CHAPTER V

DISCUSSION

Discussion of Findings

In this chapter, the discussion of findings will be presented in accordance with the objectives of the study which were to investigate:

1. Breastfeeding practices of postpartum mothers
2. Factors related to breastfeeding practices of postpartum mothers at Maharaj Nakhon Si Thammarat Hospital

1. Breastfeeding practices

In this study, practices related to breastfeeding of postpartum mothers during the first four months after delivery were divided into the following two categories:

1.1 Exclusive breastfeeding meant the infants received only the mothers' breast milk without any other substance including water except for medicines and vitamins.

1.2 Non-exclusive breastfeeding meant the infants were fed with their mothers' breast milk together with other nutritional substances such as formula milk, water, or fruit juice.

Success in breastfeeding means exclusive breastfeeding without giving any other nutritional substances even water to the infants. WHO, UNICEF, and the Ministry of Public Health have proposed that exclusive breastfeeding should be continued at least during the first four months after childbirth, and this has been set as the goal of the Baby Friendly Hospital.

In the present study, it was found that only 20.5% of the subjects exclusively bresatfed their infants for at least four months, which was higher than the finding of the Department of Health in 1996 which indicated that only 3.6% of the postpartum mothers breastfed their infants exclusively during the first four months. However, when compared this study finding with the operational goal of the promotion of mothers' and children's health specified in the Ninth National Health Development Plan (2002-2006), it could be seen that the finding of the present study was still lower than the goal set by the government, which was 30.0%. Also, the number was lower than that surveyed by at Maharaj Nakhon Si Thammarat Hospital in 2001 which was equal to 28.0%. In addition to this, about one-quarter of the subjects in the present study (26.5%) exclusively breastfed their infants for one month or less.

An interesting finding was that even though the number of subjects who exclusively breastfed their infants was lower than the goal set by the government, about two-thirds of the subjects (64.3%) had not wean their infants from breastfeeding. In other words, they still practiced breastfeeding, but they also gave other nutritional substances to their infants such as water or fruit juice. It could be seen that giving the infants water or fruit juice was a practice which had been done for generations.

Therefore, to encourage the postpartum mothers to exclusively breastfeed their infants during the first four months requires instilling the acceptance of this practice among the mother groups and in the community. As this is contradictory to the long-held practice, the efforts leading to desirable changes would take time, and a consistent and extensive promotional campaign is called for.

As for three-quarters of the subjects (79.5%) who practiced non-exclusive breastfeeding, the period of time during which the highest number of mothers stopped breastfeeding was one month or less (35.6%). They cited the following reasons: having to work outside the house (37.7%), not having enough lactation (33.7%), the infants refusing to suck (10.5%), having nipple-related problems (5.2%), having health problems leading to non-nutritional breast milk (4.1%), and having someone else look after the infants (1.7%). These findings were consistent with the findings obtained during the focus group discussion. In the discussion, most of the subjects cited having to work outside their home as the main reason that prevented them from exclusively breastfeeding their infants for the first four months due to the family's economic problems requiring both parents to be breadwinners for the family.

The findings of the present study agreed with the findings of Somchai Durongdej et al. (1984 : 25-31) which found that the main reasons why mothers did not breastfeed were having to return to work, not having enough lactation, having breast problems, and having breasts and nipples that hurt. Similarly, Helsing & King (1985: 211-214) explain that in the United States the most important reason postpartum mothers stop breastfeeding is working outside. Furthermore, Coreil & Murphy (1988:

276) found that working mothers stopped breastfeeding because of stress, exhaustion, inconvenience to breastfeed in the office, mothers' health problems, and beliefs in advertisements that formula milk is easy to prepare and more convenient.

When considering the government's policy to promote exclusive breastfeeding at least during the first four months, while in fact it allows only a 90-day maternity leave, it could be clearly seen that there is still a contradiction between the government's breastfeeding policy and policy regarding leaves of absence. Moreover, postpartum mothers may have economic and financial problems which forced them to quickly return to work to help relieve their husbands' economic burdens. Thus, it is difficult for them to achieve a four-month exclusive breastfeeding practice promoted by the government. In the present study, it could be seen that having to return to work and not having enough lactation are preventable and solvable problems if mothers have appropriate preparation during their pregnancy and postpartum period. If the mothers have sufficient knowledge of breastfeeding, they may be more confident to breastfeed their infants. Also, if they receive immediate advice and guidance suitable for the problems they are facing, they are more likely to successfully exclusively breastfeed their children for at least four months.

2. Factors related to postpartum mothers' breastfeeding practices at Maharaj Nakhon Si Thammarat Hospital

The related factors which were explored based on the PRECEDE Framework consisted of the following:

2.1 Predisposing factors—They were fundamental factors leading to motivation to develop a practice including demographic factors (age, religion, education, occupation, workplace, and family income), intention to breastfeed, plan to breastfeed, knowledge about breastfeeding, and attitudes toward breastfeeding.

2.2 Enabling factors—They were necessary resources as well as skills enabling individuals to have certain behaviors including ante-natal care, place of ante-natal care, type of childbirth, experience with breastfeeding, type of nipples, health status during pregnancy, health problems during the first four months after delivery, health problems of infants after childbirth, health problems of infants during the first four months, birth weight, current weight, and type of milk/formula received during hospital stay.

2.3 Reinforcing factor—It is a factor which indicated practice or behavior for which support was provided; that is, support for breastfeeding practices.

2.1 Predisposing factors related to breastfeeding examined in the present study were

2.1.1 Demographic factors

Age In the present study, age was not statistically significantly associated with breastfeeding practices(p-value = .567). This is different from the finding of Utaiwan Treratpan (1996: 76) which revealed that age was a factor that affected breastfeeding. However, the finding of the present study was in congruence with the study of Pornpen

Patumwiwattana and Chantira Wachirapakorn (1996:44) which indicated that age was not associated with postpartum mothers' breastfeeding practices. Likewise, Winikoff et al. (1988: 14-15) conducted a study in four communities in Bangkok Metropolis and found that the age of the mothers was not related to breastfeeding. One plausible explanation is that the mothers of all age groups at Maharaj Nakhon Si Thammarat Hospital similarly received encouragement and support to practice breastfeeding, so their ages did not affect such practice.

Religion This study finding suggested that religion was not statistically significantly related to breastfeeding practices (p-value = .327). This was in agreement with a study of Kritaporn Muangprom (1997 : 58) which discovered that religion was a factor which was not associated with breastfeeding practices. This may be because the public health officials gave similar treatment to all postpartum mothers regardless of their religious beliefs, so there was no significant difference among them when it came to this particular factor.

Education In this study, education was not statistically significantly related to breastfeeding practices (p-value = .504). In contrast, Kesara Sripitchayakarn and Kannikar Kantharaksa (1992 : 37) found that educational background was correlated with breastfeeding, and the subjects with a lower level of education breastfed their infants for a longer period when compared with those who were highly educated. In the present study, educational background was divided into three levels. Almost half, or 46.3%, of the subjects who exclusively breastfed for four months finished high school, and 32.9% completed elementary education. However, only 20.7% of the mothers who

exclusively breastfed for four months graduated with a certificate, an undergraduate degree, or higher.

Occupation In the present study, occupation was statistically significantly correlated with breastfeeding practices (p-value = .015). It was found that 65.9% of the postpartum mothers who were housewives exclusively breastfed their infants for at least four months. This is because the postpartum mothers who had other occupations had to return to work outside their house. This is congruent with the study of Pensri Kanchanatthiti et al. (1986 : 67-101) which found that the mothers' career or their working outside the house to help earn family income is the most frequently cited reason that leads to weaning. This means that the mothers' career is an obstacle for breastfeeding. This may be because the mothers have to work far away from home, and there is no child care center in the office. Also, the mothers may not know how to squeeze their milk and store it for the babies while they are away working. Likewise, during the focus group discussion, the subjects stated that the main obstacles which prevented them from exclusively breastfeeding their infants for at least four months were having to work outside their house and not having sufficient lactation. These two reasons are in fact related to each other. When the mothers return to work, they breastfeed their babies less frequently; thus, their lactation is lessened and becomes insufficient for the babies. As a result, exclusive breastfeeding is also lowered.

Workplace In the present study, workplace was statistically significantly related to breastfeeding practices (p-value < 0.001). This finding was similar to the findings of Saowapa Homsuwan and Santit Boonyasong (1999 : 7) and Susanha

Yimyam (2002 : 80) which indicated that mothers who work at home breastfeed their infants for a longer period than the mothers who work outside. It could be explained that the mothers who work at home have more chance to be close to their infants, and they can breastfeed their infants as much as they want to, so they are more likely to breastfeed for a longer period.

Family income Family income was not statistically significantly related to breastfeeding practices (p-value = .929). This is incongruent with the finding of Kesara Sripitchayakarn and Kannikar Kantharaksa (1992 : 37) which found that family income was associated with breastfeeding practices as the subjects who had lower family income breastfed their infants for a period longer than that of the subjects who had higher family income. This may be because the subjects who are not financially stable have less chance to buy formula milk for their babies. However, the present study's finding was similar to the findings of Utaiwan Treratpan (1996 : 77) and Wah Wah Aung (2000: 76) which suggested that monthly family income was not associated with breastfeeding practices. One observation is that the postpartum mothers all received advice from public health officials and they realized the significance of breastfeeding, regardless of their family income, so their income was not related to their breastfeeding practices.

2.1.2 Intention to breastfeed (Example: Did you have an intention to practice breastfeeding during pregnancy?)

In this study, intention to breastfeed was statistically significantly related to breastfeeding practices (p-value = .032). This finding was in agreement with the finding

of Saowapa Homsuwan and Santit Boonyasong (1999 : 9) which revealed that intention to breastfeed was associated with breastfeeding. Moreover, Kesara Sripitchayakarn and Kannikar Kantharaksa (1992 : 39) discovered that the mothers who had an intention to breastfeed their infants since their pregnancy were able to exclusively breastfeed for at least four months. Similarly, the finding of Kanchana Kumdee (1994 : 89) indicated that intention to breastfeed was a reinforcing factor which enabled the mothers to continue their breastfeeding practices even after their return to work outside their home. Finally, the finding of Ubol Taweesri (1992 : 42) pointed out that breastfeeding could be successfully practiced for more than four months despite the abnormality of the mothers' nipples or the mothers' chronic illness if the mothers had intended to practice breastfeeding since they became pregnant.

2.1.3 Plan to breastfeed (Example:Did you have a plan to breastfeed your baby with working?)

It was found that plan to breastfeed was not statistically significantly related to breastfeeding practices (p-value = .615). This may be because plan to breastfeed was only one part of the mothers' decision-making. The mothers could easily change their plan to breastfeed their infants if they encountered obstacles or problems.

2.1.4 Knowledge of breastfeeding

The study finding revealed that knowledge of breastfeeding was not statistically significantly associated with breastfeeding practices (p-value = .502). More than half of the subjects (56.0%) had a good level of knowledge of breastfeeding. This finding was incongruent with the finding of Chanokporn Tanwatananond (1996 : 91) which found

that when it came to the knowledge factor, highly educated postpartum mothers had better breastfeeding practices than those who were not highly educated. In additoin, Rentschler (1991: 151-154) found that the postpartum mothers' reception of knowledge and preventive measures of problems in breastfeeding was a factor which led to successful breastfeeding. Also, Sarunya Chitcharoen (1994 : 81) and Utaiwan Triratanapunta (1996 : 80) found that the mothers' perception referred to knowledge and understanding as well as positive feelings of breastfeeding, and it was a factor which affected the duration of breastfeeding practice. The mothers' reception of knowledge regarding benefits of lactation, correct methods of breastfeeding, and solutions to breastfeeding problems could be used as a guideline to ensure that mothers have a good attitude toward breastfeeding practice. Willam (1977, cited in Achara Masmalai et al., 2001 : 57) found that success in breastfeeding was closely related to positive feelings of mothers toward breastfeeding, leading to breastfeeding practices. Knowledge is a fundamental factor which leads to motivation to successfully perform a behavior (Green and Kreuter, 1991). In the present study, even though the subjects had a good level of knowledge of breastfeeding, only a small number of them were able to correctly answer the questions regarding method, solutions to problems, and appropriate ways to take care of the breasts (see Appendix B). This may be because the advice of the public health officials emphasized the benefits of breast milk, which was evidenced by 98.3% of the subjects who got the correct answer. On the other hand, they did not pay as much attention to other aspects of breastfeeding, or they may have lacked necessary skills to transfer breastfeeding knowledge to the mothers. Also, it could be the case that postpartum mothers may have had incorrect beliefs or misconception about breastfeeding which were left unchanged. Besides, the mothers

may be given the knowledge by the public health officials, but they were not ready to take in the correct information, or the information did not match what they wanted to know, so they did not pay attention to learn it. Prapapen Suwan and Swing Suwan (1991: 33) point out that individuals generally receive only information or the arousal which matches their interest. For this reason, it is public health officials' responsibility to provide advice on appropriate technique of breastfeeding which satisfies the mothers' needs.

2.1.5 Attitudes toward breastfeeding

In this study, attitudes toward breastfeeding were not statistically significantly related to breastfeeding practices of postpartum mothers (p-value = .587). Two-thirds of the subjects (64.8%) of the subjects had a moderate level of attitudes toward breastfeeding, and one-third of the subjects (35.3%) had a high level of attitudes toward breastfeeding. It is worth noting here that there was none who had a low level of attitudes toward breastfeeding. In addition, during the focus group discussion, most of the subjects believed that the mothers' breast milk was the best source of nutrition for their infants. In the questionnaire, the item which received the highest mean score was the one indicating that breastfeeding increased attachment and bonding between the mother and child. Likewise, Chanokporn Tanwattananond (1996 : 91) found that the mothers' attitudes toward breastfeeding was associated with breastfeeding practices. This finding suggested that mothers with good attitudes toward breastfeeding tended to breastfeed their infants more than those who did not have such good attitudes.

2.2 Enabling factors related to breastfeeding

The enabling factors related to breastfeeding which were examined in the present study were as follows:

2.2.1 Ante-natal care

In the present study, ante-natal care was not statistically significantly related to breastfeeding practices of postpartum mothers (p-value = .068). In fact, ante-natal care is considered a part of promotion of breastfeeding because it enables pregnant women to prepare themselves for subsequent breastfeeding, take proper care of their breasts, correct nipple problems, and receive knowledge of breasfeeding. However, all of this can be achieved with only one hospital visit for ante-natal care, so it did not yield a significant result. Also, in this study there was only a small number of mothers (1.3%) who did not receive any ante-natal care. This was congruent with the study of Saowapa Homsuwan and Santit Boonyasong (1999 : 10) which found that ante-natal care did not lead to more practice of breastfeeding.

2.2.2 Place of ante-natal care

The place where pregnant women received ante-natal care was not statistically significantly related to breastfeeding practices (p-value = .064). Similarly, Saowapa Homsuwan and Santit Boonyasong (1999 : 10) found that the place where the pregnant women sought ante-natal care was not associated with breastfeeding . This may be because more than half of the subjects in the present study (62.3%) received ante-natal care at Maharaj Nakhon Si Thammarat Hospital, while 24.2% sought ante-natal care services at a health station. In fact, the mothers who sought ante-natal care at a health station would be referred to Maharaj Nakhon Si Thammarat Hospital, so the subjects

were rather homogeneous when it came to the place where they received ante-natal care. In addition, when considering advice regarding how to breastfeed and how to take care of breasts, most of the subjects (90.7%) received sufficient advice from public health officials. Thus, there was no significant difference among the subjects when it came to the place where they sought ante-natal care.

2.2.3 Type of delivery

In the present study, type of delivery was not statistically significantly associated with breastfeeding practices of postpartum mothers (p-value = .386). In general, in cases of abnormal child delivery, the doctor would use a tool such as vacuum or forceps to pull the baby out. In cases of C-secion, complications such as pain or exhaustion caused by blood loss may result. However, they are not major obstacles which prevent postpartum mothers from practicing breastfeeding, especially if the mothers received close care and necessary support from public health offcials or if the mothers truly understand the nature of breastfeeding. This finding was congruent with the finding of Ubol Taweesri (1992 : 2), which found that medical health personnel and public health personnel were those who role was to support the mothers to practice breastfeeding. A study of Janke (1988: 159-164) discovered that postpartum mothers who underwent a C-section and the mothers who gave birth with a natural method did not differ when it came to the period of time when they actually raised their kids. On the contrary, Prawit Somboon (1994 : 19) found that type of child delivery affected breastfeeding as natural, normal childbirth makes mother readier to breastfeed their infants.

2.2.4 Experience with breastfeeding

Experience with breastfeeding was statistically significantly associated with breastfeeding practices (p-value = .037). Mothers who have breastfed their firstborn child tended to breastfeed their next child. This finding was similar to that of Susanha Yimyam (2002 : 70) which discovered that experience with breastfeeding of the previous child was associated with the decision to breastfeed the next child. However, Jeerawan Wannaro and Pravit Wannaro (2003 : 46) found that mothers' experience with breastfeeding was not an enabling factor to promote breastfeeding practices.

2.2.5 Characteristics of the nipple

The study finding revealed that characteristics of the nipple were statistically significantly related to breastfeeding practices (p-value = .020). This is because normal nipples enable infants to more easily suck their mothers' breast milk than short nipples or clogged nipples. Similarly, Kanchana Kumdee (1992 : 107) found that abnormality of the mothers' nipples was an obstacle in breastfeeding practices. In the focus group discussion, the subjects also indicated that abnormal nipples prevented postpartum mothers from exclusively breastfeeding their infants.

2.2.6 Mothers' health status during pregnancy and mothers' health problems during the first four months

In the present study, the mothers' health status during pregnancy and their health problems during the first four months after delivery were not statistically significantly associated with breastfeeding practices (p-value = 0.473 and 0.578, respectively). This may be because most of the subjects (95.1%) were healthy during

their pregnancy, and most (96.3%) did not have any health problems during the first four months after child delivery, so the study findings yielded no significance. These findings were congruent with the finding of Sithiporn Horharitanon et al. (1994 : 42) which showed that the health status of postpartum mothers was not related to breastfeeding practices. In contrast, Kanchana Kumdee (1992 : 109) found that the postpartum mothers' sickness was an obstructing factor preventing them from breastfeeding their infants.

2.2.7 The infants' health problems after birth

The infants' health problems after birth were not statistically significantly associated with breastfeeding practices of the postpartum mothers (p-value = .071). Similarly, Sithiporn Horharitanon et al. (1994 : 42) and Kritaporn Muangprom (1997 : 60) discovered that the infants' health status at birth was not related to breastfeeding practices. On the contrary, Kanchana Kumdee (1992 : 104) and Saowapa Homsuwan and Santit Boonyasong (1999 : 8) found that the health problems of the infants at birth were associated with breastfeeding.

2.2.8 The infants' health problems during the first four months after birth

In this study, the infants' health problems during the first four months after birth were statistically significantly related to breastfeeding practices (p-value = .016). One explanation is that sick children are weak and exhausted, so they are unable to suck their mothers' nipples, losing the chance to be breastfed. Besides, the finding of the

focus group discussions indicated that most of the subjects felt that the infants' sickness was an obstacle for breastfeeding practices.

2.2.9 The infants' birth weight

The finding of the present study revealed that the infants' birth weight was not statistically significantly related to breastfeeding practices (p-value = 0.319). This finding was incongruent with the findings of Sithiporn Horharitanon et al. (1994: 41) and Kritaporn Muangprom (1997 : 57) which indicated that there was a significant relationship between infants' birth weight and breastfeeding practices as the infants with low birth weight did not have enough energy to suck their mothers' breasts as much as the normal weight infants did. Moreover, Calzolari et al. (1989: 653-656) conducted a study and discovered that children with birth weight more than 3,000 grams tended to be breastfed more and longer than those who weighed in less than 3,000 grams. However, the present study's finding was similar to the findings of Utaiwan Treratpan (1996 : 79) and Saowapa Homsuwan and Santit Boonyasong (1999 : 2) that the infants' birth weight was not related to breastfeeding

2.2.10 Current weight of infants

The present study's finding revealed that there was a statistically significant relationship between current weight of infants and breastfeeding practices (p-value = .009). This finding lent support to the finding of Kritaporn Muangprom (1997 : 57) which showed that the infants' current weight was related to breastfeeding. In this study, 32.9% of the subjects who had an infant weighing in at 5,000 grams or heavier exclusively fed their infants for at least four months more than those whose babies were

less than 5,000 grams in weight. It was noticeable that the heavier the infants' current weight, the longer the duration of breastfeeding. Also, Lindenberg (1990: 35-41) found that infants who weaned faster were those whose weight was lower.

2.2.11 Type of formula/milk received during hospital stay

The type of formula/milk the infants received during their hospital stay was statistically significantly associated with breastfeeding practices (p-value < .001). Similarly, Saowapa Homsuwan and Santit Boonyasong (1999 : 2) found that the type of milk the infants received for the first time was associated with breastfeeding. Put another way, the infants who first received their mothers' breast milk tended to be fed with breast milk for a longer period than those who received a bottle of formula as their very first meal. Being fed with formula milk as early as during their hospital stay after child delivery may make the infants become used to sucking milk from a bottle which is easier and does not require as much energy as sucking their mothers' nipples. As such, the infants may refuse to suck their mothers' breast after that, thus leading to failure in breastfeeding. A study of Reiff & Essock-Vitale (1985:L 872-879) showed that receiving formula milk since hospital stay was statistically significantly related to the duration of breastfeeding. The mothers who gave formula milk to the infants simultaneously with breastfeeding tended to wean their infants faster than those who exclusively breastfed their infants during hospitalization. Also, Utaiwan Treratpan (1996 : 78) conducted a study and found that the type of formula/milk the infants received during their hospital stay was an influential factor affecting the duration of breastfeeding. In the present study, it was found that only approximately one-fouth(27.1%) of the subjects who exclusively breastfed their infants during their

hospital stay continued exclusive breastfeeding for at least four months after hospital discharge. Based on the finding, the suggestions give for further study.

2.3 The reinforcing factor related to breastfeeding

The reinforcing factor taken into account in this study was support from family members, others, and medical and public official staff who provided assistance during pregnancy and delivery. In the present study, this particular factor was not found to be statistically significantly associated with breastfeeding practices (p-value = 0.498). This means that support for breastfeeding is not related to breastfeeding practices. Likewise, Utaiwan Treratpan (1996 : 84) found that factors promoting breastfeeding were not statistically significantly associated with duration of breastfeeding. In general, most of the mothers stopped breastfeeding their infants after hospital discharge due to lack of support and encouragement in terms of news and information, morale support, and knowledge and demonstration of correct breastfeeding practice since the time they first became pregnant until after recuperation at home. In the present study, two-thirds (67.8%) of the subjects received a moderate level of support, and the individuals who provided most support and encouragement to pregnant women were public health officials (mean score = 2.31). When interviewed about different periods of time they received support from public health officials, the subjects revealed that the time when they received the least support was during the postpartum period (mean score = 1.95). As for encouragement and support from public health officials, the topics for which the subjects received the lowest mean score were obstacles hindering them from successfully practicing breastfeeding (mean score = 1.34) and advice and assistance of public health officials regarding breastfeeding during home visits (mean score = 1.11).

These findings lent support to the researcher's observation of the public health officials' operation during each period which showed that the scope of work of public health officials did not cover postpartum mothers under the responsibility of Maharaj Nakhon Si Thammarat Hospital, even though it was specified in the policy of Maharaj Nakhon Si Thammarat Hospital that it should be conducted to set a good example for others. Therefore, public health officials need to become aware of their responsibilities, and all parties involved need to cooperate with one another to continue promoting breastfeeding practices among postpartum mothers.