BREASTFEEDING PRACTICES AND RELATED FACTORS AMONG MOTHERS OF INFANTS AGED 6-12 MONTHS IN LATHA TOWNSHIP, YANGON, MYANMAR

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IN PARTIAL FULLFILLMENT OF THE REQUIREMENT FOR
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Thematic Paper
entitled

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ABSTRACT

This cross-sectional study assessed the percentage of breastfeeding practice and analyzed factors related to breastfeeding practices among mothers with children aged 6-12 months in Latha Township,Yangon Region, Myanmar. Data were collected from 135 mothers interviewed using structural questionnaires. The results showed that percentage of exclusive breastfeeding up to 6 months was 40.7%. Nearly all mothers (97.8%) initiated breast milk within one hour after delivery. The reason for not giving exclusive breastfeeding, up to 6 months, is cultural belief. 34.8% of mothers believed that the child would relieve thirst by giving water. This is the main barrier for exclusive breastfeeding practice. Another reason was due to return to work place (10.4%). Working mothers gave bottle feeding to their child. The age of the mother, education of mother and previous experience of breastfeeding were related to exclusive breastfeeding. More than half of the mothers (61.5%) had a low level of knowledge about exclusive breastfeeding practice. Most of the mothers (89.6%) had positive attitude towards exclusive breastfeeding practice. There was relationship between maternal knowledge and attitude and exclusive breastfeeding (p-value=0.000). The results showed that social support, ANC visit, ANC frequency, ANC place, place of delivery, mode of delivery, postnatal care, gender of child and the birth weight of child were associated with exclusive breastfeeding practice. Therefore health personnel should give detailed information about exclusive breastfeeding, such as advantages of exclusive breastfeeding to mother and infants and breastfeeding techniques to mothers in this area.

KEY WORDS: BREASTFEEDING PRACTICES / LATHA TOWNSHIP/ MYANMAR

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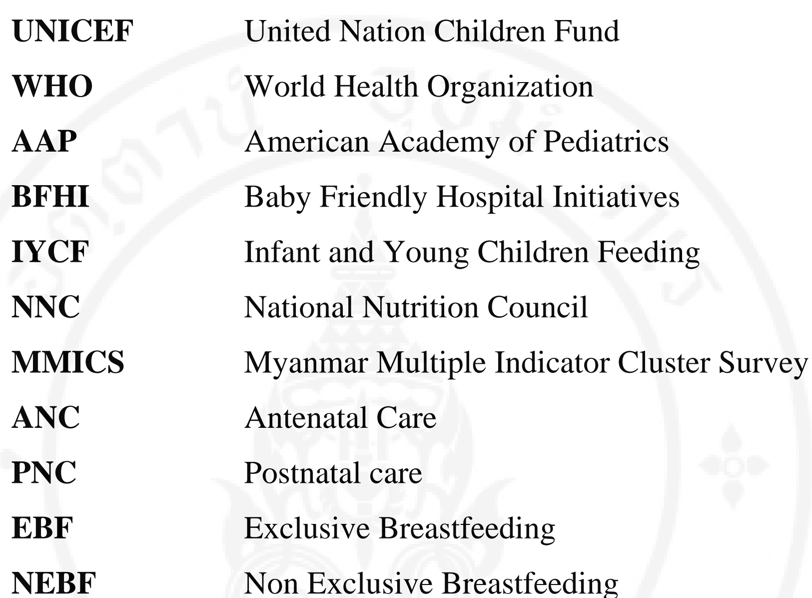

UNICEF	United Nation Children Fund
WHO	World Health Organization
AAP	American Academy of Pediatrics
BFHI	Baby Friendly Hospital Initiatives
IYCF	Infant and Young Children Feeding
NNC	National Nutrition Council
MMICS	Myanmar Multiple Indicator Cluster Survey
ANC	Antenatal Care
PNC	Postnatal care
EBF	Exclusive Breastfeeding
NEBF	Non Exclusive Breastfeeding

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CHAPTER I
INTRODUCTION

1.1 Background and Rationale

Exclusive breastfeeding is essential for infants .World Health Organization recommends that " early initiation breastfeeding within first hour after birth, exclusive breastfeeding up to six months , weaning diet starts after six months , continue breastfeeding beyond two years. Breastfeeding on demand – that is as often as the child wants."(1)

Mothers should exclusively breastfeed to prevent their infants from infectious diseases. Breast milk contains essential nutrients for child, and is economical and safe. According to American Academy of Pediatrics, infant mortality due to gastrointestinal diseases, respiratory illness can be decreased up to 55% by giving breastfeeding until first six months (2). The United Nations Children's Fund (UNICEF) stated that exclusive breastfeeding has more advantages than mixed feeding. Strong national policies enhancing breastfeeding could prevent the deaths of around 1 million children under five in the developing world each year.

Exclusive breastfeeding reduces infant mortality such as diarrhoea or pneumonia, and helps for a quick recovery during illness. Mothers who have breastfeeding can space next pregnancy, reduces the risk of ovarian cancer and breast cancer.

Malnutrition occurs directly or indirectly for about one third of deaths among children under five. It is often associated with inappropriate feeding practices. Around the age of 6 months, an infant needs more energy and nutrients and complementary foods are necessary. An infant of this age is also developmentally ready for other foods. If complementary foods are not introduced when a child has reached 6 months, or if they are given inappropriately, an infant's growth may be stunted.

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1.1.1 Current situation of breastfeeding in the world:

According to UNICEF global databases in 2014, Early initiation of breastfeeding (<1hr) is 44%, Exclusive breastfeeding (0-5 months) is 38% , Mix feeding is 65% ,Continued breastfeeding at 1yr (12-15 months) is 74% (2).

UNICEF reported that percentage of exclusive breastfeeding at 4 months is highest in East Asia and pacific region (63%): however, it is reduced to 44% at 6 months. In Thailand, percentage of exclusive breastfeeding at 4 months increased from 13.8% in 2002 to 20.7% in 2005 but at 6 months percentage is still low at 14.5% in 2005. Causes of increase the risk of mixed or formula feeding during the first 3 months of life are (i) mothers who have full-time job

(ii) grandmothers and other people as the main child caretakers; (iii) mothers who did not have an antenatal plan of exclusive breast-feeding; and (iv) newborns' non-exclusive breast-feeding in hospitals after birth." (3)

1.1.2 Current situation of breastfeeding in Myanmar

In Myanmar, percentage of exclusive breastfeeding is low (23.6%). Most mothers feed water and some food to infants before 4 months due to influence of sociocultural belief. In some areas, feeding of water is increased because of wrong perception of mothers that child relieve thirst by giving water. Among the total sample 1068 collected in Pyay District of Myanmar, 94.4% of mothers gave breastfeeding. Exclusive breastfeeding rate for one month is 35.3%. 83.2% of mothers gave colostrum to their babies. Initiation of breastfeeding within 1 hour was 67.5% (4).

1.1.3 Problem Statement

According to data from Myanmar Multiple Indicator Cluster Survey (2009-2010), 23.6% of mothers gave exclusive breastfeeding. Continued breastfeeding of children is more common in rural areas than in urban areas, and rarely seen among mothers with high education and rich mothers.

Breastfeeding practices in Myanmar are affected by socio-economic changes, modernization. Only 16% of mother practices exclusive breastfeeding during first 3 months and is more than other urban areas which were conducted in previous studies of breastfeeding practices. 70% of mother gave water and other liquids

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immediately after birth(5). Some studies showed that exclusive breastfeeding rate of one month is 35.3%.(6).

The study is conducted in Latha Township, urban area (downtown area) of Yangon region, Myanmar. Situation of breastfeeding in this area has not been explored. Various brands of infant formula are more available in this area of the supermarkets and drug shops .We should assess breastfeeding practice and the percentage of exclusive breastfeeding along with associated factors among mothers with children aged 6-12 months in this area and compare with other urban areas in Yangon.

1.2 Research Question

1) What is breastfeeding practice in first 6 months among mothers with children aged 6-12 months in Latha Township,Yangon, Myanmar ?

2) What factors are related to breastfeeding practices in first 6 months among mothers in children aged 6-12 months in Latha Township,Yangon, Myanmar ?

1.3 Objectives

1.3.1 General Objective

To identify breastfeeding practices during first 6 months of children among mothers with children aged 6-12 months and the associated factors in Latha Township,Yangon Region, Myanmar

1.3.2 Specific Objectives

1) To assess the percentage of breastfeeding practice among mothers with children aged 6-12 months in Latha Township,Yangon Region, Myanmar

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2) To identify mother's general characteristics, child's general characteristics, mother's knowledge, attitude, social support and health care utilization

concerning with breastfeeding practices of Myanmar mothers with children aged 6-12 months

3) To analyze the association between factors of breastfeeding practices and breastfeeding practices of Myanmar mothers with children aged 6-12 months

1.4 Research Hypotheses

1) There is an association between mother's general characteristics and breastfeeding practice

2) There is an association between mother's knowledge, attitude towards breastfeeding practice

3) There is an association between social support and breastfeeding practice

4) There is an association between health service utilization of mother and breastfeeding practice

5) There is an association between child's general characteristics and breastfeeding practice

1.5 Variables

1.5.1 Independent variables

- **General characteristics of mother**
  - Age
  - Occupation
  - Education level
  - Number of children
  - Previous experience of breastfeeding
- **Mother's Knowledge about breastfeeding practices**
- **Mother's Attitude towards breastfeeding practices**
- **Health Service Utilization**

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- **Social Support**
- **Family income**
- **General characteristics of child**
  - Age of child
  - Sex of child
  - Birth weight
  - Mode of delivery
  - Place of delivery

1.5.2 Dependent Variable

- **Breastfeeding practices**

1.6 Operational definitions

1.6.1 Independent Variables

General characteristics of mother

Age: Age of mother who has infant aged 6-12 months

Occupation: Mother's work to get money

Education: highest education of mother such as illiterate, primary, secondary, high school, university level, etc.

Family income: Total income earned by family for a month

Mother's Knowledge of breastfeeding practice: correct understanding of mothers regarding breastfeeding such as beneficial to infants, mothers and beneficial to family planning.

Attitude of mother towards breastfeeding refers to feeling and belief of mother regarding breastfeeding

Health service utilization includes time to start and number of antenatal care visits and post natal visit

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Antenatal care visit: the number of visit as appointment that the mother went to ANC centre

Postnatal care visit: visiting time to clinic 1 month after delivery of child

Social support: encouragement and support about Exclusive Breastfeeding by husband, parents, mother-in-law, relatives and health care providers

General Characteristics of child

Birth weight: Body weight of the infant as the first delivery categorized as low (2.5kg), normal (2.6kg-3.5kg) and overweight (3.6kg)

Mode of delivery; Mother's delivery pattern such as vaginal, instrumental and caesarean delivery

Place of delivery; the place where the baby was born (health centre or home)

1.6.2 Dependent Variable

Breastfeeding practices: activities done by mothers related to feeding breast milk to infants including initiation and duration of breastfeeding

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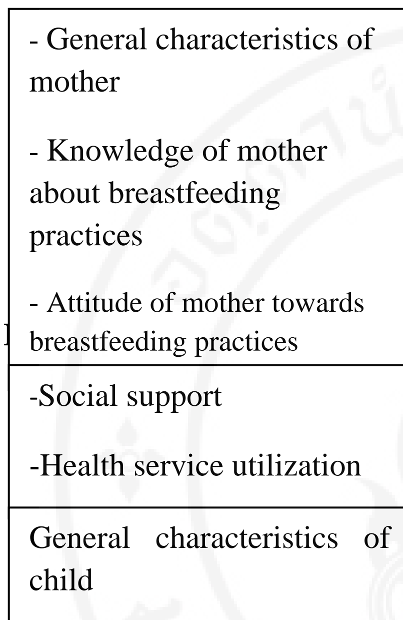
1.7 Conceptual framework

Independent Variables

Predisposing factors **Dependent Variable**



1.8 Usefulness of the study

- The study will provide useful information which assist health care professionals in providing health education to mothers about breastfeeding practices
- The study will contribute to better understanding of existing barriers for breastfeeding practices of mothers in urban area of Yangon Region, Myanmar

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CHAPTER II
LITERATURE REVIEW

This section consists of the previous studies and literature related to breastfeeding practices in different countries and Myanmar. It also describes the importance of breastfeeding and analyzes the association between maternal general characteristics, mother's knowledge, attitude, health service utilization, social support from husband, health care provider, mother's health status and breastfeeding practices.

2.1 Importance of breastfeeding

To reduce malnutrition among children, breastfeeding is essential. According to Millennium Development Goal (MDG) Four: " Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate".(7)

Breastmilk is natural food for child that cannot be replaced by any other infant formulas. Breastfed children are more resistant to diseases than formula-fed children. Diarrheal disease occurs mostly in formula feeding infants than breastfed infants. Colostrum, produced immediately after giving birth contains natural antimicrobial agents for infant's immune system. (8) Breast milk also contains immunoglobulin A, white blood cells, lysozymes, lactoferrin and oligosaccharides. (9)

Breast milk provides all nutrients such as fat, carbohydrates, proteins, vitamins, minerals and water. (10) It protects infants from diarrhoea, acute respiratory infections, gastrointestinal infection. It reduces chronic diseases later in life such as obesity, high cholesterol, hypertension, diabetes. It also enhances cognitive development of the child.(11)

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Maternal benefits include reduction of post-partum haemorrhage, delays the return to fertility, reduces anaemia, type 2 diabetes, breast, uterine and ovarian cancer. (12) Breastfeeding not only benefits to child and mother, but also benefits to

environment and society. (13) Breastfeeding does not cause environmental pollution. Electricity or fuel are consumed in the preparation of infant formula. Breastfeeding does not require packaging, shipping, or disposal. It reduces the cost of health services that must be paid for by insurers, government agencies, or families. It improves vaccine effectiveness. It has economic benefit to family because of high cost of infant formulas.

There are 3 types of infant formulas.

1) Milk based infant formula e.g. Cow's milk, goat's milk

2) Soy based infant formula

3) Special infant formula e.g. lactose-free infant formula, hypoallergenic infant formula, exempt infant formula (for low birth weight babies). (14)

There are many disadvantages of infant formulas.

1) Infant formula takes two times longer for baby to digest than breastfed baby so formula fed babies are more likely to have colic symptoms and constipation.

2) Higher cost than breastfeeding

3) Formula feeding requires a lot of preparation and cleaning

4) Infant formula contains no antibodies so it cannot protect babies from infection .(15)

The American Academy of Pediatrics (AAP) recommends that mothers should give exclusive breastfeeding until first six months and continue up to 2 years. Supplementary feeding should be given after first 6 months. (16)

Improving breastfeeding practices in infants aged 0-12 months is essential for development of children. One of the strategies of improvement of the prevalence of breastfeeding is Baby Friendly Hospital Initiative launched by UNICEF and WHO in 1991-1992. More than 19,600 hospitals have been designated in 152 countries around the world over the last 15 years.

Hospital designated BFHI should provide the following care:

- " Not accept free or low cost breast milk substitutes, feeding bottles or teats "
- "Implement 10 steps to successful breastfeeding". (17)

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Ten steps to successful breastfeeding

1) "Have a written breastfeeding policy that is routinely communicated to all health care staff."

2) "Train all health care staff in skills necessary to implement this policy."

3) "Inform all pregnant women about the benefits and management of breastfeeding"

4) "Help mothers initiate breastfeeding within a half-hour of birth."

5) "Show mothers how to breastfeed, and how to maintain lactation even if they should be separated from their infants."

6) "Give newborn infants no food or drink other than breastmilk, unless medically indicated."

7) "Practice rooming-in: allow mothers & infants to remain together (24 hrs. a day)."

8) "Encourage breastfeeding on demand."

9) "Give no artificial teats or pacifiers to breastfeeding infants."

10) " Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic". (18)

According to WHO guidelines of rating for infant and young child feeding practices, "Initiation of breastfeeding (% of babies breastfed within one hour of birth)" of 0-29% is poor, 30-49% is fair, 50-89% is good, 90-100% is very good. "Exclusive breastfeeding (% of babies 0-<6 months of age exclusively breastfed in the last 24 hours)" of 0-11% is poor, 12-49% is fair, 50-89% is good, 90-100% is very good.

"Duration of breastfeeding (median duration in months of breastfeeding of children under three years of age)" of 0-17% is poor, 18-20% is fair, 21-22% is good, 23-24 or beyond is very good." Bottle feeding (% of babies 0-<12months fed from bottles in the last 24 hours)" of 30-100% is poor, 5-29% is fair, 3-4% is good, 0-2% is very good." Complementary feeding (% of breastfed babies 6-<10 or 7-<10 months of age who received complementary foods in the last 24 hours)" of 0-59% is poor, 60-79% is fair, 80-94% is good, 95-100% is very good. (19)

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2.2 Importance of complementary feeding

Breast milk alone is not enough for infants' nutrition from six months onward. An infant's diet must be gradually increased. Children should be given breastfeeding for two years. (20) To prevent children from malnutrition is better than to cure children from diseases.

WHO recommends that " infants start receiving complementary foods at 6 months of age in addition to breast milk, initially 2-3 times a day between 6-8 months, increasing to 3-4 times daily between 9-11 months and 12-24 months with additional nutritious snacks offered 1-2 times per day". Rice is the best food for an infant's first complementary food because it can be easily digested, less likely to cause allergic reaction. (21) A variety of food such as meat, fish, eggs, vegetables and fruits should be given. Complementary food consists of two kinds; Specially prepare food and family food that are modified to make the baby easy to eat. Complementary feeding should be timely. It means that all infants should receive food from 6 months of age. It should be frequent, enough, varied, appropriate texture and active (Responsive feeding). Children should be fed slowly and patiently. Encourage children to eat but do not force them. If the child refuses to eat, try to feed different food combinations.

Good hygiene practice is important in breastfeeding practices to prevent contamination of infectious agents. Hands of caregivers should be washed before feeding. Clean utensils, cups and bowls should be used. Avoid feeding bottles. Foods should be kept safely after preparation. (22)

Full term babies are born with enough iron to cover their needs in the early months and they use their iron store to fill the gap. But this store is used up by about 6 months. Complementary foods that provide plenty of iron are needed to fill the iron gap from about 6 months of age. If the iron gap is not filled, the child will become anaemic. The iron gap is biggest in 6-12 months, so the risk of anaemia is highest if complementary foods which contain plenty of iron are not provided. (23)

WHO guided IYCF Indicators to assess the coverage of effective feeding practices among infants and young children less than 2 years of age. Eight core indicators are early initiation of breastfeeding, exclusive breastfeeding under 6 months, continued breastfeeding at 1 year, introduction of solid, semi-solid or soft foods, minimum dietary diversity, minimum meal frequency, minimum acceptable

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diet, consumption of iron-rich or iron-fortified foods. Seven optional indicators are children ever breastfed, continued breastfeeding at 2 years, age-appropriate breastfeeding, predominant breastfeeding under 6 months, duration of breastfeeding, Bottle-feeding, milk feeding frequency for non-breastfed children. (24)

"Infant Feeding Recommendations by National Nutrition Council, Myanmar"

❖ " Exclusive breastfeeding up to 6 months and continued demand breastfeeding for 2 years"

❖ " Introduce complementary foods when the child is 6 months old "

❖ " Starts with

- Soft, easy to swallow foods
- Rice based home-made foods or recognized ready-made infant foods
- Add a small amount of cooking oil to ensure adequacy of calories "

❖ " Gradually introduce

- Foods of harder consistency
- Other locally available foods – eggs, fish, liver, meat, pulses, fruit and vegetables"

❖ " Encourage consumption of

- Vitamin A rich foods such as liver, red and yellow fruits and green vegetables
- Iron rich foods such as meat, liver and green leafy vegetables
- Protein rich foods such as meat, egg, fish, beans
- Use iodized salt"

❖ " Frequency of feeding 3-5 times per day

➢ At 6-8 months

- Start feeding with porridge or soft steamed rice with fish or beans
- Add one teaspoon of oil

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- Feed two times per day
- Mashed banana can be fed ”

➢ At 8-12 months

- Feed soft steamed rice with meat, fish, beans or egg adding one teaspoon of oil
- Feed 3 times per day
- Feed fruits and vegetables

➢ At 12 months- 2 years

- Feed from the family pot except hot and spicy food
- At least 3 meals per day plus 1-2 times of nutritious snacks can be given in between meals. (25)

“Summary of complementary feeding recommendations in NNC National Nutrition Guidelines 2001 (Myanmar)”

4-6 months	rice, banana and papaya
7 months	add meat, fish, beans and vegetables
8-9 months	add small fish and pieces of fruit
10-11 months	add egg
12 month	feed from the family pot

2.3 Current status of infant feeding practice globally

Poor breastfeeding and complementary feeding practices occurs all over the world. It is estimated that only 34.8% of infants are exclusively breastfed for the first 6 months of life. Complementary foods are often introduced too early or too late and nutritionally inadequate, unsafe. Early introduction of complementary foods increases infant morbidity and mortality, because of reduce ingestion of protective factors present in breastmilk.

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According to UNICEF data (2009), “less than 40% of infants under 6 months of age are exclusively breastfed. In the Asia/Pacific region, around half of

the countries have exclusive breastfeeding rates greater than 40%. Three quarters or more of infants are exclusively breastfed in DPR Korea, Sri Lanka, Cambodia and the Solomon Islands, around half in India, and around one third in the Philippines, Indonesia and Malaysia. Exclusive breastfeeding rates are low, less than 20% in Thailand and Vietnam. In West and Central Africa, only 20 percent of infants younger than six months are exclusively breastfed."

According to data of World Breastfeeding Trend, percentage of breastfed infants between 6 and 9 months receiving complementary foods are 99.3% in Argentina, 99.1% in Brazil, 91% in Malawi, 85% in Sri Lanka, 81.5% in Republic of Korea, 75% in Nepal, 74.2% in Bangladesh, 68.2% in Vietnam, 58% in Philipines, 56.7% in India, 47.9% in Indonesia, 36.3% in Pakistan, 25.6% in China, 21% in Bhutan. (26)

2.4 Current situation of breastfeeding practice in Myanmar

According to Myanmar Multiple Indicator Cluster Survey(2009-2010), timely initiation of breastfeeding is 75.8%, exclusive breastfeeding rate is 23.6%, continued breastfeeding rate at 12-15 months is 91%, at 20-23 months is 65.4%, timely complementary feeding rate is 80.9%, frequency of complementary feeding is 56.5% and adequately fed infants is 41%. (27)

Breastfeeding practices in Northern District, Yangon

According to data collected from 300 mothers attending health services at four health centers of Insein and Shwepyitha Townships in Northern District of Yangon in 1999, 48 percent of respondents with 0-4 month old babies currently practiced breastfeeding whereas 21.8 percent with 6-9 month old babies practiced complementary feeding. (28)

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2.5 Review of related research for factors related to exclusive breastfeeding

Predisposing factors

Maternal age

Maternal age is an important factor that can affect exclusive breastfeeding. In 2007 National Survey of Children's Health in United States, initiation of breastfeeding is highest in mothers aged 30 years and above. (29) In Scotland, percentage of mothers under 20 years of age who are exclusively breastfeeding at 6-8 weeks is 6.1%. (30) In a study conducted in Singburi Province, Thailand, younger mothers practiced more exclusively breastfeeding.(57) Cross-sectional study conducted by the Nigerian Medical Association mentioned that mothers aged 44 to 49 years are more likely to exclusively breastfeed than mothers aged 15-19years. (31) A research in South Africa showed that older mothers are more likely to practice exclusive breastfeed than younger mothers. (32)

Maternal education

Education of mother also contributes as an important factor in exclusive breastfeeding practices. According to Myanmar Multiple Indicator Cluster Survey 2009-2010 Report, there is no association between the mother's education level and exclusive breastfeeding. But in another study in US, higher level of maternal education was positively associated with exclusive breastfeeding practices (33). A study in Scotland , 86% of mothers who had higher level of education breastfed their infants (34).

Occupation

Maternal occupation is one of the important factors that influence exclusive breastfeeding practice. Mothers who have to return to work after delivery are difficult to practice exclusive breastfeeding. In a study conducted in Klang, Malaysia, mothers who do not work were 3.5 times more likely to exclusively breastfeed than working mothers (35) . In Jordan, working women are less likely to

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breastfeed (36). In longitudinal study of Australia, percentage of breastfeeding of mother who worked at full time was 42% (37). United Kingdom millennium cohort study mentioned that mothers who returned to work at or before 4 months have less likely to breastfeed (38).

Number of children

In Japan, in the study by Kaneko et al., multiparous women were more likely to continue exclusive breastfeeding than primiparous women. On the other hand, Yokoyama et al. found that mothers with multiple births were 2.44 times more likely to choose bottle feeding than those with single births (39). In cross-sectional study conducted in Klang, Malaysia, multiparous mothers were almost twice more likely to exclusively breastfeed compared to primiparous mothers. (35)

Family Income

In Cohort Study conducted in Brazil, infants from low income families had more likely to cease exclusive breastfeeding before the third month of infant's age (40). In longitudinal study in Lebanon showed 18.2% of mothers from high family income exclusively breastfed compared with 33.3% of mothers from low family income (41).

Knowledge of mother about breastfeeding practices

Maternal knowledge and attitude were strongly related with exclusive breastfeeding practice. In Eastern Mediterranean Health Journal:sep/oct 2008, Vol.14 Issue 5, p1003, nearly 35% of mothers believed that breast milk was not enough for their infants. (42) In a study conducted in Mahachai District, Thailand, mothers who had low level of knowledge were less exclusively breastfed. (56)

Attitude of mother towards breastfeeding practices

According to data collected from the 2002/2003 and 2007 Indonesia Demographic and Health Survey, misconception about colostrum prevents infants from being breastfed immediately after delivery.(43) In cross sectional study

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conducted in Bang Pa-In, Ayudthaya, Thailand, majority of the mothers had a neutral attitude towards breastfeeding. (44)

Place of delivery

In a study conducted in 2008 in Ghana, mothers who delivered at a government health facility had a higher probability to practice exclusive breastfeeding compared to mothers who delivered at home, or a private health facility. (45) But in Canadian national survey in 2006, women who gave birth at home were 5 times more likely to exclusively breastfeed than those who gave birth at hospitals or clinics. (46)

Mode of delivery

A Retrospective Cohort Study in China showed that mothers who planned cesarean delivery are less likely to breastfeed and more likely to formula feed to infants than those who planned vaginal delivery. (47) According to data collected from a study conducted in Pakistan, initiation of breastfeeding was low in women who delivered the babies by cesarean sections than those delivered by vaginal delivery. (48)

Sex of child

According to data collected from 12 central and western provinces of China, there was positive association between male child and exclusive breastfeeding.(49) On the other hand, female infants were exclusively breastfed in higher percentage (73.5%) than male infants(65.9%) in Nablus, Palestine. (50)

Birth weight of child

In cross sectional study conducted in 2007 in US, children with a very low birth weight (VLBW) (<1500 g) were most likely to have been breastfed, and those with a moderately low birth weight (MLBW) (1500 to <2500 g) were least likely to have been breastfed (51). But in Western Australia, Scott et al. found that infants born of normal birth weight were over two times more likely to have been breastfed than low birth weight babies. (52) In Japan, low birth weight infants were less likely to be breastfed at six months. (39)

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Social Support

According to data collected from study in Bangladesh, there is a significantly positive association between social support and duration of exclusive breastfeeding practice.(53) In cross-sectional study in Klang, Malaysia, mothers who have supportive husbands on breastfeeding were four times more likely to exclusively breastfeed than mothers who have non-supportive husbands. (35)

Health Service Utilization

It is important to disseminate accurate information on exclusive breastfeeding to pregnant women attending antenatal visits. In a community-based cross-section study conducted in Ethiopia showed that mothers who had 3 and more antenatal visit during pregnancy were more likely to exclusively breastfeed.(54) According to data collected from 12 central and western provinces of China, attending antenatal visits 5 times or more was positively associated with exclusive breastfeeding. (49) In a study conducted in Benin city, Nigeria, mothers who had ANC in hospitals were more exclusively breastfed. (58) In cross-sectional study in southeastern Nigeria, mothers who visited postnatal care were more exclusively breastfed. (59)

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CHAPTER III
MATERIALS AND METHODS

3.1 Study Design

A cross-sectional study design

3.2 Study Site

Latha Township, Yangon Region, Myanmar. It is located in the western part of Yangon, and has borders with Lanmadaw Township in the west, Pabedan Township in the east, Seikkan Township and Yangon river in the south, and Dagon Township in the north. It consists of ten wards. Lanmadaw and Latha townships make up the Yangon Chinatown.

Total area of township – 0.296 square meter

Total population – 27,500

3.3 Study Population

810 mothers with infants aged 6-12 months in Latha Township, Yangon , Myanmar

3.4 Sample size

$$n = \frac{Z^2_{\alpha/2} P (1-P)}{d^2}$$

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$$= \frac{(1.96)^2 (0.24)(0.76)}{(0.07)^2} = 135$$

n= estimated sample size

$Z_{\alpha/2}$=value from normal distribution at 95% confidence interval (1.96)

P =prevalence of breastfeeding (23.6%) (According to Myanmar Indicator Cluster Survey MICS 2009-2010)

d= degree of error allowance (0.07)

Sample size = 135 mothers with infants aged 6-12 months

3.5 Sampling procedure

Systematic random sampling method

In doing Systematic Random Sampling, the sampling interval (I) is determined by the formula

I = N/n

= 810/135

= 6

I = sampling interval

N = population size

N = sample size

One mother will be selected as sample for every 6 mothers in the population.

At Township Health Centre, 1st and 2nd weeks of every month are weeks for vaccination of children. Samples are selected from mothers who have 6-12 months old children come to township health centre for vaccination of children during these weeks.

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Inclusion criteria

- Mothers who have children aged 6-12 months
- Mothers aged above 18 years old

Exclusion criteria

- Mothers with children who have congenital abnormality such as cleft palate, Down's Syndrome
- Mothers who cannot breastfeed due to HIV/AIDS, chronic renal failure, heart failure,
- breast cancer, nipple deformity
- Mothers who have twin children

Discontinuation criteria

- Mothers who agree to participate but change their mind later

3.6 Instrument

The research instrument of this study was structured questionnaires .Questionnaireswere developed from literature review, previous studies. It includes six parts and questions are translated into Myanmar language.

Part I. General characteristics of mother and child

There are (6) questions for mothers which include age , education level, occupation, number of children, previous experience of breastfeeding, family income and (6)questions for child: age, sex, birth weight, birth order.

Part II. Knowledge of mother about breastfeeding practices

This part includes (18) questions about benefits of breastfeeding, duration of breastfeeding and understanding about complementary food.

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Part III. Attitude of mother towards breastfeeding practices

This part consists of (13) questions related to opinion , belief and feeling of mother regarding breastfeeding and complementary feeding practices.

Part IV. Social support

This part has (4) questions concerned with advice, support and encouragement of family and health care personnel for breastfeeding.

Part V. Health service utilization

There are (8) questions including antenatal care, post natal care, support of health care personnel for breastfeeding.

Part VI. Breastfeeding practices

This part contains (5) questions including breastfeeding practices and complementary feeding.

3.6.1 Validity and reliability

Questionnaires were created and revised according to reference books for breastfeeding practices and recommendations of experts. Then it was examined by the preceptor and co-preceptor including appropriate wording, accuracy and completeness of the content. Questionnaires were pre-tested to mothers in Mahachai, Bangkok who had same selection criteria.

3.6.2 Scoring criteria

Maternal Knowledge about breastfeeding practice was measured by Yes and No answer, score 1 for “right answer” and 0 for “wrong answer” and “don’t know answer”. The level of knowledge was classified into three levels as follows (Bloom’s cut off point for knowledge).

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Knowledge Level	Score	
High	15-18	>80%
Moderate	11-14	60-80%
Low	0-10	<60%

Attitude of mother about breastfeeding practice was measured by Agree, Uncertain and Disagree.

	Score		
	Agree	Uncertain	Disagree
Positive statement	3	2	1
Negative statement	1	2	3

Attitude Score	Level of attitude
21-39 (80-100% of the range)	positive attitude
16-20 (60-79% of the range)	neutral attitude
13-15 (<60% of the range)	negative attitude

3.7 Data Collection

1) Before data collection, permission from Township Medical Officer of Township Health Centre, Latha Township, Yangon region should be obtained.

2) The questionnaire was translated into Myanmar version by researcher.

3) The interview will be conducted by researcher.

4) Before interviewing, researcher will introduce herself and brief explain about the purpose of the study.

5) The researcher will also explain that the duration of interview will take 15-20 minutes and also explain about questionnaires such as characteristics of mother and child, knowledge and attitude of mother towards breastfeeding and breastfeeding practices.

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6) Mothers will be informed that their answers will be kept confidential.

7) After instruction, mothers will fill out the informed consent form and answer the questionnaires.

8) In case of any inconvenience, the interview will be discontinued and another mother will be chosen.

3.8 Data Processing and Analysis

3.8.1 Data entry and editing

Data will be edited, coded and entered by using Epi data software version 3.1.

3.8.2 Statistical techniques

➢ Descriptive statistics such as frequencies, means and standard deviations will be calculated.

➢ Chi-square test will be used to assess the association between independent variables and breastfeeding practices of mothers.

3.9 Ethical considerations

The study will be conducted after the approval of Ethical Review Committee for Human Research, Faculty of Public Health, Mahidol University. The researcher will ask permission from Latha Township Medical Officer. The interviewer will explain the objectives of this research and obtain informed consent from the respondents before starting interview. Respondents will have right to reject to answer when they do not want to answer the question. No incentives will be provided to avoid any favor of getting answer. Respondent's name will not be included in the questionnaire. The researcher will use coding system to keep confidential of mother. The researcher will enter data into computer day by day and by herself to avoid reveal the confidential. After all data are entered and analyzed by

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SPSS software version 18, all data will be destroyed by burning. In any sort of report to be published, it will not include any information that we will make it possible to identify the respondents.

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CHAPTER IV
RESULTS

This cross-sectional study was conducted in Latha Township, Yangon, Myanmar from 1st April 2015 to 30th April 2015. It was intended to analyze the factors influencing breastfeeding practices among mothers with infants aged 6-12 months. The study was conducted by interviewing 135 mothers in Latha Township, Yangon, Myanmar. The findings are presented in two parts.

Part I consists of results of descriptive statistics related to general characteristics of mother, knowledge and attitude of mothers about breastfeeding practices, social support, health service utilization and general characteristics of child.

Part II describes relationship between breastfeeding practices and general characteristics of mother, knowledge and attitude of mothers about breastfeeding practices, social support, health service utilization, general characteristics of child.

4.1 Part I

4.1.1General characteristics of mother

43.7% of mothers in the study were between 30-39 years of age, while 41.5% were in the age group of 20-29 and only 14.8% were in the age group of 40-49 years. Mean age of mothers was 31.7± 6.4. The range of mother's age was 21-45 years.

Half of the mothers (49.6%) have only one child. Mean number of children was 1.7±0.8. Range of number of children was 1-6.

Concerning with educational level, 39.3% of the mothers passed high school level. Only 3.7% of mothers were illiterate.

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About half of the mothers (51.1%) were self-employed. Only 3.7% of mothers were government employees.

Mothers who had previous experience of breastfeeding were 50.4%.

Nearly half of families (48.9%) were in the middle income group and 33.3% of families were high income families. Mean family income per month was 353,740.7±437,785.2. Range of family income per month was 50,000 – 2,000,000.

Table 4.1 Number and percentage of general characteristics of mother

General characteristics of mother	Number	Percent
Age (years)		
20-29	56	41.5
30-39	59	43.7
40-49	20	14.8
Number of children		
One	67	49.6
Two	37	27.4
Three and more	31	23
Education		
Illiterate	5	3.7
Primary	8	5.9
Secondary	22	16.3
High School	53	39.3
University	47	34.8
Occupation		
Housewife	49	36.3
Government employee	5	3.7
Occupation		
Private employee	12	8.9
Self-employed	69	51.1
Previous experience of breastfeeding		
Yes	68	50.4
No	67	49.6

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Table 4.1 Number and percentage of general characteristics of mother (cont.)

General characteristics of mother	Number	Percent
Family income per month		
<100,000 kyats	24	17.8
100,000 – 200,000 kyats	66	48.9
>200,000 kyats	45	33.3

4.1.2 Maternal knowledge about breastfeeding practices

All of mothers had good knowledge about usefulness of early breastfeeding after delivery. Very few mothers knew about the advantages of breastfeeding to mother as shown in table 4.2.

Table 4.2 Number and percentage of maternal knowledge about exclusive breastfeeding

Statements	Number	Percent
1. Breast milk should be given as soon as after delivery.	133	98.5
2. Breast milk during first few days after delivery is yellowish and useful for the newborn baby.	135	100
3. Breast milk is safe and easy to digest for baby.	63	46.7
4. Your baby should be given only breast milk, not even water up to six months.	62	45.9
5. Breast-fed babies are healthier than those who are not.	89	65.9
6. Breast milk protects baby against many diseases such as diarrhoea, pneumonia.	37	27.4
7. Breastfed children have better mental development than those who are not.	40	29.6
8. Breastfeeding helps to develop strong bonding between mother and baby.	23	17
9. Breastfeeding can prolong the chance of getting next pregnancy.	12	8.9

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Table 4.2 Number and percentage of maternal knowledge about exclusive breastfeeding (cont.)

Statements	Number	Percent
10. Breastfeeding can prevent mother from breast and ovarian cancer.	9	6.7
11. Breastfeeding can cause malnutrition to mother.	133	98.5
12. It is better to give breast milk on schedule to discipline the child than the time when infant hungry or cry.	86	63.7
13. Continued breastfeeding should be up to two years.	65	48.1
14. Is the right position to breastfeed your child's chin touched to the breast?	57	42.2
15. During the lactation period, mother should eat more meat.	135	100.0
16. Formula milk contains more nutrients than breast milk.	130	96.3
17. During child illness, breastfeeding should be stopped.	123	91.1
18. Mashed rice should be given at 3 months of age.	126	93.3

Over half of the mothers (61.5%) had low level of knowledge about breastfeeding. Very few mothers (8.9%) had high level of knowledge about breastfeeding as shown in table 4.3.

Table 4.3 Number and Percentage of maternal knowledge level about exclusive breastfeeding

Level of knowledge	Score	Number	Percent
High level	15-18 (>80%)	12	8.9
Moderate level	11-14 (60-80%)	40	29.6
Low level	0-10 (<60%)	83	61.5

4.1.3 Maternal attitude towards breastfeeding practices

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Table 4.4 showed attitude level of mother towards breastfeeding practices. Majority of mothers (89.6%) had positive attitude towards exclusive breastfeeding. There was no mother who had negative attitude level.

Table 4.4 Number and percent of attitude level of mother towards breastfeeding practices

Level of attitude	Score	Number	Percentage
Positive	21-39	121	89.6
Neutral	16-20	14	10.4

Table 4.5 shows that all of the mothers had positive attitude that colostrum is useful for baby and they should not eat dry fish and sticky rice only during their lactation period.

Table 4.5 Number and percent of attitude level of agreement towards breastfeeding practices of mother

Statements	**Level of Agreement**					
	Agree		**Uncertain**		**Disagree**	
	No.	**%**	**No.**	**%**	**No.**	**%**
1. During breastfeeding, mothers should avoid eating vegetables to prevent abdominal colic of baby.	0	0	2	1.5	133	98.5
2. Colostrum is dirty milk and it is not suitable for baby.	0	0	0	0	135	100
3. Water should be given to relieve thirst of baby under 6 months.	64	47.4	3	2.2	68	50.4
4. If breast milk alone is fed to my baby up to six months, baby will not grow enough.	22	16.3	14	10.4	99	73.3
5. Mother should continue breastfeeding when the baby gets diarrhoea.	121	89.6	11	8.1	3	2.2
6. If mother got sick, breastfeeding should be stopped until mother is recovered.	31	23	12	8.9	92	68.1
7. Breastfeeding can disturb the beauty of mother.	2	1.5	0	0	133	98.5
8. Formula milk is more expensive than breast milk so it helps the baby grow faster	0	0	6	4.4	129	95.6
9. Breastfeeding can be reduced after introduction of complementary food	34	25.2	18	13.3	83	61.5

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Table 4.5 Number and percent of attitude level of agreement towards breastfeeding practices of mother (cont.)

Statements	Level of Agreement					
	Agree		Uncertain		Disagree	
	No.	%	No.	%	No.	%
10. If breasts are small, they will not produce enough milk	8	5.9	12	8.9	115	85.2
11. Early complementary feeding before 6 months of age makes the baby full and sleep longer	0	0	30	22.2	105	77.8
12. Mother should eat dry fish, sticky rice only during Lactation period	0	0	0	0	135	100
13. Mothers should not give breastfeeding in public places	5	3.7	0	0	130	96.3

4.1.3 Social Support

All mothers got social support as shown in table 4.6. Over half of the mothers (69.6%) received support from health personnel. More than half of the mothers (63.7%) got information from health personnel about breastfeeding practices.

Table 4.6 Number and percent of social support to mothers

Social support	Number	Percent
Person who encourage breastfeeding		
Mother	33	24.4
Mother-in-law	3	2.2
Person who encourage breastfeeding		
Husband	2	1.5
Relatives	3	2.2
Health personnel	94	69.6
Information sources		
Books	9	6.7
Husband	2	1.5

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4.1.4 Health service utilization

Almost all the mothers (97.8%) visited ANC service. Among those, over half of mothers (56.8%) went to antenatal clinics during first 3 months. Nearly all (93.2%) of mothers visited ANC service more than four times. Half of the mothers (50.8%) received ANC service in hospitals. Majority of mothers (72.6%) received postnatal care. Almost all (95.6%) gave child birth in hospitals. Over half of mothers (55.6%) had normal delivery..

Table 4.7 Number and percent of health service utilization of mother

Health service utilization	Number	Percent
ANC visit		
Yes	132	97.8
No	3	2.2
Time to start ANC visit		
First 3 months	75	56.8
4-6 months	50	37.9
Time to start ANC visit		
More than six months	7	5.3
ANC frequency		
< 4 times	9	6.8
ANC frequency		
≥ 4 times	123	93.2
ANC place		
Hospital	67	50.8
Clinic	50	37.9
Health centre	15	11.4
Place of delivery		
Hospital	129	95.6
At home without health personnel	6	4.4
Type of delivery		
Normal	75	55.6
Caesarean	60	44.4

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Table 4.7 Number and percent of health service utilization of mother (cont.)

Health service utilization	Number	Percent
Postnatal care		
Yes	98	72.6
No	37	27.4

4.1.5 General characteristics of child

Majority of children (42.2%) were 12 months old. Most of the children (71.9%) were male. Nearly half of the children (49.6%) were first born. More than half of the children (94.1%) had birth weight between 2.5 kg and 4 kg. Minimum birth weight is 2 kg and maximum birth weight is 4.6 kg. During last 2 weeks, many children (12.6%) suffered fever. Majority of children (68.1%) did not attend hospital for illness during last 6 months.

Table 4.8 Number and percent of general characteristics of child

General characteristics of child	Number	Percent
Age		
6 month	50	37
7 month	12	8.9
9 month	11	8.1
10 month	5	3.7
12 month	57	42.2
Range	6-12	
Mean± SD	9.01± 2.8	
Minimum	6	
Maximum	12	
Sex		
Male	97	71.9
Female	38	28.1
Birth Order of child		
1st child	67	49.6
2nd child	37	27.4

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Table 4.8 Number and percent of general characteristics of child (cont.)

General characteristics of child	Number	Percent
Birth Order of child		
3rd child	23	17
4th child	5	3.7
6th child	3	2.2
Birth weight (kg)		
<2.5 kg	3	2.2
2.5-4.0 kg	127	94.1
>4.0 kg	5	3.7
Mean± SD	3.32± .6	
Minimum	2	
Maximum	4.2	
Illness type of child during last 2 weeks		
Cold	7	5.2
Fever	17	12.6
Diarrhoea	8	5.9
Hospitalization of child during last 6 months		
0 time	92	68.1
1 time	22	16.3
2 times	12	8.9
3 times	3	2.2
4 times	3	2.2
Hospitalization of child during last 6 months		
5 times	3	2.2

4.1.6 Breastfeeding practices of mother

Nearly all of the mothers (97.8%) initiated breast milk within one hour after delivery. Less than half of the mothers (40.7%) practiced exclusive breastfeeding. Majority of mothers (34.8%) stopped exclusive breastfeeding because of traditional culture.

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Table 4.9 Number and percent of breastfeeding practices of mother (n= 135)

Exclusive breastfeeding practices	Number	Percent
Initiation of breastfeeding within one hour after delivery		
Yes	132	97.8
No	3	2.2
Months of feeding breast milk only during first 6 months		
0 month	129	95.6
1 month	120	88.9
2 months	107	79.3
3 months	100	74.1
4 months	57	42.2
5 months	57	42.2
6 months	55	40.7
Reason for stop breastfeeding before 6 months		
Traditional culture (give water to child)	47	34.8
Return to work	14	10.4
Child cannot suck	9	6.7
Insufficient breast milk	4	3
Illness of mother	3	2.2
Reason for stop breastfeeding before 6 months		
Breastfeeding destroy mother's beauty	3	2.2

4.2 Part 2

4.2.1 Relationship between general characteristics of mother and breastfeeding practices

There is significant relation between age of mother and breastfeeding practices. Elderly mothers practiced more exclusive breastfeeding than young mothers.

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Mothers who had higher educational level practiced exclusive breastfeeding more than those who had lower educational level.

Table 4.10 Relationship between general characteristics of mother and breastfeeding practices

General characteristics of mother	Total	Breastfeeding				p value
		EBF		Non EBF		
		No.	%	No.	%	
Age of mother (years)						
20-29	56	16	28.6	40	71.4	0.000
30-39	59	23	40	36	61	
40-49	20	16	80	4	20	
Number of children						
One	67	24	35.8	43	64.2	0.512
Two	37	17	45.9	20	54.1	
Three and more	31	14	45.2	17	54.8	
Education						
Illiterate	5	0	0	5	100	0.178[a]
Literate	130	55	42.3	75	57.7	
Occupation						
Housewife	49	18	36.7	31	63.3	0.069
Employee	86	37	43	49	57	
Previous experience						
Yes	68	31	45.6	37	54.4	0.248
No	67	24	35.8	43	64.2	

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Table 4.10 Relationship between general characteristics of mother and breastfeeding practices (cont.)

General characteristics of mother	Total	Breastfeeding				p value
		EBF		Non EBF		
		No.	%	No.	%	
Monthly family income						
<100,000 kyat	24	6	25	18	75	0.055
100,000-200,000 kyat	66	34	51.5	32	48.5	
>200,000 kyat	45	15	33.3	30	66.7	

p value – Pearson Chi-square test, [a] Fisher's Exact test

4.2.2 Relationship between maternal knowledge and breastfeeding practices

Table 4.11 shows that there is significant relationship between maternal knowledge level and breastfeeding practices. Mothers with low level of knowledge about exclusive breastfeeding practiced exclusive breastfeeding less than those who had high level of knowledge.

Table 4.11 Relationship between maternal knowledge and breastfeeding practices

Maternal knowledge level	Total	Breastfeeding practices				p value
		EBF		Non EBF		
		No.	%	No.	%	
High level	12	6	50	6	50	0.000
Moderate level	40	26	65	14	35	
Low level	83	23	27.7	60	72.3	

p value – Pearson Chi-square test

4.2.3 Relationship between maternal attitude and breastfeeding practices

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This result shows significant relationship between maternal attitude towards breastfeeding and breastfeeding practices (p-value = 0.000). All mothers with

neutral attitude practiced nonexclusive breastfeeding. There is no mother with negative attitude.

Table 4.12 Relationship between maternal attitude and breastfeeding practices

Maternal attitude level	Total	Breastfeeding practices				p value
		EBF		Non EBF		
		No.	%	No.	%	
Positive attitude	121	55	45.5	66	54.5	0.000[a]
Neutral attitude	14	0	0	14	100	

p value – [a] Fisher's Exact test

4.2.4 Relationship between Social Support and Breastfeeding practices

This table shows significant relation between social support and breastfeeding practices (p-value = 0.000). Mothers who got social support from health personnel practiced more exclusive breastfeeding than those who got other supports.

Table 4.13 Relationship between Social Support and Breastfeeding practices

Social Support	Total	Breastfeeding practices				p value
		EBF		Non EBF		
		No.	%	No.	%	
Person who encourage breastfeeding						
Health personnel	94	52	55.3	42	44.7	0
Non health personnel	41	3	7.3	38	92.7	
Information sources						
Health personnel	86	49	57	37	43	0
Non health personnel	49	6	12.2	43	87.8	

p value – Pearson Chi-square test

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4.2.5 Relationship between health service utilization and breastfeeding practices

Table 4.14 shows that there is no relationship between time to start ANC visit and breastfeeding practice. But there are relationships between ANC visit (p-value = 0.003), frequency of ANC, place of birth, postnatal care (p-value = 0.000) and breastfeeding practices.

Table 4.14 Relationship between health service utilization and breastfeeding practices

Health service utilization	Total	Breastfeeding practices				p value
		EBF		Non EBF		
		No.	%	No.	%	
ANC visit						
Yes	132	55	41.7	77	58.3	0.003[a]
No	3	0	0	3	100	
Time to start ANC visit						
First 3 months	75	35	46.7	40	53.3	
4-6 months	50	18	36	32	64	0.062
More than 6 months	7	2	28.6	5	71.4	
ANC frequency						
<4 times	9	0	0	9	100	0.000[a]
≥4 times	123	55	44.7	68	55.3	
ANC place						
Hospital	67	18	26.9	49	73.1	
Clinic	50	31	62	19	38	0.000
Health centre	15	6	40	9	60	

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Table 4.14 Relationship between health service utilization and breastfeeding practices (cont.)

Health service utilization	Total	Breastfeeding practices				p value
		EBF		Non EBF		
		No.	%	No.	%	
Birthplace						
Hospital	129	55	42.6	74	57.4	0.000[a]
At home without health personnel	6	0	0	6	100	
Type of delivery						
Normal	75	31	41.3	44	58.7	0.876
Caesarean	60	24	40	36	60	
Postnatal care						
Yes	98	45	45.9	53	54.1	0.000
No	37	10	27	27	73	

p value- Pearson Chi-square test, [a] Fisher's Exact test

4.2.6 Relationship between general characteristics of child and breastfeeding practices

Table 4.15 shows that there is significant relationship between age, gender of child and breastfeeding practice. Female children are exclusively breastfed than male children. There is also relationship between birthweight of child and breastfeeding practice (p value = 0.022).But there is no relationship between birth order and hospitalization of children during last six months.

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Table 4.15 Relationship between general characteristics of child and breastfeeding practices

General Characteristics of child	Total	Breastfeeding practices				p value
		EBF		Non EBF		
		No.	%	No.	%	
Age						
6-9 months	73	55	75.3	18	24.7	0.000[a]
10-12 months	62	0	0	62	100	
Gender						
Male	97	36	37.1	61	62.9	0.000
Female	38	19	50	19	50	
Birth order						
1st Child	67	24	35.8	43	64.2	
2nd Child	37	17	45.9	20	54.1	0.17
3rd Child and more	31	14	45.2	17	54.8	
Birth weight						
<2.5 kg	3	0	0	3	100	
2.5 - 4 kg	127	53	41.7	74	58.3	0.022
>4 kg	5	2	40	3	60	
Hospitalization of child during last six months						
0 time	92	41	44.6	51	55.4	0.119
≥1 time	43	14	32.6	29	67.4	

P value- Pearson's Chi-square test, [a] Fisher's Exact test

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CHAPTER V
DISCUSSION

In this study, systematic random sampling method was used. One mother was selected as sample for every 6 mothers in the population. The results will be presented and compared with the results of previous studies. There are two main topics in this chapter:

(1) Exclusive breastfeeding practice of mothers

(2) Factors related to breastfeeding practices

5.1 Exclusive breastfeeding practice

In this study, 40.7% of mothers practiced exclusive breastfeeding up to 6 months. It is higher than 23.6% of the whole country from Myanmar Multiple Indicator Cluster Survey (2009-2010) and 22% of previous study in Hlaing Township.(25)

Nearly all mothers (97.8%) initiated breast milk within one hour after delivery because they were encouraged by health personnel. One of the reasons for not giving exclusive breastfeeding up to 6 months was cultural belief. Forty-seven mothers (34.8%) believed that the child would relieve thirst by giving water. The result showed that 19.3% of mothers gave water to their child before 3 months of age. This is the main barrier for exclusive breastfeeding practice. Another reason was due to return to work place (10.4%). Working mothers gave bottle feeding to their child. Percentage of mothers who thought that breastfeeding would destroy their beauty was low (2.2%).

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5.2 Factors related to breastfeeding practice

5.2.1 General characteristics of mother

In this study, there was significant relationship between older mothers and exclusively breastfeeding practice because of previous experience of breastfeeding. This study is the same results as a study from South Africa, (32) but different from study in Thailand, that the younger mothers practiced more exclusive breastfeeding. (57) Most of the mothers in this study had only one child which is similar to the studies conducted in Mae Sot District, Thailand (2) and Hlaing Township in Myanmar. (25) In this study, there was no relationship between educational level of mother and exclusively breastfeeding practice. But in the previous studies from Bangladesh (55) and U.S (33) showed that higher level of maternal education was positively associated with exclusively breastfeeding practice. In this research, self-employed mothers (43%) practiced more exclusive breastfeeding than other employment status because they could breastfeed their children than mothers with other employment status. So mother's occupation was not associated with exclusive breastfeeding practice in this study. But United Kingdom millennium cohort study mentioned that mothers who returned to work at or before 4 months have less likely to breastfeed. (38)

Half of the mothers (50.4%) in this research had previous experience of breastfeeding and practiced more exclusive breastfeeding. But (43%) research in Mae Tao Clinic, Mae Sot District, Thailand showed that previous experience of breastfeeding was not associated with breastfeeding practice (2).

This study was conducted in Latha Township which is downtown area of Yangon. Also this area was called Chinatown. Therefore majority of mothers have family business and almost half of the families in this research were middle income group (48.9%). Mothers from this group more exclusively breastfeed than other income groups. There was no relationship between family income and exclusively breastfeeding practice in this research. The result of this study is different from the previous study in Klang, Malaysia which showed that mothers from high family income group were less exclusively breastfed. (35) But in Cohort Study conducted in Brazil, infants from low income families had more likely to cease exclusive breastfeeding before the third month of infant's age. (40)

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5.2.2 Knowledge and attitude of mothers towards breastfeeding

Knowledge level of mother is important in exclusive breastfeeding practice. This study showed that 61.5% of mothers had low level of knowledge about exclusive breastfeeding practice and there was a significant relationship between low level of maternal knowledge and exclusively breastfeeding practice. Mothers who had low level of knowledge were less exclusively breastfed. The result was similar to the previous study in Mahachai District, Thailand. (56)

In this study, most of the mothers (89.6%) had positive attitude towards exclusive breastfeeding practice. In previous cross sectional study conducted in Bang Pa-In, Ayudthaya, Thailand, majority of the mothers had a neutral attitude towards breastfeeding. (44) Attitude level of mother was one of the important factors related to exclusive breastfeeding practice. Mothers with positive attitude were more likely to breastfeed. This research found that positive attitude level of mother was significantly associated with exclusive breastfeeding practice. The result of this study was consistent with the previous study in Hlaing Thar Yar Township. (18)

5.2.3 Social Support

In this study, most of the mothers (69.6%) got social support from health personnel. Relationship between social support from health personnel and exclusive breastfeeding practice was significant in this present study. According to data collected from study in Bangladesh, there was a significantly positive association between social support and duration of exclusive breastfeeding practice (53). The result was correspondent with the previous study in Hlaing Thar Yar Township (18).

5.2.4 Health service utilization

Nearly all mothers received antenatal care (ANC) service (97.8%) and frequency of ANC visit of these mothers was 4 times and more in this study. All mothers who did not attend ANC visit and all mothers who visited ANC visit for less than 4 times practiced non-exclusive breastfeeding. In a cross-section study conducted in Ethiopia showed that mothers who had 3 and more antenatal visit during pregnancy were more likely to exclusively breastfeed. (54) There was relationship between ANC visit, frequency of ANC and exclusive breastfeeding practice in this study. Mothers

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who received ANC in the clinics were more exclusively breastfeed than mothers who received ANC in hospitals and health centers. This result is different from the study in Benin City, Nigeria which showed than mothers who had ANC in hospitals were more exclusively breastfed (58). Almost all of the mothers (95.6%) delivered at hospitals. All mothers who did not deliver at hospitals practiced non-exclusive breastfeeding because they did not get aid from health personnel. But in Canadian national survey in 2006, women who gave birth at home were 5 times more likely to exclusively breastfeed than those who gave birth at hospitals or clinics. (46) More than half (72.6%) of mothers visited postnatal care and it is related to exclusive breastfeeding practice (p-value = 0.000) in this research which is similar to the study in southeastern Nigeria. (59)

5.2.5 General characteristics of child

This present study showed that nearly half of the infants (42.2%) were 12 months old and there was association between age of child and exclusive breastfeeding practice (p-value = 0.000). Percentage of male infants (71.9%) was more than female infants in this study. Female infants were more exclusively breastfed than male infants in this study. This data may be due to cultural value. Mothers gave priority to male infants. Majority of mothers were Chinese in this township and they gave infant formula to their male infants because they think that male infants need more energy than female .So male infants were given infant formula and female infants were more exclusively breastfed than male infants. It is significantly related to exclusive breastfeeding. In Nablus, Palestine, female infants were exclusively breastfed in higher percentage (73.5%) than male infants (65.9%) (50) On the other hand, there was positive association between male infants and exclusive breastfeeding in 12 central and western provinces of China. (49). All infants who had birth weight of <2.5 kg were non-exclusively breastfed because mothers thought that their infants would gain weight by using infant formula rather than breastmilk. Five infants had high birthweight (>4 kg). This data may be due to mother’s disease (diabetes). There was relationship between birth weight of infants and exclusive breastfeeding in this research (p-value = 0.022). In Japan, low birth weight infants were less likely to be breastfed at six months. (39) In Western Australia, Scott et al. found that infants born

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of normal birth weight were over two times more likely to have been breastfed than low birth weight babies. (52)

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CHAPTER VI
CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

Objective of this study was to identify breastfeeding practices during first 6 months of children among mothers with children aged 6-12 months and to analyze the association between general characteristics of mothers, knowledge and attitude of mothers towards breastfeeding practices, social support, health service utilization and general characteristics of child and breastfeeding practices in Latha Township,Yangon Region, Myanmar. The study population was 135 mothers with children aged 6-12 months.

The results showed that percentage of exclusive breastfeeding practice up to six months in Latha Township, Yangon, Myanmar was 40.7%.

Among 135 mothers, majority were in 30-39 age group . About half of the mothers (49.6%) have only one child. Thirty-nine percent of the mothers passed high school level. Half of the mothers (51.1%) were self-employed. One-third of them (36.3%) were housewives. Half of mothers (50.4%) had previous experience of breastfeeding. About half of families (48.9%) were in the middle income group and One-third (33.3%) of families were high income families. Over half of the mothers (61.5%) had low level of knowledge about breastfeeding. Majority of mothers (89.6%) had positive attitude towards exclusive breastfeeding. Over half of the mothers (69.6%) received social support from health personnel. More than half of the mothers (63.7%) got information from health personnel about breastfeeding practices.

Almost all the mothers (97.8%) visited ANC service. Nearly all (93.2%) of mothers visited ANC more than four times. Half of the mothers (50.8%) received ANC service in hospitals. Majority of mothers (72.6%) received postnatal care. Almost all (95.6%) gave child birth in hospitals. Over half of mothers (55.6%) had normal delivery.

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Nearly half of the children (42.2%) were 12 months old. Almost three quarters of the children (71.9%) were male. Nearly half of the children (49.6%) were first born. More than half of the children (94.1%) had normal birth weight. Majority of children (68.1%) did not attend hospital for illness during last 6 months.

Maternal age, knowledge and attitude of mother, social support, ANC visit, frequency of ANC, ANC place, place of delivery, postnatal care, gender of infant and birthweight of infant were associated with breastfeeding practices.

6.2 Recommendations for implementation

1) Knowledge level of mothers about exclusive breastfeeding in this township is low. Mothers should be given detailed information about breastfeeding practices such as breastfeeding technique, advantages of exclusive breastfeeding for mother and children from health personnel.

2) Persons who influence mothers for breastfeeding such as mother-in-law, husband should be given health education to change cultural belief and taboo that influence exclusive breastfeeding.

3) Working mothers should be educated how to store breastmilk in the bottle and keep it in the fridge to have longer duration of exclusive breastfeeding when they go to work.

4) Mass education on exclusive breastfeeding via media in the form of pamphlets, posters, TV, books.

6.3 Recommendations for further research

1) This study was conducted in urban area (downtown) with sample size of 135 mothers which does not represent different geographical, ethnic and socio-cultural group of the whole country. More in depth interview is advised.

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2) For effective health education program, further research should be conducted using qualitative data collection.

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APPENDICES

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APPENDIX A
QUESTIONNAIRES[ENGLISH]

Survey area ………………………………………….. ID…………………

Date ……………….

Please fill the blank, tick only one answer

Part I. General characteristics of mother

1. Age of mother ………………………….
2. Total number of children
   ☐[1]one ☐[2] two ☐[3] three and more
3. Education level of mother
   ☐[1] Illiterate ☐[2] Primary ☐[3] Secondary
   ☐[4] High School ☐[5] University ☐[6]Others , specify…………
4. Occupation of mother
   ☐[1]Housewife ☐[2] Government employee
   ☐[3] Private employee ☐[4] Self employed
   ☐[5] Others, specify …………
5. Do you have previous experience of breastfeeding?
   ☐[1] Yes ☐[2] No
6. Monthly family income………… Kyats

General characteristics of child

1. Age of child ………… month
2. Gender of child ☐[1] Male ☐[2] Female
3. Birth order of this child ………….
4. Birth weight ………..

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5. What type of illness did the child suffer last 2 weeks? How many times?
   - ☐[1] Cold ( ) time
   - ☐[2] Fever ( ) time
   - ☐[3]Diarrhoes ( ) time
   - ☐[4] Pneumonia ( ) time
   - ☐[5]Others , specify ……….

6. How many times did the child visit the hospital for illness during previous 6 months?

   ……….

Part II. Maternal Knowledge about exclusive breastfeeding

Content	Yes	No
1. Breast milk should be given as soon as after delivery	☐[1]	☐[2]
2. Breast milk during first few days after delivery is yellowish and useful for the newborn baby	☐[1]	☐[2]
3. Breast milk is safe and easy to digest for baby	☐[1]	☐[2]
4. Your baby should be given only breast milk, not even water up to six months	☐[1]	☐[2]
5. Breast-fed babies are healthier than those who are not	☐[1]	☐[2]
6. Breast milk protects baby against many diseases such as diarrhoea, pneumonia	☐[1]	☐[2]
7. Breastfed children have better mental development than those who are not	☐[1]	☐[2]
8.Breastfeeding helps to develop strong bonding between mother and baby	☐[1]	☐[2]
9.Breastfeeding can prolong the chance of getting next pregnancy	☐[1]	☐[2]
10. Breastfeeding can prevent mother from breast and ovarian cancer	☐[1]	☐[2]
11. Breastfeeding can cause malnutrition to mother	☐[1]	☐[2]
12. It is better to give breast milk on schedule to discipline the child than the time when infant hungry or cry	☐[1]	☐[2]
13. Continued breastfeeding should be up to two years	☐[1]	☐[2]
14.Is the right position to breastfeed your child's chin touched to the	☐[1]	☐[2]

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Content	Yes	No
breast?		
15. During the lactation period, mother should eat more meat.	□[1]	□[2]
16. Formula milk contains more nutrients than breast milk	□[1]	□[2]
17. During child illness, breastfeeding should be stopped	□[1]	□[2]
18.Mashed rice should be given at 3 months of age	□[1]	□[2]

Part III. Attitude of mother towards exclusive breastfeeding

Content	Agree	Uncertain	Disagree
1. During breastfeeding, mothers should avoid eating vegetables to prevent abdominal colic of baby	□[1]	□[2]	□[3]
2. Colostrum is dirty milk and it is not suitable for baby	□[1]	□[2]	□[3]
3. Water should be given to relieve thirst of baby under 6 months	□[1]	□[2]	□[3]
4. If breast milk alone is fed to my baby up to six months, baby will not grow enough	□[1]	□[2]	□[3]
5. Mother should continue breastfeeding when the baby gets diarrhoea	□[1]	□[2]	□[3]
6. If mother get sick, breastfeeding should be stopped until mother is recoverd	□[1]	□[2]	□[3]
7. Breastfeeding can disturb the beauty of mother	□[1]	□[2]	□[3]
8. Formula milk is more expensive than breast milk so it helps the baby grow faster	□[1]	□[2]	□[3]
9. Breastfeeding can be reduced after introduction of complementary food	□[1]	□[2]	□[3]
10. If breasts are small, they will not produce enough milk	□[1]	□[2]	□[3]
11. Early complementary feeding before 6 months of age makes the baby full and sleep longer	□[1]	□[2]	□[3]

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Content	Agree	Uncertain	Disagree
12. Mother should eat dry fish, sticky riceonly during lactation period	☐1	☐2	☐3
13. Mothers should not give breastfeeding in public places	☐1	☐2	☐3

Part IV. Social Support

1. Who encourage you to breastfeed your baby?

☐1 Mother ☐2 Mother-in-law ☐3 Husband ☐4 Relatives
☐5Employer
☐6Neighbour ☐7 Friends ☐8 Health personnel ☐9Others, specify ………….

2. Does your husband help you during breastfeeding?

☐1Yes if yes, go to Q3 ☐2No

3. How did your husband help you during breastfeeding?

☐1 Helping you in housework
☐2 Taking care of baby while you are tired

☐3Others, specify ……….

4. Where did you get the information about breastfeeding?

☐1 TV ☐2 Newspaper ☐3 Books ☐4 Radio ☐5 Mother-in-law
☐6 Peers ☐7 Husband ☐8 Mother ☐9 Relatives
☐10 Health Personnel ☐11Others, specify …………

Part V. Health service utilization

1. Did you receive antenatal care during the pregnancy of this baby?

☐1Yes if yes go to Q2,Q3,Q4 ☐2 No

2. Where did you receive antenatal care during the pregnancy of this baby?

☐1hospital ☐2 clinic
☐3 health centre ☐4 Others, specify …………

3. When did you start antenatal care? ………….months of gestation

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4. How many times did you have antenatal care?

☐[1] less than 4 times ☐[2] 4 or more times

5. Where was the baby born?

☐[1]Hospital ☐[2] clinic

☐[3] Health centre ☐[4] At home with health personnel

☐[5] At home with family/relatives ☐[6] Others, specify ……….

6. Type of delivery

☐[1] Normal ☐[2] Instrumental ☐[3] Caesarean Section

7. Did you visit health centre for postnatal care after delivery?

☐[1]Yes ☐[2] No

8. Did you obtain any information concerning with the advantages of breastfeeding from health care personnel?

☐[1] Yes ☐[2] No

Part VI. Breastfeeding practices

1. Did the child receive breast milk within 1 hour after delivery?

☐[1] Yes ☐[2] No

2.

Age (month)	Breastfeeding	Bottle feeding	Complementary food	Remark
0				
1				
2				
3				
4				
5				
6				

3. What is the reason for your choice of that feeding practice? (breastfeeding, mix feeding, bottle feeding)

…………………………….

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4. Why did you stop breastfeeding?

☐[1] Return to work ☐[2]Inadequate breast milk ☐[3] Illness of mother

☐[4] Problem in the breast ☐[5]Others, specify …………

5. When did you start complementary feeding to your baby?

………. Months

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APPENDIX B

QUESTIONNAIRES

ရန်ကုန်တိုင်းဒေသကြီး ၊ လသာမြို့နယ်အတွင်းရှိအသက်(၆)လမှ(၁)နှစ်အတွင်းရှိ ကလေးမိခင်များ၏မိခင်နို့တိုက်ကျွေးခြင်းနှင့်ပတ်သက်သော အသိပညာ၊သဘောထား၊ အလေ့အထတို့ကို လေ့လာခြင်းမေးခွန်းလွှာ

အဖြေမှန်ကိုကွက်လပ်တွင် (√) ခြစ်ပေးပါရန်။

အမှတ်စဉ်

နေ့စွဲ ……

အပိုင်း(၁)။ မိခင်နှင့်ပတ်သက်သောမေးခွန်းများ

၁။မိခင်၏အသက် ....

၂။ကလေးစုစုပေါင်းဘယ်နှစ်ယောက်ရှိသနည်း၊

၁ယောက် ၂ယောက် ၃ယောက်နှင့်အထက်

၃။မိခင်၏ပညာအရည်အချင်း

စာမတတ် မူလတန်း အလယ်တန်း

အထက်တန်း တက္ကသိုလ် အခြား(ရှိလျှင်ဖော်ပြပါ)

၄။မိခင်၏အလုပ်အကိုင်

မှီခို အစိုးရဝန်ထမ်း ပုဂ္ဂလိကဝန်ထမ်း

ကိုယ်ပိုင်အလုပ် အခြား…… (ရှိလျှင်ဖော်ပြပါ)

၅။သင့်တွင်နို့ချိုတိုက်ကျွေးခြင်းနှင့်ပတ်သက်သောအတွေ့အကြုံရှိခဲ့ဖူးပါသလား

ရှိပါတယ် မရှိပါ

၆။မိသားစု၏ပျမ်းမျှဝင်ငွေ

…… ကျပ်

ကလေးနှင့်ပတ်သက်သောမေးခွန်းများ။

၁။ကလေး၏အသက် ....

၂။ကလေး၏လိင် ကျား မ

၃။ဒီကလေးကဘယ်နှစ်ယောက်မြောက်ပါလဲ။

....

၄။မွေးဖွားပြီးစက ကလေး၏ကိုယ်အလေးချိန် ……

၅။လွန်ခဲ့သော (၂)ပတ်အတွင်းမှာကလေးတွင်မည်သည့်ရောဂါများဖြစ်ပွားခဲ့ပါသလဲ။

အကြိမ်မည်မျှဖြစ်ခဲ့သလဲ။

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၁။အအေးမိ ( ) ကြိမ်

၂။အဖျားဝင် ( ) ကြိမ်

၃။ဝမ်းလျှောဝမ်းပျက် ( ) ကြိမ်

၄။အဆုတ်အအေးမိ ( ) ကြိမ်

၅။အခြား(ရှိလျှင်ဖော်ပြပါ)

၆။ကလေးသည်ဆေးရုံကိုလွန်ခဲ့သော (၆)လအတွင်းက ဘယ်နှစ်ခေါက်သွားခဲ့ပါသလဲ။

....

အပိုင်း(၂)။ မိခင်နို့ တိုက်ကျွေးခြင်းနှင့်ပတ်သက်၍မိခင်၏အသိပညာ။

မေးခွန်းများ	မှန်	မှား
၁။ ကလေးမွေးဖွားပြီးလျှင်ပြီးချင်း မိခင်နို့ စတင်တိုက်သင့်သည်။		
၂။ ကလေးမွေးပြီး ရက်အနည်းငယ်အတွင်းထွက်သော မိခင် နို့ဦးရည်သည် အဝါရောင်သန်းသော်လည်း တိုက်ကျွေးရန်သင့်တော်ပါသည်။		
၃။မိခင်နို့ သည်ကလေးအတွက်ရောဂါကင်းပြီးအစာကျေလွယ်သည်။		
၄။သင်၏ကလေးကို အသက် (၆)လအထိအခြားမည်သည့်ရေအစားအစာမှ မတိုက်ကျွေးပဲ မိခင်နို့ တစ်မျိုးတည်းသာတိုက်ကျွေးသင့်သည်။		
၅။မိခင်နို့ တိုက်ကျွေးခြင်းခံရသောကလေးသည်အခြားကလေးများထက် ပို၍ကျန်းမာသည်။		
၆။မိခင်နို့ တစ်မျိုးတည်းသီးသန့် တိုက်ကျွေးခြင်းသည် သင်၏ကလေးကို ဝမ်းပျက်ဝမ်းလျှောနှင့် အဆုတ်အအေးမိရောဂါတို့ မှကာကွယ်ပေးနိုင်သည်။		
၇။မိခင်နို့ တိုက်ကျွေးသောကလေးသည်မိခင်နို့ မတိုက်ကျွေးသောကလေးထက် ဉာဏ်ရည်ဖွံ့ ဖြိုးသည်။		
၈။မိခင်နို့ တိုက်ကျွေးခြင်းသည်မိခင်နှင့်ကလေးကို ပိုမိုရင်းနှီးစေသည်။		
၉။မိခင်နို့ တိုက်ကျွေးခြင်းသည် မိခင်တွင်နောက်ထပ်ကိုယ်ဝန်ရရှိနိုင်မှုကို ကာကွယ်ပေးသည်။		
၁၀။မိခင်နို့ တိုက်ကျွေးခြင်းသည် မိခင်ကို သားမြတ်ကင်ဆာ၊ သားအိမ်ကင်ဆာ တို့ မှကာကွယ်ပေးနိုင်သည်။		
၁၁။မိခင်နို့ တိုက်ကျွေးခြင်းသည် မိခင်ကိုအာဟာရချို့ တဲ့စေသည်။		
၁၂။ကလေးကို အချိန်နှင့်နို့ တိုက်ခြင်းသည် ကလေးငိုတိုင်း နို့ တိုက်ကျွေးခြင်းထက်ပို၍ကောင်းမွန်သည်။		
၁၃။မိခင်နို့ ကို ကလေးအသက်နှစ်နှစ်ရောက်သည်အထိ တိုက်ကျွေး သင့်သည်။		
၁၄။ကလေးကိုနို့ တိုက်ကျွေးစဉ်တွင် ကလေး၏မေးစေ့ကိုမိခင်၏ ရင်သားနှင့်ထိကပ်၍ တိုက်ကျွေးခြင်းသည် မှန်ကန်သောအနေအထား ဟုတ်ပါသလား။		

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အပိုင်း(၂)။ မိခင်နို့ တိုက်ကျွေးခြင်းနှင့်ပတ်သက်၍မိခင်၏အသိပညာ။

မေးခွန်းများ	မှန်	မှား
၁၅။သင်သည်နို့ ချိုတိုက်ကျွေးစဉ်တွင် အသားဟင်းကို ပိုမိုစားသင့် ပါသလား။		
၁၆။ကလေးနို့ မှုန့် တွင်မိခင်နို့ ထက်အာဟာရဓာတ်ပိုမိုပါဝင်သည်။		
၁၇။ကလေးနေမကောင်းချိန်တွင် မိခင်နို့ တိုက်ခြင်းကို ရပ်ထား သင့်သည်။		
၁၈။ပျော့ပျောင်းသောထမင်းကို ကလေးအသက်(၃)လမှာ စတင်ကျွေးသင့်သည်		

အပိုင်း(၃)။ ကလေးကိုနို့ တိုက်ကျွေးခြင်းနှင့်ပတ်သက်သောမိခင်၏သဘောထား။

မေးခွန်းများ	သဘောတူ	မသိပါ	သဘောမတူ
၁။မိခင်နို့ တိုက်ကျွေးစဉ်ကာလ တွင်ကလေးကိုလေထိုးလေအောင့် မဖြစ်စေရန် မိခင်သည် အရွက် များစားခြင်းမှရှောင်သင့်သည်။			
၂။နို့ ဦးရည်သည် မသန့် ရှင်းသော နို့ ရည်ဖြစ်သဖြင့် ကလေးအား တိုက်ကျွေးရန်မသင့်လျော်ပါ။			
၃။ကလေးအသက်(၆)လမတိုင်ခင်မှာပင် ကလေးကိုရေငတ်ပြေစေရန် ရေတိုက် သင့်သည်။			
၄။ ကလေးအသက်(၆)လအထိ မိခင်နို့ တစ်မျိုးတည်းတိုက်ကျွေးလျှင် ကလေးကောင်းစွာမဖွံ့ ဖြိုးပါ။			
၅။ကလေးသည်ဝမ်းပျက်ဝမ်းလျှောနေ သော်လည်း မိခင်နို့ ကိုဆက်လက် တိုက်ကျွေးရပါမည်။			

အပိုင်း(၃)။ ကလေးကိုနို့ တိုက်ကျွေးခြင်းနှင့်ပတ်သက်သောမိခင်၏သဘောထား။

မေးခွန်းများ	သဘောတူ	မသိပါ	သဘောမတူ
၆။မိခင်ဖျားနာ (သာမန်ကိုယ်ပူ၊အအေးမိ)လျှင် နို့တိုက်ခြင်းကနေပြန်မကောင်းမချင်း ရပ်ထားသင့်သည်။			

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မေးခွန်းများ	သဘောတူ	မသိပါ	သဘောမတူ
၇။မိခင်နို့တိုက်ကျွေးခြင်းသည် မိခင်၏အလှအပကိုထိခိုက်နိုင်သည်။			
၈။ကလေးကိုနို့မှုန့်တိုက်ကျွေးခြင်းသည် မိခင်နို့တိုက်ကျွေးခြင်းထက် အကုန်အကျများပြီး ကလေးအား ပိုမိုကြီးထွားစေသည်။			
၉။ဖြည့်စွက်စာကျွေးပြီးနောက် မိခင်နို့တိုက်ကျွေးခြင်းကိုလျှော့ချနိုင်သည်။			
၁၀။မိခင်၏နို့များသေးလျှင် မိခင်နို့လုံလောက်မည်မဟုတ်ပါ။			
၁၁။ကလေးအသက်(၆)လမတိုင်မီ ဖြည့်စွက်စာကျွေးခြင်းသည် ကလေး အားဗိုက်ပြည့်စေပြီး တာရှည်စွာ အိပ်ပျော်စေသည်။			
၁၂။မိခင်သည်နို့ချိုတိုက်ကျွေးစဉ်ကာလတွင် ကောက်ညှင်းနှင့်ငါးခြောက်ကိုသာစားသုံးသင့်သည်။			
၁၃။ မိခင်သည် လူအများသွားလာသော နေရာတွင် ကလေးကိုနို့မတိုက်သင့်ပါ။			

အပိုင်း(၄)။ အားပေးကူညီမှုဆိုင်ရာမေးခွန်းများ

၁။သင့်ကလေးအား မိခင်နို့တိုက်ရန် မည်သူကတိုက်တွန်းပါသနည်း။

မိခင် ယောက္ခမ ခင်ပွန်း ဆွေမျိုးများ အလုပ်ရှင်

အိမ်နီးချင်း သူငယ်ချင်း ကျန်းမာရေးဝန်ထမ်း အခြား ┼┼┼┼┼

၂။သင့်ရဲ့ခင်ပွန်းကရော သင်နို့တိုက်ကျွေးနေတုန်းမှာကူညီခဲ့ပါသလား။

ကူညီခဲ့ပါတယ် မကူညီခဲ့ပါ

၃။သင်နို့တိုက်ကျွေးနေတုန်းမှာ သင့်ရဲ့ခင်ပွန်းကဘယ်လိုနည်းလမ်းတွေနဲ့ကူညီခဲ့ပါသလဲ။

အိမ်အလုပ်တွေကိုဝိုင်းပြီးကူညီလုပ်ကိုင်ပေးပါတယ်

သင်ပင်ပန်းနေတဲ့အချိန်မှာကလေးကိုကြည့်ပေးပါတယ်

အခြား ┼┼┼┼┼

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၄။မိခင်နို့တိုက်ကျွေးခြင်းအကြောင်းသတင်းကို ဘယ်ကရပါသလဲ။

ရုပ်မြင်သံကြား သတင်းစာ စာအုပ် ရေဒီယို

ယောက္ခမ ဘဝတူမိခင်အချင်းချင်းဆီမှ ခင်ပွန်း မိခင်

ဆွေမျိုးများ ကျန်းမာရေးဝန်ထမ်း အခြား ……………

အပိုင်း(၅)။ကျန်းမာရေးဝန်ဆောင်မှု အသုံးပြုခြင်းဆိုင်ရာမေးခွန်းများ

၁။ ကလေးကို ကိုယ်ဝန်ရှိစဉ်က ကိုယ်ဝန်အပ်ဖူးပါသလား

အပ်ဖူးပါသည် မအပ်ဖူးပါ

၂။ ကိုယ်ဝန်ကို မည်သည့်နေရာတွင် အပ်ပါသလဲ

ဆေးရုံ ဆေးခန်း

ကျန်းမာရေးဌာန အခြား ……………

၃။ ကိုယ်ဝန်ဘယ်နှစ်လမှာ ကိုယ်ဝန်စတင်အပ်ပါသလဲ။

………… လ

၄။ ကိုယ်ဝန်တစ်လျှောက်လုံး ဘယ်နှစ်ကြိမ်ကိုယ်ဝန်ပြရန် သွားခဲ့ပါသလဲ။

လေးကြိမ်အောက် လေးကြိမ်နှင့်အထက်

၅။ ကလေးကို မည်သည့်နေရာတွင်မွေးခဲ့ပါသလဲ။

ဆေးရုံ ဆေးခန်း

ကျန်းမာရေးဌာန အိမ်၌ကျန်းမာရေးဝန်ထမ်းဖြင့် ကျန်းမာရေးဝန်ထမ်းမရှိဘဲ

၆။ ကလေးမွေးဖွားခဲ့စဉ်

ရိုးရိုးမွေး ညှပ်ဆွဲမွေး ဗိုက်ခွဲမွေး

၇။ ကလေးမွေးပြီး (၄၅)ရက်အတွင်းကျန်းမာရေးဌာနသို့ သွားပြပါသလား။

ပြပါသည် မပြပါ

၈။ ကျန်းမာရေးစောင့်ရှောက်သူများထံမှ မိခင်နို့တိုက်ကျွေးခြင်း၏ကောင်းကျိုးများ နှင့်ပတ်သက်သော သတင်းအချက်အလက်များ ရခဲ့ဖူးပါသလား။

ရခဲ့ပါတယ် မရခဲ့ပါ

အပိုင်း(၆)။ကလေးအား အာဟာရတိုက်ကျွေးခြင်းဆိုင်ရာအလေ့အကျင့်များ

၁။ ကလေးမွေးဖွားပြီး ၁နာရီအတွင်းမှာကလေးသည် မိခင်၏နို့ကိုသောက်သုံး ရပါသလား။

သောက်သုံးရပါသည် မသောက်သုံးရပါ

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၂။ နို့ ချိုတိုက်ကျွေးခြင်းဆိုင်ရာအလေ့အကျင့်များ

ကလေးအသက် (လ)	မိခင်နို့တိုက်ခြင်း	နို့ဗူးတိုက်ခြင်း	ဖြည့်စွက်စာကျွေးခြင်း	မှတ်ချက်
၀				
၁				
၂				
၃				
၄				
၅				
၆				

၃။ အဘယ်ကြောင့်ထိုနည်းလမ်းကိုအသုံးပြု၍ တိုက်ကျွေးသနည်း။

⅔⅔⅔⅔⅔⅔⅔

၄။ မိခင်နို့ တစ်မျိုးတည်းသီးသန့် တိုက်ကျွေးခြင်းကို ဖြတ်ရသည့်အကြောင်းအရင်း။

လုပ်ငန်းခွင်ပြန်ဝင်ရ၍ မိခင်နို့ မလုံလောက်၍ မိခင်နေမကောင်း၍

နို့ ကျိတ်တည်၍ အခြား⅔⅔⅔⅔⅔

၅။ ကလေးကို မည်သည့်အသက်တွင်ဖြည့်စွက်စာစတင်ကျွေးပါသလဲ။

...............လ

APPENDIX C
INFORMATION SHEET

1.Title of project:

FACTORS INFLUENCING BREASTFEEDING PRACTICES AMONG MOTHERS WITH INFANTS AGED 6-12 MONTHS IN LATHA TOWNSHIP, YANGON, MYANMAR

2.Study site:

Latha Township, Yangon, Myanmar

3.This project is conducted by Myat Sandar Aung

under supervision of Major Advisor as follows:

Assistant Professor Patcharanee Pavadhgul

4.Brief Background, Rationale: (use simple word, understandable by volunteer participant)

Breastfeeding is a natural and beneficial source of nutrition for infants. Infants have to receive exclusively breastfed for the first six months of life to attain optimal growth, development and health. WHO recommends that early initiation breastfeeding within first hour after birth, exclusive breastfeeding up to six months , weaning diet starts after six months , continue breastfeeding beyond two years. Breastfeeding on demand – that is as often as the child wants. According to American Academy of Pediatrics, breastfeeding for at least six months can decrease worldwide infant mortality due to diarrhoea, respiratory illness, and other infectious diseases by up to 55%. Exclusive breastfeeding reduces infant mortality due to common childhood illnesses such as diarrhoea or pneumonia, and helps for a quick recovery during illness. Mothers who have breastfeeding can space next pregnancy, reduces the risk of ovarian cancer and breast cancer.

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In Myanmar, percentage of exclusive breastfeeding is low (23.6%). Most mothers feed water and some food to infants before 4 months due to influence of sociocultural belief. In some areas, feeding of water is increased because of wrong perception of mothers that child relieve thirst by giving water. Breastfeeding practices in Myanmar are affected by socio-economic changes, modernization. Only 16% of mother practices exclusive breastfeeding during first 3 months and is more than other urban areas which were conducted in previous studies of breastfeeding practices. 70% of mother gave water and other liquids immediately after birth. Some studies showed that exclusive breastfeeding rate of one month is 35.3%.

The study is conducted in Latha Township, urban area (downtown area) of Yangon region, Myanmar. Situation of breastfeeding in this area has not been explored. Various brands of infant formula are more available in this area of the supermarkets and drug shops .We should assess the percentage of exclusive breastfeeding among mothers with children aged 6-12 months in this area and compare with other urban areas in Yangon.

5.Objectives:

General Objective

To identify breastfeeding practices in first 6 months aged of children and the associated factors among mothers of children aged 6-12 months in Latha Township,Yangon Region, Myanmar

6.You are invited to be a volunteer/subject to participate in the project:

As you are mother of child aged 6-12 months and you are the one who can give us information concerning the breastfeeding and factors influencing the breastfeeding, you are invited to join in this project.

You should be invited to participate in the project as you are the mother who meet inclusion criteria such as mothers who have children aged 6-12 months, mothers aged above 18 years old and you also live in Latha Township

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7. Research activities which involving you when you volunteer to participate in this research project will be as following: (focus on the parts that involve volunteers/subjects)

You are kindly requested to answer all the questionnaires that the researcher will provide.

8.Period of time that you will be involved in this research activities (Treatment/data collection):

15-20 minutes for interview activity

9.Expected benefits of the project to you and to others:

You may not get direct benefit at the time of study but this study will give benefit if the policy makers reinforce the activities in breastfeeding because of this study. You can gain the knowledge from answering the questions and can access your breastfeeding practice for your child.

10.Risks or any undesirable that may occur to you caused by this research and measure or prevention and risk reclusion method which will be provided during participation in the project

If you feel uncomfortable from answering the questionnaires, researcher can discontinue any time. You can withdraw from the study anytime if you want.

11.How can you securely store the data and keep them confidential? (such as how to take care data, where are data storage who will access, and how to destroy data and when)

The researcher will use coding system to keep them confidential and enter data into computer day by day and by herself to avoid reveal the confidential. After all data are entered and analyzed, all data will be destroyed.

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12.The right of the subject (he/she) to withdraw from the project.

Each and every mother can withdraw anytime of the study period if they don’t want to provide the information and encounter sensitive question

13.Contact address of authorized persons in case of emergency.

Myat Sandar Aung

Student ID: 5737040

Program: Master of Public Health International Program

Address: Room 506,521/3-4, Sriayuthaya Road, Prayatai District, Rajthavee, Bangkok, 10400

Tel: 0993842782

E-mail: drms801@gmail.com

This research project be approved by the Ethical Review Committee for Human Research, Faculty of Public Health, Mahidol University. Office address at Building 1, 4th Floor, 420/1 Rajvithi Road, Rajthevi, Bangkok 10400, Telephone: 0-2354-8543-9 Ext. 1127, 7404 Fax: 0-2640-9854

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APPENDIX D
INFORMED CONSENT FORM

Project Title:
FACTORS INFLUENCING BREASTFEEDING PRACTICES AMONG MOTHERS WITH INFANTS AGED 6-12 MONTHS IN LATHA TOWNSHIP, YANGON, MYANMAR

Responsible person(s) and institute: Myat Sandar Aung
Student ID: 5737040
MPH International Program
Faculty of Public Health, Mahidol University
Bangkok 10400, THAILAND

Date ……………………..………………………… (day/month/year)

I (Mr./Mrs./Ms.)……………….……………………….……………...………………………..
Home address………….……… Street…….………Village number…………………
Sub district………… District…..……….. Province………….….. Postal code………

I have read and understood all statements in the **information sheet**. I have also been explained the objectives and methods of the study, as well as possible risks and benefits that may happen to myself upon the participation in the study. I understand that the information will be kept confidential and my name will not be declared in any case. I shall be given a copy of the signed **informed consent form**.
I have the right to withdraw from the project at any time without any adverse effects upon myself.

Signature…..………………………….…… (Respondent/informant)
(…….…………………………..)
Signature…………………………………… (Researcher)
(Myat Sandar Aung)

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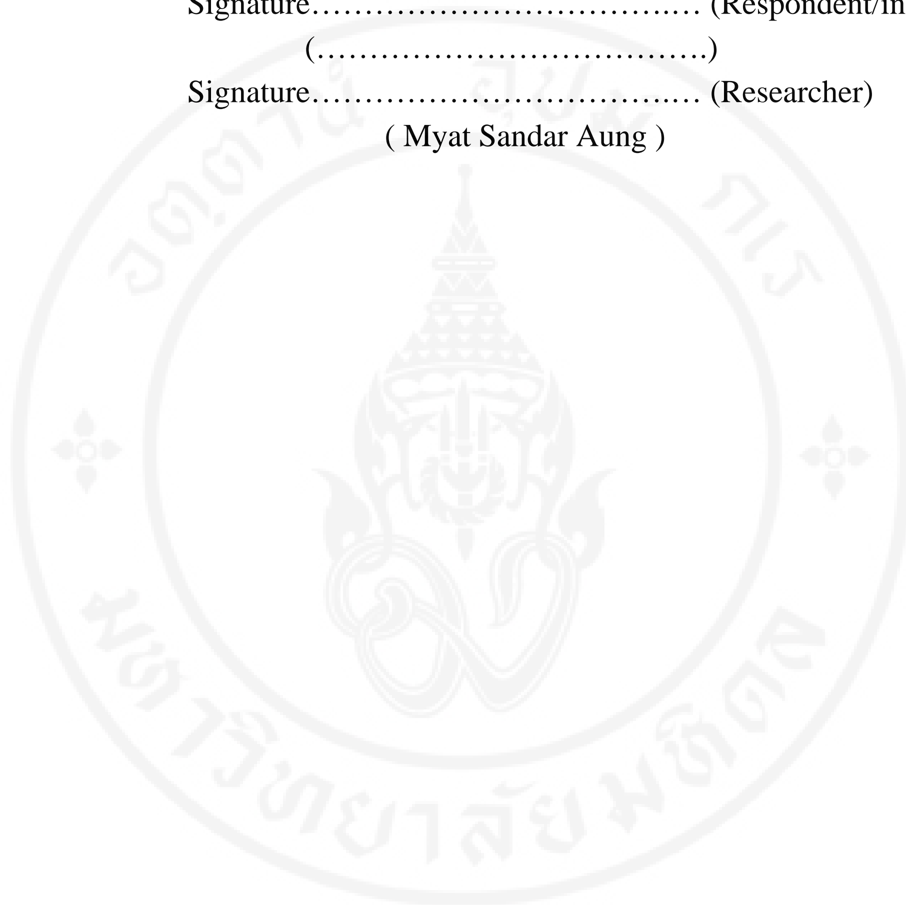
I cannot read but before having finger print on this **informed consent form**, the investigator/interviewer has read and explained to me in detail about the study, the information sheet and the **informed consent form** until I completely understood.

Signature………………………………… (Respondent/informant)

(……………………………….)

Signature………………………………… (Researcher)

(Myat Sandar Aung)



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အသိပေးသဘောတူညီမှုအကြောင်းကြားစာ

စာတမ်းခေါင်းစဉ်။ ။ မြန်မာနိုင်ငံ၊ ရန်ကုန်တိုင်း၊လသာမြို့နယ်တွင် နေထိုင်သော အသက် (၆)လမှ တစ်နှစ်အတွင်းရှိ ကလေးများ၏ မိခင်များ၏ကလေးကိုနို့ချိုတိုက်ကျွေးခြင်းနှင့် ပတ်သက်သော အသိပညာ၊ သဘောထား၊ အလေ့အထတို့ကိုလေ့လာခြင်း။

တာဝန်ရှိသူ။ ။ ဒေါက်တာမြတ်စန္ဒာအောင်

ကျောင်းသားအမှတ်စဉ် – ၅၇၃၇၀၄၀

လူထုကျန်းမာရေးမဟာသိပ္ပံဘွဲ့

လူထုကျန်းမာရေးဌာန၊ မဟီဒေါတက္ကသိုလ်၊

ဘန်ကောက်မြို့၊ ထိုင်းနိုင်ငံ။

ရက်စွဲ။------------ (ရက်၊ လ၊ နှစ်)

အိမ်အမှတ် -------၊ လမ်း ------- ၊ ရပ်ကွက် -------------၊ မြို့နယ် ----------------- တွင် နေထိုင်သော ကျွန်တော် /ကျွန်မ ------------------ သည် ဤသဘောတူညီမှုပုံစံတွင် ပါဝင်သော အချက်အလက်များကို ဖတ်ရှုပြီး နားလည်ပါသည်။ ကျွန်တော် /ကျွန်မကို သုတေသန၏ရည်ရွယ်ချက်များ၊ လုပ်ကိုင်ပုံနည်းလမ်းများနှင့် သုတေသနတွင် ပါဝင်ကူညီခြင်း၏ကောင်းကျိုး၊ ဆိုးကျိုးများကို သေချာစွာရှင်းပြခဲ့ပါသည်။ အဖြေအားလုံးသည် သုတေသနလုပ်ငန်းအတွက်သာအသုံးပြုရန်ဖြစ်ပါသည်။ထို့အပြင် အဖြေအားလုံးသည် သုတေသနပြုလုပ်သူမှလွဲ၍ အခြားမသက်ဆိုင်သူများဆီသတင်းမပေါက်ကြားရန်အတွက်လည်း ထိန်းသိမ်းထားရှိပါမည်ဟု နားလည်ပါသည်။ အထက်ပါ အကြောင်းအရာများကို ကျွန်တော် /ကျွန်မသည် သဘောတူညီကြောင်းလက်မှတ်ရေးထိုးပါသည်။ ကျွန်တော် /ကျွန်မသည် မည်သည့်ဆိုးကျိုးမှမရှိစေဘဲ မေးခွန်းဖြေဆိုခြင်းမှ အချိန်မရွေးနှုတ်ထွက်ခွင့်ရှိပါသည်။

လက်မှတ် -------------------- (ဖြေဆိုသူ – မိဘ)

အမည် --------------------

လက်မှတ် -------------------- (သုတေသနပြုစုသူ)

အမည် --------------------

ကျွန်တော် / ကျွန်မသည် စာမဖတ်တတ်သော်လည်း မေးခွန်းမေးသူသည် သုတေသနတွင် ပါဝင်သော အချက်အလက်များကို နားလည်သည်အထိ သေချာစွာ ရှင်းလင်းဖတ်ကြား၍ လက်ဗွေနှိပ်စေပါသည်။

လက်မှတ် --------------------- (ဖြေဆိုသူ – မိဘ)

အမည် ---------------------

လက်မှတ် --------------------- (သုတေသနပြုစုသူ)

အမည် ---------------------

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APPENDIX E

Certificate of Approval
Ethical Review Committee for Human Research
Faculty of Public Health, Mahidol University

COA. No. MUPH 2015-060

Protocol Title : FACTORS INFLUENCING BREASTFEEDING PRACTICES AMONG MOTHERS WITH INFANTS AGED 6-12 MONTHS IN LATHA TOWNSHIP, YANGON, MYANMAR

Protocol No. : 30/2558

Principal Investigator : Miss Myat Sandar Aung

Affiliation : Master of Public Health (International Program)
Faculty of Public Health, Mahidol University

Approval Includes :
1. Project proposal
2. Information sheet
3. Informed consent form
4. Data collection form/Program or Activity plan

Date of Approval : 25 March 2015
Date of Expiration : 24 March 2016

The aforementioned project have been reviewed and approved according to the Declaration of Helsinki by Ethical Review Committee for Human Research, Faculty of Public Health, Mahidol University.

(Assoc. Prof. Dr. Sutham Nanthamongkolchai)
Chairman of Ethical Review Committee for Human Research

(Assoc. Prof. Dr. Prayoon Fongsatitkul)
Dean of Faculty of Public Health

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BIOGRAPHY

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PLACE OF BIRTH	Yangon, Myanmar
INSTITUTIONS ATTENDED	Institute of Medicine (1) Yangon 2000-2006 Diploma in Accounting (LCCI), UK
WORKING EXPERIENCE	Volunteer of HIV Project Myanmar Anti-Narcotic Association 2013 Feb-2013 December Project Facilitator HIV Project Myanmar Anti-Narcotic Association 2014 Jan-2014 Feb Researcher Supply Chain Management Project Supply Chain Management Team United States of America 2014 Mar-2014April
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