**
   a. Midwives
   b. Paediatricians
   c. Health assistants
3. **Barriers related to initiation of breastfeeding and support of women**
   a. Delayed initiation of breastfeeding among primiparae women
   b. Mode of birth
   c. Practices in Birthing Centre

4. **Challenges in the promotion of EBF**
   a. Cultural and traditional practices
   b. Returning to work
   c. Low educational status
   d. Breastfeeding problems

5. **Barriers to breastfeeding promotion**
   a. Shortage of staff
   b. Lack of continuing professional development about breastfeeding

**8.2 Discussion**

8.2.1 **Limited knowledge and understanding about breastfeeding**

Health professionals’ knowledge and understanding of breastfeeding are perceived to be essential for the promotion and support of breastfeeding, and are discussed in the following sections.

8.2.1.1 **Knowledge of benefits of breastfeeding and EBF**

All health professionals were knowledgeable about EBF as defined by the World Health Organization (World Health Organization, 2015). They understood the rationale for EBF and its importance for babies’ nutrition during the first six months of their lives. While health professionals were able to state the benefits of both EBF and breastfeeding, in general their
responses only related to the benefits to babies. A possible reason for focusing strongly on breastfeeding benefits for could be due to the importance Bhutanese families place on the vulnerability and special needs of babies (Bohler & Ingstad, 1996). Similarly, this belief could also lead the majority of health professionals, being Bhutanese nationals, to focus more on the importance of breastfeeding to babies, than to mothers. This standpoint is consistent with the student researcher’s observations as a Bhutanese national who is well versed in the traditions and culture of Bhutan.

8.2.1.2 The Baby-Friendly Hospital Initiative

Most senior midwives, obstetricians and paediatricians believed that JDWNRH was no longer a Baby-Friendly Hospital. This was confirmed by the Program Officer from the Ministry of Health, who stated that JDWNRH had lost its Baby-Friendly designation because it was not able to fulfil the criteria for being a Baby-Friendly Hospital. Furthermore, the latest report by the International Baby Food Action Network stated that in the last five years no hospitals in Bhutan have been designated or reassessed as Baby-Friendly (International Baby Food Action NetWork Asia, 2015).

The current breastfeeding policy recommends that all health workers promote, protect and support breastfeeding in reference to the Ten Steps to Successful Breastfeeding by the WHO (World Health Organization, 1989) and as promoted in Bhutan (Ministry of Health, 2002). Despite this, the majority of the health professionals were not aware of the existence of this policy, although five midwives were aware of it, and all the paediatricians were sceptical about its existence.

Except for four midwives and three paediatricians, health professionals were not aware of the establishment of breastfeeding groups. According to the WHO, Step 10 of the Ten Steps to Successful Breastfeeding states the establishment of breastfeeding support groups and referring mothers to them on discharge from the hospital or clinic (World Health
Organization, 1989). The first breastfeeding support group was formed in Bhutan in 2013 but presently the group is inactive, according to the Program Officer, because of a lack of follow-up due to staff shortages within the program. Hence, lack of knowledge among health professionals about the existence of a breastfeeding policy indicates either a lack of communication between health professionals in clinical areas. This also includes those at policy level, or health professionals not familiarising and updating themselves with the policies of the Ministry of Health.

8.2.2 Health professionals’ breastfeeding promotion, education and support of women

This section discusses the findings regarding breastfeeding promotion, education and support for women provided by all categories of health professionals who participated in the study.

8.2.2.1 Midwives

The study reveals that among the five categories of health professionals who took part in the study, midwives were positioned at the forefront of promoting, educating and providing support for breastfeeding women. This is an expectation of midwives, according to the scope of practice determined by the International Confederation of Midwives, which states:

The midwife is recognised as a responsible and accountable professional who works in partnership with women to give the necessary support, care and advice during pregnancy, labour and the postpartum period, to conduct births on the midwife’s own responsibility and to provide care for the newborn and the infant. This care includes preventative measures, the promotion of normal birth, the detection of complications in mother and child, the accessing of medical care or other appropriate assistance and the carrying out of emergency measures. (International Confederation of Midwives, 2010, p. 2)

The level of breastfeeding promotion, education and support provided by midwives was limited to providing simple instructions to pregnant women and support which included hands-on assistance with positioning and attachment of babies soon after birth. While hands-on approaches are helpful for babies’ immediate nutritional needs, a review has found that
rather than hands-on practice, ‘hands-off’ teaching by health professionals encouraged and empowered women with breastfeeding knowledge and skills (Hannula, Kaunonen, & Tarkka, 2008). Midwives, in applying hands-on approaches, need to be mindful that this can be intrusive and upsetting for women, as found in numerous studies (Redshaw & Henderson, 2012; Schmied, Beake, Sheehan, McCourt, & Dykes, 2011); however, if provided with empathy, sensitivity and rapport, physical help was appreciated by women (Schmied et al., 2011). According to midwives in the current study, later in the postnatal period but within six weeks following birth, midwives in the Lactation Clinic claimed to have helped women with breastfeeding problems such as providing assistance with manual expression, attachment and positioning of babies at breasts. There was not, however, any evidence to support this claim.

8.2.2.2 **Paediatricians**

In the current study, all paediatricians were breastfeeding advocates. Among them, one was a qualified trainer for Infant and Young Child Feeding (IYCF) for health workers, while another was an internationally certified lactation consultant. When women sought their help, paediatricians, whenever possible, advised women on good feeding practices. In contrast, in a study of health professionals in Nevada, USA it was found that paediatricians scored the lowest for breastfeeding knowledge and confidence despite the availability of resources to access information and evidence-based practice (Sigman-Grant & Kim, 2015). In Canada, paediatricians were also found to endorse formula feeds as equivalent to breastmilk and kept formula samples in offices (Pound, Williams, Grenon, Aglipay, & Plint, 2014). Paediatricians adopted this practice because they cared for more complex or medically fragile babies with more feeding difficulties and in whom formula supplementation may at times be necessary (Pound et al., 2014).

In addition, paediatrician members of the American Academy of Paediatrics presented negative opinions and attitudes about breastfeeding (Feldman-Winter, Schanler, O’Connor, &
Lawrence, 2008). This was the result of a cross-sectional follow-up survey of 875 paediatricians’ breastfeeding knowledge, attitudes and practices, which were compared to the results of a similar survey undertaken in 1995. In 2004 it was found that, comparatively, paediatricians were less likely to believe that the benefits of breastfeeding outweigh the difficulties and inconvenience of breastfeeding. They reported issues such as immaturity of mothers, inconvenience, low milk supply and infected nipples as reasons to recommend against breastfeeding (Feldman-Winter et al., 2008). Feldman-Winter et al., further assert that a negative attitude may be due to poor knowledge about how to overcome barriers and challenges, and recommend the need to continually enhance paediatricians’ knowledge, attitudes and practices in relation to breastfeeding.

8.2.2.3 Health assistants

Three health assistants who participated in the study and conducted Outreach Clinics (ORCs) provided limited support in helping women with breastfeeding. They were, however, qualified to provide breastfeeding education at ORCs but this did not occur frequently. Their other responsibility was to refer women encountering any breastfeeding problems to the hospital.

8.2.2.4 Obstetricians

Similarly, four obstetricians who participated in the study reported providing limited breastfeeding support for women and typically prescribed the medicine metoclopramide to support breastmilk production. They were more focused on their obstetrics roles and referred women to midwives for breastfeeding support and education. Similar findings emerged from a study conducted in the USA, where obstetricians who did not state a preference for mode of feeding babies played a minor role in influencing women to exclusively breastfeed (Ramakrishnan, Oberg, & Kirby, 2014). On the other hand, obstetricians who were perceived
to favour EBF were more likely to influence women to exclusively breastfeed at one and three months. This is in contrast to women who perceived that their obstetricians had no interest in their mode of feeding (Ramakrishnan et al., 2014). Although the EBF duration in this study is considerably shorter than the WHO recommended minimum of six months, the findings demonstrate that breastfeeding support by obstetricians can have a positive effect on breastfeeding women.

8.2.2.5 Program Officer
The Program Officer, by virtue of his role in the Ministry, did not provide direct breastfeeding care to women, but supported and promoted breastfeeding indirectly by facilitating and organising workshops and training related to breastfeeding for health professionals involved in direct care of women. However, the majority of midwives claimed they did not have access to the training and workshops, despite the nature of their roles at the frontline of maternity services, with women throughout all the phases of childbearing.

8.2.3 Barriers related to initiation of breastfeeding and support of women
The WHO (World Health Organization, 1989) recommends initiation of breastfeeding within half an hour of birth; however, various factors can delay initiation of breastfeeding. These barriers were usually encountered by midwives who were present when women initiated breastfeeding in the Birthing Centre and Maternity Ward. The difficulties faced by midwives in initiating breastfeeding are discussed in the following sections.

8.2.3.1 Delayed initiation of breastfeeding among primiparae women
One of the barriers to initiation of breastfeeding identified by midwives in this study was primiparity. Other studies have also found that breastfeeding initiation is delayed in primiparae women (Habib, 2003; Hackman et al., 2015; Orun et al., 2010; Pandya, Chavada, Jain, & Verma, 2015). In other words, while multiparae women drew on previous
breastfeeding experience, primiparae had no breastfeeding experience to draw from. A negative association between primiparity and breastfeeding initiation was found in a study in Turkey, where the researchers attributed lack of previous breastfeeding experience as the reason for the negative association (Orun et al., 2010). A study in Pennsylvania, USA among 1099 women, of whom 542 were primiparae women and 557 were multiparae women, also revealed that primiparae had greater delay from birth to first breastfeeding attempt, were less likely to feed at least eight times in the first 24 hours and had more breastfeeding problems during their maternity stay than those who had breastfed previously (Hackman et al., 2015). According to Hackman et al. (2015), multiparae women’s prior breastfeeding experience strengthened their breastfeeding intention, determination and self-efficacy to meet their goal, or provided a more realistic understanding of their breastfeeding intentions and expectations. This is lacking in primiparae women, who have never breastfed before and do not have the experience to draw on.

Other studies demonstrate different reasons for the delay in breastfeeding initiation in primiparity. In India, a neighbouring country of Bhutan, a study undertaken including 75 primiparae and 75 multiparae women found that only 16% of primiparae initiated breastfeeding within 24 hours compared to 50% of multiparae. The reason for the delay was speculated to be related to an expectation of in-laws for primiparae women to give birth to male babies. In India, people prefer to have a male as their first baby; therefore, the expectation for a male child by in-laws causes emotional pressure on women, which might lead to delayed milk secretion (Pandya et al., 2015).

A study in a Saudi Arabian hospital to monitor the practice and progress of initiation of breastfeeding within half an hour to one hour after birth among 602 women found that primiparae were not compliant with initiation of breastfeeding within half an hour of birth (Habib, 2003). The reasons identified were women’s lack of knowledge, coming to the labour
room without enough nourishment resulting in women being tired, lack of motivation and lack of family support (Habib, 2003). Thus, the findings of these studies highlight the need to provide extra support and encouragement in helping primiparae women to initiate breastfeeding successfully.

8.2.3.2 Mode of birth

Another barrier to breastfeeding initiation identified by midwives in the current study was birth by caesarean section. This finding is in contrast with the findings of the interviews with women, where none of the women mentioned the effect of mode of birth on their breastfeeding practices. In the current study, caesarean section caused a delay in initiation of breastfeeding because of the time taken for the actual procedure. Other barriers related to caesarean section included women being positioned in a supine position immediately after the procedure, making it difficult for babies to be correctly positioned and attached to the mothers’ breasts. Initiation of breastfeeding was also delayed following caesarean sections because women experienced pain and were not able to easily change their position to breastfeed more comfortably.

A study conducted in Saudi Arabia of 60 primiparae women found that women who gave birth by caesarean section were more likely not to initiate breastfeeding (Albokhary & James, 2014). Instead, they gave formula feed within 24 hours of birth. The reason for not initiating breastfeeding was reportedly because of pain after a caesarean section causing difficulty for women to sit up, hold and breastfeed their babies (Albokhary & James, 2014). Similarly, a study conducted in Hong Kong to examine factors associated with breastfeeding initiation in 2761 women found that birth by caesarean was a barrier to initiation of breastfeeding (Lok et al., 2015). Most women in that study underwent a planned caesarean section and hence may have decided not to breastfeed in anticipation of post-operative pain and discomfort (Lok et al., 2015). Similarly in Nepal, women who had undergone a caesarean
section were not allowed to move their head or body, resulting in babies being fed pre-lacteal feeds by their families (Khanal et al., 2015).

Other studies worldwide have demonstrated that caesarean sections are associated with delayed initiation of breastfeeding (Boccolini, Carvalho, Oliveira, & Vasconcellos, 2011; Exavery, Kante, Hingora, & Phillips, 2015; Orun et al., 2010; Pérez-Ríos, Ramos-Valencia, & Ortiz, 2008; Ramoo et al., 2014; Veile & Kramer, 2015; Vieira et al., 2010).

8.2.3.3 Practices in the Birthing Centre

Soon after birth, midwives adhered to practices that involved removal of babies from their mothers for non-urgent procedures including being weighed and administration of Vitamin K by injection. These practices could be managed after each woman had had the opportunity to hold, bond and initiate the first breastfeed for her newborn baby. For the current study, it was also reported that babies are placed under a radiant warmer routinely during the third stage of labour and during repair of an episiotomy or vaginal or perineal injury.

Separation of healthy babies from mothers soon after birth results in a delay in early initiation of breastfeeding. Researchers studying 500 breastfeeding dyads in Nigeria found that routine practices such as cleaning and weighing babies were negatively associated with early initiation of breastfeeding (Awi & Alikor, 2007). In non-Baby-Friendly hospitals in Colorado, USA nurses routinely left babies with mothers for less than five minutes after birth and then took the babies away for routine care such as cleaning, Vitamin K administration and physical assessment (Weddig, Baker, & Auld, 2011). In addition, babies were swaddled with a blanket, which is similar to Bhutanese practice, and women wore gowns, thus preventing skin-to-skin contact (Weddig et al., 2011). The above practices contradict BFHI Step 4, helping mothers to initiate breastfeeding within half an hour of birth (World Health Organization, 1989) and could result in delayed initiation of breastfeeding.
A study of 695 women in China provides evidence that women who initiated breastfeeding within the first hour of a baby’s life were more likely to be fully breastfeeding at the time of discharge from hospital compared to those who initiated breastfeeding more than one hour after the birth (Tang et al., 2013). Tang et al. (2013) defined ‘full breastfeeding’ as babies receiving only breastmilk with no other liquids or solids (except vitamins, mineral supplements or medications), or breastmilk and water, water-based drinks, fruit juice and oral rehydration salts, but no breastmilk substitutes or solids. It is argued that this is similar to EBF. Similarly in Taiwan, initiation of breastfeeding within half an hour was associated with higher odds of breastfeeding at one month and three months (Chien & Tai, 2007). In the current study, some women initiated breastfeeding later than the WHO recommended timeframe and provided breastmilk supplements to their babies. The important point is that, at six weeks after birth, none of the women had ceased breastfeeding due to a delay in initiation.

8.2.4 Challenges in the promotion of EBF

Many factors were found to hinder the promotion of EBF. In this section, the challenges faced by the health professionals and their strategies in promoting EBF are discussed. The discussion is organised under four subheadings.

8.2.4.1 Cultural and traditional practices

Bhutanese cultural practices such as giving a baby butter, honey and drops of water when bathing were described by health professionals as factors that affected the exclusivity of breastfeeding. The practice of non-exclusive breastfeeding or giving babies other fluids was consistently found and one participant in the current study described this problem as existing in Bhutanese culture “from time immemorial”. Similarly in Egypt and Ghana, pre-lacteal
foods were given to babies in keeping with norms and traditions (El-Gilany & Abdel-Hady, 2014; Otoo, Larney & Pérez-Escamilla, 2009).

The justification for non-exclusive breastfeeding was reported to be underpinned by the Bhutanese belief that breastmilk alone will not satiate a baby’s hunger and thirst. Similar findings were revealed in a study conducted in Vietnam where, out of 6068 women, 52.4% had the misconception that babies would be thirsty if they were not given water and 48.6% believed that EBF did not provide all the necessary nutrients to babies (Nguyen et al., 2013). In the Congo, water was given to babies because it was thought to be required for proper digestion of breastmilk (Yotebieng et al., 2013). The above findings highlight the need for health professionals to provide education to breastfeeding women on how to assess whether their babies are obtaining sufficient nutrition and hydration. Similar recommendations on the importance of educating women about baby-feeding cues have resulted from other studies, where women gave breastmilk supplements because they perceived their baby was crying and not sleeping properly due to hunger after breastfeeding (Clayton, Li, Perrine, & Scanlon, 2013; Heinig et al., 2006).

Another common belief, as stated by health professionals for the current study, referred to Bhutanese women regarding a newborn as an impure being. Women therefore usually do not touch or have skin-to-skin contact until their baby is wiped dry and wrapped in blankets. However, such a practice could deprive babies of the advantages of early skin-to-skin contact such as easing of the baby’s transition to extra-uterine life (Walters, Boggs, Ludington-Hoe, Price, & Morrison, 2007) and regulation of the baby’s temperature, respiration, energy conservation, crying and nursing behaviours (Walters et al., 2007). Bystrova et al. (2003) state that early skin-to-skin contact alleviates the birthing stress on newborns by decreasing their sympathetic tone through their mother’s touch, body warmth
and odour. In addition, the odour of the mother’s breast helps guide babies towards the mother’s nipple (Bystrova et al., 2003).

Studies have also found that early skin-to-skin contact, as soon as possible after birth, is associated with successful early breastfeeding. A study involving 21,842 breastfeeding dyads in the USA found that early skin-to-skin-contact within the first three hours following birth was associated with greater likelihood of women exclusively breastfeeding during their maternity hospital stay (Bramson et al., 2010). Bramson et al. (2010) add that the longer the duration of skin-to-skin contact is practised, the greater the likelihood of breastfeeding exclusively. Other studies have also found that skin-to-skin contact is also associated with successful breastfeeding initiation (Gubler, Krahenmann, Roos, Zimmermann, & Ochsenbein-Kolble, 2013), with EBF at discharge (Moore & Anderson, 2007), with EBF at discharge and at one month (Dani et al., 2015) and with an increase in exclusivity of breastfeeding and increased overall duration of breastfeeding (Mikiel-Kostyra, Mazur, & Boltruszko, 2002). Furthermore, a paediatrician in the current study explained that the practice of not encouraging breastfeeding immediately after birth could prevent the milk-producing reflex, making it more difficult for women to produce milk and leading to delayed initiation of breastfeeding. Consequently, the practice of withholding a baby from contact with their mother immediately after birth along with the mother perceiving the newborn as an impure being can result in the baby being denied the benefits associated with early skin-to-skin contact with the mother.

On the upside, health professionals in the current study praised Bhutanese women’s culture of breastfeeding everywhere, without inhibition. The health professionals reasoned that Bhutanese women considered breastfeeding a social norm and a way of life for a mother. Therefore, Bhutanese women practise breastfeeding anywhere: in private or public areas, and they do not feel embarrassed to breastfeed in public areas. This finding is contrary to the
finding of studies conducted in New York City, USA (Mulready-Ward & Hackett, 2014) and in Ireland (Shortt et al., 2013), where women cited embarrassment while breastfeeding in public. Similarly, disapproval of breastfeeding in public places was shared by partners as well as grandmothers who participated in a focus group study undertaken in Texas, USA (Gill, Reifsnider, Mann, Villarreal, & Tinkle, 2004). In another US study, interviews with expectant women and fathers revealed that they disapproved of breastfeeding in public (Avery & Magnus, 2011). Health professionals in the current study stated that because women were not embarrassed to breastfeed anywhere, breastfeeding initiation was successful and women breastfed babies for a longer duration; however, EBF practices were sub-optimal.

While cultural and traditional practices influenced women’s breastfeeding, family elders were usually responsible for enforcing these practices among women. Health professionals in the current study echoed the views of the women that most of the time cultural practices were enforced by family elders. They reasoned that the culture of living in a joint family (extended family) that exists in Bhutanese society has favoured elders to enforce their views on women. In such environments, new mothers are usually subjected to various recommendations and advice from other family members about how to feed their babies. Usually, the decision about how to feed is made by the individual who has the most authority in the family: mostly grandmothers of the baby.

This type of culture is also prevalent in countries such as Nepal, where advice from grandmothers is most influential in the pre-lacteal feeding of babies (Khanal et al., 2015); in Laos, where elders, especially grandmothers and relatives, encourage supplementary foods (Lee, Durham, Booth, & Sychareun, 2013); in Egypt (El-Gilany & Abdel-Hady, 2014); in Ghana (Otoo et al., 2009); in Zimbabwe (Nduna et al., 2015); and in Cameroon, where elders pressured women to give their baby breastmilk supplements in keeping with their traditions
These cultural and traditional practices imposed by elders can deny babies the benefits of colostrum and also inhibit EBF practices.

The health professionals in the current study recommended that family members be included in breastfeeding education. They claimed that it is important particularly to target female elders for the education, because these elders have an influence over women to enforce traditional and cultural practices that are detrimental to EBF. The importance of including family members and partners in breastfeeding education has also been acknowledged in other studies. Maycock et al. (2013) explain that providing family and partners with antenatal education and postnatal support for breastfeeding can improve breastfeeding rates. Recommendations to provide family members, including husbands or partners, with breastfeeding education has also emerged following studies in Hong Kong (Wang et al., 2014), Taiwan (Ho & McGrath, 2011), the UK (Brown & Davies, 2014), the USA (Grassley & Nelms, 2008; Mueffelmann et al., 2014) and Vietnam (Bich, Hoa, & Målvqvist, 2014). In light of the findings of this study, there is evidence to support recommendations that Bhutanese health professionals incorporate breastfeeding education and support inclusive for not only women, but also their partners and other family members to improve breastfeeding and EBF rate.

While it is important to educate partners and family members about breastfeeding for better breastfeeding outcomes, it was observed that in Bhutanese society fathers do not necessarily get a chance to play an active role in women’s breastfeeding decisions. Paediatricians in the current study stated that fathers are almost sidelined from involvement in breastfeeding decisions or support from the day women start to receive antenatal care.

Evidence shows that if fathers preferred EBF, mothers were more likely to practise EBF in the first few postnatal weeks in the USA (Mueffelmann et al., 2014). In Brazil, fathers have also been found to encourage women to continue EBF until six months (Vieira et al., 2014).
and in Taiwan fathers helped women decide to continue breastfeeding when they returned to work (Tsai, 2014). Furthermore, primiparae women who received support from their husbands or partners during the early postnatal period were more likely to breastfeed for a longer duration (Hunter & Cattelona, 2014). Therefore, there is a need for Bhutanese health professionals to actively involve and encourage fathers to support women to breastfeed and EBF.

8.2.4.2 Returning to work

The health professionals in the current study considered returning to work as a cause of non-exclusive breastfeeding of babies by women. One study participant stated, “Sometimes you have to feed them [women] fish, before they can learn how to fish”. This suggests that sometimes circumstances necessitate women to trivialise breastfeeding because they have much larger worries and responsibilities such as working and earning for their entire family. Therefore, health professionals stated that returning to work was a barrier to EBF for six months.

Research findings have also shown that women in Ethiopia who return to work are not able to practise EBF (Mekuria & Edris, 2015). Similarly, studies have revealed an association between return to work and low or declining breastfeeding duration rates among women in Australia (Baxter et al., 2009; Cooklin et al., 2008; Weber et al., 2011), Mexico (Rivera-Pasquel, Escobar-Zaragoza, & Gonzalez de Cosio, 2014) and the USA (Guendelman et al., 2009; Mirkovic et al., 2014). Furthermore, a study highlighted an association between breastfeeding women’s return to work and weaning after six weeks in Hong Kong (Wang et al., 2014). In Canada, even though some women received paid maternity leave for twelve months, return to work was still associated with early cessation of breastfeeding (Kehler et al., 2009).
Health professionals participating in this study argued that to improve the rate of EBF until at least six months after birth, there should be an equivalent increase in maternity leave. This increase would not only promote the EBF rate but also increase breastfeeding duration to benefit both maternal and baby health. At the time of this study, Bhutanese women working for the government received paid maternity leave for three months, while those employed by private or corporate organisations received one to two months paid maternity leave. In Ireland and Scotland, it was found that women having longer maternity leave breastfed for longer than those who received a shorter leave duration (Skafida, 2012; Smith et al., 2015). While a longer duration of maternity leave is desirable for longer breastfeeding duration, women in the current study could not afford to extend their leave to stay at home to breastfeed their babies because, according to the health professionals, these women could be the sole income providers in their families. However, it is to be noted that recently the Government of Bhutan has taken a positive step to support breastfeeding. According to a recent report by the national newspaper, ‘Kuensel’, the Cabinet of the Government of Bhutan has endorsed a proposal for six months maternity leave and an additional six months of flexi-time, to allow breastfeeding women working in government organisations to work for a half-day for up to six months (Pokhrel, 2015b), and on 1 March 2016 the Royal Civil Service Commission issued a press release stating that this change came into effect immediately (Royal Civil Service Commission, 2016).

Most workplaces in Bhutan do not provide an enabling environment for women to breastfeed babies. There are no child care facilities and even basic facilities such as crèches are rare to find in most workplaces. So women cannot help but leave their babies at home in the hands of others. While women working in government organisations can avail themselves of one additional hour of break for breastfeeding (Royal Civil Service Commission, 2012), for some women this time is not sufficient for them to commute home to breastfeed because
their workplaces are a long distance from their homes. This is because women may not have their own vehicle to commute back and forth, nor have the financial means to pay for private taxis, as in Thimphu the public transport (buses) traverse only certain areas.

While health professionals reported they recommended to women returning to work that they express breastmilk as a strategy to continue EBF, for various reasons none of the women planned to do so. Firstly, the women claimed not to have received any such recommendation or advice from midwives. Further, the women had already decided to supplement their breastmilk when they returned to work. Some midwives from the Birthing Centre and Maternity Ward admitted that although they knew about expressing breastmilk, they had never advised women to express, nor did women seek such advice. One paediatrician stated that expressing breastmilk was not feasible for her, while one of her colleagues stated that women have more important things to do in their lives such as earning a livelihood, rather than spending their time expressing breastmilk to feed their babies. Similarly, a paediatrician in a study undertaken in Colombia stated that women have to work and do not have the luxury of staying at home just to breastfeed (Radzyminski & Callister, 2015).

These issues highlight a range of difficulties faced by breastfeeding women who have to return to work. Some of the problems relate to a lack of support and advice from health professionals. Therefore, there is a need for ongoing professional development to support and promote EBF, particularly for midwives, who are in the right position to provide women and their families with education about strategies such as the expression of breastmilk and its storage.

8.2.4.3 Low educational status of women

In the current study, health professionals identified the low education level of Bhutanese women as a reason for failure to practise EBF. However, health professionals also fell short
in providing regular support to women. Most health professionals failed to identify
opportunities for breastfeeding promotion and education for women throughout all phases of
childbearing. Instead, they argued that women should be more self-directed in seeking
information.

Studies have shown that well-educated women acquired breastfeeding knowledge and
had positive intentions for EBF (Yu et al., 2015). These women tended to perform better in
terms of initiating breastfeeding (Lakew, Tabar, & Haile, 2015) and breastfed for a longer
duration (Kronborg & Vaeth, 2004; Magarey et al., 2015; Roostae et al., 2015). In Nigeria
and Ireland, women with tertiary education were more likely to practise EBF and to
breastfeed longer than those with either secondary or primary school qualifications (Onah et
al., 2014; Smith et al., 2015). In Canada, women with no post-secondary education were
associated with early cessation of breastfeeding (Kehler et al., 2009). Similarly, lower levels
of education (Year 12 and lower) were associated with early introduction of solid feeds to
babies by four months in Australia (Magarey et al., 2015) and by three months in Croatia
(Zakarija-Grkovic et al., 2015).

Women in the current study did not think EBF was necessary. They assumed that their
baby would survive without EBF on the premise that babies of the past had survived without
EBF. The Program Officer acknowledged there is a need to change such attitudes among
women towards breastfeeding and he argued this change could be brought about by educating
women about the importance of breastfeeding and EBF.

8.2.4.4 Breastfeeding problems

This section discusses the effect of breastfeeding problems on EBF. In this study, contrary to
the women’s view that even though they faced breastfeeding problems, for example, sore,
cracked nipples, breast engorgement and painful breasts, they persisted with breastfeeding.
Health professionals asserted such problems were one of the reasons women chose breastmilk
supplements. These contrasting views possibly relate to the women’s definition of EBF (feeding breastmilk in addition to other fluids), whereas the health professionals were more aware of the WHO definition of EBF.

In this study, the women considered giving supplements if they perceived they were not producing enough milk, which they believed was indicated by their baby crying and/or refusing to settle. Congruent with this view, health professionals stated that because women perceived they were not producing enough breastmilk, this was a main reason for supplementing their supply with formula preparation. One paediatrician also stated that women did not consider colostrum breastmilk and therefore until the ‘full’ or white milk came in, women gave formula to babies. This finding is consistent with practices in Ethiopia, where out of 383 participants 11% discarded the first milk until white milk came in (Adugna, 2014). This issue highlights the importance of providing regular and accurate information to women and their families in relation to breastfeeding and its challenges, and how to manage the challenges.

Health professionals perceived that women usually encountered breastfeeding problems at home and that was when they started supplementing with formula preparation. At JDWNRH, following a normal vaginal birth women were discharged home the following day or within 24 hours, while those who had undergone a caesarean section were discharged after 72 hours. Health professionals, therefore, stated that even if women had initiated breastfeeding in the hospital and went on to develop problems such as sore nipples and breast engorgement at home, this led to supplementation of breastmilk.

Similar views were expressed by midwives in Australia, who noted that women often faced breastfeeding problems at home following discharge from hospital, which occurred within 48 hours of birth and before their breastmilk came in (McLelland, Hall, Gilmour, & Cant, 2015). However, unlike women in Australia who are offered a domiciliary visit, for
women in Bhutan, at present, a system of domiciliary support does not exist. Other studies have found similar issues, where early discharge resulted in women having to leave the hospital before they had established breastfeeding (Forster et al., 2008; Rudman & Waldenstrom, 2007). Similarly, a study conducted in England comprising 4800 primiparae women found that a length of stay in hospital of less than six hours was associated with lower likelihood of EBF (Henderson & Redshaw, 2011). Although researchers did not specify the reason, it is possible that discharge from hospital before breastfeeding is established is more likely to result in women experiencing breastfeeding problems at home. This is the time when women are most likely to start breastmilk supplementation.

In the current study, health professionals claimed they recommended breastmilk supplements when a woman was not producing breastmilk. One of the paediatricians admitted to being perplexed that many women without obvious underlying causes were not able to produce breastmilk within the first few days following birth. She attributed this problem to the fact that women did not practise skin-to-skin contact and babies were swaddled. She further stated that swaddling can potentially cause a mother to miss cues from her baby demanding to be breastfed and result in failure to breastfeed on demand, causing reduced breastmilk production. Skin-to-skin contact as soon as possible after birth is recommended, provided both the woman and her baby are well, not only for the purpose of attachment, but also to promote breastfeeding within half an hour of birth (Bramson et al., 2010; Gubler et al., 2013; Hongo et al., 2015; Tang et al., 2013). This practice is in accordance with BFHI Step 4 of the WHO recommendation, which states that mothers are recommended to initiate breastfeeding within half an hour of birth (World Health Organization, 1989). These issues highlight the necessity for women to receive timely professional support and assistance with breastfeeding.
Midwives’ supplementation of breastmilk when they perceived babies were dehydrated and without waiting for a doctor’s order was also responsible for interfering with breastmilk production. Their action contravenes BFHI Step 6 of the WHO recommendation, which states that newborns should be given no food or drink other than breastmilk, unless there is a medical indication to do so (World Health Organization, 1989). One midwife stated that breastmilk supplementation was preferred to babies becoming dehydrated and ultimately being subjected to diagnostic procedures such as drawing blood and being admitted to hospital.

8.2.5 **Barriers to breastfeeding promotion**

Health professionals faced numerous barriers during breastfeeding promotion. These are discussed in the following sections.

8.2.5.1 **Shortage of staff**

While women wanted more education during pregnancy about what to expect when breastfeeding, health professionals stated they were faced with staff shortages that prevented them from providing adequate education to women. In particular, midwives in the Antenatal Unit, Birthing Centre and Maternity Ward reported this as a barrier. Inadequate staffing levels led midwives to shift their priorities to other critical and immediate needs of women because of the demands of a heavy workload. The midwives reported they focused more on attending to the immediate care needs of women during labour, birth and immediately following birth, which left them with almost no time for breastfeeding education or promotion. This was similar to views expressed by midwives and maternal child health nurses in Victoria, Australia where they stated that lack of time was a barrier to teaching breastfeeding skills before women were discharged home (Gilmour et al., 2009).

Furthermore, postnatal care was considered a low priority compared to attending to birthing
women (Gilmour et al., 2009). Hence, health professionals, especially midwives, in the current study were constantly challenged by their perceived inability to provide adequate breastfeeding support due to staff shortage and busyness. Similar issues have been identified in Australia (Rayner, Forster, McLachlan, Yelland, & Davey, 2008) and Ireland (Whelan & Kearney, 2015).

According to the findings of the current study, some midwives were not clear about who should be primarily responsible for promotion of and education about breastfeeding in the hospital. Midwives in the Birthing Centre and Maternity Ward felt women should have been educated about breastfeeding during their antenatal care, because once women were in the Birthing Centre or Maternity Ward, staff shortages made it difficult to educate women. The midwives justified their stance by stating that if babies were admitted to the NICU, breastfeeding would be promoted by the nurses in the NICU.

On a similar note, health assistants stated that breastfeeding promotion was not in their scope of practice, even though they had content about it during the program of study for their course. However, their claim is contrary to the description of their roles and responsibilities, which states that, in addition to preventative, promotive and curative services, they are also required to provide maternal and child care services (Human Resource Division, 2014). Moreover, health assistants argued that ORC activities were mostly carried out in open areas; therefore, it was not feasible to provide breastfeeding support to women with breastfeeding problems. Hence, they referred all women with breastfeeding difficulties to the Lactation Clinic at the hospital.

Overworked and demotivated health professionals can compromise breastfeeding and EBF practices. A paediatrician participant of this study contended that because of staff shortages and heavy workloads, midwives were demotivated, thereby compromising good breastfeeding practices. Similar findings emerged from a study undertaken in the UK of
midwives and maternity support workers who, due to lack of time and staff, were found to have low levels of compliance in relation to breastfeeding promotion, education and support for women (Hunter, Magill-Cuerden, & McCourt, 2015). Similarly, both paediatricians and obstetricians in the current study explained they were too busy in their primary roles of looking after sick babies and mothers to have sufficient time for breastfeeding promotion and education activities.

Likewise, at the policy level only one person was responsible for the Nutrition Program, where breastfeeding was just a part of numerous responsibilities of the program. Due to the diverse roles in the Nutrition Program, the Program Officer stated the issues related to breastfeeding promotion and education could not be adequately addressed by him alone, leading to failures and gaps in the Nutrition Program, and JDWRGH losing its Baby-Friendly status. In addition, issues pertaining to the existence of an outdated breastfeeding policy, lack of follow-up, such as through breastfeeding groups for women and their families, and lack of evaluation of the implementation and effectiveness of staff training in IYCF were highlighted by the Program Officer.

On the other hand, health professionals stated breastfeeding can be compromised by women themselves because they did not seek breastfeeding information. Midwives in the current study argued that when health professionals organised breastfeeding information sessions specifically for pregnant women, very few attended. This was attributed by midwives to the possibility that women assumed they would naturally know how to breastfeed once their babies were born. Similarly, midwives in the Maternity Ward and Birthing Centre reported that following birth, most women were not willing to stay to receive education. Women, on the other hand, claimed they did not approach health professionals for education or assistance, assuming they were too busy.
Lack of continuing professional development about breastfeeding

Lack of regular training for health professionals about breastfeeding is a barrier for EBF. Some midwives had received no continuing education on breastfeeding since they had graduated from their nursing education, and among health assistants, out of three only one was trained in IYCF. Due to a lack of training and continuing education, midwives and health assistants encountered difficulties in providing advice and support when they identified women with breastfeeding problems.

Findings of many other studies support the need for regular updates in breastfeeding knowledge and skills for health professionals. Health professionals’ limited education was seen as a barrier to best practice breastfeeding initiation in Colorado, USA (Weddig et al., 2011). The need for refresher courses to update breastfeeding knowledge has been voiced by midwives in Australia (McLelland et al., 2015) and Ireland (Whelan & Kearney, 2015), and by maternal and child health nurses in Mozambique (Arts et al., 2011). In addition, many researchers have recommended refresher courses on breastfeeding for health professionals (Ekström, Kylberg, & Nissen, 2012; Jiang et al., 2012; Wang et al., 2014; Yotebieng et al., 2013).

The benefits of providing regular updates in knowledge and skills on breastfeeding to health professionals are multifarious. A study was undertaken in Poland of 361 health care practitioners, including midwives, medical doctors, nurses, educators, psychologists and members of other professions, of whom 168 had completed a professional development course in breastfeeding. The researchers found that 83.3% of the control group (those who had not received the education) were not adequately prepared to provide breastfeeding counselling and support (Nehring-Gugulska, Nehring, & Krolak-Olejnik, 2015). Various other studies have found that professional development updates are effective in improving nurses’ and midwives’ knowledge about breastfeeding (Cobb, 2014; Davis & Sherrod, 2015;
Phillips, 2011) and improve breastfeeding rates (Ekström et al., 2012; Ekström & Thorstensson, 2015; Grossman et al., 2009; Li et al., 2014; Zakarija-Grković et al., 2012). Finally, a review of 15 studies from nine countries found that continuing breastfeeding education improves the knowledge, clinical skills and practices, and counselling skills of nurses and midwives (Ward & Byrne, 2011).

In contrast to the claim of the Program Officer that health professionals were given training on breastfeeding, the majority of midwives in the Birthing Centre and Maternity Ward reported that this was not the case. As a consequence, midwives reported they became demotivated and disheartened in their role, which in turn led to a disorganised approach to breastfeeding promotion and education for women and their families. However, the Program Officer contended that health professionals were responsible for updating their own knowledge. One paediatrician also stated that midwives had become used to training being given to them and so they lacked the initiative to seek knowledge on their own.

8.3 Conclusion

Bhutanese health professionals were found to possess knowledge of EBF and the WHO breastfeeding recommendations; however, many were not sure whether JDWNRH was still accredited as Baby-Friendly. Similarly, many of the health professionals were not aware of the existence of the National Breastfeeding Policy, which mandates them to adhere to the WHO’s BFHI Ten Steps to Successful Breastfeeding.

Many other factors hindered health professionals’ efforts to promote EBF. Health professionals attributed factors such as women’s adoption of cultural and traditional practices, their return to work, their low education levels and breastfeeding conditions as barriers to EBF. Further, busyness and staff shortages, compounded by lack of regular professional development programs on breastfeeding, were key factors perceived by health professionals as barriers to effective breastfeeding promotion.
The next chapter will discuss the application of the theory of planned behaviour to the findings from the women’s and the health professionals’ interviews.
CHAPTER 9: APPLICATION OF THEORY OF PLANNED BEHAVIOUR TO INTERPRET FINDINGS

9.1 Introduction

The Theory of Planned Behaviour (TPB) is commonly used to predict human behaviour. In the current study, it has been used to inform the development of interview guides for interviews with women and health professionals, and in data analysis and interpretation. The theory has been successfully applied in identifying the factors that influence the three determinants of women’s intention, at the term of pregnancy and six weeks after birth, to breastfeed and for exclusive breastfeeding (EBF). Similarly, the theory has been successfully used in identifying the factors that influence the three determinants of health professionals’ intention to support and promote breastfeeding and EBF.

In the first section of this chapter, the discussion focuses on the application of the TPB to the findings of the interviews with the women. This is followed by a discussion of the application of the theory to the findings of the interviews with the health professionals.

9.2 Theory of planned behaviour and the women

In the current study, the intention was defined as the women’s plan to breastfeed and to breastfeed exclusively, while the expected outcome was EBF at six weeks. Factors such as cultural and traditional beliefs, moral norms and socioeconomic status affected the three determinants of the women’s intention, as shown in Figure 9.1.
Figure 9.1 illustrates the relationship between women’s attitudes, subjective beliefs and control beliefs around breastfeeding.

Figure 9.1 Theory of Planned Behaviour and the findings of the interviews with women, adapted from Ajzen (2005)
The discussion will be presented under the following subheadings:

- Women’s attitudes towards breastfeeding
- Subjective beliefs affecting breastfeeding
- Perceived Behavioural Control beliefs affecting breastfeeding

### 9.2.1 Women’s attitudes towards breastfeeding

Attitude is defined as an individual’s positive or negative evaluation of performing the behaviour of interest (Ajzen, 2005). According to TPB, women’s positive or negative attitudes towards breastfeeding determine, in part, their intention to breastfeed. Those with positive attitudes are more likely to state an intention to breastfeed and to perform the behaviour, whereas women with a negative attitude may not consider breastfeeding at all.

The women in the current study reported positive attitudes towards breastfeeding and numerous factors shaped their attitudes. They stated their intention to breastfeed was based on their perception that breastmilk was the best possible nutrition for their babies because of its protective and nutritional properties. The association between such perceptions and the intention to breastfeed is consistent with the findings of other studies (Bai et al., 2009; Stuebe & Bonuck, 2011; Vaaler et al., 2010; Wojcicki et al., 2010).

In addition, the Bhutanese culture of believing that all babies have to be breastfed once they are born, as well as the belief that it is natural to breastfeed, also influenced women’s attitude towards breastfeeding. Because of this, primigravidae women, even after being told that breastfeeding was painful, and multigravidae women, having experienced discomfort when breastfeeding their previous babies, adopted positive attitudes towards breastfeeding, and all women intended to breastfeed.

However, even though women had a positive attitude towards breastfeeding, the majority of the women did not intend to breastfeed exclusively. This was because most of the women lacked knowledge of what EBF means and were not aware of the WHO
recommendations for EBF (World Health Organization, 2015). Researchers have found that women who were aware of the WHO guidelines held a positive attitude towards breastfeeding and planned to breastfeed exclusively until six months after birth. This was the finding of a study of 33 women in the UK who adopted EBF for six months after the birth of their babies. These women also perceived EBF as a natural option for feeding their babies and found EBF to be convenient, easy and fulfilling (Brown & Lee, 2011).

The study by Brown and Lee (2011) highlights the potential for knowledge of the WHO recommendation to have a positive influence on women’s attitudes towards breastfeeding. When the women in the current study were informed about the WHO recommendation, the majority of them stated they would strive to breastfeed exclusively, but this was a conditional undertaking. For example, they planned to exclusively breastfeed only if they produced sufficient milk to satisfy their baby’s hunger, and their measure of satisfaction included the baby not crying and remaining settled.

9.2.2 Subjective beliefs affecting breastfeeding

Ajzen (1991) defines subjective norms as a person’s ‘perception of social pressure’ to perform or not to perform a specific behaviour. One study found that subjective norms did not predict the breastfeeding intention of women (Wambach, 1997); however, in the current study subjective norms have been found to be associated with breastfeeding intention and outcomes. This is similar to the findings of a study conducted in Scotland, where it was demonstrated that subjective norms are important determinants of initiation and continuation of exclusive breastfeeding, as well as non-exclusive breastfeeding (Swanson & Power, 2005).

In the current study, subjective norms are defined as expectations of and influences by family, friends, and health professionals, and hospital policy in relation to women’s intention to breastfeed and EBF. Subjective norms were strongly influenced by cultural and traditional practices, social norms and moral norms. For example, breastfeeding was found to be a social
norm in Bhutan, where all women were expected to breastfeed their babies. Primigravidae women who were due to give birth perceived breastfeeding as the only option for feeding their baby. Further, certain cultural and traditional beliefs called for women to adopt practices that would hinder the exclusivity of breastfeeding. Consequently, due to social, cultural and traditional pressures, women felt that breastfeeding their baby was the right thing to do. This is referred to as a moral or personal norm and is defined as personal feelings of moral obligation or responsibility to perform or refuse to perform a certain behaviour (Ajzen, 1991, p. 199). Other studies have similarly found moral norms in the form of social expectations to be strong predictors of intention to breastfeed (Lawton et al., 2012; McMillan et al., 2008).

Elders in the family influenced women’s intention and practice of EBF. ‘Elders’ in this case refers to women’s mothers, grandmothers and mothers-in-law. The elders expected childbearing women to follow certain cultural and traditional practices after birth, such as giving babies butter as soon as they were born or feeding them bathwater before immersing them in water. Women during the interviews commonly stated that they had been ‘told’ by their elders that they had to follow these practices. Hence, even though most women claimed that they were going to exclusively breastfeed, this practice was subject to the conditions upheld by their elders, as well as cultural and traditional practices.

Women looked to their female family members for breastfeeding support, seeking their advice as well as hands-on support. Provision of breastfeeding support by female members has been a finding of other studies (Bai et al., 2011; Lundberg & Ngoc Thu, 2012; Swanson & Power, 2005). However, family members in the current study also expected women to give babies other foods in the belief that breastmilk was not sufficient. Female family members, in drawing on their own experiences, influenced childbearing women. It is perceived, therefore, that these elders did not know or understand the meaning of EBF. Similar findings have emerged in a number of studies, where women who had intended to
perform EBF gave formula feeds because of their own and their elders’ perception that breastmilk alone was not sufficient to nurture their baby (Gewa & Chepkemboi, 2016; Hernández & Vásquez, 2010; Wagner et al., 2013; Walingo & Mutuli, 2014). In the current study, women’s mothers and mothers-in-laws discouraged EBF because they claimed that babies during their time survived without it and, therefore, babies today should be able to do the same. This was their rejoinder when they were told about the importance and the benefits of EBF.

Among the women’s social referents, husbands or partners played the least prominent role in deciding on babies’ mode of nutrition. They were deemed by women as supportive when they helped with household chores so that women could breastfeed. However, when it came to babies’ feeding mode, husbands accepted the decision of the women and the female elders in the family.

Women in both groups looked to health professionals to provide them with breastfeeding support. During pregnancy, most of the multigravidae women intended to breastfeed because health professionals had directed them to do so following the birth of their previous babies. Other studies have found that health professionals influence women’s intention to breastfeed (Walsh et al., 2015) and that women prefer professional advice during pregnancy and after the birth of their baby (Plutzer & Keirse, 2012). Similarly in Kenya, the opinions of health professionals were most influential in women’s decision to initiate breastfeeding within the first hour of life, to exclusively breastfeed until six months and to continue breastfeeding through the baby’s first year (Walingo & Mutuli, 2014).

However, although the primigravidae in the current study looked on health professionals as an important social referent, they were not provided any breastfeeding information during their pregnancy. Similarly after birth, due to inadequate breastfeeding support by health professionals, especially midwives, women faced difficulties with
attachment and positioning of their babies, leading to the development of nipple soreness, damage and breast engorgement. Further, due to inadequate breastfeeding education, when women perceived they had insufficient breastmilk production they commenced supplementation of their supply with a formula preparation.

9.2.3 Perceived control beliefs affecting breastfeeding

Perceived behavioural control (PBC) is defined as a person’s perception of the ease or difficulty of performing a behaviour of interest (Ajzen, 1991). In this study, the control was defined as the woman’s control over her feeding decision and her confidence in being able to exclusively breastfeed until six months after birth and up to two years of age. For women in the present study, factors that positively influenced PBC were previous breastfeeding experiences (multigravidae women), observation of others breastfeeding successfully (primigravidae women), provision of breastfeeding support by family and perceptions of breastfeeding as a natural process. Factors that negatively affected PBC in this study were a lack of EBF knowledge, breast problems, the baby’s behaviour, elders’ influence in maintaining cultural and traditional practices, socioeconomic status and lack of health professionals’ support.

Women in both groups stated during their pregnancies they had control over their choice of their baby’s mode of feeding. They perceived they were confident that with help and support from their husbands, family and health professionals, they would breastfeed successfully. They also perceived that breastfeeding was a natural process and would occur once their baby was born. In addition, multigravidae women had their previous breastfeeding experiences to draw on. All these factors led to their intention to breastfeed and EBF. However, contrary to the women’s claim during pregnancy that they had full control over their baby’s feeding plan, at six weeks after birth this was found not to be the case. Instead, it was reported by women that their choice of nutrition for their baby was influenced largely by
the baby’s grandmother. Women, especially primiparae women, reported they did not have any choice or control over their own baby’s nutrition and that non-exclusive breastfeeding practices were applied. During the early postnatal days, health professionals, especially midwives, reported they gave supplementary formula feeds to babies without seeking the opinions or consent of the breastfeeding mothers or doctors.

The behaviours of a baby were also influenced by its mother’s sense of control over feeding. If their baby was unsettled and cried, mothers assumed the baby was still hungry and so they gave a supplement. A study conducted in Australia found that mothers’ PBC was similarly affected by their perception of their baby’s hunger (Walsh et al., 2015). Other research has identified that babies crying and failing to settle were understood by mothers as signs the babies were hungry and were reasons for breastmilk supplementation (Hauck et al., 2011b; Heinig et al., 2006; Oommen et al., 2009).

Other factors that affected women’s PBC were breastfeeding problems and the health condition of their babies. For example, when women experienced delayed breastmilk production, most reported that they supplemented their baby’s nutrition with either a formula preparation or water. Babies were also supplemented when they developed conditions that were beyond women’s control, such as jaundice, dehydration and fever. This breastmilk supplementation is aligned with Step 6 of the Ten Steps to Successful Breastfeeding, where it is recommended babies can be fed other feeds to support recovery from these conditions (World Health Organization, 1989).

The socioeconomic status of women also influenced women’s PBC. Women who returned to paid work reported that they could not afford to take time off work to stay at home and breastfeed. They stated that they depended on their wages for sustenance, which affected their PBC over exclusively breastfeeding their babies. Return to work has previously been found to affect women’s PBC over EBF, as well as the duration of breastfeeding (Bai et
al., 2009; Dodgson et al., 2003; Walingo & Mutuli, 2014). In the current study, although at six weeks none of the women who worked for government, corporate or private organisations had returned to work, their intention not to breastfeed exclusively once they returned to work stood firm. Only two women, who had their own businesses, had resumed their work, which allowed them to have their babies with them.

Lack of breastfeeding information during pregnancy led to women’s failure to understand what constituted EBF or what to expect after birth. Women, especially primiparae, were taken aback by the reality of breastfeeding and reported they were not aware that it could give rise to problems such as sore nipples and breast engorgement. In addition, inadequate and lack of breastfeeding support after the birth severely affected women’s PBC and consequently most started supplementing breastmilk with a formula feed.

The TPB has been useful in identifying the factors that affected attitudes, subjective norms and PBC as determinants of women’s intention to breastfeed. These factors affected women’s intention to breastfeed exclusively; however, as explained above and for a range of reasons, women were not able to practise EBF. Consequently, six weeks after birth the majority of women reported they practised non-exclusive breastfeeding for their babies. In other words, women were breastfeeding, but at the same time they were supplementing breastmilk with either water, formula feed or solids. These findings, in reference to the PBC, indicate that the women were compromised by a lack of breastfeeding education and support from health professionals. This was experienced throughout the childbearing continuum, including pregnancy, the immediate postnatal period and up to six weeks after birth. Although health professionals are well positioned to encourage and reinforce factors to help women develop positive attitudes towards breastfeeding and EBF, this was not the case for this study.
9.3 Theory of planned behaviour and the health professionals

Application of TBP in the current study has been useful in identifying the factors that determined health professionals’ attitudes, subjective norms and PBC over promoting and supporting breastfeeding. Figure 9.2 shows the relationship between the three behavioural determinants of the TPB and health professionals’ intention towards breastfeeding support and promotion.

**Figure 9.2 Theory of Planned Behaviour and the findings from the health professionals’ interviews**
For health professionals, the factors affecting PBC were more influential than attitudes and subjective norms when it came to their intention to support and promote breastfeeding. However, studies that have applied TPB to explore health professionals’ intention to support and promote breastfeeding could not be identified. Hence, the discussion draws on international literature where TPB was applied to health professionals in other areas of practice. The discussion will be presented under the following subheadings:

- Attitudes towards and intention to provide breastfeeding support and promotion
- Subjective norms affecting breastfeeding support and promotion
- PBC affecting breastfeeding support and promotion

9.3.1 Attitudes towards and intention to provide breastfeeding support and promotion

Health professionals had a favourable attitude towards breastfeeding and EBF. Factors such as knowledge of EBF, benefits of breastfeeding and the WHO recommendation to promote and support breastfeeding influenced their attitudes towards breastfeeding and EBF. Health professionals, however, demonstrated reluctance to promote EBF in practice. Most stated that supporting breastfeeding was not easy, due to factors affecting PBC such as lack of breastfeeding training, a shortage of staff and related heavy workloads. As a consequence, health professionals displayed a negative attitude towards encouraging, promoting or supporting EBF.

9.3.2 Subjective norms affecting breastfeeding support and promotion

Subjective norms for health professionals in the current study are defined as the expectations from the women, their families and society. Women, their families and society in general expected health professionals to support them with breastfeeding. Social referents for health professionals also included their hospital executives and their colleagues. The senior
executive of JDWNRH expected all health professionals, particularly those working in the maternity care with close contact with mothers and babies, to encourage EBF until six months, in accordance with the WHO and Royal Government of Bhutan’s recommendations. However, they faced barriers when women and families supplemented breastmilk without seeking advice. In addition, women’s and family members’ adoption of certain cultural and traditional practices after birth hampered health professionals’ role in encouraging EBF. Colleagues also played an important role, where staff who were inexperienced and new to the field looked on their colleagues to guide and teach them.

9.3.3 PBC affecting breastfeeding support and promotion

A few health professionals in the current study stated that they were confident in assisting women with breastfeeding. This confidence stemmed from their own personal experiences of breastfeeding and years of working in maternity care; whereas for junior or inexperienced health professionals, their confidence was partly drawn from support and guidance from their colleagues. However, it was reported by participating health professionals that factors such as lack of updates in knowledge and skills in breastfeeding influenced PBC over promoting and supporting EBF. Therefore, health professionals recommended the need for updates in breastfeeding knowledge and skills in order to provide effective EBF promotion. Similar recommendations have been made by researchers to update dieticians’ and nurses’ knowledge and clinical skills in relation to breastfeeding in order to overcome their perceived barriers to recommending breastfeeding to new mothers (Daneault et al., 2004).

Other factors such as lack of facilities (for example, a shed or shelter) also hindered health professionals, especially health assistants, in breastfeeding promotion and education for women in the current study. Lack of physical resources, such as inaccessibility to hand basins and products for hand hygiene, has also been reported as a barrier to nurses adhering to practice standards (White et al., 2015). Additionally, staff shortages and related workloads
were reported by health professionals in the current study as impairing their ability to provide adequate and relevant breastfeeding support for women.

The factors described above affected health professionals’ PBC and outweighed their positive attitude and subjective norms in relation to breastfeeding, resulting in health professionals providing inadequate breastfeeding support and information. This finding supports Ajzen (2005) statement that PBC alone can influence a behavioural outcome, independent of the behavioural intention. However, in the current study the factors that negatively affected PBC had a stronger effect than the factors positively aiding PBC. This led to inadequate breastfeeding promotion and support for women.

Studies have shown that PBC alone can bring about behavioural changes. PBC was found to be a strong predictor of behaviour in a study of 802 nurses where TPB was applied to explore their intention to comply with post-exposure management following exposure to blood and body fluids in Taiwan (Ko et al., 2011). Nurses’ intentions were predicted first by their PBC to perform post-exposure follow-up and then by subjective norms and finally by their attitudes towards the post-exposure management (Ko et al., 2011). In another study, perceptions by nurses that they had control regarding recommendations for use of filter needles show that PBC and attitudes were the main determinants of their intention to follow the recommendations (Gagnon, Cassista, Payne-Gagnon, & Martel, 2015).

Application of the TPB has been useful in identifying the factors affecting health professionals’ intention to support and promote breastfeeding and EBF in women. Health professionals were reluctant to express their intention to promote EBF, despite having positive attitudes towards EBF. This reluctance could have been due to being aware of their expectations in the form of subjective norms relating to breastfeeding. Factors related to the demands of everyday practice in maternity care affected health professionals’ PBC so as to outweigh or diminish their intention. The factors encountered by health professionals in
Bhutan that had a negative impact on their PBC and their capacity to provide optimal BF support and promotion need to be addressed to ensure that the influence of positive attitudes and subjective norms are not overshadowed or minimised.

**9.4 Conclusion**

The TPB takes into account three determinants: attitudes, subjective norms and control beliefs that predict a human behaviour. The study women had a positive attitude towards breastfeeding because they understood the benefits of breastmilk for their babies and this understanding was reinforced by the social norm for breastfeeding all babies. Female members of their families and friends for both group of women were important social referents for them. Although the women claimed to be confident about breastfeeding, factors such as the influence of elders, lack of support from health professionals, breastfeeding problems, returning to work and the baby’s behaviour affected their PBC. This influence resulted in the majority of women adopting non-exclusive breastfeeding practices as identified at six weeks after birth.

Health professionals held a favourable attitude towards breastfeeding and EBF due to their knowledge of the benefits of breastfeeding and EBF, and the WHO recommendations. The subjective norms that influenced health professionals’ intention to support and promote breastfeeding included expectations of women and their families, hospital executives and their colleagues. However, health professionals’ PBC was affected by lack of updates in breastfeeding knowledge and skills, busyness and staff shortages, and lack of resources, leading to inadequate breastfeeding support and promotion for women.

The next chapter addresses the conclusion resulting from this study and presents the implications and recommendations for practice, policy, education and future research. The strengths and limitations of the study are acknowledged.
CHAPTER 10: CONCLUSION

10.1 Introduction

In this final chapter, the aims and methodological approach of the study are presented, as well as the key factors identified from the experiences of all participants. The participants included two cohorts of childbearing women at the term of pregnancy and six weeks after birth, and health professionals, including midwives, obstetricians, paediatricians, health assistants and a Program Officer.

The identified key findings characterise, among other factors, traditional and cultural influences perpetuated by families and elders, which interfere with breastfeeding outcomes and in particular EBF. The findings also reveal a lack of vital breastfeeding support from health professionals, in particular from midwives. From the perspective of health professionals, ad hoc breastfeeding education and promotion in Bhutan was influenced by staff shortages and related workloads, and issues related to professional development responsibilities of both the individual health practitioners and the organisation. The key findings are broadly presented under two headings related to childbearing women and health professionals. Recommendations related to practice, education, policy and future research are presented, along with the strengths and limitations of the study.

10.2 Aims and methodological approach

This study has been designed to explore Bhutanese women’s perceptions of, intentions for and experiences related to their babies’ nutrition at the term of pregnancy and at six weeks after birth; and to explore the roles of Bhutanese health professionals in the promotion of breastfeeding and EBF.

A Qualitative Exploratory Descriptive design, utilising face-to-face semi-structured interviews, was conducted with childbearing women and health professionals. The theory of
planned behaviour (TPB) by Azjen (1991), comprising three determinants (attitudes, subjective norms and behavioural control) in the prediction of behavioural intention have underpinned this study. The TPB has informed the development of interviews guides, the data collection, and the analysis and identification of key themes. This approach has provided a framework for identifying the breastfeeding practices of Bhutanese women, and the gaps in health promotion activities and support of women by health professionals.

10.3 Key findings

The key findings that interfere with breastfeeding education, promotion and EBF are presented under two headings, ‘childbearing women’ and ‘health professionals’.

10.3.1 Childbearing women

Childbearing women held positive attitudes towards breastfeeding in general, including their intention for EBF until six months as recommended by the WHO (World Health Organization, 2015). Firstly, their positive attitudes were underpinned by the women’s knowledge of the nutritional benefits of human breastmilk for their babies. Such knowledge was predominantly obtained from families, elders and friends, with limited information obtained from health professionals, in particular midwives. Secondly, their attitudes were informed by the women’s understanding that it is natural to breastfeed one’s baby.

Thirdly, social norms specifying that all Bhutanese women breastfeed their babies actively directed women’s attitudes to be favourable towards breastfeeding, thereby influencing their intention to breastfeed. Lastly, breastfeeding was perceived as demonstrating the positive behaviour of taking responsibility for their babies. Although the rates of initiation and duration of breastfeeding were high according to Ministry of Health data (Department of Public Health, 2008; Nutrition Program, 2015), EBF was found to be low and applied incorrectly.
Various factors affected the women and their intentions for practising breastfeeding, especially EBF. Firstly, the women lacked knowledge of what constituted EBF and most were not aware that EBF is recommended until at least six months of age (World Health Organization, 2015). For those women who possessed some understanding of EBF, they did not know that other fluids and solid foods should not be given to their babies.

Secondly, the choice of a baby’s feeding depended on the person who had the authority in the family, usually elders and particularly the baby’s grandmothers. The elders held the belief that breastmilk alone would not be sufficient to satisfy the baby’s thirst and hunger, and thus women were compelled to feed babies other foods.

Thirdly, certain cultural and traditional practices were adopted by the women which hindered the exclusivity of breastfeeding. These practices had been in use for a long time and the women adopted them without any further consideration because they were enforced by the family elders.

Fourthly, babies’ behaviours also influenced the women’s feeding practices. If babies were unsettled and cried, women assumed they were still hungry and as a consequence gave them breastmilk supplements. In addition, their perception of inadequate breastmilk production resulted in supplement use. The baby’s condition, such as jaundice, dehydration and fever, also led to breastmilk supplementation, but it is acknowledged that this use would have been subject to prescription by a medical practitioner.

Lastly, women who were returning to work planned to give their baby supplements once they returned to work because they were not aware of other options to support the continuation of EBF. They were not provided with any information on how they could continue EBF when they returned to work. These factors affected each woman’s breastfeeding intention and related practices.
The predominant factors that interfered with the women’s intention and practice of EBF were inadequate breastfeeding support, education and ongoing information from health professionals during all of their childbearing phases. Multiparae women were not given any breastfeeding information or support on the assumption by health professionals that these women would know how to breastfeed based on their previous experience. Further, the women were discharged from the maternity care of the hospital without any breastfeeding information. Additionally, the women accepted pain while breastfeeding, sore or damaged nipples and breast engorgement as normal phenomena of breastfeeding. Thus, inadequate breastfeeding information provided by health professionals is considered an influential factor among women who continue to adopt non-exclusive breastfeeding practices. Limited or no breastfeeding education and support for childbearing women is in complete contradiction to the WHO’s promotion of EBF (World Health Organization, 2015). This impact places women at risk of misconstruing the true meaning of EBF and endorses the continuation of cultural and traditional practices after birth that hinder EBF.

### 10.3.2 Health professionals

Health professionals had a positive attitude towards breastfeeding. They understood the definition of EBF and were aware of the BFHI and the Ten Steps to Successful Breastfeeding (World Health Organization, 1989), and the benefits of breastmilk for babies. Despite this awareness among health professionals, JDWRH had lost its Baby-Friendly Hospital designation due to lack of implementation of any breastfeeding programs and the existence of an outdated National Breastfeeding Policy, which still recommended EBF for four months even though the WHO recommends 6 months. At a practice level, most health professionals provided minimal assistance with breastfeeding, primarily due to the reported staff shortages.

Various factors determined health professionals’ attitudes towards breastfeeding, including EBF, education and promotion. Firstly, shortage of staff and heavy workloads
hindered breastfeeding promotion and support by health professionals. In the clinical areas and as a consequence of staff shortages (particularly midwives), the women and their families were not given any or minimal information about breastfeeding during any of the phases of their childbearing experience. Even after birth when the women attempted to breastfeed their babies and many of them experienced problems such as painful and damaged nipples and breast engorgement, health professionals did not respond to the women’s need for support. As a consequence of little or no support from health professionals, many breastfeeding women supplemented their breastmilk with a formula feed. Midwives claimed that they did not have sufficient time to work with women and guide them in breastfeeding and correct attachment.

Secondly, some health professionals stated that they were confident in assisting women with breastfeeding. This confidence stemmed from their own personal experiences of breastfeeding, as well as years of working in maternity care. Junior health professionals usually sought help from their more experienced colleagues, thereby perpetuating inappropriate practices that are more anecdotal, as opposed to evidence-based. The majority of health professionals, however, did not have confidence in assisting and advising women with breastfeeding because of lack of continuing professional development of knowledge and skills in breastfeeding.

Lastly, lack of facilities such as sheds and shelter also hindered health professionals, especially health assistants, in breastfeeding promotion and education. Thus, the factors described above resulted in health professionals providing inadequate breastfeeding support and information, leading to non-exclusive breastfeeding practices by women six weeks after birth.
10.4 Recommendations for practice, policy, education and research

The findings of the study have given rise to a number of recommendations, which are discussed under the following subheadings.

10.4.1 Clinical practice

The recommendations arising for the improvement of breastfeeding support and practices are:

1. Health professionals should provide breastfeeding support to all pregnant women, regardless of whether they have breastfed previously.

2. Health professionals should adopt the promotion of the BFHI Ten Steps to Successful Breastfeeding (World Health Organization, 1989) as the template for best practice in breastfeeding initiation, duration and exclusivity.

3. Health professionals should promote early initiation of breastfeeding within 30 minutes of birth, provided the mother and her baby are both well.

4. New mothers need to have access to health professionals, especially midwives, for support with breastfeeding to ensure correct attachment. The aim is to minimise problems such as painful or damaged nipples and breast engorgement in order to achieve successful breastfeeding and support EBF.

5. Health professionals should promote EBF and provide knowledge and strategies to continue with EBF even after women return to work.

10.4.2 Education

The recommendations arising for the educational needs of health professionals are:

1. Health professionals, especially midwives, should undertake, at least annually, continuing professional development related to breastfeeding. This is one of the requirements for the essential competencies of basic midwifery practice according to the International Confederation of Midwives, where it is stated that the basic professional behaviours of a
midwife are that a midwife “maintains/updates knowledge and skills, in order to remain current in practice” (International Confederation of Midwives, 2010, p. 4). However, it was seen that most of the midwives in this study had not updated their skills and knowledge since their graduation. For many midwives, this could represent several years.

2. Performance appraisal processes for health professionals related to their awareness of relevant policies, procedures and guidelines for breastfeeding and baby nutrition should be enacted uniformly and consistently in the best interests of breastfeeding women and their families. This applies to all health professionals, including midwives, obstetricians, paediatricians and health assistants. For midwives, this is again one of the essential competencies of basic midwifery practice, where a midwife should “have a knowledge of the legal and regulatory framework governing reproductive health for women of all ages, including laws, policies, protocols and professional guidelines” (International Confederation of Midwives, 2010, p. 3).

The recommendations arising from study findings for the educational needs of women are:

3. Innovative, flexible (according to the learning needs of women who may not be literate) and formalised education programs should be implemented for pregnant women to prepare them for breastfeeding as soon as possible after birth. These programs need to include relevant family members, particularly husbands/partners and grandmothers, and explain about the potential of Bhutanese cultural and traditional practices to interfere with EBF and to demystify them.

4. A program of support for new mothers soon after birth should be developed to assist them with the initial breastfeed, and information related to correct attachment to achieve successful breastfeeding and resources should be made available to them after they have been discharged home.
5. Women returning to work should be educated on breastmilk expression and storage.

10.4.3 Policy

The recommendations arising from the study findings relevant to policymakers are:

1. Seek re-designation of JDWNRH as a Baby-Friendly Hospital for the promotion of the BFHI Ten Steps to Successful Breastfeeding (World Health Organization, 2009) as the template for best practice in breastfeeding initiation, duration and exclusivity.

2. Revise the National Breastfeeding Policy to recommend EBF until six months, in accordance with the WHO recommendation.

3. Develop strategies to increase information flow from policymakers to the health professionals providing care for childbearing women.

4. Mandate evidence of regular and ongoing learning activities to promote continuous development of health professionals so as to promote best practice in the delivery of appropriate and effective care of childbearing women and their families.

5. Review staffing patterns and conform to midwife–women ratios as close as possible to the global standard for new mothers and provide active support for breastfeeding and EBF.

6. Provide maternity leave extension for all childbearing women, irrespective of whether they are employed by the government or private agencies, at least for the duration recommended by the WHO.

7. Improve on and increase the use of media and improve accessibility to correct information related to breastfeeding initiation, EBF and support services to all women of childbearing age in Bhutan in the absence of provision of breastfeeding information by health professionals.

8. Advocate more flexible working hours and crèche access in the workplace for all breastfeeding women.
9. Strengthen Outreach Clinics in the community to include breastfeeding support and activities to help women with breastfeeding problems closer to their homes.

10. Introduce provision of domiciliary postnatal visits by health professionals for ongoing support services for breastfeeding women following discharge home after birth.

10.4.4 Future research

The recommendations for future research are:

1. Husbands are looked on by women as one of their support persons during labour and childbirth; however, they are found to be less involved in women’s breastfeeding decisions. Therefore, research to explore and understand husbands’ or partners’ views and expectations regarding breastfeeding and EBF is warranted.

2. Most of the traditions and cultural practices hindering exclusivity of breastfeeding are typically enforced by elders, especially grandmothers. A study exploring their perceptions of breastfeeding in reference to the WHO recommendations could provide considerably more insights. These insights could inform strategies for changing perceptions in order to improve breastfeeding and EBF practices.

3. Most working women in the study had no intention of breastfeeding exclusively when they returned to work. They were not informed about how to continue breastfeeding exclusively even if they had wanted to. A further study of working women is required to investigate their needs and what information they expect from health professionals.

4. The Government of Bhutan has endorsed maternity leave for six months and flexi-working hours, which came into effect on 1 March 2016. A study to explore the effects of the maternity leave extension and flexi-working hours on EBF rate for employed women in Bhutan is recommended.
10.5 Limitations and strengths of the study

Most interviews with women were conducted and recorded in the Bhutanese language, Dzongkha. As all of these interviews were subsequently translated into English, it is possible that some of their meanings or nuances may have been lost or altered in the process of translation. In consideration of this possibility, the utmost care was taken to avoid or minimise such problems and the student researcher/interviewer is fluent in both Dzongkha and English. This issue was also partly addressed by pre-testing of the interview guides with three antenatal women and three postnatal women to ensure the questions were clear and comprehensible. This pre-testing process was important in the event that minor changes were required. It was found, however, that no changes were required.

Another process undertaken to address possible issues as a result of translation from Dzongkha to English included the two supervisors cross-checking transcripts for the loss of nuances specific to the social, cultural, political and traditional elements unique to Bhutan. At the time, there was no midwife academic from Bhutan who could fulfil this activity.

Secondly, the study findings may not be generalisable to other countries, as it was conducted in one single hospital in Bhutan, but the findings may be transferable to other hospitals within Bhutan, because they have similar structures and processes to the JDWNRH. This study, however, does not represent the views of women living in rural areas or those who did not seek care from the hospital.

In conclusion, this study was designed to explore the views, perceptions and experiences of EBF of both women and health professionals in Bhutan. The findings of this study have helped to answer what factors influenced women’s intention and breastfeeding practices. The study findings have also helped to answer what factors influenced health professionals’ intention and promotion of effective breastfeeding support to women. The study has informed the development of recommendations that, if adopted, will contribute towards improving
EBF practice in Bhutan. Lastly, the study has identified areas for future research in relation to breastfeeding and EBF in Bhutan.

Finally, to the best of our knowledge, this is the first study to be conducted in Bhutan that has explored the perceptions of women in relation to breastfeeding and EBF. The study has also sought the views and opinions of different categories of health professionals involved in providing breastfeeding support and information to women.
References


Thimphu: Retrieved from

[http://www.searo.who.int/entity/human_resources/data/Bhutan_HRH_Country_Profile.e.pdf](http://www.searo.who.int/entity/human_resources/data/Bhutan_HRH_Country_Profile.e.pdf)

Hunter, L., Magill-Cuerden, J., & McCourt, C. (2015). 'Oh no, no, no, we havent got time to be doing that': Challenges encountered introducing a breast-feeding support
intervention on a postnatal ward. *Midwifery, 31*(8), 798-804. doi:
10.1016/j.midw.2015.03.006

mothers: exploring the impact of father involvement in the early post-partum period.
*Health Promotion Perspectives, 4*(2), 132-136. doi: 10.5681/hpp.2014.017

Assessment Report on Bhutan. India.

Initiative Assessment Report on Bhutan. India.

International Confederation of Midwives. (2010). *Essential competencies for basic midwifery
practice.:* Retrieved from [www.internationalmidwives.org](http://www.internationalmidwives.org)

Ipekci, M. M., & Ertem, M. (2012). Infant feeding knowledge and practices of mothers with
6-24-month-old babies in the "Baby-Friendly City" of Diyarbakir. *Breastfeeding Medicine, 7*(6), 535-542. doi: 10.1089/bfm.2011.0115

Knowledge and beliefs about breastfeeding are not determinants for successful
breastfeeding. *Breastfeeding Medicine, 9*(6), 308-312. doi: 10.1089/bfm.2013.0124

Planned Behavior in explaining exclusive breastfeeding intention and behavior among
women in Kelantan, Malaysia. *Nutrition Research and Practice, 9*.

Jadhav, U., Chhophel, T., Ingale, M., Sharma, P. K., Drukpa, K., Singh, E. H., & Pradhan, N.
*Bhutan Journal of research & Development, 2*(2).

April, 2013, from [http://www.jdwnrh.gov.bt/?page_id=14](http://www.jdwnrh.gov.bt/?page_id=14)


Ragnedda, G., Leoni, S., Parpinel, M., Casetta, I., Riise, T., Myhr, K. M., . . . Pugliatti, M. (2015). Reduced duration of breastfeeding is associated with a higher risk of multiple


support program. *Journal of Human Lactation, 31*(1), 129-137; quiz 189-190. doi: 10.1177/0890334414548070


Spencer, R., Greatrex-White, S., & Fraser, D. M. (2014). ‘I was meant to be able to do this’: a phenomenological study of women’s experiences of breastfeeding. *Evidence Based Midwifery, 12*(3), 83-88.


Appendices

Appendix A  Maternity service units in JDWR Hospital

Hospital Management Committee

Medical Director

Clinical departments

Community Health Department

Birthing Centre  Maternity Ward

Reproductive Health Unit (RHU)  Outreach Clinic

Antenatal Unit  Postnatal Unit  Well-Baby Clinic
Appendix B  Maternity care pathway in JDWNR Hospital

Antenatal Unit (routine check-ups from 12 weeks to 41 weeks)

Emergency Room

Yes

In labour within 41 weeks

No

Maternity ward for induction

Birthing suite

Normal birth

Immediate postnatal ward

Discharged <24 hours

Postnatal check-up (1 week, 3 weeks and 6 weeks) at Postnatal Unit

Antenatal Unit (routine check-ups from 12 weeks to 41 weeks)

In labour within 41 weeks

Yes

Emergency Room

Birthing suite

Normal birth

Immediate postnatal ward

Discharged <24 hours

Postnatal check-up (1 week, 3 weeks and 6 weeks) at Postnatal Unit

No

Maternity ward for induction

Caesarean section

Maternity Ward

Discharge after 72 hours
Appendix C  Plain Language Statement and consent form for women

PLAIN LANGUAGE STATEMENT AND CONSENT FORM

TO: Women during their pregnancy and six weeks after birth

Plain Language Statement

Date:

Full Project Title: Exploration of Breastfeeding Promotion and Practices in Bhutan
Principal Researchers: Associate Professor Diane Phillips & Professor Alison Hutchinson
Student Researcher: Mrs. Kinga Pemo

1. Your Consent

You are invited to take part in this research project. This Plain Language Statement (PLS) 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 so that you can make a fully informed decision whether you are going to participate.

Please read this PLS carefully. Feel free to ask questions about any information in this document. You may also wish to discuss the project with a relative or friend or your local health worker. Feel free to do this.

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 the PLS and Consent Form to keep as a record.

2. Purpose

The purpose of the study is to explore Bhutanese women’s perceptions, intentions, and experiences related to their babies’ nutrition at term of pregnancy and at six weeks after birth and to explore the roles of Bhutanese health professionals, including midwives, obstetricians,
paediatricians, health assistants and a Program Officer in the promotion of exclusive breastfeeding (EBF).

3. **Methods:**

Individual interviews will occur with women who are at the term of their pregnancy and after they give birth. Two interviews are planned for women (during pregnancy and six weeks after birth) and one interview with health professionals (midwives, obstetricians, paediatricians and health assistants), lasting about 45-60 minutes.

4. **What is required of you:**

You should be currently attending antenatal care at the Reproductive Health Unit (RHU) of Jigme Dorji Wangchuck National Referral Hospital (JDWNRH). Participation will involve you giving your time for an interview, which will be conducted when you visit the RHU for your routine appointment. The interview will be audio-recorded.

5. **Potential Risks:**

We do not anticipate any risks related to this research project. You will be asked questions about your perceptions of breastfeeding and your feeding plan for your baby. If you feel some discomfort due to prolonged sitting, you are welcome to stand or walk according to your wishes.

6. **Potential benefits to participants:**

The findings of the project will provide an understanding of your perceptions of breastfeeding what influences you to breastfeed and your experience of breastfeeding. The project findings will also help identify possible resources and strategies to promote breastfeeding.

7. **Privacy, Confidentiality and Disclosure of Information**

The data collected during this study will not be traceable to you. All data, including audio recordings, transcripts and notes will be treated as confidential, de-identified with an identification number allocated and stored separately from the participant’s contact details. No individuals will have their identity recorded or revealed. Pseudonyms will be used for transcripts and direct quotes. Further, data will be stored in a secure password protected file on the Deakin University, School of Nursing and Midwifery’s shared drive. Access to the drive is only available to the student researcher and two supervisors. Paper-based data will be stored in a locked cabinet to which only the supervisors and the student researcher will have the key.
Data will be stored for a minimum of five years after final publication after which time the data will be destroyed.

8. **Results of the research:**

The results of the research project will be reported in a thesis which will be stored in the Deakin University library. The results may also be published and presented at international conferences. If you wish to know the results of this research project, you may contact either the student researcher or supervisors through the contact address given at the end of PLS.

9. **Monitoring of Research:**

The student researcher will receive supervision and regular verbal and written feedback from the supervisory team throughout the conduct of this research project. Research reports will regularly be sent to supervisors for assessment of quality and relevancy.

10. **Reimbursement for your costs:**

You will not be paid for taking part in this project.

11. **Source of funding for the research:**

This research activity is being undertaken in fulfilment of the requirements for a Higher Degree by Research in the nursing award and the student researcher is supported by a Deakin University Postgraduate Research Scholarship.

12. **Participation is voluntary:**

If you do not wish to take part you are not obliged to. If you decide to take part and later change your mind, you are free to withdraw from the project at any stage. Any information obtained from you to date will not be used and will be destroyed. If you become upset during the interview, the interview will be ceased and the student researcher will obtain support for the individual from Dr. Ugyen Sonam who is the head of Community Health Department of JDWNRH and a qualified doctor. If you wish, the interview can be planned for another time. Before you make your decision, the student researcher will be available to answer any questions you have about the research project. You can ask for any information you want.

If you decide to withdraw from this project, please notify a member of the research team.

Further Information, queries or any problems contact:
a. Associate Professor Diane Phillips (Principal Supervisor)
   
   Email  diane.phillips@deakin.edu.au
   
   Area    School of Nursing and Midwifery
   
   Phone   +613 9244 6119
   
   Campus  Burwood

b. Professor Alison Hutchinson (Associate Supervisor)
   
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c. Kinga Pemo (Student researcher)
   
   Email  kpemo@deakin.edu.au
   
   Area    School of Nursing and Midwifery
   
   Phone no:  +97517420781 (Bhutan)
   
   +437 723 564 (Australia)

14. Complaints

If you have any complaints about any aspect of the project, the way it is being conducted or any questions about your rights as a research participant, then you may contact:

   The Manager, Research Integrity, Deakin University, 221 Burwood Highway, Burwood Victoria 3125, Telephone: 9251 7129, research-ethics@deakin.edu.au

   Please quote project number: 2014-003.
Consent Form

To: Women during their pregnancy and six weeks after birth

Date:

Full Project Title: Exploration of Breastfeeding Promotion and Practices in Bhutan

Reference Number: 2014-003

I have read, or have had read to me in my first language, and I understand the attached Plain Language Statement. I freely agree to participate in this research project according to the conditions in the Plain Language Statement. I have been given a copy of the Plain Language Statement and Consent Form to keep.

The researcher has agreed not to reveal my identity and personal details, including where information about this research project is published, or presented in any public form. It has been explained to me that my interview will be audio recorded and I understand that I will be contacted and interviewed again at six weeks after the birth.

Participant’s Name (printed)

……………………………………………………………………

Signature ……………………………………Date …………………
Appendix D  Plain Language Statement and consent form in Dzongkha

Appendix D  Plain Language Statement and consent form in Dzongkha

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བདེ་བས་བསོད་ནས་བོད་ཀྱིས་བཤད་ལོག་བཞི་ཡོད་མྱིན་ནོ། །

སྣོན་ལུས་གཞོན་ལག་འཐད་ཅུང་ནས་བོད་ཀྱི་རང་ཚོགས་ཆོས་ལྡན་དྲི་འབྲོན་པོ་ལག་བཞི་ཡོད་མྱིན་ནོ། །

བདེ་བས་བསོད་ནས་བོད་ཀྱི་རང་ཚོགས་ཆོས་ལྡན་དྲི་འབྲོན་པོ་ལག་བཞི་ཡོད་མྱི

སྣོན་ལུས་གཞོན་ལག་འཐད་ཅུང་ནས་བོད་ཀྱི་རང་ཚོགས་ཆོས་ལྡན་དྲི་འབྲོན་པོ་ལག་བཞི་ཡོད་མྱི

རྒྱུ་དམིགས་བཅས་པའི་གླེང་གི་ལྷག་ཐོབ་

སྣོན་ལུས་གཞོན་ལག་འཐད་དེ་ཁོ་བ་བོད་ཀྱི་རང་ཚོགས་ཆོས་ལྡན་དྲི་འབྲོན་པོ་ལག་བཞི་ཡོད་མྱི

སྣོན་ལུས་གཞོན་ལག་འཐད་དེ་ཁོ་བ་བོད་ཀྱི་རང་ཚོགས་ཆོས་ལྡན་དྲི་འབྲོན་པོ་ལག་བཞི་ཡོད་མྱི

སྣོན་ལུས་གཞོན་ལག་འཐད་དེ་ཁོ་བ་བོད་ཀྱི་རང་ཚོགས་ཆོས་ལྡན་དྲི་འབྲོན་པོ་ལག་བཞི་ཡོད་མྱི

སྣོན་ལུས་གཞོན་ལག་འཐད་དེ་ཁོ་བ་བོད་ཀྱི་རང་ཚོགས་ཆོས་ལྡན་དྲི་འབྲོན་པོ་ལག་བཞི་ཡོད་མྱི

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སྣོན་ལུས་གཞོན་ལག་འཐད་དེ་ཁོ་བ་བོད་ཀྱི་རང་ཚོགས་ཆོས་ལྡན་དྲི་འབྲོན་པོ་ལག་བཞི་ཡོད་མྱི

སྣོན་ལུས་གཞོན་ལག་འཐད་དེ་ཁོ་བ་བོད་ཀྱི་རང་ཚོགས་ཆོས་ལྡན་དྲི་འབྲོན་པོ་ལག་བཞི་ཡོད་མྱི

སྣོན་ལུས་གཞོན་ལག་འཐད་དེ་ཁོ་བ་བོད་ཀྱི་རང་ཚོགས་ཆོས་ལྡན་དྲི་འབྲོན་པོ་ལག་བཞི་ཡོད་མྱི

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སྣོ

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ফানার্স চাঁদিন ওডিনগ্রুপ ওয়ার্ল্ড কারিগরি পরিবর্তনের মাধ্যমে নির্দেশিকা সৃষ্টি করেছেন। তিনি তাদের সমস্ত মার্কেটিং ক্ষেত্রে এই পরিবর্তনের মাধ্যমে নির্দেশিকা সৃষ্টি করেছেন। ফানার্স চাঁদিন ওডিনগ্রুপ ওয়ার্ল্ড কারিগরি পরিবর্তনের মাধ্যমে নির্দেশিকা সৃষ্টি করেছেন।

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To: Health professionals (midwives, obstetricians, paediatricians, health assistants and Program Officer)

Plain Language Statement

Date:

Full Project Title: Exploration of Breastfeeding Promotion and Practices in Bhutan
Principal Researcher: Associate Professor Diane Phillips
Student Researcher: Mrs. Kinga Pemo
Associate Researcher(s): Professor Alison Hutchinson

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 so that you can make a fully informed decision whether you are going to participate.

Please read this Plain Language Statement (PLS) carefully. Feel free to ask questions about any information in the document. You may also wish to discuss the project with a colleague or seniors or supervisors. Feel free to do this.

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 the PLS and Consent Form to keep as a record.
2. **Purpose:**

The purpose of the study is to explore Bhutanese women’s perceptions, intentions, and experiences related to their babies’ nutrition at term of pregnancy and at six weeks after birth and to explore the roles of Bhutanese health professionals, including midwives, obstetricians, paediatricians, health assistants and a Program Officer in the promotion of exclusive breastfeeding (EBF).

3 **Methods:**

Semi-structured individual interviews will be conducted, lasting about 45-60 minutes. Two interviews are planned to be undertaken with women (during pregnancy and six weeks after birth) and one interview with health professionals (midwives, obstetricians, paediatricians and health assistants), lasting about 45-60 minutes.

4 **What is required of you:**

You need to be currently employed in the hospitals and working in the RHU, Maternity Ward and Birthing Centre in JDWNRH. Participation will involve you giving your time for an interview. The interview will be audio-recorded.

5 **Potential Risks:**

We do not anticipate any risks related to this research project. You will be asked questions about your knowledge, understanding on exclusive breastfeeding (EBF) and support you provide to women related to breastfeeding. If you feel some discomfort due to prolonged sitting, you are welcome to sit, stand or walk according to your wishes. However, there is a risk that you may share some personal or confidential information by chance, or that you may feel uncomfortable talking about some of the topics. We do not wish for these to happen. You do not have to answer any question or take part in the interview if you feel the question(s) are too personal or if talking about them makes you uncomfortable.

6 **Potential benefits to participants:**

There will be no direct benefit to you, but your participation is likely to lead to the findings of the project that will provide increased understanding of the reasons for non-compliance with EBF for six months, promotion of EBF in Bhutan and identification of health professionals’ understanding of breastfeeding (effectiveness, adequacy, and relevancy) and the initiatives for promotion of EBF.
7 Privacy, Confidentiality and Disclosure of Information
The data collected during this project will not be traceable to you. All data, including audio recordings, transcripts and notes will be treated as confidential, de-identified with an ID number allocated and stored separately from each your contact details. No individuals will have their identity recorded or revealed. Pseudonyms will be used for transcripts and direct quotes. Further, data will be stored in a password protected file on the Deakin University, School of Nursing and Midwifery’s secure shared drive. Access to the drive is only available to the student researcher and two supervisors. Paper-based data will be stored in a locked cabinet to which only the student researcher and the supervisors of the School of Nursing and Midwifery will have the key. Data will be stored for a minimum of 5 years after final publication, after which time the data will be destroyed.

8 Results of the research:
The results of the research project will be reported in a thesis which will be stored in the Deakin University library. The results may also be published and presented at international conferences. If you would like to be informed about the results the project, you may obtain this information by contacting either the student researcher or supervisors through the contact address given at the end of PLS.

9 Monitoring of Research:
The student researcher will receive supervision and regular verbal and written feedback from the supervisory team throughout the conduct of this research project. Research reports and write-ups will regularly be sent to supervisors for assessment of quality and relevancy.

10 Reimbursement for your costs:
You will not be paid for taking part in this project.

11 Source of funding for the research:
This research activity is being undertaken for the fulfilment of a Higher Degree by Research in Nursing Award and the student researcher is supported by a Deakin University Postgraduate Research Scholarship.

12 Participation is voluntary
If you do not wish to take part you are not obliged to. If you decide to take part and later change your mind, you are free to withdraw from the project at any stage. Any information obtained from you to date will not be used and will be destroyed. If you become upset during the
interview, the interview will be ceased and the student researcher will obtain support for you. If you wish, the interview can be planned for another time.

Before you make your decision, a member of the research team will be available to answer any questions you have about the research project. You can ask for any information you want. Sign the Consent Form only after you have had a chance to ask your questions and have received satisfactory answers.

If you decide to withdraw from this project, please notify a member of the research team.

Further Information, queries or any problems

a. Associate Professor Diane Phillips (Principal Researcher)
   Email diane.phillips@deakin.edu.au
   Area School of Nursing and Midwifery
   Phone +613 9244 6119
   Campus Burwood

b. Professor Alison Hutchinson (Associate Supervisor)
   Position Chair in Nursing (Monash Health)
   Email alison.hutchinson@deakin.edu.au
   Area School of Nursing and Midwifery
   Phone +613 9244 6446
   Campus Burwood

c. Kinga Pemo (Student researcher)
   Email kpemo@deakin.edu.au
   Area School of Nursing and Midwifery
   Phone no: +97517420781 (Bhutan)
              +61437 723 564 (Australia)

13. Complaints
If you have any complaints about any aspect of the project, the way it is being conducted or any questions about your rights as a research participant, then you may contact:

The Manager, Research Integrity, Deakin University, 221 Burwood Highway, Burwood Victoria 3125, Telephone: 9251 7129, research-ethics@deakin.edu.au

Please quote project number: 2014-003
CONSENT FORM

To: Health professionals (including midwives, obstetricians, paediatricians, health assistants and a Program Officer)

Date:

Full Project Title: Exploration of Breastfeeding Promotion and Practices in Bhutan
Reference Number: 2014-003

I have read, or have had read to me in my first language, and I understand the attached Plain Language Statement.

I freely agree to participate in this project according to the conditions in the Plain Language Statement. I have been given a copy of the Plain Language Statement and Consent Form to keep.

The researcher has agreed not to reveal my identity and personal details, including where information about this project is published, or presented in any public form. It has been explained to me that my interview will be audio recorded.

Participant’s Name (printed) ................................................ ..................................................

Signature ..........................................................Date ...........................................
Appendix F  Interview guide for women during pregnancy

INTERVIEW GUIDE FOR WOMEN DURING PREGNANCY

Study Title:  Exploration of Breastfeeding Promotion and Practices in Bhutan

Legend:

MWO: Multigravida Woman
PWO: Primigravida Woman

Introduction:
1. Identify if there are any questions about the PLS of the project or consent form.
2. Explain that the interview is to be audio recorded.
3. Provide an overview of the project.
4. How are you today?
5. Have you been well throughout your pregnancy?
6. How do you feel about having your baby?
7. Is this your first baby? If not, what number baby is this?

SECTION ONE – DEMOGRAPHIC INFORMATION

1. How old are you?
2. What is your marital status?
3. What is your educational status?
4. Have you been working during pregnancy?
5. When did you stop working?
6. Where do you live?
7. Do you live with your family? Which family members do you live with?
8. What is the baby’s expected date of birth?
9. How old is the baby’s father?
10. What is his educational status?
11. Is he employed?
12. Do you smoke, chew tobacco or chew betel nut?
13. Do you consume alcohol?
14. Do you suffer from any health conditions? e.g., heart disease, diabetes etc.
15. Have you experienced any problems during the pregnancy? (i.e. hyperemesis, placenta praevia, rising blood pressure, gestational diabetes)

**SECTION TWO - BEHAVIOURAL BELIEFS**

1. What is your plan for breastfeeding your child? Have you decided to breastfeed your child? If so what made you decide to breastfeed your child? If you have decided not to breastfeed your child explains why? If you have not yet decided to breastfeed or not to breastfeed your baby, explain why. Why are you undecided? What factors have influenced you in being undecided?

2. What is your general view about breastfeeding? (Probe on breastfeeding knowledge, previous breastfeeding experience, or through siblings or friends for primigravida women). Probes specific for multigravida women: Did you breastfeed your previous child/children? For how long did you exclusively breastfeed your child? Can you tell me about the breastfeeding experiences with your previous child/children)?

3. What do you understand by the term EBF?
4. What is your knowledge about benefits of EBF?
5. What is your understanding of the benefits of breastfeeding your baby?
6. Where and from whom did you learn about these benefits of breastfeeding?
7. If you are planning to breastfeed, are you planning to practice EBF your child? If yes, why. If not, why not?
8. Do you know of any Bhutanese cultural traditions regarding EBF?
9. Do you know what the Bhutan government’s position is about EBF?
10. During your pregnancy, what knowledge and help regarding EBF have you received from the midwives and/or obstetricians?
11. Do you have any other comments you wish to make?

**SECTION THREE – NORMATIVE BELIEFS**

1. What is your understanding of the Bhutanese culture about EBF?
2. Does this apply to colostrum?
3. What culture did you observe during your previous childbirth? Did it help with EBF?
4. Do you plan to observe any Bhutanese cultural traditions related to EBF?
5. What is your understanding of Bhutanese Government’s recommendation of EBF your baby until six months of age?
6. How do your family and partner expect you to feed your baby?
7. What have the midwives or doctors told you about EBF?
8. What form of feeding do they expect you to adopt?
9. Do you think you can carry out what they expect you to? And how?
10. Have you discussed breastfeeding with your friends or someone who is practicing EBF?
11. Will you adopt EBF your baby because of what they say?
12. Do you have any other comments you wish to make?

**SECTION FOUR – CONTROL BELIEFS**

1. For your previous child/children who helped you to decide on the mode of your baby’s feeding.
2. How did you come to your decision about your baby’s feeding in this pregnancy? (i.e. support from family, midwives or obstetrician, and partner)
3. Are you confident about your choice of baby feeding? (i.e. to exclusively breastfeed, of non-exclusive breastfeeding or not to breastfeed at all?). How confident are you and why? (i.e. due to your age; breastfeeding history in your family, support, knowledge of EBF)
4. How long would you like to like to breastfeed exclusively? How long would you like to breastfeed your baby for?
5. Do you have any other comments you wish to make?

Thank you for your participation in this interview
INTERVIEW GUIDE FOR WOMEN AT SIX WEEKS AFTER BIRTH

Study Title: Exploration of Breastfeeding Promotion and Practices in Bhutan

Mother ID

MWO: Multigravida Woman
PWO: Primigravida Woman

Introduction:
1. Review PLS of the project and consent form.
2. Explain that the interview is to be audio taped.
3. Explain again the overview of the project.

SECTION ONE – DEMOGRAPHIC INFORMATION

1. What was the mode of your baby’s birth? (i.e. normal vaginal birth or assisted vaginal birth)
2. How long was the labour?
3. If you experienced a caesarean birth of your baby, did you experience a labour or was it an elective or planned procedure?
4. What was the reason for your baby’s birth via caesarean section?
5. Were you well after the birth?
6. If not, could you explain what was wrong with you?
7. Are you feeling well now?
8. Was your baby well after the birth?
9. If your baby was not well after birth, please explain.
10. Is your baby well now?

SECTION 2 – BEHAVIOURAL BELIEFS

1. Can you tell me what happened right after the birth?
2. Did the midwives give you the baby soon after birth for skin-to-skin contact and/or to breastfeed?
3. If not when did you put the baby to breast?
4. How did the first breastfeed go?
5. Did you have your baby with you in the first hour after the birth?
6. Did you give your baby the early milk called colostrum? If so, why?
7. If you did not give your baby colostrum, please explain why not?
8. Can you tell me about your breastfeeding experiences while in the hospital? (i.e. any breastfeeding difficulties in the hospital; supplementation or complementary formula feeds).
9. Are you exclusively breastfeeding your baby now? If yes, how do you manage it? For how long do you plan to exclusively breastfeed? Why?
10. Who gave you help with breastfeeding in the hospital? (i.e. mothers, husband, sisters, health workers, friends?)
11. Describe the breastfeeding support you received from the midwives, doctors, and others?
12. Was their support adequate for your particular needs?
13. From whom did you receive breastfeeding advice immediately prior to discharge from the postnatal ward?
14. At the time of discharge, what advice were you given about EBF?
15. How was the breastfeeding at home?
16. If you experienced any difficulties, please explain what they were.
17. Did you seek help with breastfeeding?
18. If yes, from who? (i.e. mother, husband, sibling or friend)
19. What type of support did they give you? (i.e. advice, prepared food for you and your family)

SECTION 3- NORMATIVE BELIEFS

1. Did you follow any traditional and cultural practices while in the hospital?
2. If so, which ones did you apply?
3. Did you observe any traditions of EBF at home?
4. If so, what are they?
5. Describe how your tradition in your community affected your breastfeeding?
6. Did your family and friends influence you in continuing or discontinuing breastfeeding?
7. What role did your family and friends play in breastfeeding roles?
8. Describe the support and expectations of health workers.
9. Did the government and WHO recommendations on breastfeeding have any effect on your breastfeeding choices?

SECTION 3 – CONTROL BELIEFS

1. Are you giving your baby breastmilk only?
2. If not, why?
3. How are you feeding your baby now?
4. Why did you make that decision?
5. When you made the decision were you in complete control of making a decision or did you have had to consult others?
6. If you had to consult others whom did you consult?
7. Are you back at work now?
8. If not, when do you plan to return to work?
9. What is your baby feeding plan for when you return to work?
10. Overall, what is your thought regarding breastfeeding: Was it easy? Not what you expected?
11. What are your thoughts about breastfeeding support by the health professionals?
12. When reflecting back on the time during pregnancy, when you were learning about baby nutrition, have your expectations of breastfeeding been met?
13. If so, in what way?
14. Explain how your expectations were met?
15. Do you have any other comments you would like to make about breastfeeding?

Thank you for your participation in this interview
Appendix H  Interview guide for health professionals

INTERVIEW GUIDE FOR HEALTH PROFESSIONALS
(Midwives, obstetricians, paediatricians, health assistants and Program Officer, Ministry of Health)

Study Title:  Exploration of Breastfeeding Promotion and Practices in Bhutan

<table>
<thead>
<tr>
<th>Staff ID</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>

Legend
Midwife – MID
Obstetrician – OB
Paediatrician – PED
Health Assistant – HA
Program Officer – PRO

SECTION ONE - DEMOGRAPHIC AND EDUCATIONAL BACKGROUND

1. Gender
   Male □1
   Female □2

2. Which of the following best describes your age?
   20–29 years □1
   30–39 years □2
   40–49 years □3
   > 50 years □4

3. How long have you been working in the Maternity Ward/Birthing Centre/Community Health Unit?
   < 1 year □1
   1–5 years □2
   6–10 years □3
   11–15 years □4
   > 15 years □5

4. Where did you undertake your most recent professional education?
   In Country (RIHS) □1
   Abroad □2

5. In what year did you complete your most recent professional education?
   ________________________________

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6. What qualifications do you hold?
   - Diploma ☐1
   - Degree ☐2
   - Graduate Diploma ☐3
   - Any other (Specify)............................ ☐4

7. What is your position description?
   - Staff Nurse ☐1
   - Chief Nurse ☐2
   - Health Assistant ☐3
   - Obstetrician ☐4
   - Paediatricians ☐5
   - Others (Specify)............................... ☐6

8. Which of the following statements best describes where you mainly work?
   - Community Health Unit (Antenatal Dept.) ☐1
   - Community Health Unit (Post Natal Department) ☐2
   - Community Health Unit (Out Reach Clinic) ☐3
   - Birthing Centre ☐4
   - Maternity Ward ☐5
   - Others (specify) ☐6

9. Have you undertaken any further training or attended workshops related to the promotion of breastfeeding and support for women?
   - Yes: _____________________________________________________________
   - No: _____________________________________________________________

10. If yes, briefly specify ________________________________________________

11. In what year did you undertake the training or attend the workshop related to breastfeeding?

12. Have you attended any international conferences or seminars about breastfeeding?
    - [1] Yes
    - [0] No

    If yes, briefly specify ________________________________________________

13. Would you like to make further comments?

SECTION TWO - BEHAVIOURAL BELIEFS

1. Explain what is meant by EBF.
2. What is your understanding of the benefits of breastfeeding and EBF?
3. What is your thought on the current status of breastfeeding in Bhutan?
4. What is your comment on Bhutan’s EBF rate of 10.4% at six months of age and then sudden increased to 48.7% in 2010?
5. Identify and comment on the WHO’s BFHI’s Ten Steps to Successful breastfeeding.
<table>
<thead>
<tr>
<th>Ten Steps to Successful Breastfeeding (breastfeeding)</th>
<th>Probes</th>
<th>comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Have a written breastfeeding policy that is routinely communicated to all healthcare staff.</td>
<td>Is there one? Are you aware of it? Do you have any idea what it says?</td>
<td></td>
</tr>
<tr>
<td>2 Train all health care staff in skills necessary to implement this policy</td>
<td>Are you aware of the WHO’S BFHI? Have you been trained or heard of anyone being trained?</td>
<td></td>
</tr>
<tr>
<td>3 Inform all pregnant women about the benefits and management of breastfeeding</td>
<td>Do you do this? Is what you do appropriate and enough?</td>
<td></td>
</tr>
<tr>
<td>4 Help mothers initiate breastfeeding within half an hour of birth</td>
<td>Do you follow this? What are the barriers to following this step?</td>
<td></td>
</tr>
<tr>
<td>5 Show mothers how to breastfeed, and how to maintain lactation even if they should be separated from their infants.</td>
<td>Is this being carried out? What are the barriers to following this step?</td>
<td></td>
</tr>
<tr>
<td>6 Give newborn infants no food or drink other than breastmilk, unless medically indicated</td>
<td>Is this being done? What are the reasons for giving other foods?</td>
<td></td>
</tr>
<tr>
<td>7 Practice rooming-in - that is, allows mothers and infants to remain together - 24 hours a day.</td>
<td>Is this being practiced?</td>
<td></td>
</tr>
<tr>
<td>8 Encourage breastfeeding on demand</td>
<td>Is this being practiced?</td>
<td></td>
</tr>
<tr>
<td>9 Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants</td>
<td>Is this being followed?</td>
<td></td>
</tr>
<tr>
<td>10 Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. What factors do you think may prevent women from not being able to exclusively breastfeed their babies until at least six months of age in our society?

7. How do you think health professionals can help mothers to exclusively breastfeed their babies until at least six months of age?

8. What strategies can health professionals apply to support mothers to exclusively breastfeed their babies until at least six months of age?
9. Have you cared for many women with breastfeeding difficulties occurring soon after birth while in the hospital, or during the visits following discharge from the hospital or at community visits? How? (Probe on common reasons for supplementing breastmilk in hospital, breast conditions, and mode of birth such as an assisted vaginal birth or caesarean birth, breastmilk expression, formula feed, main reasons women tell you for why they supplemented the baby?)

10. Do you wish to make any further comments?

SECTION 3 – NORMATIVE BELIEFS

1. What are your thoughts about WHO and Bhutan’s Government policy of EBF until six months of age? (i.e. probe on why and how this is to be achieved).

2. In your experience which cultural belief have you seen are useful or not useful/harmful to breastfeeding?

3. What cultural aspects do you support or encourage to promote breastfeeding?

4. What roles do family and friends play in women’s action? How do you support them?

5. What do hospital management and your colleagues expect from you in terms of breastfeeding promotion?

6. What BF advice and support do you provide mothers? (Probes on when during pregnancy women discuss their feeding plan, what is discussed, who is involved, hands-on support while in hospital, at discharge, postnatal visits, and community visits)

7. Do you wish to make any further comments?

SECTION 4 – CONTROL BELIEFS

1. What are your perceptions of the barriers in promoting breastfeeding and giving education programs and support to women and their families during pregnancy, immediately after birth, at six weeks and during your ORC visits?

2. What do you think can better equip you to deal with all these problems?

3. How do you think you can solve them? (Probe: staffing, proper knowledge, and skills, relevant training, staff support)

4. What strategies would you apply?

5. How confident are you in assisting and advising women on breastfeeding?

6. Do you wish to make any further comments

Thank you for your participation in this interview
Appendix I  Flyer for women

School of Nursing and Midwifery

Exploration of Breastfeeding Promotion and Practices in Bhutan

If you are:

- An expecting mother between 38-41 weeks
- Willing to meet me again for interview when your baby is six weeks old
- Willing to give me 45-60 mins of your time for each interview

You could be the perfect candidate to participate in a research project on exploring breastfeeding practices in Bhutan. We are interested to know about your perception of breastfeeding and breastfeeding experiences; and the level of support and help provided to you by the health professionals. Your involvement in the project will contribute towards the improvement of breastfeeding practices in our country. Are you interested?

Contact: Kinga Pemo (Ph.D. student)
Nursing and Midwifery,
Deakin University

Phone: +97517420781 (Bhutan)
Email: kpemo@deakin.edu.au.
Appendix J  Flyer for health professionals

School of Nursing and Midwifery

Exploration of Breastfeeding Promotion and Practices in Bhutan.

You are invited to join the research project entitled ‘Exploration of Breastfeeding Promotion and Practices in Bhutan’. The purpose of this project is to investigate breastfeeding practices in our country.

Participation in the project will involve one face-to-face interview, lasting about 45-60 minutes, about your views on breastfeeding, Baby-Friendly Hospital Initiative (BFHI), and how you support breastfeeding in your workplace. Please consider this invitation if you are interested and if you are:

- A midwife working in the RHU, birthing suites and Maternity Ward
- An obstetrician
- A paediatrician
- A health assistant in Community Health Department of JDWNR Hospital
- And a Program Officer in Ministry of Health.

For further information please

Contact:  Kinga Pemo (PhD student)
          Nursing and Midwifery,
          Deakin University
Phone: +97517420781 (Bhutan)
Email: kpemo@deakin.edu.au.
Appendix K  Organisational consent from JDNRH

ROYAL GOVERNMENT OF BHUTAN
Jigme Dorji Wangchuck National Referral Hospital
Thimphu, Bhutan

18 February, 2014

ADM/14/JDNRH/2014/9688

Dear Kinga Pemo,

We are pleased to grant the permission to conduct your study on breastfeeding at Jigme Dorji Wangchuck National Referral Hospital.

Dr. Gosar Pemba,
Medical Superintendent,
JDNRH,
Thimphu

Signature Redacted by Library
Appendix L  Ethics approval from Deakin University

Memorandum

To:        A/Prof Dane Phillips  
            School of Nursing & Midwifery  

cc: Ms Kinga Pemo  

From:  Deakin University Human Research Ethics Committee (DUHREC)  

Date:  10 March, 2014  

Subject: 2014-003  
           Exploration of Exclusive Breastfeeding Practices in an Urban Hospital in Bhutan  
           Please quote this project number in all future communications  

The application for this project was considered at the DUHREC meeting held on 17/02/2014.  

Approval has been given for Ms Kinga Pemo, under the supervision of A/Prof Diane Phillips, School of Nursing & Midwifery, to undertake this project from 10/03/2014 to 10/03/2019.  

The approval given by the Deakin University Human Research Ethics Committee is given only for the project and for the period as stated in the approval. It is your responsibility to contact the Human Research Ethics Unit immediately should any of the following occur:  

- Serious or unexpected adverse effects on the participants  
- Any proposed changes in the protocol, including extensions of time  
- Any events which might affect the continuing ethical acceptability of the project  
- The project is discontinued before the expected date of completion  
- Modifications are requested by other HRECs  

In addition you will be required to report on the progress of your project at least once every year and at the conclusion of the project. Failure to report as required will result in suspension of your approval to proceed with the project.  

DUHREC may need to audit this project as part of the requirements for monitoring set out in the National Statement on Ethical Conduct in Human Research (2007).  

Human Research Ethics Unit  
research-ethics@deakin.edu.au  
Telephone: 03 9251 7123
# Appendix M  Ethics approval from Ministry of Health, Bhutan

**REBH Approval Letter**

<table>
<thead>
<tr>
<th>PI:</th>
<th>Dr Diane Phillips</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Institute:</strong></td>
<td>Deakin University, Faculty of Health, School of Nursing and Midwifery, Australia</td>
</tr>
<tr>
<td>Co-PIs:</td>
<td>Prof Alison Margaret Hutchinson &amp; Ms Kinga Pemo</td>
</tr>
<tr>
<td><strong>Study Title:</strong></td>
<td>Exploration of Exclusive Breastfeeding Practices in an Urban Hospital in Bhutan</td>
</tr>
<tr>
<td><strong>REBH's Decision:</strong></td>
<td>Approved with conditions</td>
</tr>
<tr>
<td>Protocol Version No. 1</td>
<td>Dated: 5th November, 2013</td>
</tr>
<tr>
<td>Informed Consent Version No. 1</td>
<td>Dated: 5th November, 2013</td>
</tr>
<tr>
<td><strong>Mode of Review:</strong></td>
<td>✓ Full Board Review Meeting No. 4/2013 (17th)</td>
</tr>
</tbody>
</table>

**Conditions for Approval**

1. Any changes to the proposal or to the attachments (informed consent and research tools such as forms) should be approved by REBH before implementation.
2. Final report of the study both in soft and hard copy must be submitted to REBH at the end of the study.
3. This approval is valid till 12th January, 2015. The PI has to apply for the continuing review two months before this validity expires, if the study continues beyond the approved period.

---

*Signature Redacted by Library*

Chairperson-REBH

For further information please contact: mongal56@health.gov.bt; REBH Member Secretary

---

PABX: + 975-2-322602, 322351, 328091, 328092, 328093  Minister: 323973 Fax: 323113 Secretary 326627  Fax: 324649 HRD: Tel/Fax 323953 Extension 142

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Appendix N  Sample of initial coding

6W MWO 10
Normal labour.
6 hours duration of labour.
Not a fussy baby.
Baby was put on her chest, wiped clean and taken away.
Did not breastfeed that time.
Baby put to breast after half an hour of birth.
Baby not suckling at first but mother forced him to suckle.
She was producing milk.
Fed colostrum to the baby.
No breastfeeding problem at hospital.
Develop nipple pain and slight sores at home.
Came to Well-Baby Clinic at three days and was shown how to breastfeed.
Was taught to put whole black part of nipple inside the baby’s mouth.
Kept on breastfeeding despite the pain.
Given nothing else besides breastmilk at hospital and home.
Gave baby bath water during the bath time because baby was thirsty.
Was just a drop and thought it wouldn’t matter.
Midwives and her mother helped her with breastfeeding in the hospital.
Midwives helped by lifting the baby up and putting the nipple inside the baby’s mouth.
Midwives helped just once.
As the baby was breastfeeding fine she found the help adequate.
Midwives told her to breastfeed exclusively upon discharge.
Did not follow any tradition and culture in the hospital.
At home did not do anything for a month.
Her family and friends told her that while breastfeeding sore nipples are natural.
Was told to endure pain and continue breastfeeding.
Shared her knowledge of putting the whole nipple inside the baby’s mouth with her younger sister who had given birth.
Her sister did not develop sore nipples.
Her mother wanted to give baby other foods but she told her about hospital recommendation.
Her mother thought that baby would be hungry.
She plans to breastfeed during the breaks and to have her husband bring the baby over to her when she returns to work.
Breastfeeding is easy.
She wants to stay with her baby and breastfeed as much as possible which she is doing so her expectation has been met.
## Appendix O  Sample of indexing (6WMWO 10)

<table>
<thead>
<tr>
<th>Initial codes</th>
<th>Coding Labels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal labour</td>
<td></td>
</tr>
<tr>
<td>6 hours duration of labour</td>
<td></td>
</tr>
<tr>
<td>Not a fussy baby</td>
<td></td>
</tr>
<tr>
<td>Baby was put on her chest, wiped clean and taken away</td>
<td>Hospital routine</td>
</tr>
<tr>
<td>Did not breastfeed that time</td>
<td></td>
</tr>
<tr>
<td>Baby put to breast after half an hour of birth</td>
<td></td>
</tr>
<tr>
<td>Baby not suckling at first but mother forced him to suckle</td>
<td>Breastfeeding experience in the hospital</td>
</tr>
<tr>
<td>She was producing milk</td>
<td></td>
</tr>
<tr>
<td>Fed colostrum to the baby</td>
<td></td>
</tr>
<tr>
<td>No breastfeeding problem at hospital</td>
<td></td>
</tr>
<tr>
<td>Did not follow any tradition and culture in the hospital</td>
<td></td>
</tr>
<tr>
<td>At home did not do anything for a month</td>
<td></td>
</tr>
<tr>
<td>Came to Well-Baby Clinic at three days and was shown how to breastfeed</td>
<td>Breastfeeding supports by health professionals</td>
</tr>
<tr>
<td>Was taught to put whole black part of nipple inside the baby’s mouth</td>
<td></td>
</tr>
<tr>
<td>Midwives helped by lifting the baby up and putting the nipple inside the baby’s mouth</td>
<td></td>
</tr>
<tr>
<td>Midwives helped just once</td>
<td></td>
</tr>
<tr>
<td>Develop nipple pain and slight sores at home</td>
<td>Breastfeeding experience at home</td>
</tr>
<tr>
<td>Kept on breastfeeding despite the pain</td>
<td></td>
</tr>
<tr>
<td>Given nothing else besides breastmilk at hospital and home</td>
<td></td>
</tr>
<tr>
<td>Gave baby bath water during the bath time because baby was thirsty</td>
<td>Traditional Practice</td>
</tr>
<tr>
<td>Was just a drop and thought it wouldn’t matter</td>
<td></td>
</tr>
<tr>
<td>Midwives and her mother helped her with breastfeeding in the hospital</td>
<td>Breastfeeding support by health professionals</td>
</tr>
<tr>
<td>As the baby was breastfeeding fine she found the help adequate</td>
<td></td>
</tr>
<tr>
<td>Midwives told her to breastfeed exclusively upon discharge.</td>
<td></td>
</tr>
<tr>
<td>Her family and friends told her that while breastfeeding sore nipples are natural and was told to endure pain and continue breastfeeding</td>
<td>Family and friend’s influence</td>
</tr>
<tr>
<td>Her mother wanted to give baby other foods but she told her about hospital recommendation</td>
<td></td>
</tr>
<tr>
<td>Her mother thought that baby would be hungry</td>
<td></td>
</tr>
<tr>
<td>She plans to breastfeed during the breaks and to have her husband bring the baby over to her when she returns to work</td>
<td>Breastfeeding plan upon returning to work</td>
</tr>
<tr>
<td>Breastfeeding is easy</td>
<td></td>
</tr>
<tr>
<td>Shared her knowledge of putting the whole nipple inside the baby’s mouth with her younger sister who had given birth</td>
<td></td>
</tr>
<tr>
<td>Her sister did not develop sore nipples</td>
<td></td>
</tr>
<tr>
<td>She wants to stay with her baby and breastfeed as much as possible which she is doing so her expectation has been met</td>
<td></td>
</tr>
</tbody>
</table>
# Appendix P  Charting sample, multiparae women at six weeks

<table>
<thead>
<tr>
<th>Cases</th>
<th>Current status of exclusivity of breastfeeding</th>
<th>Mother’s Expectations of breastfeeding</th>
<th>Perception of breastfeeding</th>
<th>Reason for breastmilk supplementation</th>
<th>Tradition and Culture related to Breastfeeding</th>
<th>Understanding of exclusive breastfeeding (EBF)</th>
<th>Breastfeeding plan for the baby</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 : 6W MWO 16</td>
<td>Breastfeeding and nothing else. Baby was given 10% glucose to latch on. Baby given drops of bath water by the husband.</td>
<td>Her expectation has been met as she was breastfeeding without any problem.</td>
<td>Finds breastfeeding easy.</td>
<td>Baby was given 10% glucose to make her latch on.</td>
<td>Baby given a drop of bath water by the husband.</td>
<td>States that she is doing EBF. Her husband giving bath water shouldn’t matter as they have not given solid foods.</td>
<td>Planning to follow the government recommendation of EBF for six months. If baby cries she will feed formula</td>
</tr>
<tr>
<td>Gravida = 2nd Mode of birth = SVD Age = 24 Educational status = Primary</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>10 : 6W MWO 10</td>
<td>Solely breastfeeding but the baby was being given a drop of bath water.</td>
<td>The expectation has been met as she was with her baby and was breastfeeding exclusively.</td>
<td>Breastfeeding is easy.</td>
<td>The traditional practice of giving bath water.</td>
<td>Gave bath water to the baby. Did not give butter as the baby had jaundice.</td>
<td>Mother thinks giving a drop of bath water wouldn’t affect the exclusivity of breastfeeding.</td>
<td>Planning to do EBF until six months</td>
</tr>
<tr>
<td>Gravida = 2nd Mode of birth = SVD Age = 32 Educational status = Primary</td>
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</tr>
<tr>
<td>Themes</td>
<td>Sub-themes</td>
<td>Initial coding multigravidae women</td>
<td>Initial coding primigravidae women</td>
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</tr>
</tbody>
</table>
| Theme 1: Previous breastfeeding experiences and influencing factors | Multigravidae women’s practice of exclusive breastfeeding | Giving solid foods and not fluids will affect the exclusivity of breastfeeding.  
Carried out EBF giving nothing except a drop of water thinking baby was thirsty.  
Practicing EBF but gave butter when the baby was born.  
EBF but gave drops of bath water to the baby every time the baby was given a bath.  
Sore nipples and breast engorgement is normal in breastfeeding.  
Refusal of the baby to suckle and not producing breastmilk was considered as a breastfeeding problem. | Not applicable |
| Culture, traditions and beliefs affecting breastfeeding practices | Giving butter right after birth as a gesture of welcoming them to the world was carried out for previous babies.  
Baby was given holy water upon visiting temples for the first baby.  
Gave bath water to the previous baby. | Not applicable |
<table>
<thead>
<tr>
<th>Themes</th>
<th>Sub-themes</th>
<th>Initial coding multigravidae women</th>
<th>Initial coding primigravidae women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Squeezed out colostrum for the first baby because it was thought to be rotten milk.</td>
<td></td>
</tr>
<tr>
<td>Theme 2: Compulsory Breastfeeding</td>
<td>Directed to breastfeed</td>
<td>Going to breastfeed because hospital staff told to do so.</td>
<td>Elders stated that breastfeeding is beneficial.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Listen to and follow whatever the hospital staff says.</td>
<td>Friends said colostrum is good.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Aware of colostrum and understands it needs to be given to the baby, but not why.</td>
<td>Directed by the family to breastfeed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Directed to breastfeed by parents</td>
<td>Breastmilk is the best and natural.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Want to breastfeed because it was good for the baby.</td>
<td>Baby will be healthy and not get other diseases.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Baby will not get sick when breastfed.</td>
<td>Mother’s milk is more nutritious and baby will be strong and healthy.</td>
</tr>
<tr>
<td>Being responsible for one’s actions</td>
<td>Natural choice/not looking for an alternative option.</td>
<td>Does not need a plan as breastfeeding is natural.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Once the baby is born it is natural to the breast.</td>
<td>Not breastfeeding never occurred to the mother.</td>
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</tr>
<tr>
<td></td>
<td>Never occurred not to breastfeed.</td>
<td>Going to give birth, therefore, has to breastfeed.</td>
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<tr>
<td></td>
<td>Understood, that as soon as the babies are born they should be breastfed.</td>
<td>Breastfeeding is one way of taking care of babies.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Have to breastfeed once the baby is born.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Themes</td>
<td>Sub-themes</td>
<td>Initial coding multigravidae women</td>
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<tr>
<td></td>
<td>Breastfeeding is work of women.</td>
<td>EBF will depend on the health of the baby.</td>
<td>EBF will depend on enough milk production.</td>
</tr>
<tr>
<td></td>
<td>It will not do not to breastfeed one’s own child.</td>
<td>Depend on the baby not crying.</td>
<td>Plans to do EBF but give drops of bath water too.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Depend on not having breast pain and sore nipple.</td>
<td>If not able to produce milk baby will be given cow’s milk.</td>
</tr>
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<td></td>
<td></td>
<td>Depend on mothers producing enough breastmilk.</td>
<td>If breastmilk is not produced, plans to give commercial milk.</td>
</tr>
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<td></td>
<td></td>
<td>Depends if baby is satiated with breastmilk.</td>
<td>Depends on the baby not being thirsty and hungry.</td>
</tr>
<tr>
<td>Theme 3: Perceptions and knowledge about breastfeeding</td>
<td>Women’s perceptions of potential factors influencing their capacity for exclusive breastfeeding</td>
<td></td>
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<td></td>
<td>Those who have to return to work will face difficulty breastfeeding</td>
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<td></td>
<td>The previous baby could not settle when she returned to work so for this present pregnancy she might have to give supplement too.</td>
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<tr>
<td></td>
<td>Stays home and does not work so can do EBF</td>
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<tr>
<td>Situation of working women</td>
<td>Not thought about how to feed the baby when she returns to work</td>
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<td></td>
<td>Plans to feed formula upon returning to work</td>
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<td></td>
<td>Plan to give supplements as baby will not settle after when the mother returns to work.</td>
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<td>Themes</td>
<td>Sub-themes</td>
<td>Initial coding multigravidae women</td>
<td>Initial coding primigravidae women</td>
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</tr>
<tr>
<td>Theme 4: Understandings and views on breastfeeding and exclusive breastfeeding</td>
<td>Primigravidae women’s definition and understanding of exclusive breastfeeding</td>
<td>Does not know what EBF is.</td>
<td>EBF is giving breastmilk for six months and giving baby water too.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EBF is giving only milk with little water in between.</td>
<td>Plans to adopt EBF until six months as per the recommendation by the hospital but plans to give little water too as breastmilk is not sufficient.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Plans to breastfeed along with water because the baby will be thirsty.</td>
<td>Plans to give water and cow’s milk with breastmilk as breastfeeding will not the quench baby’s thirst.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>It is O.K. to give a little water.</td>
<td>Doesn’t know what colostrum is.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Will not give the first drops of breastmilk as it will be dirty.</td>
<td>Colostrum is rotten milk and should be thrown away.</td>
</tr>
<tr>
<td>Themes</td>
<td>Sub-themes</td>
<td>Initial coding multigravidae women</td>
<td>Initial coding primigravidae women</td>
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<tr>
<td>Discussion of breastfeeding is embarrassing</td>
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<td>Not sought any breastfeeding information, feels shy to find out such information.</td>
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<td>Does not discuss breastfeeding with others but only about childbirth.</td>
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<td>Too embarrassed to talk about breastfeeding with others</td>
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<td></td>
<td></td>
<td>Does not discuss breastfeeding with friends but talk only about labour pains</td>
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<tr>
<td>Acceptance that first breastfeeding is painful</td>
<td></td>
<td>Was told that the breastfeeding for the first time will be painful.</td>
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<td></td>
<td>Was told by parents to keep on breastfeeding even when it was painful</td>
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<td>Was told by those who had children before persisting on breastfeeding will teach her how to breastfeed.</td>
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<tr>
<td>Plans to observe cultural and traditional practices recommended by elders</td>
<td></td>
<td>Drinking <em>changkey</em> will help with milk production.</td>
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<td></td>
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<td>Intends to follow the practice of baby being given drops of bath water.</td>
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<tr>
<td>Themes</td>
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<td>Will allow baby’s grandmother to give drops of bath water to the baby even though knowing it is not good to give the water.</td>
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<td>Was told to give butter to the baby once it is born</td>
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<td>Baby is not breastfed the first night</td>
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<td></td>
<td></td>
<td>Was told to give her baby formula and cerelace once it is born</td>
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<tr>
<td>Observation of breastfeeding experiences</td>
<td></td>
<td>Observed niece breastfeeding and saw that she found it painful. Did not ask for midwives’ help.</td>
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<td>Observed none breastfeeding exclusively until six months.</td>
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<td>Observed elder sister giving foods to her baby as the baby was crying all the time and stopped crying when given food.</td>
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<td>Observed an aunt feeding powdered milk upon her return to work and plans to do the same.</td>
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<td></td>
<td>Those who were not able to breastfeed were giving lactogen.</td>
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<tr>
<td>Themes</td>
<td>Sub-themes</td>
<td>Initial coding multigravidae women</td>
<td>Initial coding primigravidae women</td>
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<td></td>
<td>Despite a recommendation from the hospital, saw many giving other food.</td>
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<td></td>
<td>Her mother told her she has to give a little bit of water between breastfeeds.</td>
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<td></td>
<td>Observed someone face difficulty producing breastmilk in spite of assistance by the midwives and the baby was given lactogen.</td>
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<td></td>
<td></td>
<td>A friend had the problem of not being able to produce milk in the hospitals, midwives gave baby 10% glucose.</td>
<td></td>
</tr>
<tr>
<td>Theme 5: Breastfeeding information provided by health professionals</td>
<td>Inadequate breastfeeding support and advice from health professionals</td>
<td>No information from the hospital regarding breastfeeding for the present pregnancy. Once told that it was not first pregnancy then no information was given about breastfeeding. Acceptance by women that health workers are too busy. Just verbal advice on EBF to few women. No information about breastfeeding during the antenatal check-up.</td>
<td>During the registration, was told to exclusively breastfeed for six months. No other breastfeeding information. No breastfeeding information by the health professionals during the check up as they were too busy. Does not know much about breastfeeding as health professionals had not given any information. Doesn’t know about the WHO’S recommendation. No knowledge of breastfeeding policy.</td>
</tr>
<tr>
<td>Themes</td>
<td>Sub-themes</td>
<td>Initial coding multigravidae women</td>
<td>Initial coding primigravidae women</td>
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<td></td>
<td></td>
<td>No breastfeeding information for the present pregnancy was given some information for the previous one.</td>
<td>Never heard of WHO’s recommendation</td>
</tr>
<tr>
<td>Informal sources of breastfeeding knowledge</td>
<td>Learn about EBF from television.</td>
<td>Was told about breastfeeding being beneficial and nutritious from grandmothers, mothers and neighbours.</td>
<td>Mostly from those who are already mothers.</td>
</tr>
<tr>
<td></td>
<td>Learnt that colostrum should be given to baby through TV.</td>
<td>Friends told about the correct attachment of the baby to the breast.</td>
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<td></td>
<td>Saw breastfeeding information on TV and posters on the walls of the hospital.</td>
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<tr>
<td></td>
<td>Learn about the importance of breastfeeding from the internet.</td>
<td>Read about the benefits from MCH book and from doctor program in TV.</td>
<td></td>
</tr>
</tbody>
</table>


### Appendix R  Mapping and interpretation: Identifying themes for women at six weeks

<table>
<thead>
<tr>
<th>Themes</th>
<th>Sub-themes</th>
<th>Initial coding Multiparae women</th>
<th>Initial coding Primipara women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theme 1: Current Breastfeeding practices</td>
<td>Effectiveness of breastfeeding advocacy during previous birth experiences</td>
<td>Fed colostrum to the baby as told to do so by the hospital staff.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Did not give a drop of water to the baby as told not to by midwives.</td>
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<td></td>
<td></td>
<td>Did not follow the practice of giving butter and water as instructed by staff</td>
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<tr>
<td></td>
<td></td>
<td>No family or friends suggested giving food or water to the baby because all of them were aware of hospital recommendations.</td>
<td></td>
</tr>
<tr>
<td>Women’s practice, definition and understanding of exclusive breastfeeding practice</td>
<td>At present, just breastfeeding and giving drops of water every time baby has a bath.</td>
<td>EBF with three drops of water while bathing.</td>
<td>Just giving drops of water and think the mother can do EBF until six months.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Aware of the WHO recommendation but thinks it would be O.K. to give water to the baby.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Giving baby bath water during the bath time because the baby will be thirsty.</td>
<td>After two days of giving formula, she was exclusively breastfeeding</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Giving drops of water, just a drop wouldn’t matter.</td>
<td>Exclusively breastfeeding after giving baby butter for the first time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Till date doing EBF. Relatives while giving baby bath give drops of bath water to the baby. Parents scold her (mother) if she does not do this.</td>
<td></td>
</tr>
</tbody>
</table>
**Practicing EBF, not giving any solid foods just giving bath water to drink.**

<table>
<thead>
<tr>
<th>Reasons for supplementation of breastmilk</th>
<th>Baby cries due to not getting enough milk.</th>
<th>Baby was given a formula for jaundice while in the hospital.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baby had jaundice and was fed lactogen.</td>
<td>Giving one spoonful of water to quench the thirst.</td>
</tr>
<tr>
<td></td>
<td>Delay in breastmilk production in the hospital.</td>
<td>Gave formula upon advice by the midwives due to insufficient milk supply.</td>
</tr>
<tr>
<td></td>
<td>Giving drops of water while giving a baby bath.</td>
<td>Gave formula as the baby had a fever.</td>
</tr>
<tr>
<td></td>
<td>Butter given during the first few days after birth as a welcome to the world.</td>
<td>Giving drops of bath water while giving a baby bath.</td>
</tr>
<tr>
<td></td>
<td>Baby was given holy water.</td>
<td>Baby given butter due to tradition where the baby should not enter a new house empty mouthed.</td>
</tr>
<tr>
<td></td>
<td>Was given cow’s urine during the naming ceremony.</td>
<td>Gave baby butter and water as not doing so would be considered inauspicious</td>
</tr>
</tbody>
</table>

**Theme 2: Bhutanese women’s breastfeeding**

<table>
<thead>
<tr>
<th>Women’s experiences of breastfeeding</th>
<th>First, few days of breastfeeding was painful but after the establishment of breastfeeding, it was easy.</th>
<th>So painful that mother cried while breastfeeding.</th>
</tr>
</thead>
</table>

- Butt given during the first few days after birth as a welcome to the world.
- Baby was given holy water.
- Was given cow’s urine during the naming ceremony.
<table>
<thead>
<tr>
<th>experiences and intention to continue</th>
<th>No qualms about breastfeeding in public.</th>
<th>Endured the pain and breastfed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did not have to think about breastfeeding, it is a must.</td>
<td>Was advised to bear the pain and keep breastfeeding, did not seek help.</td>
<td></td>
</tr>
<tr>
<td>Breastfeeding is easy and convenient.</td>
<td>Was told that it was natural to have painful nipples by elders as they had the same too.</td>
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<tr>
<td></td>
<td>Told by family and friends that first breastfeeding would result in sore nipples.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Informed by the midwives that it is natural to get sore nipples.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Women’s perception of barriers to exclusive breastfeeding</th>
<th>Not possible to do EBF when the mother returns to work.</th>
<th>Planning to give other foods when the mother returns to work.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will give other food to the baby once the three months maternity leave is over.</td>
<td>Plans to EBF till six months but not sure if it could be carried out or not.</td>
<td></td>
</tr>
<tr>
<td>Plans not to give anything until six months if the baby does not cry but will give other food like cerelace if the baby does.</td>
<td>Will feed other food when the mother returns to work.</td>
<td></td>
</tr>
<tr>
<td>EBF will depend on the baby being settled and not crying.</td>
<td>Plans to do EBF until six months if her breastmilk is adequate.</td>
<td></td>
</tr>
<tr>
<td>EBF at six weeks but might give other food as the baby grows and they may be hungry.</td>
<td>Plans to adopt EBF until six months but if the baby is not satiated by breastmilk will give other foods.</td>
<td></td>
</tr>
<tr>
<td>Plans to start on supplements when the mother returns to work.</td>
<td>If the baby is unsettled and crying all the time mother will feed supplements.</td>
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</tr>
<tr>
<td>People in the community had told her that they started giving their babies solid food when the babies cried and were unsettled.</td>
<td>Enforcement of traditional and cultural practices by elders.</td>
<td></td>
</tr>
<tr>
<td>Enforcement of traditional and cultural practices by elders.</td>
<td>Influenced by friends and family to give other food when baby cries.</td>
<td></td>
</tr>
<tr>
<td>Influenced by friends and family where they have suggested giving baby food and water when it cries because it might be crying due to hunger.</td>
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</tr>
<tr>
<td>Not prepared for the reality of breastfeeding</td>
<td>Expected breastfeeding to be easy but it was not.</td>
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<td></td>
<td>During pregnancy, no breastfeeding information was given and so did not know what to expect.</td>
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<td></td>
<td>Found breastfeeding painful and not as expected.</td>
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<td></td>
<td>Wasn’t aware that breastfeeding leads to sore nipples.</td>
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<tr>
<td></td>
<td>Faced with breastfeeding difficulties, nothing went according to the mother’s thoughts.</td>
<td></td>
</tr>
<tr>
<td>Theme 3: Culture, traditions and beliefs affecting breastfeeding practices</td>
<td>Cultural and traditional practices to increase breastmilk production</td>
<td>Cultural and traditional practices affecting exclusivity of breastfeeding</td>
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<tr>
<td>Took plenty of soup, milk, water and juice to produce milk.</td>
<td>Took spice (carom seeds) to produce more milk.</td>
<td>Drank changkey to produce milk.</td>
</tr>
<tr>
<td>Took spice (carom seeds) to produce more milk.</td>
<td>Drank salted butter tea, ate dried meat, and chicken and fish soup to produce milk.</td>
<td>Drink soup and plenty of fluids to produce milk.</td>
</tr>
<tr>
<td>Drank changkey to produce milk.</td>
<td>Restricted eating chilli and fresh vegetables as they would cause baby to have stomach pain and diarrhoea.</td>
<td>Restricted chilli as it will go through breastmilk and cause diarrhoea in the baby.</td>
</tr>
<tr>
<td>Ate dried meat, eggs and fish to produce milk.</td>
<td>Drank changkey to produce milk.</td>
<td>Ate dried meat, eggs and fish to produce milk.</td>
</tr>
<tr>
<td>Cultural and traditional practices affecting exclusivity of breastfeeding</td>
<td>At present just breastfeeding and giving drops of water every time baby has a bath.</td>
<td>Giving a drop of water every time baby is given bath as they thought the baby will be thirsty.</td>
</tr>
<tr>
<td>Baby was given drops of bath water, this has been going on so has become a habit.</td>
<td>Baby was given drops of bath water, this has been going on so has become a habit.</td>
<td>Gave baby piece of butter when born as welcome to the world.</td>
</tr>
<tr>
<td>Gave baby a drop of holy water</td>
<td>Gave baby a drop of holy water</td>
<td>Drops of holy water when visiting temples.</td>
</tr>
<tr>
<td>Gave cow’s urine to baby on 7th day during the baby’s naming ceremony.</td>
<td>Gave cow’s urine to baby on 7th day during the baby’s naming ceremony.</td>
<td></td>
</tr>
<tr>
<td>At home her mother gave a small piece of butter to the baby otherwise, she was told that rats will destroy the things in the house.</td>
<td>At home her mother gave a small piece of butter to the baby otherwise, she was told that rats will destroy the things in the house.</td>
<td></td>
</tr>
<tr>
<td>Theme 4: Hospital Practices affecting breastfeeding</td>
<td>Hospital routines</td>
<td>Baby put on the mother’s chest, umbilical cord cut and the baby was taken away, no attempt at breastfeeding.</td>
</tr>
</tbody>
</table>
The baby was kept on mother’s chest but the mother was not allowed to touch and the baby was taken away.

Baby was given 10% glucose to make it latch on.

Given lactogen as the baby had jaundice.

Discharged the next day without any breastfeeding information.

Developed sore nipples and breast engorgement at home.

First breastfeeding was attempted only after mother and baby were cleaned up.

Babies fed with formula in the hospital by the health professionals when there was inadequate milk production.

Was discharged the next day without any breastfeeding information.

Developed sore nipples and breast engorgement at home.

No breastmilk production thus gave supplements in the hospital.

<table>
<thead>
<tr>
<th>Appropriate timing for breastfeeding information and support</th>
<th>Education on breastfeeding was after the childbirth and not during the pregnancy.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Shown how to breastfeed when she came with the problem at one week to the Lactation Clinic.</td>
</tr>
<tr>
<td></td>
<td>Breastfeeding help is more after birth at the Maternity Ward and Lactation Clinic.</td>
</tr>
<tr>
<td></td>
<td>More help and information about breastfeeding necessary during the antenatal period.</td>
</tr>
<tr>
<td></td>
<td>No advice during the pregnancy.</td>
</tr>
<tr>
<td></td>
<td>It would have been good to know during the pregnancy about positioning and attachment.</td>
</tr>
<tr>
<td></td>
<td>Breastfeeding information should have been given during pregnancy.</td>
</tr>
<tr>
<td></td>
<td>Midwives helped after the birth with breastfeeding.</td>
</tr>
<tr>
<td></td>
<td>Breastfeeding information during the pregnancy would help.</td>
</tr>
<tr>
<td></td>
<td>Information required during pregnancy.</td>
</tr>
<tr>
<td>Theme 5: Perceptions of breastfeeding support</td>
<td>Multiparae women should know about breastfeeding</td>
</tr>
<tr>
<td>---------------------------------------------</td>
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</tr>
<tr>
<td>Multi-parae women should know about breastfeeding.</td>
<td>When health professionals were informed that it was not the first pregnancy, no further information was given.</td>
</tr>
<tr>
<td></td>
<td>Midwives did not give any help as this was her third child.</td>
</tr>
<tr>
<td></td>
<td>Health professionals told mothers that since they were already mothers they should know how to breastfeed.</td>
</tr>
<tr>
<td></td>
<td>No breastfeeding advice on discharge probably because the health professionals thought mothers know about breastfeeding.</td>
</tr>
<tr>
<td>Breastfeeding support provided by health professionals.</td>
<td>No breastfeeding advice on discharge because this was not a first baby for the mother</td>
</tr>
<tr>
<td></td>
<td>Hospital midwife came in only once and showed how to breastfeed the baby.</td>
</tr>
<tr>
<td></td>
<td>Midwives in the hospital helped when baby refused to suckle once while in the labour room.</td>
</tr>
<tr>
<td></td>
<td>No help at all in the Maternity Ward</td>
</tr>
<tr>
<td></td>
<td>Did not ask for midwives’ help as they were busy.</td>
</tr>
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</tbody>
</table>
Mother was told that she doesn’t know anything about breastfeeding no matter how much the health professionals taught her.

Midwives came to help baby suckle but gave up once they couldn’t.

Health professionals too busy to help with breastfeeding.

<table>
<thead>
<tr>
<th>Breastfeeding support from the family</th>
<th>Family, especially mothers, sisters, and husbands help at home by doing household chores.</th>
<th>Her mother and husband supported her with breastfeeding.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Did not need help with breastfeeding at home but came to Lactation Clinic.</td>
<td>Husband helped with the positioning of the baby.</td>
</tr>
<tr>
<td></td>
<td>Managed breastfeeding on their own.</td>
<td>Parents helped with breastfeeding by holding the baby.</td>
</tr>
<tr>
<td></td>
<td>When faced with breastfeeding problems mothers sought help from the hospital and did not seek help from anyone at home because people at home would not know what to do.</td>
<td>Mostly female member of the family helped with breastfeeding.</td>
</tr>
</tbody>
</table>
### Appendix S  Mapping and interpretation: Identifying themes for health professionals

<table>
<thead>
<tr>
<th>Themes</th>
<th>Sub-themes</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Theme 1: Knowledge of EBF and current breastfeeding status in Bhutan</td>
<td>Knowledge of benefits of breastfeeding and EBF practices</td>
<td>EBF is feeding only with mother’s milk for six months after birth, not giving even a drop of water. The exception is like syrups that doctor orders. Breastmilk contains all the nutrient that a baby need. Breastmilk helps in brain development. Breastfeeding provides all the nutrients that baby needs. Protects baby from getting diseases. The fertility return will be delayed.</td>
<td>Feeding the baby exclusively with breastmilk without giving even water or formula before six months. It protects the baby from ailments such as ARI, diarrhea because it contains antibodies. Protects from diseases and infection. Contamination is reduced. Does not get waterborne diseases. Has all the nutrition required.</td>
<td>EBF means, after birth until six months, no water, no juice nothing aside from the breastmilk. Reduces diseases, infection and allergies and non-communicable diseases. Development of bond between mother and baby. Beneficial to child development, and ideal food for babies. Breastfeeding is convenient. For mothers decrease in cancers and postpartum haemorrhage.</td>
<td>EBF, the child should be breastfed up to six months with no supplementary feeding, not even a single drop of water. Prevents the baby from getting an illness like common cold, diarrhea, and it will help the baby’s immune system. Baby will get a balanced diet which the mother is getting and there will be bond, attachment with the mother.</td>
<td>EBF is totally mother feeding only breastmilk to their babies until the age of six months. Reduction in the mortality and morbidity among the under-five children if exclusively breastfed. Reduces pneumonia, diarrhea, dysentery and malnutrition.</td>
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</table>

EBF = Exclusive Breastfeeding
<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Readily available.</td>
<td>No knowledge about the existence of breastfeeding group.</td>
<td>Bonding between mother and baby.</td>
<td>Beneficial for society.</td>
<td>Right temperature.</td>
<td>Baby can have anytime.</td>
<td>Baby can have anytime.</td>
</tr>
<tr>
<td>Right temperature.</td>
<td>Usually, advice timed breastfeeding.</td>
<td>It’s natural, it’s at the right temperature. Do not have to heat.</td>
<td>Economic benefits.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Breastfeeding is the complete food for the baby</td>
<td>Thinks that well baby clinic is breastfeeding group formation</td>
<td>Offers natural contraception.</td>
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<tr>
<td>Knowledge of and adherence to the Ten Steps to Successful Breastfeeding</td>
<td>No sure if there is breastfeeding policy.</td>
<td>No sure if there is breastfeeding policy.</td>
<td>People working with care of babies are aware of breastfeeding policies.</td>
<td>JDWNRH is a Baby-Friendly Hospital due to introduction of Lactation Clinic in the hospital</td>
<td>Not aware if the rooming in is practiced or not.</td>
<td>Mothers and babies are not separated at birth.</td>
</tr>
<tr>
<td></td>
<td>Does not think there is breastfeeding group.</td>
<td></td>
<td>Formula available and accessible.</td>
<td></td>
<td>Initiating breastfeeding within 30 minutes not being implemented.</td>
<td>Lactation Clinic shows how to maintain lactation if they are separated.</td>
</tr>
<tr>
<td></td>
<td>Breastfeeding on demand but timed initially until breastfeeding gets established</td>
<td></td>
<td>Initiating breastfeeding within 30 minutes not being implemented.</td>
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<tbody>
<tr>
<td>Current breastfeeding and EBF status in Bhutan.</td>
<td>EBF is low as the country is less developed and most of the mothers are not educated and many do not understand about benefits of EBF.</td>
<td>EBF is low because of mothers going to work.</td>
<td>EBF is low because of mothers going to work.</td>
<td>Gov’t pledge not implemented.</td>
<td>Most women are breastfeeding due to health education.</td>
<td>Sceptical about the current EBF rate because different documents show different rates.</td>
</tr>
<tr>
<td></td>
<td>EBF is poor as some mothers don’t seem to know how much they are taught about EBF.</td>
<td>EBF is low in women who are uneducated.</td>
<td>Pacifiers dipped in mothers’ milk given to sick babies.</td>
<td>Pacifier used for sick babies might send the wrong message to the public</td>
<td>EBF is increasing because people have understood the importance of EBF.</td>
<td>EBF is a behavioural change and will take more than two years to change such behaviours therefore not possible for EBF rate to increase from 10.4% in 2008 to 48.7% 2010.</td>
</tr>
<tr>
<td></td>
<td>Mothersons do not follow EBF.</td>
<td>Women supplements once they reach home.</td>
<td>No follow up of breastfeeding group.</td>
<td>No follow up of breastfeeding group.</td>
<td>No follow up of breastfeeding group.</td>
<td>New breastfeeding group was formed recently.</td>
</tr>
<tr>
<td></td>
<td>EBF is quite low mothers start feeding supplements.</td>
<td>EBF is increasing because of increased education by health professionals.</td>
<td>Breastfeeding overall is good but EBF is low.</td>
<td>Breastfeeding duration is decreasing because of women returning to work.</td>
<td>Breastfeeding overall is good but EBF is low.</td>
<td>New breastfeeding group was formed recently.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EBF has increased because of health education is given</td>
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<tr>
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<tr>
<td>Perception by mother</td>
<td>that baby is thirsty</td>
<td></td>
<td>by health professionals before discharge from the hospital</td>
<td>Non-exclusive breastfeeding culture</td>
<td>WHO codes not implemented so EBF is low</td>
<td>JDWNRH losing Baby-Friendly status could be due to lapses from the program side</td>
</tr>
<tr>
<td>EBF is increasing that</td>
<td>means most of the mothers are educated on breastfeeding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Nutrition Program is a big program it was manned by one or two personals</td>
</tr>
<tr>
<td>EBF status is not as</td>
<td>good as mothers are employed or working and they don’t have time to</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>When there was change over there</td>
</tr>
<tr>
<td>good as mothers are</td>
<td>breastfeed until six months.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lapse in BFHI</td>
<td>designation and breastfeeding-related activities</td>
<td></td>
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</tr>
</tbody>
</table>

EBF: Exclusive Breastfeeding

WHO: World Health Organization

BFHI: Baby-Friendly Hospital Initiative
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>were no proper handing and taking over.</td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>Whoever was responsible for the Baby-Friendly initiatives in hospital also failed to remind the Nutrition Program</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td>Policy is outdated and only recommends EBF for four months</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>Lacking in follow-up breastfeeding programs as there are no concrete monitoring and supervision tools developed</td>
</tr>
</tbody>
</table>

**Theme 2:**

Breastfeeding is a Culture of breastfeeding in Bhutan.

No embarrassment feeding in public once the baby is born.

Breastfeeding in Bhutan is easy.

Mothers breastfeed their child beyond two years.

380
<table>
<thead>
<tr>
<th>Themes</th>
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</tr>
</thead>
<tbody>
<tr>
<td>social norm in Bhutan</td>
<td></td>
<td>Women breastfeed even in front of male members of the family.</td>
<td>No social stigma of feeding in public.</td>
<td>Baby all the time with mothers and can be breastfed anytime.</td>
<td>Everyone in Bhutan breastfeeds.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>All women breastfeed however they do not breastfeed exclusively.</td>
<td>Mothers are willing to feed anytime, anywhere in public.</td>
<td>Everyone in Bhutan breastfeeds.</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Mothers engaging in breastfeeding is very high.</td>
<td>The social norm is baby is fed everywhere.</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Mothers tend to feed beyond two years.</td>
<td>Culture of swaddling/no skin-to-skin contact</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Non-exclusive breastfeeding is in practice.</td>
<td>The culture of covering the baby face.</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Never seen any Bhutanese woman expressing.</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td>Baby considered dirty so no skin-to-skin contact.</td>
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<td></td>
<td></td>
<td>Colostrum not considered as milk.</td>
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</tr>
<tr>
<td></td>
<td>Influence of the joint family</td>
<td>Grandmothers’ beliefs that baby should be fed butter</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>The old belief is passed down to the daughters.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>The mother may be aware of breastfeeding but she may not have a say in her baby feeding.</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>The culture of non-exclusive breastfeeding.</td>
<td></td>
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</tr>
</tbody>
</table>

Bhutan has a joint or extended family, therefore, a lot of influence from female members of the family and is at the mercy of suggestions and advice.

Joint family culture in Bhutan is strong.
Breastfeeding is not the end all.

The joint family influence that breastmilk is not enough.

Grandparents encourage babies to be given butter.
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<tbody>
<tr>
<td></td>
<td>Pressure from peer and mothers or mothers in law.</td>
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</tr>
<tr>
<td>Role of husband in breastfeeding</td>
<td>Husband supportive however limited role in breastfeeding.</td>
<td>Husband’s opinion not sought regarding baby’s feeding.</td>
<td>Not included in antenatal care</td>
<td>Husband needs to know about lactogenesis</td>
<td>Husband needs to help with household chores so that mothers can relax and produce breastmilk</td>
<td></td>
</tr>
<tr>
<td>Theme 3:</td>
<td>Primiparity</td>
<td>Most primiparae mothers do not know how to breastfeed.</td>
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<tr>
<td>Barriers to initiation of breastfeeding</td>
<td></td>
<td>Has no prior breastfeeding experiences.</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Primiparae mothers are normally exhausted after the childbirth and all their energy spent. They just stay there doing nothing right after delivery.</td>
<td></td>
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<td></td>
<td></td>
<td>Primiparae mothers tend to supplement their babies without midwives’ consent and knowledge.</td>
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<td></td>
<td></td>
<td>First-time mothers face more breastfeeding difficulties.</td>
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<tr>
<td>Mode of birth and other complications</td>
<td></td>
<td>For caesarean, it is impossible to initiate breastfeeding within half an hour. Because some mother takes one</td>
<td></td>
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</table>
to two hours to get back from operation theatre.

Post caesarean mothers don’t breastfeed due to pain.

Caesarean mothers lie straight (flat) and their nipples become flat. So it is difficult to initiate breastfeeding.

Caesarean mothers face more difficulty with breastfeeding than normal because following caesarean they can’t move.

Suturing of episiotomy and tears takes time and therefore breastfeeding is initiated within one hour.
<table>
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<tr>
<td>If the patient has postpartum haemorrhage, retained placenta they are taken to operation theatre and initiation within half an hour is difficult. When mother goes into postpartum haemorrhage, staff have to look after the mother Baby’s condition like asphyxia</td>
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</tr>
<tr>
<td>Theme 4: Reasons for breastmilk supplementation</td>
<td>Cultural and traditional practices</td>
<td>Mothers give butter to the baby as the baby is born as the traditional belief such as baby will get to eat butter throughout his life or as a gesture of welcoming them to the world.</td>
<td>Influence of elders especially, grandmothers that baby should be fed butter and it is passed down the generation Elders in the family think that baby should be fed more</td>
<td>A tradition passed from generation to generation. Mothers or mother-in- law would enforce olden days beliefs and influence, new mothers, to give butter or water to their baby Babies are given butter because they think that butter is fat and it gives energy They think that as soon as the baby is born they will be</td>
<td>Babies are given butter welcoming Bhutanese mothers take it for granted that EBF is not required by the children as someone survived before without EBF. Babies are given butter welcoming</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Whenever they give the baby a bath, baby is given one or two drops of water to prevent their throat from becoming dry.</td>
<td>often and have doubts that those babies are having enough from their mothers</td>
<td>Cultural practice like baby is given alcohol as soon as they are born in the east and rice powder in the west</td>
<td>hungry so they give butter.</td>
<td>them to the new world</td>
</tr>
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<td>Honey is given as it believed the baby will be intelligent.</td>
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<td>Misconception that colostrum is bad milk</td>
<td>In the community, people copy from each other</td>
<td>Elders or their relatives, neighbours often encourage, breastfeeding mothers to drink alcohol</td>
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<td>Colostrum is thrown because they think it is a rotten milk.</td>
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<td>Colostrum is considered to be rotten milk</td>
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<td>Drinking <em>changkey</em> is encouraged to produce milk.</td>
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<td>Grandmothers discourage chilli because if breastfeeding mothers eat chilli the baby will have stomach pain</td>
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<td>Grandmothers and grandfather’s feed supplement as they</td>
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<td>Return to work</td>
<td>EBF cannot be achieved because some women have to go to work.</td>
<td>believe baby should have something solid in their stomach</td>
<td>Mothers returning to work cannot do EBF for the first six months, breastfeeding is not convenient.</td>
<td>Working mothers get maternity leave of only three months and private employees get only one month.</td>
<td>Increasing number of women are working so due to three months maternity leave EBF is not possible</td>
<td>Working mothers who have to return to work after their maternity leave are not able to EBF until six months.</td>
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<td>Working mothers cannot feed her child exclusively because they only get three months maternity leave.</td>
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<td>Don’t have the time to breastfeed babies because they have to go to work.</td>
<td>Working mothers get maternity leave of only three months and private employees get only one month.</td>
<td>Increasing number of women are working so due to three months maternity leave EBF is not possible</td>
<td>Working mothers who have to return to work after their maternity leave are not able to EBF until six months.</td>
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<td>Especially for nurses who do night duty after six months and those who are doing shift duties it could be a problem for them.</td>
<td>For those returning to work, the rules and regulation are not breastfeeding friendly.</td>
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<td>Maternity leave until three months is a constraint.</td>
<td>In the rural areas, mothers go to work in the field and leave their babies with grandmothers who feed other things to the baby.</td>
<td>Mothers who had to return to work may not be able to take their children to work or field to breastfeed</td>
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<td>Government policy state EBF, for six months and the maternity leave, is</td>
<td>Even in health, those doing shift duties do not get time off, houses are far and bosses are</td>
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<td>In the rural areas, mothers go to work in the field and leave their babies with grandmothers who feed other things to the baby.</td>
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<td>three months. And it doesn’t tally.</td>
<td>not willing (to give time off)</td>
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<td>Socioeconomic and educational</td>
<td>If mothers have a car of their own, if the family support is very good and they can bring the baby to their workplaces and breastfeed, which is not possible for all mothers. Poor people, in the private sector, after one month lose their job if they don’t go back to work. Culture plays a major role among the people who are not very educated. Most of the mothers are housewives and they are not well educated.</td>
<td>The barrier to EBF is most of the mothers are uneducated. Most of the mothers are not aware of expressing and are throwing away unfinished milk. Babies are supplemented because mothers and their relatives are not educated and are not well informed. EBF rate in the rural area maybe less because of less educated mothers.</td>
<td>In the rural area, mothers have to return to work to work in the field. Some women do not have enough to eat therefore they cannot afford to take unpaid leave. Some women do not have cars and their house are far from their jobs so it is difficult for them. Mothers who have given birth should not be made to go and work.</td>
<td>Mothers cannot afford to take time off because they need money to sustain themselves. Most mothers who feeds supplement are uneducated.</td>
<td>The reasons why mothers are not able to do EBF until six months is due to low educational status. Low-literate or uneducated mothers do not understand the importance of EBF.</td>
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<td></td>
<td>Breastfeeding problems</td>
<td>Mothers who are uneducated, once they leave the hospital they feed other things like lactogen.</td>
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<td>Sometimes the mother’s nipples are retracted, making EBF difficult.</td>
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<td>Common BF difficulty is sore nipples, breast engorgement, and breast abscess which lead women to give supplements to their babies.</td>
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<td>Mothers perceive that breastmilk is not adequate.</td>
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<td>Some mothers face genuine problem such as mothers not producing enough breastmilk.</td>
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<td>Nipple crack, inverted nipples, and sore nipples lead mothers to give breastmilk supplementation.</td>
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<td>Inverted nipples and very small nipple face difficulty with breastfeeding and mothers tend not to feed resulting in</td>
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<td>Inadequate breastmilk production, baby refusal to feed, unsettled babies are the reasons mothers supplements.</td>
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<td>Mothers supplements due to the sore and cracked nipple, mastitis and breast abscess.</td>
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<td>The notion that colostrum is not milk.</td>
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<td>Previous breastfeeding difficulties experience.</td>
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<td>nipple sores and breast engorgement.</td>
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<td>Advice from health professionals</td>
<td>Health staff gives 10% dextrose to make baby latch.</td>
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<td>Supplementation is advised when there is no breastmilk production. Once breastfeeding is established formula is then stopped.</td>
<td>The formula is advised when there is no breastmilk production.</td>
<td>Babies suffering from jaundice are advised formula.</td>
<td>When a baby is sick or not gaining weight top up is being given.</td>
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<td>If the baby is sick and mother has less milk production formula feeding is advised by the doctors.</td>
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<td>When there is no milk production midwives are feeding formula through nipple tube feeding.</td>
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<td>After trying with breastfeeding as well as giving tab Maxeron to mothers if breastmilk is insufficient, supplements is advised by the doctor.</td>
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<td>When health workers are not able to help with breastfeeding problems they start on formula.</td>
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<td>Theme 5: Barriers to breastfeeding promotion activities</td>
<td>A shortage of staff in a busy maternity service</td>
<td>Thinks it’s better to supplement than baby ending up with sepsis if there is no milk production.</td>
<td>Due to huge workload not possible to provide breastfeeding care to each and every woman but trying their best.</td>
<td>Not able to provide effective breastfeeding support activities because of a huge caseload of women.</td>
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<td>Only one person staffs the program.</td>
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<td>Maternity Ward has multiple cases gynaecology, pre-operative, post-operative, many babies, and shortage of staff</td>
<td>Very busy with many patients, no time to talk about breastfeeding with mothers.</td>
<td>It is not possible to initiate breastfeeding within half an hour because of staff shortages.</td>
<td>More dedicated staff in the postnatal area required.</td>
<td>Difficult to follow up on various activities in the program.</td>
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<td>Most of the time only three staff are there in Birthing Centre and all are involved with other routine work so no time to help with breastfeeding.</td>
<td>Even forget to do breast assessment.</td>
<td>Because of a shortage of staff, midwives are overworked and they end up compromising on the ideal practice.</td>
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<td>Not able to help with each and every one with breastfeeding because of busyness.</td>
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<td>No motivation in staff.</td>
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<td>Limited staff more focused on conducting</td>
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<td>births than postnatal activities.</td>
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<td>Health education on breastfeeding is not given in detail because of so much work in the antenatal clinic, Maternity Ward, and Birthing Centre.</td>
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<td>Lack of breastfeeding training</td>
<td>Some of the staff are not aware of the importance of breastfeeding.</td>
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<td>New staff not trained in breastfeeding skills and knowledge.</td>
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<td>The new staff has no experiences.</td>
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<td>Health staff does not have required knowledge or skills.</td>
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<td>Midwives have no initiative to updates their skills instead they are used to training being given by others.</td>
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<td>Busy with neonates no time to see breastfeeding aspects.</td>
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<td>More faith in theoretical aspects than his practical knowledge as he has no practical skills.</td>
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<td>Not trained in any breastfeeding skills or knowledge.</td>
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<td>Had no formal training on breastfeeding, therefore, faces a problem when dealing with</td>
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<td>Health personnel is not well-trained breastfeeding.</td>
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<td>More staff should be included in giving education and staff should be given more workshops and education on breastfeeding.</td>
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<td>Lack of interest from women</td>
<td>Some mothers don’t want to feed because of pain they want to be comfortable first.</td>
<td>Some mothers do not listen to breastfeeding advice.</td>
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<td>Needed to be trained first to help mother with breastfeeding during ORC</td>
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<td>Most of the patients do not like to stay in the hospital. They are eager to go home.</td>
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<td>Most mothers are reluctant to come to breastfeeding</td>
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<td>education. They want to get their antenatal</td>
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<td>check-up done fast and go home, thus missing</td>
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<td>breastfeeding information.</td>
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<td>Sometimes it is very difficult to convince</td>
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<td>patient and family about EBF.</td>
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<td>Mothers do not to seek advice about breastfeeding from health professionals.</td>
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Breastfeeding support not being conducted actively in ORCs

ORC mostly deals with immunization, family planning, treatment of the common diseases.

Only health education talk is given on breastfeeding.
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<td>Theme 6: Strategies to improve the EBF rate</td>
<td>Increase advocacy about the importance of breastfeeding.</td>
<td>Need to create more awareness of EBF. Most of the mothers are not educated or Grandmothers should also be</td>
<td>Educate the mothers as well as the decision makers in the family.</td>
<td>There needs to be communication, information, education through TV. Educated mothers will express, they are not</td>
<td>Women needed to be educated on the importance breastfeeding. Women’s family should also be</td>
<td>Requires more effort to create awareness about the importance of breastfeeding.</td>
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<td>familiar with the importance of EBF.</td>
<td>given education during the antenatal period.</td>
<td>doing it because there are no resources.</td>
<td>Advocate the importance of breastfeeding during the World Breastfeeding weeks and have TV shows.</td>
<td>made aware of the importance of EBF.</td>
<td>Women, especially in rural area, are not aware of the importance because of inaccessibility to awareness program.</td>
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<td>Target relatives and spouse as they tend to influence the mother.</td>
<td>Increase working mothers’ level of awareness about the importance of breastfeeding and disadvantages of breastfeeding.</td>
<td>Need to educate mothers during the pregnancy about how to produce milk.</td>
<td>Children will become future parents so that the early education and exposure of the knowledge of breastfeeding might be very important to change their mindsets.</td>
<td>Educate and empower adolescents who are the future fathers and mothers.</td>
<td>Need to scale up or promote or create awareness among the public so that they understand the benefits of EBF.</td>
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<td>Awareness on breastfeeding should start from antenatal visits.</td>
<td>There should be increased awareness, and education for those who are in the village, through media and health professionals going door to door.</td>
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<td>Health education together with husband and wife, during antenatal and postnatal visits.</td>
<td>Certain rules and regulations where it should be made convenient for working mothers to EBF.</td>
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<td>Awareness should begin from high school and added in the curriculum.</td>
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<td>EBF until six months</td>
<td>EBF for six months is not achievable because even if the milk is expressed it is not enough. Possible only with extension of maternity leave. EBF can be achieved by having a flexible time to the working women. If the government can give six months maternity leave, women can practice EBF for six months.</td>
<td>Increasing maternity leave for six months can help mother undertake EBF for six months. Royal Government of Bhutan’s Policy of EBF until six months is achievable if there is increased awareness and maternity leave is increased. There should be crèches set up.</td>
<td>Increase maternity leave and convince policy makers the importance of breastfeeding.</td>
<td>It is very important to make people and stakeholders aware of the importance of breastfeeding. Educate policy makers and offices to make crèches so that women can express their milk and breastfeed.</td>
<td>EBF until six months can never be achieved if maternity leave is not increased.</td>
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<td>Provision should be made to make room available for breastfeeding in every office.</td>
<td>where babies are kept and mothers can come and breastfeed their children.</td>
<td>Companies should give mothers designated place to express their milk and to preserve their milk.</td>
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Increasing maternity leave to six months will help in EBF.

Increasing maternity leave should show the public how importance EBF until six months.

|           | Expression of breastmilk | Mothers are shown how to express and store their breastmilk before they return to work by the midwives in the Lactation Clinic. Has knowledge that breastmilk can express and stored but has never advised such to women. | Expression of breastmilk and keeping it in a fridge can help mothers to exclusively feed their babies when they return to work. |

Expressing breastmilk becomes tiresome for those who have rigid rules at work. |
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<td></td>
<td></td>
<td>No women in the Maternity Ward and Birthing Centre have come forward asking for such advice. Has never given advice to women about expressing and storing breastmilk when they return to work.</td>
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<td>Working mothers cannot achieve EBF by providing expressed breastmilk through personal experience.</td>
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<td></td>
<td>Policy level plans to increase the exclusive breastfeeding rate</td>
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<td></td>
<td>Plan to revitalise the Baby-Friendly initiatives to promote and create awareness among the mothers of the importance of EBF. Update National Breastfeeding Policy. Working on the extension of maternity leave so</td>
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<td>Theme 7: Breastfeeding support and promotion activities</td>
<td>Breastfeeding advice and support</td>
<td>Provide awareness, during pregnancy or during antenatal check-up about breastfeeding and EBF. Teach correct positioning and attachment. And benefits of breastfeeding in the Maternity Ward. Health education to mothers about how to breastfeed, about advantages and disadvantages of EBF.</td>
<td>Inform mothers whenever possible about the benefits and management of breastfeeding. Encourage as far as possible breastmilk feeding whether it is through tube feeding. Encourage them to express milk and give it by cup and spoon. Advise not to use artificial nipples and soothers.</td>
<td>Talk about the importance of breastfeeding regularly and about good attachment and positioning. Advice to attend health facility if they have any problem with breastfeeding at home.</td>
<td>Health education, highlighting the importance of EBF. Talk to mothers about advantage and disadvantages of breastfeeding. Refer breastfeeding problems.</td>
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that working mothers can stay at home for the first six months and exclusively breastfeed their child.
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<td>Provides syringe to pull out flat nipples</td>
<td>During the rounds, check whether they’re lactating, whether the breasts are engorged.</td>
<td>breastfeeding and EBF.</td>
<td>Syringe to pull out nipples during the antenatal time.</td>
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<td>Hands on help if mothers are facing a problem with attachment and positioning.</td>
<td>During the rounds advise women to practice EBF for six months and to avoid supplements.</td>
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<td>Advice nipple tube feeding to maintain stimulation to the nipple.</td>
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<td>Helps caesarean mothers with positioning at least once.</td>
<td>Usually, give them metoclopramide, for no breastmilk production.</td>
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<td>Health workers to empower mothers that any nipple shape can lead to successful breastfeeding.</td>
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<td>Inform about the benefits of EBF and provide hands-on support.</td>
<td>Advises on how to care for their breasts, they should feed every two hours, and allow breast not to get engorged.</td>
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<td>Breastmilk expression is taught two weeks before mothers return to work.</td>
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<td>Staff assists in positioning and attach the baby to breastfeed.</td>
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<td>Working mothers are taught how to express and store breastmilk before they return to work.</td>
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*EBF: Exclusive Breastfeeding; EBF: Extended Breastfeeding*
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<td>Delegation of responsibilities</td>
<td>Delegate midwives to engage mothers in early feeding, rooming in and inform about EBF.</td>
<td>All the breastfeeding problems are dealt by the midwives.</td>
<td>Paediatricians trains midwives in breastfeeding skills and knowledge.</td>
<td>Observed midwives in Antenatal Clinic inform all pregnant women about the benefits and management of breastfeeding.</td>
<td>Observed midwives in Postnatal Clinic advising women to express their milk and store in the fridge</td>
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<td>Fragmentation of midwives’ education role</td>
<td>Some of the problems like inverted nipples should be fixed by midwives in Antenatal Clinic. It is too late to address such problems when women come to give birth.</td>
<td>is a challenge due to a huge workload.</td>
<td>breastfeeding support in ORCs.</td>
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<td>No time to advice when in the hospital for birth so all breastfeeding advice should be done by antenatal staff.</td>
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<td>Showing mothers how to breastfeed, and how to maintain lactation if mothers are separated from their babies should be done by neonate staff.</td>
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<td>Due to staff shortages, mothers are not shown</td>
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<td>how to breastfeed and maintain lactation in Birthing Centre and Maternity Ward.</td>
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<td>No breastfeeding advice was given to mothers admitted in first stage room.</td>
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<td>In Birthing Centre pregnant women are not informed of benefits and management of breastfeeding.</td>
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<td>Midwives in the Birthing Centre and Maternity Ward do not consider assisting with breastfeeding as their primary responsibility.</td>
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