Family Support on Exclusive Breastfeeding Practice Among Mothers in Bangladesh

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A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of

Master of Nursing Science (International Program)

Prince of Songkla University

2010

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Academic Year	2009

ABSTRACT

The purpose of this descriptive correlational study was to examine the relationship between family support and the quality and duration of exclusive breastfeeding practice among mothers in Bangladesh. One hundred mothers were asked to provide information about family support and the quality and duration of exclusive breastfeeding practice. Three experts validated the content of the questionnaire. The reliability of the questionnaires to assess family support and exclusive breastfeeding practice were tested. The Cronbach's alpha coefficiens were .98 and .72, respectively. Data were analyzed by using descriptive and correlational statistics. The results revealed that the average duration of mothers' exclusive breastfeeding was 4.33 months and the quality of the exclusive breastfeeding practice was at a moderate level (M = 3.68, SD = 1.57). Family support was also at a moderate level (M = 3.43, SD =.75). The findings showed that there was a significantly high positive relationship between family support and the quality (r = .66, $p < .01$) and duration of exclusive breastfeeding practice (r = .90, $p < .01$).

The results showed that Bangladeshi mothers' average duration of exclusive breastfeeding (4.33 months) was less than that recommended by the WHO. Mothers need to continue exclusive breastfeeding practice up to 6 months. Thus enhancing family support is needed to support the duration of exclusive breastfeeding. Providing nursing care to increase the quality of exclusive breastfeeding practice is recommended to mothers who take care of children aged 9-12 months.

ACKNOWLEDGEMENT

I would like to express my sincere appreciation and deepest respect to my major advisor, Asst. Prof. Dr. Pajongsil Perngmark and my co-advisor Asst. Prof. Dr. Sopen Chunuan for all their guidance, encouragement, valuable advice, suggestions and support throughout this study. Great appreciation is offered to all committee members and all experts involved in validating the instruments. I would like to express my deepest thanks to Asst. Prof. Dr. Sang-arun Isaramalai and Asst. Prof. Dr.Umaporn Boonyasopun for their essential advice and suggestions during my proposal defense that made my study concise.

I also would like to extend my grateful appreciation and deepest respect to Asst. Prof. Dr. Wongchan Petpichetchian for her warm love, encouragement, guidance, advice and suggestions in relation to this study. I would like to thank all friends for their encouragement and support throughout my study, and also the staff of Faculty of Nursing, Prince of Songkla University, where I was fortunate to be a student. I am very grateful to the Bangladesh Government and Graduate School, Prince of Songkla University for their financial support throughout my master's study. My study would have been impossible to complete without the help, ideas, time, efforts and good wishes of many individuals. Above all I thank God.

Finally, I am most grateful to my beloved parents, elder brother, husband and son for their unending love, prayer and support throughout my study in Thailand.

Lipika Rani Biswas

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CHAPTER 1

INTRODUCTION

Background and Significance of Problem

Breastfeeding is a unique source of nutrition that plays an important role in the growth, development, and survival of infants (Giashuddin & Kabir, 2004). Breastfeeding is promoted internationally as the preferred method of feeding infants up to 6 months and continuing up to 2 years with the addition of weaning food (Giashuddin & Kabir, 2003). The World Health Organization (WHO) defines exclusive breastfeeding as feeding a child only with breast milk without any additional supplementation such as water, juices or solids (Kakute et al., 2005). The duration of breastfeeding is an important factor to extend the exclusive breast feeding (Giashuddin & Kabir, 2004; Memon, Sheikh, Memon, & Memon, 2006). The WHO recommended that the duration of exclusive breastfeeding should be the first six months for babies. Unfortunately, the breastfeeding initiation and duration rate was quite low in both developed and developing countries and particularly in Bangladesh (Galler, Harrison, Ramsey, Chawla, & Taylor, 2006).

However, in a previous study, global monitoring found that only 39% of all infants were exclusively breastfed for six months due to community beliefs and lack of social support (Quinn, Guyon, & Ramiandrazafy, 2004). Thirty-eight percent of infants under 6 months of age in the developing world are exclusively breastfed, whereas in Bangladesh the exclusive breastfeeding rate is 43% up to 6 months (UNICEF, 2008). Recent health statistics for Bangladesh revealed that the infant

mortality rate is as high as 59.02 deaths/1000 live births (Central Intelligenc Agency World Factbook, 2010). The major causes of infant mortality are diarrhea, malnutrition, and respiratory tract infection (Baqui et al., 2001; as cited in Mihrshahi et al., 2007; UNICEF, 2008). In Bangladesh, more than two-thirds of all infant deaths occurred due to diarrheal diseases and respiratory tract infection (Baqui et al., as cited in Mihrshahi et al., 2007). The prevalence of diarrhea and acute respiratory infection in infants aged between 0-3 months was significantly associated with lack of exclusive breastfeeding (Mihrshahi et al., 2007). Thus, breastfeeding is necessary to reduce neonatal and infant mortality and morbidity rates.

Breastfeeding is also a cost-effective approach for children's health improvement and decreases the load of childhood diseases (Alden, 2004; Cattaneo & Quintero-Romero, 2005). Breastfeeding has a vital birth spacing effect which is especially important in developing countries where the awareness, acceptability and availability of modern family planning methods are very low (Reddy, n. d). The enormous benefits of breastfeeding for infants, mothers, family and society are evident.

Bangladesh is one of the developing countries where breastfeeding is practiced by the majority of lactating mothers but not in the form of exclusive breastfeeding. Colostrum, by tradition, is discarded. There is also a ritual of giving all babies prelacteal feeding such as honey or holy water (Haider, Kabir, & Ashworth, 1999). In order to improve the situation concerning breastfeeding in the country, the Campaign for the Protection and Promotion of Breastfeeding (CPPBF) has been established in Bangladesh since 1989 (Talukder, 1996). In a survey conducted with 1,100 lower middle class mothers in Dhaka city, the researchers found that only 15% of babies

were exclusive breastfed due to the practice of traditional prelacteals (Haider et al., 1999). In addition, only 24% mothers had initiated breastfeeding within one hour after birth and 85% had fed prelacteal food to their babies (Mihrshahi et al., 2007).

There are several factors influencing breastfeeding practices. These include mothers' beliefs about insufficient breast milk, support from the family members (such as the husband, mother's mother, mother-in-law, and grandmother), financial insufficiency, household workload and mothers' disinterest (Haider, Kabir, Hamadani, & Habte, 1997). The baby's father is the most influential person for exclusive breastfeeding practice of a lactating mother. The husband's influence is more significant than that of health professionals (Humphreys, Thompson, & Miner, 1998). Support from a baby's father by active participation in decision making about breastfeeding has a powerful effect on the initiation and duration of breastfeeding (Pisacane, Continisio, Aldinucci, Amora, & Continisio, 2005). The father's role includes child caring, doing household work, ensuring mother's care during breastfeeding or when mother feels tired (Februhartanty, Bardosono, & Septoari, 2006). Husbands had a significant role for mothers who stop breastfeeding. Mothers from rich families stopped breastfeeding earlier than mothers of poorer families due to their ability to buy powdered milk and other baby formulas (Giashuddin & Kabir, 2004). Low income family women had little confidence in their ability to successfully breastfeed and had very little knowledge about the realities of breastfeeding of a newborn baby (Whelan & Lupton, 1998). Among these factors, support from family members makes a high contribution to breastfeeding. Without support from family members, it may be difficult for lactating mothers to practice and maintain their breastfeeding practice.

In this study family support and exclusive breastfeeding were explored. The researcher was interested in exploring family support and its relationship with exclusive breastfeeding practice, in the context of Bangladesh culture. In this context the majority of women in the family are dominated by men and other elders (such as husbands, their mothers, mothers-in-law, grandmothers, and other family members). Traditionally, a woman in Bangladesh derives her status from her family in child bearing and child rearing. For this reason, without support from family members, it may be difficult for lactating mothers to practice and maintain exclusive breastfeeding. Knowledge gained from this study could be beneficial for health care providers, particularly nurses, to take initiatives to improve this situation in Bangladesh.

Objectives of the Study

The aims of this study were to:

1. Explore the levels of quality and average duration of exclusive breastfeeding practices of breastfeeding among mothers of infants aged 9-12 months

2. Identify the sources and types of family support regarding exclusive breastfeeding among mothers of infants aged 9-12 months

3. Identify the level of family support about the quality and duration of exclusive breastfeeding practice among mothers of infants aged 9-12 months

4. Examine the relationships between family support and the quality and duration of exclusive breastfeeding practice among mothers of infants aged 9-12 months

Research Questions

The research questions of this study were:

1. What are the levels of quality and average duration of exclusive breastfeeding practice among mothers of infants aged 9-12 months?

2. What are the sources and types of family support regarding exclusive breastfeeding among mothers of infants aged 9-12 months?

3. What are the levels of family support on exclusive breastfeeding practice among mothers of infants aged 9-12 months?

4. Are there any relationships between family support and the quality and duration of exclusive breastfeeding practice among mothers of infants aged 9-12 months?

Conceptual Framework of the Study

House's conceptualization of social support (1981) and Pender's view of health promoting behavior (2006) were used to guide the research framework. House identified four functional dimensions of social support including emotional, instrumental, informational, and appraisal support. Emotional support deals with the demonstration of caring, encouragement, empathy, love, and trust. Instrumental support is the tangible or physical support which consists of goods or services. Informational support refers to advice provided through personal information or suggestions. Appraisal support refers to the provision of constructive feedback. The family members of lactating mothers can provide the above four types of support for exclusive breastfeeding practice.

Pender, Murdaugh and Parsons (2006) explains that social support is related to health promoting behavior. Health promoting behavior can motivate the individuals to engage in behavioral change directed towards the maintenance and enhancement of health. Breastfeeding practice is considered as a health promoting behavior. The family members are considered as significant sources of family support. The support from family members, particularly husbands, mothers of the lactating mother, mothers- in-law, and grandmothers will influence the exclusive breastfeeding practice including quality and duration of mothers. Exclusive breastfeeding practice means the practice of only breastfeeding the baby up to six month of age without any supplementation (Kakute et al., 2005). The relationship between family support and exclusive breastfeeding practice among mothers is set out in Figure 1.

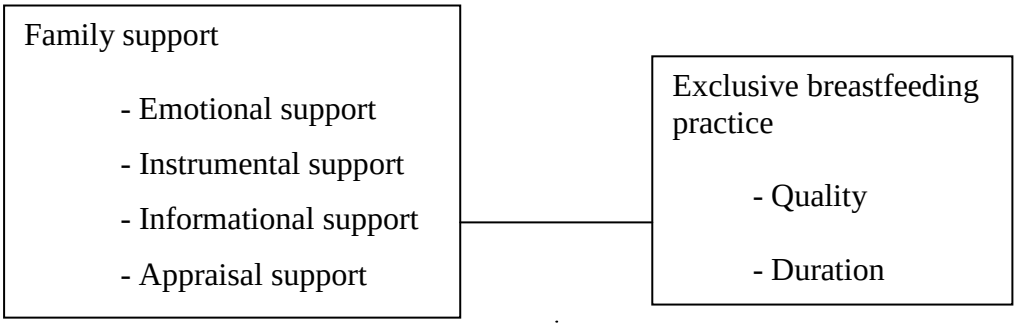

Figure 1

Conceptual Framework of the Study

Hypothesis

There are positive relationships between family support and the quality and duration of exclusive breastfeeding practice among mothers of infants aged 9-12 months.

Definition of Terms

Family support refers to the level of support which provides companionship, assistance, and emotional nourishment. Family members support for lactating mothers includes four types of support: emotional, informational, appraisal, and instrumental. Family support could be provided by the husband, mother-in-law, the mother of the lactating mother, grandmothers and others who live in the family. Each type of supports is defined as follows:

Emotional support refers to the caring, love, empathy, encouragement and mental assurance family members give to the lactating mother.

Instrumental support refers to hands-on help to the lactating mother during breastfeeding to the baby. It involves household work, childrearing and personal care as well as financial support to meet the nutritional requirement of the lactating mother. This is given in order to keep the lactating mothers healthy for successful exclusive breastfeeding.

Information support refers to the information, advice and suggestions by the family members to the lactating mother about the benefits of exclusive breastfeeding.

Appraisal support refers to reinforcement to build up the self-confidence of lactating mother for the practice of exclusive breastfeeding.

Exclusive Breastfeeding practice is feeding a child with breast milk only, without any additional supplementation, for six months after birth and continuing up to 9-12 months with additional supplementation. There are 2 domains of exclusive breastfeeding practice: 1) quality and 2) duration.

Quality of exclusive breastfeeding practice refers to the mother's breastfeeding performance; that is whether she has given breast milk to her child with or without any additional supplementation within 6 months of giving birth.

Duration of exclusive breastfeeding practice refers to the duration or number of months the mother has given only breast milk to her child.

Scope of the Study

This study explored the relationships between family support and the quality and duration of exclusive breastfeeding practice among mothers of infants aged 9-12 months. These mothers came to get immunization at the Expanded Program of Immunization (EPI) centre Sylhet Osmani Medical College Hospital, Bangladesh, during the period January, 2010 to February, 2010.

Significance of the Study

The results of the study could contribute in the following ways to nursing practice, nursing education, and nursing research to promote exclusive breastfeeding:

1. For nursing practice, the results of this study could provide information to guide promoting the role of family in providing support for the lactating mother to practice exclusive breastfeeding.

2. For nursing education, the findings from this study could guide the nursing curriculum towards an appropriate body of knowledge related to family support for exclusive breastfeeding practice.

3. For nursing research, the result of this study could provide a body of knowledge related to family support and the exclusive breastfeeding practice of Bangladesh's women.

CHAPTER 2

LITERATURE REVIEW

This chapter presents the review of research literature relating to Exclusive breastfeeding, family support for exclusive breastfeeding practice, factors related to family support on exclusive breastfeeding practice, relationships between family support and exclusive breastfeeding practice quality and duration, and exclusive breastfeeding practice quality and duration in Bangladesh.

1. Exclusive Breastfeeding
   - 1.1 Concept of Breastfeeding
   - 1.2 Definition of Exclusive Breastfeeding
   - 1.3 Definition of Partial Breastfeeding
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2. Family Support for Exclusive Breastfeeding Practice
   - 2.1 Definition of Family Support
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Exclusive Breastfeeding

A review of breastfeeding is one of the main aspects of this study which is divided into four parts: concept of breastfeeding; definition of exclusive breastfeeding; definition of partial breastfeeding; and benefits of exclusive breastfeeding.

Concept of Breastfeeding

Breastfeeding is the act of providing milk to a newborn or infant from the mother's breasts. Breast milk is sterile, easily digested, nonallergenic, and transmits maternal antibodies that protect against many infections and illnesses (Thomas, 1997). According to Sudharto (2008) breastfeeding is a way of providing ideal food for the healthy growth and development of infants. Leung and Sauve (2005) stated that breastfeeding is the optimal method of infant feeding. Breast milk provides almost all the necessary nutrients, growth factors and immunological components a healthy term infant needs. Breastfeeding is the most widely accepted preferred method of nutrition of the newborn thus providing numerous health benefits to both the mother and her infants (Sinusas & Gagliardi, 2001). Thus, Breastfeeding is a way of providing ideal food the growth and development of infants and protecting against several infectious diseases.

Definition of Exclusive Breastfeeding

The World Health Organization defines exclusive breastfeeding as feeding a child only with breast milk with no additional supplementation such as water, juice or solids (Kramer & Kakuma, 2002). Exclusive breastfeeding means that the infant is not receiving any plain water, sugar water, juices, or other liquids, cow's milk, tinned milk, infant formula, semi solid or solid foods or any other substance with the

exception of drops or syrups consisting of vitamins, mineral supplements or medicines (Februhartanty et al., 2006). Exclusive breastfeeding is defined as when the infant received breast milk only and no other solids or liquids with the exception of vitamins, minerals, medicines or oral rehydration solutions (Memon et al., 2006; Mihrshahi, Oddy, Peat, & Kabir, 2008). The World Health Organization (WHO) recommends that children should be exclusively breastfed during the first 6 months and should continue, with supplementation, up to the age of two years or more (Susin, Giugliani, & Kummer, 2005). Therefore, exclusive breastfeeding means breast milk only within the first 6 months of the life of a baby with no other supplementary food, fluids, or juice but with the exception of vitamins and medicines.

Definition of Partial Breastfeeding

Partial breastfeeding means that the child receives breast milk and any food or liquid including non-human milk (Rehana, 1998). Partial breastfeeding is defined as when the infant receive breast milk in addition to complementary food (Mihrshahi et al., 2008). The World Health Organization (WHO) defines partial breastfeeding as being given other milk or gruel in addition to breast milk (Haider et al., 1997). Therefore, partial breastfeeding means breast milk and in addition any liquid or food.

Benefits of Exclusive Breastfeeding

Nowadays, the benefits of breastfeeding are well known. Breastfeeding is the best for all including mother, infant, family, and society in many aspects including physical, psychosocial, and economical aspects (Adewale, 2006; Cooke, Schmied, & Sheehan, 2006; Leung & Sauve, 2005). The benefits of breastfeeding fall into the following categories.

Benefits for Infants

A review of existing literature showed that breast milk is a hygienic source of energy, essential nutrients, water, and contains immune factors that are protective and thereby decrease infant morbidity and mortality (Kakute et al., 2005). Exclusive breastfeeding for the first six months of life reduces the infant mortality rate linked to common childhood illnesses and under-nutrition (UNICEF, 2008). It provides perfect nutrition for infants and lays the foundation for their psychosocial development (Dakshayani & Gangadhar, 2008).

Breastfeeding protects the infant from health problems (Rehana, 1998). Mother's milk contains protective factors for the baby such as active enzymes, immunoglobulin, and hormones and growth factors (Wardley, Puntis, & Taitz, 1997). Breastfeeding has a significant effect in preventing infectious diseases. It provides protection against pathogens by providing antibacterial and antiviral substances that stimulate the immune system (Victora et al., 1999; as cited in Mihrshahi et al., 2007). It decreases the incidence and severity of infectious diseases including diarrhea, respiratory tract infections, necrotizing enterocolitis, otitis media, urinary tract infection, and late onset sepsis in preterm (UNICEF, 2008; Wardley et al., 1997). It also protects against allergy (Leung & Sauve, 2005; Reddy, n. d; Wardley et al.).

Breastfeeding reduces the rates of sudden infant death syndrome, the incidence of diabetes, obesity, hypercholestrolemia, and asthma (Home, Parslow, & Ferens et al.; as cited in Memon et al., 2006; Reddy n. d.; United States Breastfeeding Committee, 2002; Leung & Sauve, 2005). Human milk is easily digestible (Reddy). VanDerslice, Popkin, and Briscoe (1994) mentioned that breastfeeding is very effective for protecting young infants from diarrheal disease. Infants who are not

breastfed have a 2-3 times greater risk of diarrhea than breastfed infants and 3-5 times greater risk of pneumonia than exclusively breastfed infants. Early breastfeeding within one hour can reduce newborn infections by 6 times. Exclusive breastfeeding for the first 6 months can reduce diarrhea and pneumonia by 3 and 2.5 times respectively (Imtiaz & Saleem, 2009).

For premature infants human milk reduces the risk of life-threatening diseases of the gastrointestinal system and other infectious diseases. Human milk significantly shortens the length of hospital stays and reduces hospital costs. In a study comparing premature infants who received human milk with those who received formula milk the latter have future intelligence quotients (IQ) that are 8-15 points lower. Breastfed infants have been shown to have a higher intelligence quotient (United States Breastfeeding Committee, 2002). In addition, it enhances the neurological, visual, and oral development of the baby (Wardley et al., 1997).

Benefits for Mothers

Breastfeeding protects the mother's health (Rehana, 1998). Breastfeeding reduces the mother's risk of breast cancer and protects her from ovarian cancer. It also reduces the risk of post partum bleeding which can kill the mother (Labbok, 2001). Breastfeeding contributes to birth spacing (Rehana). Frequent suckling from the birth hormonally inhibits ovulation and therefore delays the next pregnancy. Exclusive breastfeeding can protect against pregnancy 98% during the first six months after giving birth (Labbok, 2001). It also reduces the mother's risk of anemia and may improve the health of the mother (Labbok; Wardley et al., 1997). It promotes good bonding between mother and infant. Bonding between mother and child is a continuous process, and early initiation of breastfeeding helps mother and child to get

extra contact which promotes bonding between them (Leung & Sauve, 2005; UNICEF, 2008; Wardley et al., 1997). It facilitates skin to skin contact and physical warmth between the mother and child, which further strengthens the emotional bond between mother and child (Reddy, n.d.).

Benefits for the Family

The United States Breastfeeding Committee (2002) suggested that breastfeeding reduces the need for costly health services that must be paid by families and also reduces the number of sick days that families must use to care for their sick children. From the economic perspective, breastfeeding saves money. It is also less expensive than formula feeding (Leung & Sauve, 2005).

Benefits for Society

Breastfeeding decreases the environmental burden for disposal of formula cans and bottles and decreases the energy demands for production and transport of artificial feeding products. It requires no packaging and its production does not harm the environment. It also reduces the need for costly health services that must be paid for by insurers or government agencies (United State Breastfeeding Committee, 2002).

In summary, exclusive breastfeeding has a protective role against infectious diseases resulting in decreasing the infant mortality and morbidity rate. Breastfeeding also protects mothers and establishes good bonding between mother and infant. Moreover, breastfeeding saves money for the family and also reduces the need for costly health services that must be paid for by insurers or government agencies. It also decreases the environmental burden.

Family Support for Exclusive Breastfeeding Practice

Family support is the most significant source of support for exclusive breastfeeding practice among mothers. A review of family support is one of the main aspects of this study which is divided into three parts: definition of family support; sources of family support and types of family support; and significance of family support for exclusive breastfeeding practice.

Definition of Family Support

Family support based on House's concept (1981) of social support is conceptualized as composing four dimensions including emotional, informational, appraisal, and instrumental support. Social support is the perceived support from family members, friends, and community sources (Fink, 1995 as cited in Heitman, 2006). Families provide support to one another by influencing, nurturing, and reinforcing beliefs, sharing tasks, and exchanging feelings and information. It may be in the form of instrumental, or functional, support, in practical matters such as the provision of food, transportation, clothing, housing, and access to healthcare (Heitman).

Family support might influence an individual's self-care behavior through enhancing motivation, and providing information and feedback. In an unpublished thesis Jimping (2000) defined family support as to the person's perception that his/her needs for assistance are fulfilled by family members including parents, siblings, spouse and close relatives. Family support is a type of social support that is obtained from the family. When people obtain adequate family supports they tend to feel encouraged, motivated, supported, good about themselves, and feel a need to pursue new paths. They feel they want to work harder and longer to recover. They feel a need

to become conscientious in their efforts to change and to become more realistic about the time and efforts needed to make necessary changes in their lives (Messina, 2007).

Pender et al. (2002) described family support as an interpersonal transaction involving emotional concerns (expression of care, encouragement, empathy), aid (service, money, or information), and affirmation (constructive feedback, acknowledgment). Families, in order to provide appropriate support, must recognize the needs of their members, establish effective communication, respect the unique needs of family members, and establish expectation of mutual help and assistance (Pender et al., 2006).

In conclusion, family support refers to one's need for physical, emotional, informational, and intimate support by family members, including husband, parents, mother-in-law, grandmother and other family members in order to maintain healthy practices.

Sources of Family Support on Breastfeeding

The support from family members, particularly from the husband, mother of the lactating mother, mother-in-law, grandmother and other family members will influence the breastfeeding practice of mothers. Feeding decisions are strongly influenced by the views of the family and friends (Hauck & Irurita, 2003). Thus, family members are considered as significant sources of family support. The sources of support to a mother vary and are based on age, with adult mothers citing their partners as the most important source of emotional, informational, and instrumental support. Teenage mothers received social support most often from their own mother (McVeigh & Smith, 2000). The mother-in-law is also a key person and decision-maker in the early initiation of breastfeeding (Masvie, 2006). Family support,

particularly the opinion of the baby's father and the maternal grandmother, has a highly predictive effect on the initiation and continuation of breastfeeding (Smith & Tully, 2001).

A husband's positive attitude towards breastfeeding is related to better coping with breastfeeding by the mother. Tarkka and colleagues (1999) reported that 98% of mothers stated that the baby's father was the most important person to support breastfeeding. In many studies, participants identified their husband as the main person most supportive of their decision about breastfeeding. The emotional support provided by the husband also encouraged them to breastfeed for a long time (Februhartanty et al., 2006; McVeigh & Smith, 2000; Moore & Coty, 2005).

From the review, family members are considered as significant sources of family support. It could be concluded that baby's father was the most important person who influences and supports breastfeeding.

Types of Family Support

Lactating mothers receive several types of support from the family. There are several types of family support. Following the definition of social support based on House (1981) family support consists of four types of support: emotional, informational, appraisal, and instrumental.

1. Emotional support is the expression of empathy, love, trust, reassurance, encouragement, caring and concern towards the person. It means family members showing empathy, love and caring attitudes.

2. Instrumental support involves direct assistance of a practical nature. It provides tangible support such as financial or services.

3. Informational support refers to the help that family offers through the provision of information, including practical advice. It provides personal information, advice, directions, and suggestions about how the person is doing

4. Appraisal support refers to the provision of affirmative support or constructive feedback that is useful for self-evaluation. It involves giving an assessment and reinforcement for the positive behaviors.

Significance of Family Support for Exclusive Breastfeeding Practice

Family support is the social support that is provided by the family to its family members which has a significant role in promoting and maintaining the health of an individual. Social support can enhance health and well-being, reduce levels of maladaptation and prevent unfortunate consequence due to the transitions and challenges of life (House, 1981). Families have core responsibilities for their members that society cannot replace, and it can support through providing resources and services. Family responsibilities include economic support, health care and protection, education and socialization, and family maintenance (Family Support, n.d.). Socio-cultural and economic support has a great role in obtaining the full benefits of breastfeeding. It includes: adequate food for the mother; complementary foods for the infant's diet; fair labor compensation; protection; support; and promoting the hygienic well-being of the family.

Family support is a significant contributing factor to the mother’s adherence to exclusive breastfeeding practice. The baby’s father is the most important person who influences and supports breastfeeding. A review of literature, including quantitative and qualitative studies, revealed the significant contributions of father and other family members to mother’s breastfeeding practice (Clifford & McIntyre, 2008;

Humphreys et al., 1998). In a study conducted in Uganda, the researchers explored 139 HIV infected mothers. The researchers found that mothers who adhere to exclusive breastfeeding were about 5 times more likely to receive support from the father than mothers who did not adhered to exclusive breastfeeding (Matovu, Kirunda, Rugamba-Kabagambe, Tumwesigye, & Nuwaha, 2008). In another study conducted in Nigeria, the researchers found that although the husband's support significantly increased the total duration of breastfeeding by a mean of 1.69 months, exclusive breastfeeding was not significantly affected by the husband's support (Olayemi et al., 2007). Although these two studies show conflicting results, they have led nurse midwives and researchers to include husbands in breastfeeding programs (Chaemsai, 2007). Olayemi and colleagues' study (2007) found that female support (support from older female relations) had a significant influence on both the total duration of breastfeeding, which was increased by a mean of 1.08 months, and the adequate conduct of exclusive breastfeeding.

Februhartanty et al. (2006) reported that husbands helped the mother during lactation period by providing assistance with household chores and child caring (such as bathing, feeding, and playing), and also comforting the mothers. In this study the husband's role as a friend to share household problems and nutrition, and the physical problems of the child may be regarded as a form of emotional support. The husband's role in the provision of help in household tasks 40 days after delivery is considered to be more of a physical support (Februhartanty et al.). As reported, father can be involved during antenatal visits, in child caring and household work, as well as providing comfort to the nursing mother during breastfeeding or when feeling tired from massage.

In conclusion, family support is very important for lactating mothers in order to exclusive breastfeeding practice. Family members particularly husband was more significant person for the lactating mothers by providing emotional, instrumental, informational, and financial support. So, appropriate family support can increase exclusive breastfeeding practice.

Factors Related to Family Support on Exclusive Breastfeeding Practice

Several factors can be identified from previous literature that affects the breastfeeding practice of the mother towards their babies. These factors include socio-cultural and social networks, socio-economic conditions, education and occupation, maternal knowledge and attitudes, mother's experience, mother's health condition, and infant problems. Each of these factors are discussed briefly as follows:

Socio-cultural and social networks

Traditional and cultural beliefs influence breastfeeding practice. Family ritual in child rearing practice influences breastfeeding. Culture and religious beliefs are important sources for feeding rituals. South Asian countries share some common rituals, such as prelacteal feeding. In Hindu communities it appears that although almost every Hindu child gets some breastfeeding, exclusive breastfeeding for the recommended duration and the early initiation of breastfeeding are not commonly practiced. This may be due to their ritual practice of providing prelacteal feeding, usually honey. Mothers believed it made babies' voices sweet and it protects babies from cold (Laroia & Sharma, 2006). Among some Hindus, colostrum is discarded because of the belief that its thickness and viscosity may be difficult for the newborn to swallow. Furthermore, there are beliefs that the first breast milk is "stale," or "old"

from being stored in the breasts for the duration of the pregnancy (Ingram, Johnson, & Hamid, 2003). Therefore, the breasts must be washed and colostrum should be discarded for the first day until true milk comes. In the interim, prelacteals are given to the newborn.

Similar practices are found in Muslim communities, particularly in Bangladesh where the majority of people are Muslims. In a retrospective survey with 420 mothers in rural Bangladesh, prelacteal feeding was found to be given to 77% of the babies, and honey was given to 72% of them. Reasons for giving prelacteal feeding and the time of giving the first breast feeding significantly influenced later breastfeeding practice ($p < 0.05$). A cycle was established in which prelacteal feeding delayed the initiation of lactation and the delay in lactation encouraged further prelacteal feeding (Ahmed, Rahman, & Alam, 1996).

Mothers disliked the consistency of colostrums and believed it was harmful and caused liver problems or recurring diarrhea (Hizel, Ceyhun, Tanzer, & Sanli, 2006). Memon et al. (2006) found that the prelacteal feeding of tea, honey, water and ghutti was common, and traditionally colostrum was discarded for 2 to 3 days as it was considered thick and stale. It was traditionally believed that mother's milk would come on the third day so honey, sugar or ghee was given to the newborn baby before breastfeeding (Masvie, 2006). It was also presumed that village elders and families urged the giving of supplementary food and thus influenced the mother. They decided to mix-feed their babies due to this pressure. They believed that breastfeeding provided an incomplete food which would not increase the infant's weight. It was felt that the baby should be fed with food grown by their family (Kakute et al., 2005).

Socio-economic conditions

The socio-economic status of mothers is associated with the initiation and duration of breastfeeding. A study in Bangladesh revealed that the women who lived in rural areas were less likely to stop breastfeeding than the mothers who lived in urban area (Giashuddin & Kabir, 2003). The economic conditions are also favorable for exclusive breastfeeding practice. Mothers who have good economic support are able to maintain a good nutritional status which helps them to continuously breastfeed (Giashuddin, Kabir, Rahman, & Hannan, 2003). Another study found that economically affluent families could afford to buy powdered milk and other baby formulas. High family income is one of the reasons for a shorter duration of breastfeeding (Giashuddin & Kabir, 2004)

Education and occupation

Education and occupation of both mothers and fathers was found inversely related with the duration of breastfeeding. Maternal or paternal education may reflect more educated parents who are more likely to find out information on the health aspects of infant feeding choices, and knowledge about the benefits of breastfeeding. Heck, Braveman, Cubbin, Chavez, and Kiely (2006) mentioned that women whose partners were highly educated and had professional or executive occupations were more likely to breastfeed their babies than women whose partners had lower educational levels and lower status occupations. Another study found that women who worked full time were less likely to breastfeeding than full-time housewives. (Deshpande & Gazmararian, 2000).

Maternal knowledge and attitudes

Maternal prenatal knowledge about the importance of breastfeeding positively influences the mother's attitude about breastfeeding her baby (Adewale, 2006; Moore & Coty, 2005). Chatman et al. (2004) studied the influence of knowledge and attitudes on exclusive breastfeeding practice among rural Jamaican mothers. They showed that approximately 98 percent of the mothers indicated satisfactory breastfeeding knowledge. Mother's higher knowledge about breastfeeding was associated with longer duration of breastfeeding (Kronborg & Vacth, 2004). Mother's attitudes towards breastfeeding was associated with intention to breastfeed their babies. Mothers who believed that breastfeeding is better for their infants were more likely to continue breastfeeding up to six months (Galler et al., 2006).

Mother's experience

A mother may have previous experience of infant feeding. This can be a strong influence in deciding whether to breastfeed or bottle-feed an infant. Ingram, Wooldridge, and Greenwood (2001) found that mothers who experienced breastfeeding difficulties with their first baby and gave up breastfeeding were less likely to breastfeed subsequent babies than mothers who did not experience such difficulties. The first-time mothers may have many questions about breastfeeding and may need assistance during the first feeding. Mothers with previous experience may have a better understanding regarding breastfeeding (Mckinney, James, Murrary, & Ashwill, 2005). The lack of confidence during the first one to two days is a common cause of discontinuation of breastfeeding within the first two weeks (Mckinney et al., as cited in Taveras et al., 2004).

Mother's health condition

The mother's physical and psychological health affects their breastfeeding practice. The mothers' physical condition, including sore and painful nipples, breast engorgement, and mastitis are common breastfeeding problems of mothers which are related to distress and discomfort and lead them to discontinue the breastfeeding within a few weeks after delivery (Cooke et al., 2006). Kaewsarn and Moyle (2000) also found that mother's physical health was most likely the reason for stopping breastfeeding. Insufficient milk supply is another very common reason for early cessation of breastfeeding (Gatti, 2008). It can be caused by infrequent or incomplete breast emptying, anxiety and an inadequate maternal diet (Leung & Sauve, 2005). Among psychological conditions, anxiety plays an important role in the breastfeeding practices of mothers. Chatman et al. (2004) reported that maternal anxiety influenced physiological the milk ejection reflex that might be the cause of an inadequate milk flow. Anxiety can also lead to the perception of an insufficient milk supply.

Infant problems

Infants' physical health, including congenital abnormalities such as cleft lip and palate, and baby's behavioral responses also affect a baby's breastfeeding. A baby with a cleft lip and palate faces many difficulties during feeding. A baby with bilateral and sometimes unilateral clefts usually has difficulty in breastfeeding because of ineffective sucking and assisted feeding is required by using a bottle (Owens, 2008).

However, Inch (2003) stated that feeding may be possible but collaborative management is effectively needed to support this group. Baby's behavioral responses also influence feeding. Okamotor and Matsuoka (2009) reported that 60.8% of mothers experienced emotional unrest due to excessive crying by the baby. A

mother's coping is affected by whether the child is restless, weepy, or easily irritated. A difficult child adds to the work load and tiredness of the mother. Those mothers whose children are perceived as being calm by nature experience fewer problems, greater satisfaction, and cope better with breastfeeding (Cronin, 2003; Tarkka et al., 1999). However it is essential for mothers to be alert about their babies.

In conclusion, the above findings suggest that socio-cultural and social networks, socio-economic conditions, education and occupation, maternal knowledge and attitudes, mother's experience, mother's health condition and infant problems all highly influence breastfeeding practice by lactating mothers.

Relationships Between Family Support and Exclusive Breastfeeding Practice Quality and Duration

Exclusive breastfeeding practice mainly depends on family support. If the lactating mother get sufficient physical, mental, nutritional, and informational support from family members, these will be helpful for the lactating mother to continue exclusive breastfeeding practice. It was found that mothers who had high social support were more likely to practice breastfeeding than mothers who had low social support (21.0% and 10.9%, respectively). However, the relationship between social support and breastfeeding practice was not statistically significant (Zainal, Isaranurug, Nanthamongkolchai, & Voramongkol, 2004).

The relationship between family support and exclusive breastfeeding practice quality in Bangladesh culture is valid even when lactating mothers immigrate to other countries. Specific family members' influence varies from place to place, and the woman's decision to exclusively breastfeed may be restricted by the conditions

imposed by the household leader or other family members (Espinoza, 2002). In a study conducted in Stockholm, Sweden (Rehana, 1998), 40 Bangladeshi immigrant women participated. A man's positive or negative attitudes towards breastfeeding can easily influence a woman's breastfeeding behavior. The researcher found that mothers who were advised by their husbands about breastfeeding practices were exclusively breastfeeding for significantly longer periods than mothers who had not received such advice. Mothers were advised by their mothers to breastfeed and not to combine it with bottle feeding and avoid giving honey to their babies.

The family structure was found to be significantly associated with the prevalence of exclusive breastfeeding. Women who were heads of households and women whose partners were the heads of house-hold were found to have a significantly low prevalence of exclusive breastfeeding, compared to women living under the familial authority of a female relative (Espinoza, 2002). Some mothers wished to breastfeed but stopped within a few days due to lack of appropriate support and preparation for management of breastfeeding problems (Arthur, Unwin, & Mitchell, 2007). Mothers are experienced about the physical, mental and social changes after birth. These changes may have different effects on individual mothers, and maternal close relatives should be aware of these changes (Tarkka et al., 1999). The importance of breastfeeding and its contributing factors should be discussed with the supporting person who can encourage and help the mother to continue the breastfeeding up to six months (Mckinney et al., 2005). Support is essential to continue the exclusive breastfeeding up to six months for baby (Nelson, 2007).

Exclusive Breastfeeding Practice Quality and Duration in Bangladesh

The short duration of exclusive breastfeeding practice and inappropriate feeding practice are common in both urban and rural areas of Bangladesh. Breastfeeding practice is one of the main aspects of this present study. The following is a brief review of the exclusive breastfeeding situation and factors related to exclusive breastfeeding practice in Bangladesh.

Exclusive Breastfeeding Situation in Bangladesh

Breastfeeding in Bangladesh is almost "universal" (United States Agency for International Development, 1989). However, several aspects are problematic. These include delay in initiation of breastfeeding, use of prelacteal feeds, and use of supplements from an early age. In Bangladesh almost 97% of mothers' breastfeed their children for some period of time (Ahmed, Parveen, & Islam, 1999; as cited in Giashuddin & Kabir, 2003). A study was conducted in Dhaka, Bangladesh that looked at the effects of community-based peers counseling on exclusive breastfeeding practices. The result showed a significant increase in women who breastfeed exclusively. Seventy percent of women in the intervention group who participated in community-based peer counseling were giving exclusively breastfeeding, compared to only 6% in the control group (Haider, Ashworth, Kabir, & Huttly, 2000). Haider et al. (1997) found that after counseling 75% of the mothers exclusively breastfed and 25% mother failed to exclusively breastfeed.

Although breastfeeding is almost universal in Bangladesh, the rate of exclusive breastfeeding remains low. Recent data showed that only 38 percent of children aged 2-3 months were exclusively breastfed and 23 percent of children were given complementary foods before the 6 months (Mihrshahi et al., 2008). In Bangladesh the

rate of exclusive breastfeeding practice is about 43 percent (UNICEF, 2008). However, breastfeeding is universal in Bangladesh, but prelacteal food and early initiative of supplementary food both hampered exclusive breastfeeding practice. Breastfeeding counseling is significant in increasing exclusive breastfeeding practice.

Factors Related to Exclusive Breastfeeding Practice in Bangladesh

Several factors identified from previous literature affect the exclusive breastfeeding practice of the mother with their babies. These factors include a mother's personal factors such as age, educational level and employment, birth spacing, child'. Each of these factors is discussed in brief as follows:

Maternal age

Maternal age is one of the significant factors that influence exclusive breastfeeding practices. In Bangladesh, early marriage leads young women to become mothers early. This may affect the mother's breastfeeding behavior. Most of the mothers are aged between 20-30 years and bear children during these periods (Maitra & Pal, 2004). One study found that older mothers breastfed their babies for longer period as compared to younger mothers (Haque et al., 2002; Giashuddin & Kabir, 2003). Therefore, this shows that a mother's age does contribute to their exclusive breastfeeding practice.

Maternal education

Maternal education is an important factor which influences the duration of breastfeeding. Giashuddin et al. (2003) mentioned that mothers' levels of education had a significant impact on exclusive breastfeeding. Mothers' who had completed secondary education continued breastfeeding more than mothers with only primary education. Mothers with secondary and higher education exclusively breastfed their

child more than illiterate mothers (Ahmed, Parveen, & Islam, 1999). Another study showed that mothers who had completed secondary and higher education followed a shorter duration of breastfeeding than less educated or uneducated mothers (Giashuddin & Kabir, 2004).

Employed mothers

The most significant effect on breastfeeding pattern is the mother's work status. Ghosh, Taylor, and Rosetta (2006) found that the frequency of breastfeeding was less in working mother. The women in the study were either employed as tea-pluckers or housewives. The tea-workers were poor and most of them were illiterate. Employed mothers of very young infants tried to return home at lunch time to feed their babies. However, due to the long distances to and from the plucking site, they were unable to do so. The maternal working position is also associated with the duration and frequency of breastfeeding.

Previous research by Islam, Yadava, and Alam (2006) revealed that education, as well as occupation of mothers, was correlated with the duration of breastfeeding. Most of the educated mothers worked outside in the daytime and thus tended to lactate for shorter periods and probably also provided food supplements to the children much earlier.

Birth spacing

A previous study found that birth spacing had an influence on the duration of breast-feeding of the mother (Giashuddin & Kabir, 2004). It was also found that birth spacing had a positive influence on the duration of breastfeeding for their baby. Multiple births diminish women's body nutrients and increase the risk of giving birth to a low birth-weight baby. Poor nutritional status of the mother might also be a

reason for terminating breastfeeding early. Another study found that birth spacing between two consecutive childbirths was less than 4 years (Ghosh et al., 2006).

Child's sex

Empirical evidence suggested that the continuation of breastfeeding was influenced by the child's sex. The female children had the lower risk of stopping breastfeeding than male children (Giashuddin & Kabir, 2003; Giashuddin et al., 2003). Conversely, another study found that mother gave more breastfeeding to their male children than female (Ghosh et al., 2006). Therefore, the sex is a controversial factor in terms of exclusive breastfeeding practice for mothers. In Bangladesh, it is a reality that mother are more attentive towards the male child rather than the female (Choudhury, Hanifi, Rasheed, & Bhuiya, 2000).

Socio-economic condition

The socio-economic condition of the families may indirectly influence the mother's breastfeeding practice. The family's economic and mothers' health status is more frequently related and this has an effect on the amount of breast milk secreted by the mother. According to Giashuddin and Kabir (2004) the poor nutritional status of the mother might also be reason for termination of breastfeeding. One study noted that economically affluent families could afford artificial milk for their baby and that affects the mother's attitudes about breastfeeding (Giashuddin & Kabir). Another study found that mothers of higher family income groups more exclusive breastfed their children than lower family income groups (Giashuddin et al., 2003).

Socio-cultural factors

Cultural factors are influential factors regarding exclusive breastfeeding practice. In Bangladesh some cultural practices exist which are not favorable for

exclusive breastfeeding. Traditionally mothers believed that secretion of breast milk on the second or third days was poor so they gave prelacteal food immediately after birth (Haque et al., 2002). A study showed that traditionally mothers believe that colostrum is thick, cheesy, indigestible, impure, and harmful to the baby. As a result mothers have discarded it initiate breastfeeding on the second or third day after the birth of the baby (Dakshayani & Gangadhar, 2008). Rashid, Hadi, Afsana, and Begum (2001) conducted a study to explore the mother's knowledge regarding their caring behavior towards their baby suffering from acute respiratory tract infection (ARI). The results of this study revealed that mothers provided lemon juice, honey, and warm fluids to the baby for minor illnesses which was one of the important factors that affects the exclusive breastfeeding practice. This data clearly indicated the mother's cultural beliefs influenced their practicing of exclusive breastfeeding.

In Bangladesh, 98% of newborns are traditionally fed with "heating foods" such as honey, sugar water, or mustard oil. Mothers believed that these foods provide strength to the babies and protect newborns from cold during the first few days of after childbirth. Mothers also believed that honey makes the babies' voices sweet (Rehana, 1998). This practice affects the mother's exclusive breastfeeding behavior with their babies.

From the above findings it can be concluded that maternal age, maternal education, employment mother, birth spacing, the child's sex, socio-economic conditions and socio-cultural factors or beliefs all greatly affect the exclusive breastfeeding practice of lactating mothers.

Summary

Breastfeeding is a way of providing ideal food for the healthy growth and development of infants. Breastfeeding may be defined as the feeding of baby with only breast milk up to 6 months, and continuing the breastfeeding up to two years of age with additional food, water, medicine or vitamins. The benefits of exclusive breastfeeding include its protective role against infectious diseases which, in turn, reduces infant mortality and morbidity rates. Breastfeeding also protects a mother's health from various problems and establishes good bonding between mother and infant. In Bangladesh the rate of exclusive breastfeeding practice is about 43 percent. The following factors are responsible for exclusive breastfeeding practice: maternal age; maternal educational level and employment; birth spacing; child sex; far socio-economic condition; and cultural factors.

Family support might influence the lactating mother in her exclusive breastfeeding practices through enhancing the motivation and providing information. Four types of support include emotional, instrumental, informational and appraisal support. Such support is important for exclusive breastfeeding practices. Family support is essential for all lactating mothers. Women with familial or financial problems require special attention and extra counseling sessions so that they can help to identify how to achieve and maintain exclusive breastfeeding. In Bangladesh, there are many studies that have explored exclusive breastfeeding, but the relationship between exclusive breastfeeding and family support is little known. However, the Bangladesh Government has taken the initiatives to increase exclusive breastfeeding practice and these have been implemented around the country. However, existing studies indicated that exclusive breastfeeding practice in Bangladesh is still very low.

CHAPTER 3

RESEARCH METHODOLOGY

This chapter consists of research design, setting, population and sample, sampling technique, sample size, instrumentation, data collection procedures, ethical considerations, and data analysis.

Study Design

A descriptive correlational study was used in this study to examine the relationships between family support and the quality and duration of exclusive breastfeeding practice among mothers of infants aged 9-12 months.

Study Setting

This study was conducted at the Expanded Program of Immunization (EPI) Centre in Sylhet Osmani Medical College Hospital (SOMCH). The SOMCH is a medical college hospital in north-eastern Bangladesh. It is located in an urban area in Sylhet division and the Expanded Program of Immunization (EPI) centre is situated near this hospital. Postpartum mothers, who delivered babies at this hospital and those who have home-based birth delivery with traditional birth attendants (TBA) both use the service of this EPI center for infant immunization. Usually postpartum and lactating mothers bring their child for immunization at the age of one and half months. Monthly, there are approximately 1,200 lactating mothers who have 9-12 months aged infants and infants receive the EPI service.

Population and Sample

The target population was mothers who have infants aged 9-12 months and living with family members. The sample of this study was mothers who took their child to receive immunization services at the Expanded Program of Immunization (EPI) Centre in Sylhet Osmani Medical College Hospital (SOMCH).

Sampling Technique

Convenience sampling was used for eligible subjects to participate in this study. The inclusion criteria for selecting the subjects for this study were as follows.

1. Mothers of infants aged 9-12 months
2. Live with family members
3. Mothers without medical problems

Sample Size

The sample size of this study was estimated by using power analysis (Polit & Beck, 2008). The estimated sample size was calculated for an accepted minimum level of significance (α) of .05, an expected power of .80 as the accepted minimum level of power of the test, and an estimated population effect size of .30. In this study, the researcher used the small to medium effect size of .30 to determine the sample size (Polit & Beck). Therefore, the actual number of the sample needed for this study was 88. Twelve percent was added and rounded up yielding a sample size of 100. The justification was to ensure adequate completed and returned responses.

Instrumentation

The instruments used for this study were the structured questionnaires developed by the researcher based on the literature review. The instruments consisted of three parts: Part I: Personal Assessment Form (demographic information); Part II: Exclusive Breastfeeding Practice Quality and Duration Questionnaire; and Part III: Family Support Questionnaire (Appendix B).

Part I: Personal Assessment Form. This form was used to collect demographic data. It consists of 14 items including the mother's age, religion, marital status, mother's education, mother's occupation, family monthly income, child's sex, birth order of current childbirth, place of birth, assistance with delivery, pattern of infant feeding, number of persons in the family, pattern of family, and overall support received from family members.

Part II: Exclusive Breastfeeding Practice Quality and Duration Questionnaire. This part was used to collect data on the quality and duration of exclusive breastfeeding practice of the mothers. They were asked to answer "Yes" or "No" to indicate the practices of breastfeeding. There are 3 main statements that vary the degree of breastfeeding practices: (1) strictly feed only breast milk without any additional supplementation (exclusive breastfeeding); (2) feed breast milk with water-based drink and/or small amount of ritual fluids, without any food-based fluid (predominantly breastfeeding); and (3) feed breast milk and any food or liquid including non-human milk (partial breastfeeding). For each statement, subjects were further asked to provide information about the duration of the exclusive breastfeeding practice. If subjects provided additional drink, fluids, and foods to infants, they were asked to provide such information. The questionnaire consisted of 13 items. There

were 6 closed-ended questions in which the first 6 items (four negative items and two positive items) were related to exclusive breastfeeding practice quality and the last item was related to duration. The response format for items 1-6 were yes or no where "yes" indicated the practice of that item (score 1), and "no" indicated no practice (score 0). The score of negative items were reversed. The summed score of these 6 items produced the breastfeeding practice quality. The mean scores of each item range from 0 to 6. For interpretation, the researcher divided the transformed score into three levels (highest score – lowest score)/3 (Kiess, 1996). The following scoring was used: 0-2.00 = low; 2.01-4.00 = moderate; 4.1-6.00 = high.

There were six open-ended questions that asked information related to exclusive breastfeeding practice. These identified: the hours of breastfeeding per day, the prelacteal feeding time and type of food; supplementary feeding time and reasons; and time breastfeeding was stopped. The last open-ended question asked mothers to identify the duration of breastfeeding.

Part III: Family Support Questionnaire (FSQ). The FSQ was developed by the researcher based on the concept of social support proposed by House (1981) and was used to measure family support (Appendix B. Part 3). The FSQ consisted of 20 items including: 1) Emotional support (items 1-5); 2) Instrumental support (items 6-10); 3) Informational supports (items 11-15); and 4) Appraisal support (items 16-20). All items were framed in a positive way. Each item was scored from 1 to 5. The lactating mothers were informed to mark ✓ on a 1-5 point Likert scale ranging from: never = 1; sometimes = 2; often = 3; very often = 4; and always = 5. The total score was of family support was computed by summing the score of each item constructed for the five item subscale. The total scores could range from 20 to 100.

For interpretation, the researcher divided the transformed score into three levels using the same technique as Part II (Kiess, 1996). In order to determine the level of overall family support for each dimension, the mean scores were categorized into three levels: 1.00-2.33 = low; 2.34-3.66 = moderate; and 3.67-5.00 = high.

Translation of the Instruments

The instruments in this study were translated using the back-translation technique (Sperder & Devellis, 1994). The original questionnaires were developed in the English language. The original English version of the questionnaires was translated to a Bengali version by a Bangladeshi bilingual translator. Another bilingual translator translated the Bengali version to English. Finally, an English expert evaluated both the original English version and the English back-translated version for discrepancies to ensure the equivalence of these two versions.

Validity of the Instruments

The contents of each questionnaire were validated for appropriateness and accuracy by three experts in this field. The experts consisted of a nursing educator from Department of Obstetirc-Gynaecology and Midwifery another from the Public Health Nursing Department, Faculty of Nursing, Prince of Songkla University, Thailand who was specialized in this field and in instrument development. The third one was a pediatrician in Bangladesh who is an expert in child and maternal care. The content validity concerned the degree to which each item of the instruments appropriately measured the family support questionnaire and the quality and duration exclusive breastfeeding practice questionnaire. The researcher further modified the instrument based on expert's comments and suggestions.

Reliability of the Instruments

The reliability of the Exclusive Breastfeeding Practice Quality Questionnaire (part two) and Family Support Questionnaire (part three) was examined for internal consistency by using Cronbach's alpha coefficient with 20 mothers who met the same criteria as the actual sample. Cronbach's alpha coefficient of at least .70 for new questionnaires was considered satisfactory and was used for this study (Polit & Beck, 2008). The reliability of the Exclusive Breastfeeding Practice Quality Questionnaires was .72 and the Family Support Questionnaire was .98.

*Data Collection Procedure*s

Data were collected at the Expanded Program of Immunization (EPI) Centre in Sylhet Osmani Medical College Hospital (SOMCH) north-eastern Bangladesh during January, 2010 to February 2010. The data collection procedures were divided into two phases: preparation and implementation phase.

Preparation phase

1. The proposal was approved by the Research Ethics Committee and a letter requesting for permission to collect data was written by the Dean, Faculty of Nursing, Prince of Songkla University, Thailand. The researcher then met and submitted the letter requesting for permission to collect data to the Director of Sylhet Osmani Medical College Hospital in Bangladesh.

2. The researcher explained about the objectives, study method, and benefits of the study to the Director.

3. The researcher met with the head nurse (nurse-in-charge) of the Expanded Program of Immunization (EPI) Centre and explained about the objectives, study

method, and benefits of the study. She also requested for help to identify potential subjects who met the inclusion criteria.

Implementation Phase

1. The researcher introduced herself to the eligible subjects and explained the objectives, their rights and the benefits of the study and invited them to participate in the study.

2. The subjects who agreed to participate in this study were asked to sign the consent form (Appendix A). They were informed how to complete the questionnaires.

3. The researcher asked the mothers to complete the questionnaire. In the case of the illiterate mothers the researcher read out the questionnaires to them and marked them in accord with their responses.

4. The questionnaires were checked to make sure they were complete.

Ethical Considerations

This study proposal was approved by the Research Ethics Committee, Faculty of Nursing, Prince of Songkla University, Thailand. Permission for data collection was obtained from the Director of Sylhet Osmani Medical College Hospital (SOMCH), Bangladesh and from the nurse-in-charge of the (EPI) center. The researcher explained the purpose of the study to participants. They were informed that their participation was purely voluntary, and the confidentiality would be maintained by using code numbers. Participants were given freedom to ask for explanations regarding the instruments or to withdraw from the study at any time.

Data Analysis

Descriptive and inferential statistics were used to analyze the data. The level of family support and the quality and duration of the exclusive breastfeeding practice were analyzed by using descriptive statistics. Pearson product-moment correlation was used to examine the relationship between family support and the quality and duration of exclusive breastfeeding practice among mothers. All assumptions of Pearson product-moment correlation test were met.

CHAPTER 4

RESULTS AND DISCUSSION

The findings of this study are presented as follows: demographic characteristics; quality and duration of the exclusive breastfeeding practice; family support; and the relationship between the family support and the quality and duration of the exclusive breastfeeding practice.

Results

Demographic Characteristics of the Subjects

The subjects consisted of 100 mothers who had 9-12 month-old infants. The mothers' mean age was 25.68 years (SD = 4.45), ranging from 19 to 40 years. The majority of the mothers were Muslims (75%) and house-wives (86%). They lived in extended families. More than half of the mothers' were illiterate or had primary school level education (52%). More than two-thirds of the mothers (71%) had a family monthly income of more than 7,000 TK (100 US$). The results showed that more than half of mothers (55%) delivered their babies both in hospitals and in the private clinics with the assistance of doctors. The rest of them (45%) delivered at home; 34% received assistance from their relatives during delivery, while 11% were delivered by a Traditional Birth Attendant (TBA). Data revealed that three-fourths (75%) of the subjects lived with extended families and the majority of them had an average of above five family members (Table 1).

As to the duration of breastfeeding, less than half (42%) of the mothers continued breastfeeding their baby up to six months. A quarter of the mothers

breastfed their babies for up to 6 months with prelacteal food (Appendix C, Table 9). Only 17% of the mothers who participated in this study practiced exclusive breastfeeding up to 6 months. Thirty two percent started prelacteal food within 30 minutes of childbirth and 62% of mothers used water, honey, sugar water, and mustard oil as prelacteal food. Fifty eight percent of the mothers had breastfed their baby 0-5 months with supplementary food (Appendix C, Table 7).

Table 1

Frequency and Percentage of Demographic Characteristic Among Mothers (N = 100)

Variables	n (%)
Mother's Age (years) M = 25.68, SD = 4.45, Min - Max = 19 - 40	
<20	16
21-34	81
>35	3
Religion	
Muslim	75
Hindu	25
Marital status	
Separated	5
Lived with husband	95
Mothers' Education	
Illiterate & Primary school	52
Secondary school, Undergraduate & Postgradute	48
Mothers occupation	
House wives	86
Employment, day labour & household worker	14
Family monthly income (Taka	
<7,000 TK	29
>7,000 TK	71

Table 1 *(Continued)*

Variables	n (%)
Child Sex	
Male	46
Female	54
Order of current child birth	
First	48
Second & higher	52
Place of current giving birth	
Home	45
Hospital & Clinic	55
Delivery assistant	
Doctor	55
Traditional birth attendant & Skilled birth attendant	11
Relatives	34
Pattern of infant feeding practice in the past 6 months after giving birth	
Breast milk	42
Breastmilk & formula	35
Breast milk & mixed	23
Number of persons in the family	
3 persons	10
4 persons	21
5 persons	15
More than 5 persons	54
Family Pattern	
Nuclear family	24
Extended family	76

Quality and Duration of Exclusive Breastfeeding Practice

The results show that the quality of the exclusive breastfeeding practice was at moderate level (M = 3.68, SD = 1.57). The mean duration of breastfeeding was 4.33, SD = 1.67 months (Table 2).

Table 2

Mean, Standard Deviation, and Level of Quality and Duration (months) Exclusive Breastfeeding Practice Among Mothers (N = 100)

Exclusive breastfeeding practice	Possible range	Min-Max (month)	M	SD	Level
Quality (Score)	1- 6	1-4	3.68	1.57	Moderate
Duration (month)	-	.20-6	4.33	1.67	-

In addition, it was revealed that a comparable number of mother started breast milk within one hour after child birth (54%) as apposed to those who did not (46%). Nearly all of them (99%) did not stop breastfeeding before six months (Appendix C, Table 7). When asked about time they started prelacteal food, 68% reported they did within one hour with the types of prelacteal food varied from mustard oil (7%) to honey (32%). The highest number of mothers (42%) introduced supplementary food to their baby after six months and they reasoned to do so for “nourishment” (50%) and insufficient milk supply (46%). Nearly all of them (98%) stopped breastfeeding after seven months (Appendix C, Table 8).

Family Support

The results show that only 39% of mothers received a high level of support from their husband, followed by their mother-in-law (18%) (Table 3).

Table 3

Frequency and Percentage of Perceived Overall Support Related to Breastfeeding Received from Family Members (N = 100)

	Low	Moderate	High
	Not at all / Poor n (%)	Fair n (%)	Good / Very good n (%)
Husband	28	33	39
Parents	75	8	17
Mother-in-law	70	12	18
Grandmother	98	00	2

The total score of family support was at a moderate level (M = 3.43, SD = 0.53). Every dimension of the family support was also at a moderate level. The highest mean score was on instrumental support (M = 3.52, SD = 0.47), followed by appraisal support (M = 3.51, SD = 0.61), emotional support (M = 3.38, SD = 0.71), and informational support (M = 3.29, SD = 0.53), respectively (Table 4).

Table 4

Mean, Standard Deviation, and Level of Family Support Among Mothers (N = 100)

Family support	M	SD	Level
1. Emotional support	3.38	0.71	Moderate
2. Instrumental support	3.52	0.47	Moderate
3. Informational support	3.29	0.53	Moderate
4. Appraisal support	3.51	0.61	Moderate
Overall family support	3.43	0.53	Moderate

Additional analysis

The item analysis on each subscale of family support was conducted in order to better understand this phenomenon.

Emotional support

All of the items in emotional support were scored at a moderate level except the item "My family carefully listens to me when I talk about my feelings regarding breastfeeding" (M = 3.76, SD = 0.70) which was scored at a high level. The first four items had mean scores at a moderate level "My family members encourage me to provide breastfeeding" (M = 3.45, SD = 0.91), "My family shows me empathy when I have problems to provide breastfeeding" (M = 3.50, SD = 0.88), "My family gives me cheerfulness when I have problems to provide breastfeeding" (M = 3.11, SD = 0.98), and "My family helps me to relax by taking care of my baby" (M = 3.08, SD = 0.82) (Appendix C, Table 12).

Instrumental support

Two items in instrumental support were scored at a high level while the others three items were scored at a moderate level. The high mean scores were for: "My family provides good quality of diet promoting my exclusive breastfeeding" (M = 4.50, SD = 0.59); and "My family provides financial support during breastfeeding period" (M = 4.60, SD = 0.60). The moderate mean scores were for: "My family take care of my baby when I take some rest" (M = 3.17, SD = 0.63); "My family helps me in household work when I give breastfeeding" (M = 2.36, SD = 0.77); and "My family members make good environment or comfortable when I give breastfeeding" (M = 2.96, SD = 0.69) (Appendix C, Table 12).

Informational support

All of the items in informational support were scored at a moderate level except the item "My family shows me how to give breastfeeding" (M = 3.94, SD = 0.70) which was scored at a high level. The first four items had mean score at a moderate level: "I hear about benefit of exclusive breastfeeding from my family" (M = 3.51, SD = 0.64); "My family provides information to me related to breastfeeding"; (M = 2.73, SD = 0.72); "My family gives me advice to strictly breastfeed to six months" (M = 3.55, SD = 0.88); and "My family helps me in finding sources of information about breastfeeding" (M = 2.74, SD = 0.86) (Appendix C, Table 12).

Appraisal support

Two items in appraisal support were scored at a high level while the other three items were scored at a moderate level. The high mean scores were: "My family helps me to take decision about giving exclusive breastfeeding" (M = 3.77, SD = 0.69); and "My family helps me how to solve the common breastfeeding problems"

(M = 4.07, SD = 0.60). The moderate mean scores were: “My family tells me that I have ability to give enough breastfeeding” (M = 3.47, SD = 0.79); “My family gives me a positive feedback after giving breastfeeding” (M = 2.76, SD = 0.75); and “My family appreciates me about giving breastfeeding” (M = 3.49, SD = 0.76), (Appendix C, Table 12).

The relationship between family support and the quality and duration of exclusive breastfeeding practice is presented in Table 6. The findings showed that there was a significant positive relationship between the family support and breastfeeding practice (r = .66, p < .01) and duration of breastfeeding (r = .90, p < .01) (Table 5). Moreover, significant positive correlations were also found among the dimensions of family support and breastfeeding practice and duration.

Emotional support was highly correlated with the duration of breastfeeding (r = .87, p < .01) and moderately correlated with the quality of breastfeeding practice (r = .67, p < .01). Instrumental support was moderately correlated with the duration of breastfeeding (r = .64, p < .01) and had a low correlation with the quality of breastfeeding practice (r = .43, p < .01). Informational support was significantly and positively highly correlated with duration of breastfeeding (r = .85, p < .01) and moderately correlated with the quality of breastfeeding practice (r = .60, p < .01). Appraisal support was highly correlated with duration of breastfeeding (r = .86, p < .01) and moderately correlated with the quality of breastfeeding practice (r = .64, p < .01) (Table 5).

Table 5

Pearson's Product Moment Correlation Coefficients Between Family Support and Exclusive Breastfeeding Practice Quality and Duration Among Mothers (N = 100)

Family support	Breastfeeding practice quality (*r*)	Duration of breastfeeding (*r*)
Emotional support	.67**	.87**
Instrumental support	.43**.	.64**
Informational support	.60**.	.85**
Appraisal support	.64**	.86**
Total	.66**	.90**

**$p < .01$

Discussion

The findings are discussed in three parts as follows: the level of quality and duration of breastfeeding practice; the level of family support; and the relationship between the family support and the quality and duration of exclusive breastfeeding practice.

The Level of the Quality and Duration of Exclusive Breastfeeding Practice

The results showed that overall breastfeeding practice quality among lactating mothers in Bangladesh was at moderate level (M = 3.68, SD = 1.57) (Table 2). In this regards, there have been no previous studies in Bangladesh about the level of breastfeeding practice. However, in this study another finding suggested that only 17% of mothers reported practicing exclusive breastfeeding for up to six months for their babies (Appendix C, Table 9). This finding was consistent with another previous

study in Bangladesh conducted by Giasuddin et al. (2003). The researchers found that only 16% of mothers practiced exclusive breastfeeding. There might be several reasons behind the moderate level of overall breastfeeding practice among lactating mothers in Bangladesh. These include the mother's education regarding the benefits of breastfeeding practice; socio-economic conditions; and the mother's age group. Regarding education about breastfeeding benefits in Bangladesh, the Government has initiated support for such an approach for encouraging breastfeeding. It is mainly hospital based, such as using breastfeeding counseling during antenatal visits. In fact, many mothers still deliver at home and few undertake antenatal visits. Rahman, Parkhurst and Normand (2003) reported that in Bangladesh approximately 63% of mothers do not receive antenatal care. On the other hand, dissemination of information about breastfeeding practice in the mass media, like radio, TV, and newspapers, is still very low. Therefore, many mothers are not aware of the benefits of exclusive breastfeeding and its accurate duration. This might have an effect on the moderate level of breastfeeding practice.

In the socio-economic sense, Bangladesh has low economic performance and more than half of mothers (52%) in this study, were illiterate (Table 1). However, 86% of mothers were housewives but they had to do much household work to support the family economy. In addition, they had low literacy levels and less informational support about the benefits of breastfeeding. Therefore, they gave priority to working to support the family economically rather than losing time breastfeeding their baby. Moreover, many mothers lived with extended families (76%) (Table 1). They are often engaged with many household tasks and have less time to breastfeed their babies. All these issues may affect breastfeeding practice. As to the mother's age

group, in Bangladesh early marriage leads young women to become mothers early. This might affect the mother's breastfeeding behavior. Most of the mothers are aged between 20-30 years and bear children during this period (Maitra & Pal, 2004). In this study most of the mothers were aged between 20-34 years (81%) (Table 1) which is similar to previous studies.

Additional analysis using t-test analysis found that there was a significant difference ($p < .01$) in breastfeeding practice quality between Muslim (M = 3.43, SD = 1.54) and Hindu (M = 4.44, SD = 1.44) mothers (Appendix C, Table 6). This indicates that Hindu mothers exclusively breastfed their babies more than Muslim mothers. This difference was due to mothers' education, and the place of birth (Appendix C, Table 10). Hindu mothers had higher education than the Muslim mothers and they delivered their babies in the hospital. A previous study also showed that secondary and higher educated mothers exclusively breastfed their baby more (Giashuddin et al., 2003). The findings of this study were inconsistent with the study of Haque et al. (2002). They found no significant difference in the exclusive breastfeeding practice between the two religious groups. This present study's result found that only 17% pursued exclusive breastfeeding practice. This study is inconsistent with a previous study in which the rate of exclusive breastfeeding practice was 43% (UNICEF, 2008).

Breastfeeding practice is significantly associated with start of breastfeeding and prelacteal feeding. In the present study, 54% babies received breastfeeding within one hour of birth and 62% of the babies had been given water, honey, and mustard oil after childbirth (Appendix C, Table 7). Among them, Muslim mothers (75%) and high income families (71%) provided prelacteal feeding for their baby. This was due to economic, cultural and religious factors. The study conducted by Mihrshahi et al. (2007)

found that 84% of babies were given breastfeeding within 3 days of childbirth and 67% were given honey/sugar water or mustard oil after childbirth. The results found that overall 58% mothers started supplementary feeding before 6 months. This was probably due to them being in high income families (71%), and they needed nourishment (50%), and there was an insufficient milk supply (46%). The result for supplementary feeding before 6 months was greater in high income families (Giashuddin & Kabir, 2004).

The results of this present study show that the mean duration of breastfeeding was 4.33 months (Table 2). A previous study Giasuddin & Kabir (2004) found the mean duration of breastfeeding was 3.67 months. Their study was conducted in both urban and rural areas and less than half of the mothers had no formal education. In this study, conducted in an urban area, the education level of the majority of the mothers was primary (43%) and secondary (27%), and more than half (55%) of the mothers delivered in hospital (Table 1). These may be reason for the increased duration of exclusive breastfeeding practice.

The level of family support

The results showed that the level of family support for the mothers was at a moderate level. The level of its components, emotional support, instrumental support, informational support and appraisal support, was also at a moderate level (Table 4). The reasons for this might be that in Bangladesh, as in other Asian countries, the majority of the mothers live in extended families. These include the husband, parents, mother-in-law, father-in-law, and grandmother. Family members are significant to mothers in increasing the quality and duration of breastfeeding practice. They do this by providing emotional support, instrumental support, informational support, and

appraisal support. Specifically, in this study, the highest score received for family support was from the husband (39%) and the lowest score received for family support was from grandmother 2% (Table 3). It indicates that the husbands provided more overall support to the mothers compared with other family members.

In this study, the overall family support was at a moderate level (M = 3.43). The highest score for support was instrumental (M = 3.52) and the lowest score was informational support (M = 3.29) (Table 4). This indicates that mothers received more instrumental support than informational support. This might be because the majority of families were extended. As a result, family members have more chance to provide physical support such as household work and taking care of babies. On the other hand family members may have less knowledge about the benefits and advantages of breastfeeding.

The results show that the family provided a moderate level of emotional support to the mothers (Appencix C, Table 12). They also indicated that mothers received high scores for support about listening carefully and sharing their feelings regarding breastfeeding. This suggested that mothers were wiling to share their feeling with family members. A study by Februhartanty et al. (2006) showed that husbands provided emotional support by sharing problems related to nutrition and health status of the infant.

In this present study mothers received instrumental support at a moderate level with a mean score of 3.52 (Table 4). This study showed that mothers received a high score for support from their family members regarding the good quality of diet and financial support (Appendix C, Table 12). This indicates that the family was aware about the mother's health status and health needs regarding breastfeeding. A study by

Haider et al. (1997) found that lack of financial support from the husband was a reason for the failure of exclusive breastfeeding which was inconsistent with the present study.

Mothers obtained a high score for family support about showing how to give breast feeding (M = 3.94) (Table 12). This indicated that the family was experienced about positioning for breastfeeding. However, other items showed that mothers received only a moderate level of support. This might be because the family had an inadequate knowledge of breast feeding. A previous study found that hearing about the benefit of breastfeeding was positively correlated with the intention to breastfeed (Humphreye et al., 1998).

Table 12 (Appendix C) indicates that the family provided high levels of support to the mother in taking decisions about breastfeeding and solving common breastfeeding problems. This indicates that families were co operative with the mothers and shared their ideas about breastfeeding. Kong and Lee (2004) revealed that husband support was important for lactating mother in decisions about breastfeeding.

The Relationship Between the Family Support and the Quality and Duration of Exclusive Breastfeeding Practice

The hypothesis in this study is that there is a positive relationship between the family support and the quality and duration of exclusive breastfeeding practice by mothers. Pearson's correlation coefficient was used to test the hypothesis and the result showed that there was a significant positive moderate relationship between family support and the quality of exclusive breastfeeding practice ($r = .66$, $p < .01$) and duration of exclusive breastfeeding ($r = .90$, $p < .01$), respectively (Table 5). This means that the hypothesis was supported. This study's finding was similar to previous

study findings in developed countries which found positive correlation between fathers' support and increased breastfeeding (Stremler & Lovera, 2004). Ekstrom, Widstrom and Nissen, (2003) reported that breastfeeding support was positively correlated with the duration of exclusive breastfeeding in both primipara and multipara. The time spent which the partner and being present after delivery was correlated with the duration of exclusive and total breastfeeding in primipara. In this present study, the moderate level of the relationship between the family support and the quality and duration of exclusive breastfeeding practice might be because of the low level of mothers' education (52%) (Table 1). Thus mothers had a lack of knowledge about the benefits of breastfeeding. Kronborg and Vacth (2004) mentioned that mother's higher knowledge was associated with the longer duration of breastfeeding.

That there is a positive relationship between family support and the quality and duration of breastfeeding practice can be explained as follows. Family support can change the individual's feelings and attitudes toward breastfeeding practice: this can increase the exclusive breastfeeding practice by lactating mothers. There might be two major reasons for this, such as the extended family and influential persons. These results show that 76% of the mothers were in extended families (Table 1). In Bangladesh most of the families are extended families. In this family pattern, lactating mothers may get support from their family members such as the mother-in-law, father-in-law and other family members. As for influential persons, such persons can play an important role in supporting lactating mothers to keep up exclusive breastfeeding practice. The study showed that husbands (39%) were the most influential persons, rather than other family members (Table 3). However, this finding does not support a

previous study found that partners had less influence on the mothers about their exclusive breastfeeding practice (Whelan & Lupton, 1998).

In summary, the findings of this study show that family support has a significantly positive moderate correlation with the quality and duration of exclusive breastfeeding practice. It means that the more mother gain support from family members, the more likely they are to practice exclusive breastfeeding. The presence of family support helped the lactating mothers to increase and prolong their exclusive breastfeeding practice.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

This descriptive correlational study was undertaken to describe the level of family support, the level of the quality and duration of exclusive breastfeeding practice, and to examine the relationships between family support and the quality and duration of exclusive breastfeeding practice. One hundred mothers, who had infants aged 9-12 months and who received the EPI service in the EPI centre were recruited through convenience sampling. The subjects were requested to fill one set of questionnaires which consisted of three parts: Demographic details; an Exclusive Breastfeeding Practice Quality Questionnaire; and a Family Support Questionnaire. The instruments were developed by the researcher and were evaluated for content validity by three experts. A pilot study was conducted and the desired alpha coefficients of = .98 for the family support and .72 for the quality and duration exclusive breastfeeding practice instruments were reached. The data were analyzed by using descriptive and correlational statistics.

Summary of the Study Findings

The subjects' age ranged from 19 to 40 years. Less than half of the mothers' educational level was primary. The majority of the mothers were Muslim and house wives and most lived in extended families. Thirty two percent of the mothers started prelacteal food within 30 minutes of childbirth and 62% of mothers used water, honey, sugar water, and mustard oil as a prelacteal food. Only 17% of the mothers who participated in this study practiced exclusive breastfeeding. Less than half (42%) and

(34%) of the mothers continued to breastfeed their babies up to six months and three months respectively. Moreover, the mothers received high family support from their husband (39%) and then their mothers-in-law (18%). The average duration of the mothers' exclusive breastfeeding was 4.33 months and the quality of the exclusive breastfeeding practice was at a moderate level (M = 3.68, SD = 1.57). Family support was also at a moderate level (M = 3.43, SD = 0.53). The findings show that there was a significantly high positive relationship between family support and the quality of exclusive breastfeeding practice (r = .66, p < .01) and the duration of exclusive breastfeeding (r = .90, p < .01), respectively. However, Family support had a significantly positive relationship with the quality and duration of exclusive breastfeeding practice.

Limitations of the Study

In this study all mothers were recruited from the Expanded Program of Immunization (EPI) center. This may limit the generalization of the results of this study to all mothers in Bangladesh. Another limitation was that the study was carried out in only one EPI center.

Recommendations

The following recommendations are based on the findings of the study:

Nursing practice

The findings provide evidence that family support has a significant relationship with the exclusive breastfeeding practice of lactating mothers. Nurses should be aware of the importance of family support for lactating mothers. They also

should encourage, motivate, and counsel family members to get involved in supporting lactating mothers in their exclusive breastfeeding practice.

Nursing education

The findings could be used by nurse educators to teach nursing students about the importance of family support for promoting exclusive breastfeeding practice, and find ways to encourage family support for lactating mothers.

Nursing research

This study presents additional knowledge about family support and the exclusive breastfeeding practice of lactating mothers. Further research is needed to explore this phenomenon, using a greater number of subjects and settings to obtain more variance in the data.

REFERENCES

Ahmed, F., Rahman, M., & Alam, M. (1996). Prelacteal feeding: Influencing factors and relation to establishment of lactation. *Bangladesh Medical Research Council Bulletin*, *22*, 60-64.

Ahmed, S., Parveen, S. D., & Islam, A. (1999). Infant feeding practice in rural Bangladesh: Policy implication. *Journal Tropical Pediatrics, 45,* 37-41.

Adewale, O. R. (2006). The lived experience of first-time breastfeeding mothers. *Journal of Child Birth Education, 23,* 21-25.

Alden, K. R. (2004). *Newborn nutrition and feeding.* In Lowdermilk, D. L., & Perry, S. E., Maternity & women's health care. (8th ed., PP. 755-788). St. Louis: Mosby.

Arthur, A., Unwin, S., & Mitchell, T. (2007). Teenage mothers' experiences of maternity services: A qualitative study. *Breitish Journal of Midwifery, 15,* 672-677.

Central Intelligency Agency World Factbook. (2010). Bangladesh infant mortality rate, Retrived on April 22, 2010 from http://www.indexmundi.com/ bangladesh/infant_mortality_rate.html.

Cattaneo, A., & Quintero-Romero, S. (2006). Protection, promotion and support of breastfeeding in low-income countries. *Seminars in Fetal Neonatal Medicine, 11,* 48-53.

Chaemsai, P. (2007). *Effects of continuing spouse involvement in breastfeeding promotion program for working mother on exclusive breastfeeding during first four months*, Unpublished master thesis, Mahidol University, Bangkok: Thailand.

Chatman, L. M., Salihu, H. M., Roofe, M. E. A., Wheatle, P., Henry, D., Jolly, P. E., et al. (2004). Influence of knowledge and attitudes on exclusive breastfeeding practice among rural Jamaican mothers. *Birth, 31,* 265-271.

Clifford, J., & McIntyre, E. (2008). Who supports breastfeeding? *Breastfeeding Review, 16,* 9-19.

Choudhury, K. K., Hanifi, M. A., Rasheed, S., & Bhuiya, A. (2000). Gender inequality and severe malnutrition among children in a remote rural area of Bangladesh. *Journal of Health Population Nutrition, 18*, 123-1307.

Cooke, M., Schmied, V., & Sheehan, A. (2006). An exploration of the relationship between postnatal distress and maternal role attainment, breastfeeding problems and breastfeeding cessation in Australia. *Journal of Midwifery, 23,* 66-76.

Cronin, C. (2003). First-time mothers identifying their needs, perceptions and experiences. *Journal of Clinical Nursing, 12,* 260-267.

Dakshayani, B., & Gangadhar, M. R. (2008). Breast feeding practices among the Hakkipikkis: A tribal population of Mysore district, Karnataka. *Ethno-Medical, 2,* 127-129.

Deshpande, A. D., & Gazmararian, J. A. (2000). Breast-feeding education and support: Association with the decision to breast-feed. *Effective Clinical Practice, 3,* 116-122.

Espinoza, H. (2002). The relationship between family structure and exclusive breastfeeding prevalence in Nicaragua. *Salud Publica Mex,* 44, 499-507.

Ekstrom, A., Widstrom, A. M., & Nissen, E. (2003). Breastfeeding support from partners and grandmothers: Perceptions of Swedish women. *BIRTH, 30,* 261-266.

Family Support. (n.d.). *Family support,* Retrieved September, 25, 2009 from http://eclkc.ohs.acf.hhs.gov/

Februhartanty, J., Bardosono, S., & Septiari, A. M. (2006). Problems during lactation are associated with exclusive breastfeeding in DKI Jakarta province: Father's potential roles in helping to manage these problems. *Malnourish Journal of Nutrition, 12,* 167-180.

Galler, J. R., Harrison, R. H., Ramsey, F., Chawla, S., & Taylor, J. (2006) Postpartum feeding attitudes, maternal depression, and breastfeeding in Barbados. *Journal of infant Behaviour and Development, 29,* 189-203.

Giashuddin, M. S., & Kabir, M. (2003). Breastfeeding duration in Bangladesh and factors associated with it. *Indian Journal of Community Medicine, 28,* 34-38.

Giashuddin, M. S., & Kabir, M. (2004). Duration of breast-feeding in Bangladesh. *Indian Journal of Medical Research, 119,* 267-272.

Giashuddin, M. S., Kabir, M., Rahman, A. & Hannan, M. A, (2003). Exclusive breastfeeding and nutritional status in Bangladesh. *Indian Journal of Pediatrics, 70,* 471-475.

Ghosh, R., Mascie-Taylor, N., & Rosetta, L. (2006). Longitudinal study of the frequency and duration of breastfeeding in rural Bangladeshi women. *American Journal of Human Biology, 18,* 630-638.

Gatti, L. (2008). Maternal perception of insufficient milk supply in breastfeeding. *Journal of Nursing Sholarship, 40,* 355-363.

Haider, R., Kabir, I., & Ashworth, A. (1999). Are breastfeeding promotion message influencing mothers in Bangladesh? Results from an urban survey in Dhaka, Bangladesh. *Journal of Tropical Paediatric, 45*, 315-318.

Haider, R., Kabir, I., Hamadin, J. D., & Habte, D. (1997). Reasons for failure of breast-feeding conselling: Mothers persepctives in Bangladesh. *Bulletin of the World Health Organization, 75,* 191-196.

Haider, R., Ashworth, A., Kabir, I., & Hutty S. R. A. (2000). Effect of community-based peer counsellors on exclusive breastfeeding practices in Dhaka, Bangladesh: a randomised controlled trial. *Lancet, 356,* 1643-1647.

Haque, M. F., Hussain, M., Sarkar, A. K., Hoque, M. M., Ara, F. A., & Sultana, S. (2002). Breast-feeding counselling and its effect on the prevalence of exclusive breast-feeding. *Journal of Health Population Nutrition, 20,* 312-316.

Humphreys, A. S., Thompson, N. J., & Miner, K. R. (1998). Intention to breastfeed in low-income pregnant women: the role of social support and previous experience. *Birth: Issues in Perinatal Care, 25*, 169-174.

Heitman, L. K. (2006). The influence of social support on cardiovascular health in families. *Family Community Health 29,* 131-142.

Heck, K. E., Braveman, P., Cubbin, C., Chavez, G. F., & Kiely, J. L. (2006). Socioeconomic status and breastfeeding initiation among California mothers. *Public Health Reports, 121,* 51-59.

House, J. S. (1981). *Work stress and social support.* London: Addison-Wesley.

Hizel, S., Ceyhun, G., Tanzer, F., & Sanli, C. (2006). Traditional beliefs as forgotten influencing factors on breast-feeding performance in Turkey. *Saudi Medical Journal, 27,* 511-518.

Hauck, Y. L., & Irurita, V. F. (2003). Incompatible expectations: The dilemma, of Breastfeeding mothers. *Health Care for Women International, 24,* 62-78.

Imtiaz, Y. M., & Saleem, M. (2009). Exclusive breast feeing and child survival in Pakistan and other south asian countries. *Pakistan Journal of Nutrition, 8,* 910-911.

Ingram, J., Johnson, D., & Hamid, N. (2003). South Asian grandmothers' influence on breastfeeding in Bristol. *Midwifery, 19,* 318-327.

Ingram, J., Woolridge, M., & Greenwood, R. (2001). Breastfeeding: It is worth trying with the second baby. *Lancet, 358,* 986-7.

Islam, S., Yadava, K., & Alam, M. A. (2006). Differentials and determinants of the duration of breastfeeding in Bangladesh: A multilevel analysis. *Pakistan Academic Science 43,* 1-14.

Inch, S. (2003). Feeding. In Fraser, D. M., & Cooper, M. A. (Eds.). *Myles textbook for midwives* (14 th ed., pp. 749-773). London: Chuechill Livingstone.

Jimping, S. (2000). *Family support and quality of life among visual impaired persons,* Unpublished master's thesis, Chiang Mai University: Thailand.

Kakute, P. N., Ngum, J., Mitchell, P., Kroll, A. K., Forgwei, G. W., Ngwang, L. K., et al. (2005). Cultural barriers to exclusive breastfeeding by mothers in a rural area of Cameroon, Africa. *Journal of Midwifery and Women's Health, 50,* 324-328.

Kaewsarn, P., & Moyle, W. (2000). Breastfeeding duration of Thai women. *Australian College of Midwives Incorporated Journal, 13,* 21-26.

Kiess, H. O. (1996). *Statistical concepts for the behavioral sciences.* (2 nd ed.). London: Allyn and Bacon.

Kong, S. K. F., & Lee, D. T. F. (2004). Factors influencing decision to breastfeeding. *Journal of Advance Nursing, 46,* 369-379.

Kramer, M. S., & Kakuma, R. (2002). The optimal duration of exclusive breastfeeding: A Systematic Review. WHO, Geneva, Switzerland. Retrieved May 28, 2010, from http://www.who.int/nutrition/topics/infantfeeding_recommendation/en/index.html.

Kronborg, H., & Vacth, M. (2004). The influence of psychosocial factors on the duration of breastfeeding. *Scand Journal of Public Health, 32*, 210-216.

Laroia, N., & Sharma, D. (2006). The religious and cultural bases for breastfeeding practices among the Hindus. *Breastfeed Medicine, 1,* 94-98.

Leung, A. K. C., & Sauve, R. S. (2005). Breast is best for babies. *Journal of the National Medical Association, 97,* 1010-1019.

Lobbok M. H. (2001). Effects of breastfeeding on the mother. *Pediatric Clinical North America 2001; 48,*143-158.

Masvie, H. (2006). The role of Tamang mothers-in-law in promoting breastfeeding in Makwanpur District, Nepal. *Midwifery, 22,* 23-31.

Matovu, A., Kirunda, B., Rugamba-Kabagambe, G., Tumwesigye, N. M., & Nuwaha, F. (2008). Factors influencing adherence to exclusive breast feeding among HIV positive mothers in Kabarole district, Uganda. *East Africa Medical Journal, 85,* 162-170.

Maitra, P., & Pal, S. (2004). *Early childbirth, Health inputs and child mortality*: *Recent evidence from Bangladesh,* Unpublished masters thesis, Monash University: Australia.

McVeigh, C., & Smith, M. (2000). A comparison of adult and teenage mother's self-steem and satisfaction with social support. *Midwifery, 16,* 267-276.

Memon, Y., Sheikh, S., Memon, A., & Naheed, M. (2006). Feeding beliefs and practices of mothers and caregivers for their infants. *Liaquat University of Medical and Health Sciences,* 8-13.

Messina, J. J. (2007). *Social support in recovery.* Retrieved on October, 2008, from: http://www.coping.org/selfesteem/lifestyle/support.htm.

Mihrshahi, S., Oddy, W. H., Peat, J. K., & Iqbal, K. (2008). Association between infant feeding patterns and diarrhoeal and respiratory illness: A cohort study in Chittagong, Bangladesh. *International Breastfeeding Journal*, 3-28.

Mihrshahi, S., Ichiawa, N., Shuaib, M., Oddy, W., Ampon, R., Didbley, M., et al. (2007). Prevalence of exclusive breastfeeding in Bangladesh and its association with diarrhoea and actue respiratory infection: Results of the mulitple indicator cluster survey 2003. *Health Population Nutrition, 25,* 195-204.

Moore, E. R., & Coty, M. B. (2005). Prenatal and postpartum focus group with Primiparas: Breastfeeding attitudes, support, barriers, self-efficacy, and Intention. *Journal of Pediatric Health Care, 20,* 35-46.

Mckinney, E. S., James, S. R., Murray, S. S., Ashwill, J. W. (2005). *Maternal child nursing*. (2nd ed., pp. 574-592). London: Saunders.

Nelson, A. M. (2007). Maternal-newborn nurses experiences of inconsistent professional breastfeeding support. *Journal of Advanced Nursing, 60,* 29-38.

Olayemi, O., Aimakhu, C. O., Bello, F. A., Motayo, V. O., Ogunleye, A. A., Odunukan, O. W., et al. (2007). The influence of social support on the duration of breast-feeding among antenatal patients in Ibadan. *Journal of Obstetic & Gynaecology, 27,* 802-805.

Owens, B. J. (2008). Parents' experiences of feeding a baby with cleft lip and palate. *British Journal of Midwifery, 16,* 778-784.

Okamoto, M., & Matsuaka, M. (2009). Causal model stracture analysis of emotional unrest in first time mothers faced with persistent infant crying 6-7 weeks postpartum. *Asian Nursing Research, 3,* 1-14.

Polit, D. F., & Beck, C. T. (2008). *Nursing research: Generating and assessing evidence for nursing practice* (8th ed.). Philadelphia: Lippincott William & Wilkins.

Pender, N. J., Murdaugh, C. L., & Parsons, M. A. (2002). *Health promotion in nursing practice.* (4 th ed.), Prentice Hall: Prentice Hall.

Pender, N. J., Murdaugh, C. L., & Parsons, M. A. (2006). *Health promotion in nursing practice* (5th ed.), Upper Saddle River, NJ: Pearson Prentice Hall.

Pisacane, A., Continisio, G. I., Aldinucci, M., Amora, S. D. & Continisio, P. (2005). A controlled trail of the father's role in breastfeeding promotion. *Pediatrics, 116,* 494-498.

Quinn, V., Guyon, A., & Ramiandrazafi, M, C. (2004). Successfully Scaling up Exclusive Breastfeeding. *Child Health and Nutrition Research Initiative*.

Rahman, S. A., Parkhurst, J. O., & Normand, C. (2003). *Maternal Health Review Bangladesh.* Policy Research Unit, Ministry of Health and Family Welfare Government of Peoples Republic of Bangladesh.

Rehana, Z. (1998). *Exclusive breastfeeding practices among Bangladeshi women in Stockholm*. Unpublished master thesis, Karolinska Institute, Stockholm: Sweden.

Reddy**,** M. S. (n. d.). Breast feeding - practices, problems and prospects Retrieved on May 27, 2009 from http://www.bpni.org/ breastfeeding/

Rashid, S. F., Hadi, A., Afsana, K., & Begum, S. A. (2001). Acute respiratory infections in rural Bangladesh: cultural understandings, practices and the role of mothers and community health volunteers. *Tropical Medicine and International Health, 6,* 249-25.

Susin, L. R. O., Giugliani, E. R. J., & Kummer, S. C. (2005). *Influence of grandmothers on breastfeeding practices*, Unpublished doctoral dissertation, Federal University : Brasil.

Sudharto, P. (2008). *Message*, MCH Community Newsletter Breastfeeding. WHO Country Office for India.

Sinusas, K., & Gagliardi, A. (2001). Initial management of breastfeeding. *American Faminly Physician, 64,* 981-988.

Smith, J. W., & Tully, M. R. (2001). Midwifery management of breastfeeding Using the evidence. *Journal of Midwifery and Women's Health, 46,* 423-438.

Sperder, A. D., & Devellis, R. E. (1994). Cross-cultural translation. *Journal of Cross Cultural Psychology, 25,* 501-525.

Stremler, J., Lovera, D., (2004). Insight from a breastfeeding peer support pilot program for husbands and fathers of Texas WIC participants. *Journal of Human Lactation, 20,* 417-422.

Talukder, M. (1996). Protection, promotion, and support of breast-feeding in Bangladesh. *Regional Health Forum, 1,* 18-25.

Thomas, C. L. (1997). *Taber's Cyclopedic Medical Dictionary* (18th ed.), Philadelpha: United States of America.

Tarkka, M. T., Paunonen, M., & Laippala, P. (1999). Factor related to successful breastfeeding by first time mothers when the child is 3 months old. *Jounal of Advance Nursing, 29,* 113-118.

Taveras, E. M., Li, R., Grummer- Strawn, L., Richardson, M., M, R., Rego, V. H., et al. (2004). Opinions and practices of clinicians association with continuation of exclusive breastfeeding. *Padiatrics, 113*, 283-290.

UNICEF. (2008). *Supporting mothers to breastfeed will improve children's chances of surivival, says UNICEF*. Retrieved July 25, 2009, from http://www.unicef.org/media/

United States Breastfeeding Committee. (2002). *Benefits of breastfeeding*, Retrieved June 10, 2009, from www.usbreastfeeding.org.

VanDerslice, J., Popkin, B., & Briscoe, J. (1994). Drinking-water quality, sanitation, and breast- feeding: Their interactive effects on infant health. *Bulletin of the World Health Organization, 72,* 589-601.

Wardley, B. L., Puntis, J. W. L., & Taitz, L. S. (1997). *Child nutrition* (2nd ed.), NewYork: University Press.

Whelan, A., & Lupton, P. (1998). Promoting successful breastfeeding among women with a low income. *Midwifery, 14,* 94-100.

Zainal, E., Isaranurug, S., Nanthamongkolchai, S., & Voramongkol, N. (2004). Factors related to breast feeding practices among mothers in Singburi Province, Thailand, *Journal of Public Helath and Development , 2,* 21-30.

APPENDICES

APPENDIX A

INFORMED CONSENT FORM

Study Title: Family support on exclusive breastfeeding practice among mothers in Bangladesh

Dear participants,

My name is Lipika Rani Biswas. I am a master's student of Faculty of Nursing, Prince of Songkla University, Thailand. I am also a senior staff nurse in Sylhet Osmani Medical Collage Hospital, Bangladesh. I am conducting a study family support on exclusive breastfeeding practice among mothers in Expanded Program of Immunization (EPI) Center Sylhet Medical Collage Hospital, Bangladesh. This is to fulfill the requirement of the master of nursing program.

The study and its procedure have been approved by the appropriate people and the Institutional Review Board (IRB) of Faculty of Nursing, Prince of Songkla University, Thailand. The study procedures involve no foreseeable risks or harm to you. You are asked to respond to questions about your personal information, your family support and your practice about exclusive breastfeeding using the questionnaires.

The information will be used to write a research report. The information will help to exclusive breastfeeding practice among lactating mother.

The information I can gather for the study will be kept confidentiality. Only the investigator and the major advisors are eligible to access the data. Your name and any identifying information will not be used in the report of the study. All the papers of your information will be damaged after completion of the study.

Your participation in this study is voluntary. You have the right to participate or not to participate. You also have the right to withdraw at any time.

Lastly, if you are agreed to participate in the study please sign in and return the questionnaires with appropriate responses. If you do not want to sign in this paper, but respond and return the questionnaires, it will indicate your willingness to participate in the study.

Thank you for your co-operation.

---	---	---
(Name of Participant)	(Signature of Participant)	Date
---	---	---
(Name of Researcher)	(Signature of Researcher)	Date

For further information please contact me at following address.

Name: Lipika Rani Biswas

Senior Staff Nurse

M.A.G.Osmani Medical Collage Hospital Sylhet, Bangladesh.

Phone: 01715775799

Email: Lipikawas@yahoo.com

APPENDIX B

INSTRUMENT

ID Number……..

Date of data collection……..

Place of data collection……

Part I: Demographic Data Form

Personal Information of mother

Direction: Please mark ✓ in the appropriate box or fill in the blank regarding your personal data and data related to your giving birth.

Personal Data

1. Mother's Age ……in years

Address : Vill:

P.O:

Dist:

☐ 1 Urban ☐ 2 Rural

2. Religion: ☐ 1 Islam ☐ 2 Hindu

☐ 3 Buddhism ☐ 4 Christian

☐5 Others (specify)…….

3. Marital status ☐ 1 Separated ☐ 2 Lived with husband

☐ 3 Divorced ☐ 4 Widowed

4. Mother's Education ☐ 1 Illiterate ☐ 2 Primary school
☐ 3 Secondary school ☐ 4 Undergraduate
☐ 5 Graduate ☐ 6 Postgraduate

5. Mother's occupation ☐ 1 Housewives ☐ 2 Employment
☐ 3 Day labour ☐ 4 Caretaker

6. Family monthly income ☐ 1 Less than 3,000 Taka
☐ 2 3,000-5,000 Taka
☐ 3 5,000-7,000 Taka
☐ 4 More than 7,000 Taka

7. Current Child Sex ☐ 1 Male ☐ 2 Female

8. a. Date of birth of current child (day/month/year)……..……
b. Age of current child……Month…….days

9. Order of current child birth ☐ 1 First baby ☐ 2 Second baby
☐ 3 Third ☐ 4 Forth
☐ 4 Other, (Please identify child birth order)…

10. Place of current giving birth ☐ 1 Home ☐ 2 Hospital
☐ 3 Private clinics
☐ 4 Other, (Please identify)……

11. Delivery assistant ☐ 1 Doctor ☐ 2 Nurses
☐ 3 Traditional Birth Attendant (TBA) / Skill Birth Attendant (SBA)
☐ 4 Relatives
☐ 5 Other (please identify)……

12. Pattern of infant feeding practice in the past 6 months after giving birth (Can answer more than one)

☐ 1 Breast milk

☐ 2 Formula feeding

☐ 3 Mixed foods (Solid liquid)

13 a. Number of persons in the family including you currently

☐ 1 Three persons

☐ 2 Four persons

☐ 3 Five persons

☐ 4 More than five persons

13 b. Family pattern ☐ 1 Nuclear family ☐ 2 Extended family

14. Perceived overall support related to breastfeeding received from family members

Source	Level				
	Not at all	Poor	Fair	Good	Very good
Husband					
Parents					
Mother-in-law					
Grandmother					

Part II**:** A. Exclusive Breastfeeding Practice Quality Questionnaire

Direction: Please mark ✓ to Yes or No, based on your breastfeeding practice as stated in the statements and provide condition information in the blank space. The ranking use for Yes=1, No=0

Number	Statement	Yes	No
1.	I start breast milk within 1 hour after child birth	1	0
2.	I stop breastfeeding before 6 months to my baby	1	0
3.	I provide prelacted food to my baby before 6 months	1	0
4.	I introduce supplementary for my baby just completion 6 months	1	0
5.	I provide powder milk or mixed food for my baby before 6 months	1	0
6.	I provide sugar water for my baby before 6 months	1	0

Information related to breastfeeding practice

1. When did you start breast milk? (identify hours/ minutes/ days……)
2. When did you use prelacted foods that time your child age? (Identify hours/ minutes/ days……)
3. What kind of prelacteal foods did you give to you child? (Identify water/ sugar/ sugar water/ honey/ mustard oil/others……)
4. When did you introduce supplementary? (Identify days/months……)
5. What are the reasons to introduce supplementary……..?
6. When did you stop breastfeeding? (Identify days/month/year……)

Part II. B. Duration of breastfeeding

7. How long have you only breastfed?

Hours	Days	Months

Part III: Family Support Questionnaire

Direction: Please read the following sentences and mark ✓ in the appropriate column. In this questionnaire family support can be provided by your family members related to breastfeeding. There are 5 options available: 1 = Never, 2 = Sometime, 3 = Often, 4 = Very Often, 5 = Always.

No	Item	Never	Sometime	Often	Very Often	Always
	Emotional support					
1.	My family members encourage me to provide breastfeeding	1	2	3	4	5
2.	My family shows me empathy when I have problems to provide breastfeeding	1	2	3	4	5
3.	My family gives me cheerfulness when I have problems to provide breastfeeding	1	2	3	4	5
4.	My family helps me to relax by taking care of my baby	1	2	3	4	5
5.	My family carefully listens to me when I talk about my feeling regarding breastfeeding	1	2	3	4	5
	Instrumental support					
6.	My family provides good quality of diet promoting my exclusive breastfeeding	1	2	3	4	5
7.	My family provides financial support during breastfeeding period	1	2	3	4	5
8.	My family takes care my baby when I take some rest	1	2	3	4	5

No	Item	Never	Sometime	Often	Very Often	Always
9.	My family helps me in household work when I give breastfeeding	1	2	3	4	5
10.	My family members make good environment or comfortable when I give breastfeeding	1	2	3	4	5
	Informational support	1	2	3	4	5
11.	I hear about benefit of exclusive breastfeeding from my family	1	2	3	4	5
12.	My family provides information to me related to breastfeeding	1	2	3	4	5
13.	My family gives me advice to strictly breastfeed to six months	1	2	3	4	5
14.	My family helps me in finding sources of information about breastfeeding	1	2	3	4	5
15.	My family shows me how to give breastfeeding	1	2	3	4	5
	Appraisal support					
16.	My family helps me to take decision about giving exclusive breastfeeding	1	2	3	4	5
17.	My family tells me that I have ability to give enough breastfeeding	1	2	3	4	5
18.	My family gives me a positive feedback after giving breastfeeding	1	2	3	4	5
19.	My family appreciates me about giving breastfeeding	1	2	3	4	5
20.	My family helps me how to solve the common breastfeeding problems	1	2	3	4	5

APPENDIX C

Table 6

The Comparism of Mean score of Breastfeeding Practice Quality Between Islam and Hindu by Using T-test (N = 100)

Religion	n %	Mean	SD	P-value	Level
Islam	75 (75)	3.43	1.54	.005	Moderate
Hindu	25 (25)	4.44	1.44		High

The result showed that breastfeeding practice quality was high level in Hindu mothers group (M = 4.44, SD = 1.44) and moderate level in Muslim mothers group (M = 3.43, SD = 1.54). From T-test Hindu mothers was more exclusively breastfed than Muslim mothers.

Table 7

Frequency and Percentage of Breastfeeding Practice Quality Among Mothers (N = 100)

No	Breastfeeding Practice Quality	Yes n (%)	No n (%)
1.	I start breast milk within 1 hour after child birth	54	46
2.	I stop breastfeeding before 6 months to my baby	1	99
3.	I provide prelacted food to my baby before 6 months	62	38
4.	I introduce supplementary for my baby just completion 6 months	42	58
5.	I provide powder milk or mixed food for my baby before 6 months	58	42
6.	I provide sugar water for my baby before 6 months	7	93

Table 8

Frequency and Percentage of Information Related to Breastfeeding Practice (N = 100)

Variables	n (%)
Start breastfeeding	
<30 minutes	5
1-12 hours	86
1-3 days	9
Start prelacted	
Within 1 hour	68
1-12 hours	32
Kinds of prelacteal food	
Water	14
Sugar water	12
Honey	32
Mustard oil	7
Without prelacteal food	35
Supplementary introduce	
1-3 months	35
4-5 months	23
After 6 months	42
Reasons to introduce supplementary	
Nourishment	50
Insufficient milk supply	46
Employment mother	4
Stop breastfeeding	
Before 7 months	2
After 7 months	98

Table 9

Duration of Exclusive Breastfeeding by Crosstabulation Between Total Duration of Breastfeeding and Prelacted Feeding Before 6 Months (N = 100)

Duration of total breastfeeding		Prelacted Feeding Before 6 months		Total
		No	Yes	
0- less than 6.00 month	Count	45	13	58
	% within Duration of total breastfeeding	77.59%	22.41%	100%
	% within Prelacted Feeding Before 6M	72.6%	34.2%	58.0%
	% of Total	45.0%	13.0%	58.0%
6.00 month or above	Count	17	25	42
	% within Duration of total breastfeeding	40.5%	59.5%	100.0%
	% within Prelacted Feeding Before 6M	27.4%	65.8%	42.0%
	% of Total	17.0%	25.0%	42.0%
Total	Count	62	38	100
	% within Duration of total breastfeeding	62.0%	38.0%	100.0%
	% within Prelacted Feeding Before 6M	100.0%	100.0%	100.0%
	% of Total	62.0%	38.0%	62.0%

Table 10

Chi-square Test of Religion Against Mothers Education and Place of Giving Birth (N = 100)

Variable	Religion		χ^2	*p*
	Islam	Hindu		
Mother's education				
Illiterate & Primary	45	7	7.692	.006**
Secondary & Post graduate	30	18		
Place of giving birth				
Home	38	7	3.892	.04*
Hospital	37	18		

**$p < 0.01$, *$p < 0.05$

The result showed that Hindu mothers' levels of education were high compaired with Muslim and they delivered baby in hospital as a result their breastfeeding practice was more than Muslim mothers'.

Table 11

Frequency, Percentage, and Level of Family Support Among Mothers (N = 100)

Family support	Level of Family support		
	Low n (%)	Moderate n (%)	High n (%)
1. Emotional support	10	49	41
2. Instrumental support	-	63	37
3. Informational support	6	65	29
4. Appraisal support	4	37	59
Overall family support	4	46	50

Table 12

Frequency, Percentage, Mean, Standard Deviation, and Level of Family Support Among Mothers (N = 100)

Item	Mean SD	*Never* n (%)	*Sometime* n (%)	*often* n (%)	*Very often* n (%)	*Always* n (%)
Emotional support						
1. My family members encourage me to provide breastfeeding	3.45 (0.91)	0	22	18	53	7
2. My family shows me empathy when I have problems to provide breastfeeding	3.50 (0.88)	4	7	31	51	7
3. My family gives me cheerfulness when I have problems to provide breastfeeding	3.11 (0.98)	8	17	33	40	2
4. My family helps me to relax by taking care of my baby	3.08 (0.82)	4	17	47	31	1
5. My family carefully listens to me when I talk about my feeling regarding breastfeeding	3.76 (0.70)	0	5	24	61	10
Instrumental support						
6. My family provides good quality of diet promoting my exclusive breastfeeding	4.50 (0.59)	0	1	2	43	54

Table 12 *(Continued)*

Item	Mean SD	*Never* n (%)	*Sometime* n (%)	*often* n (%)	*Very often* n (%)	*Always* n (%)
7. My family provides financial support during breastfeeding period	4.60 (0.60)	0	0	6	28	66
8. My family takes care my baby when I take some rest	3.17 (0.63)	1	10	60	29	0
9. My family helps me in household work when I give breastfeeding	2.36 (0.77)	16	34	48	2	0
10. My family member makes good environment or comfortable when I give breastfeeding	2.96 (0.69)	1	23	55	21	0
Informational support						
11. I hear about benefit of exclusive breastfeeding from my family	3.51 (0.64)	1	5	36	58	0
12. My family provides information to me related to breastfeeding	2.73 (0.72)	4	31	53	12	0
13. My family gives me advice to strictly breastfeed to six months	3.55 (0.88)	2	7	38	40	13

Table 12 *(Continued)*

Item	Mean SD	*Never* n (%)	*Sometime* n (%)	*often* n (%)	*Very often* n (%)	*Always* n (%)
Appraisal support						
14. My family helps me in finding sources of information about breastfeeding	2.74 (0.86)	6	31	50	9	4
15. My family shows me how To give breastfeeding	3.94 (0.70)	1	4	10	70	15
16. My family helps me to Take decision about giving exclusive breastfeeding	3.77 (0.69)	0	2	32	53	13
17. My family tells me that I have ability to give enough breastfeeding	3.47 (0.76)	2	8	36	49	5
18. My family gives me a positive feedback after giving breastfeeding	2.76 (0.75)	4	31	50	15	0
19. My family appreciates me about giving breastfeeding	3.49 (0.76)	3	5	34	56	2
20. My family helps me how to solve the common breastfeeding problems	4.07 (0.60)	0	0	15	63	22

APPENDIX D

LIST OF EXPERTS

Three experts examined the content validity of the demographic characteristic, Family Support Questionnaire and Exclusive Breastfeeding Practice Quality and Duration Questionnaire they were:

1. Assoc. Prof. Dr. Sureeporn Kritcharoen

Department of Obstetric-Gynaecology and Midwifery, Faculty of Nursing, Prince of Songkla University, Hat-Yai, Thailand.

2. Asst. Prof. Dr. Umaporn Boonyasopun

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3. Asst. Prof. Dr. Provat Ronjon Dey

Pediatric specialist, Sylhet Osmani Medical College Hospital, Bangladesh.

VITAE

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