พฤติกรรมการเลี้ยงบุตรด้วยนมแม่ในหญิงไทยหลังคลอด

Study on Breastfeeding Behaviors in Thai Postpartum Women

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บทคัดย่อ

การวิจัยเชิงบรรยายนี้ มีวัตถุประสงค์เพื่อศึกษาพฤติกรรมการเลี้ยงบุตรด้วยนมแม่ ในหญิงหลังคลอด จำนวน 140 คน โดยใช้แบบสัมภาษณ์พฤติกรรมการเลี้ยงบุตรด้วยนมแม่ วิเคราะห์ข้อมูลเชิงปริมาณ โดยใช้ความถี่ และร้อยละ ข้อมูลเชิงคุณภาพวิเคราะห์เชิงเนื้อหา ผลการวิจัยพบว่า

1. ระยะหลังคลอด 24–72 ชั่วโมง หญิงหลังคลอดเริ่มให้นมแม่แก่ทารกครั้งแรก 30–45 นาทีหลังคลอด ร้อยละ 22.8 ให้นมใน 24 ชั่วโมง มากที่สุด 1-6 ครั้ง (ร้อยละ 49.2) ให้นมแม่แต่ละครั้งนาน 21-30 นาที มากที่สุด (ร้อยละ 24.3) และเคยให้อาหารเสริม ร้อยละ 32.1 เนื่องจากหญิงหลังคลอด มีปัญหาหัวนมสั้นทั้งสองข้าง

2. ระยะหลังคลอด 6 เดือน ให้นมแม่อย่างเดียว เพียงร้อยละ 14.3 ให้นมแม่และอาหารเสริมแก่ทารกมากที่สุด ร้อยละ 26.4 เคยให้นมแม่กับทารกทางขวดนม โดยให้ทุกวัน ๆ ละ 3 ครั้ง ร้อยละ 65.7 ไม่เคยเลี้ยงบุตรด้วยนมผสม ร้อยละ 38.6 ให้นมผสมทารกทุกวัน ร้อยละ 45.0 โดยทารกส่วนใหญ่ เริ่มได้รับนมผสมครั้งแรกเมื่ออายุแรกเกิดทันที และอายุ 3 เดือน ร้อยละ 12.1 เริ่มให้น้ำแก่ทารกเมื่ออายุ 6 เดือน ร้อยละ 21.4 ให้อาหารเสริมครั้งแรกเมื่อ 6 เดือน ร้อยละ 42.1 หญิงหลังคลอดส่วนใหญ่ ยังไม่เลิกให้นมแม่ ร้อยละ 51.4% เหตุผลการให้อาหารเสริม และน้ำคือ หญิงหลังคลอดทำงานนอกบ้าน ไม่มีน้ำนม และหัวนมสั้น

การส่งเสริมพฤติกรรมการเลี้ยงบุตรด้วยนมแม่ที่ถูกต้อง จึงเป็นสิ่งจำเป็นเพื่อให้หญิงหลังคลอดเลี้ยงบุตรด้วยนมแม่ได้นานมากขึ้น

คำสำคัญ: การเลี้ยงบุตรด้วยนมแม่, หญิงหลังคลอด

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Abstract

This retrospective, descriptive study of breastfeeding behaviors aimed to determine the breastfeeding behaviors among 140 Thai postpartum women in the Northeastern part of Thailand. Data were collected using questionnaires. Quantitative data were analyzed by using frequency and percentages. Content analysis was used to analyze qualitative data. The results showed as following.

1. Breastfeeding behaviors between 24 to 72 hours postpartum revealed that the majority of participants began first time breastfeeding at 30-45 minutes (22.8%). Average breastfeeding frequency in 24 hours was 1 to 6 feeds (49.2%) and the duration was 21 to 30 minutes each time (24.3%). Thirty-two percent gave the infant formula supplements because of short nipples.

2. Breastfeeding behaviors in 6 months postpartum showed that there were only 14.3% of exclusive breastfeeding. Breastfeeding combined with supplementation was frequent (26.4%). Breast milk in bottle feeding was used by 65.7% of the participants which the average frequency was three times a day. Only 38.6% of the participants had no experience with giving infant formula milk and 45.0% gave the infant formula milk. Several infants had first time formula milk feeding after birth and at three-months old equally (12.1%). Water was given to 21.4% of infant at six-months old. The majority of participants (42.1%), and more than half of the postpartum women (51.5%), did continued breastfeeding. The causes for feeding with the infant formula supplements were returning to work, low breast milk supply, and short nipple.

In summary, encouraging breastfeeding behaviors among young mothers is necessary.

Keyword: Breastfeeding Behaviors, Postpartum Women

Introduction

Breastfeeding is the best way to feed an infant at least in the first sixths month of life. The longer breastfeeding, the healthier for baby will be (Fewtrell, 2004). The benefits of breastfeeding for postpartum women health, the family, and the economy have been described obviously (Binns, Lee, & Low, 2016). Although the World Health Organization (2009) recommends exclusive breastfeeding during the first six months after delivery, many Thai women early stop breastfeeding. According to the Thai National Statistical Office (2010), it was found that there were only 15.1% for exclusive breastfeeding during the first six months after delivery especially in the Northern parts of Thailand.

Most of the public hospitals in Thailand are breastfeeding promotion hospitals. They promote postpartum women for exclusive breastfeeding at least 6 months before start supplementary diets. However, they do not reach the goal of exclusive breastfeeding in the first 6 months after birth. Breastfeeding problems depend on many factors which can be classified into three causes, mother problems, infant problems, and social and believe problems. Mothers with nipple problems trend to fail with exclusive breastfeeding during the first six months after delivery. In addition, baby born with complication or abnormality are one of breastfeeding barriers. Furthermore, some adverse believe and negative attitude in breastfeeding are also the problems (Wijitsukon, Sangperm, Vatayu, Ruangjiratean & Payakruang, 2012).

Despite an increased interest in breastfeeding behaviors, it is surprising that in Northeastern Thailand little research has been conducted to explain exclusive breastfeeding problems especially breastfeeding behaviors. A limited numbers of studies have been conducted regarding breastfeeding problems (Silchareoan & Vinyan, 2009; Wijitsukon et al., 2012). There is limited information, however, about exclusive breastfeeding behaviors among postpartum women in Khon Kaen, Thailand. It is important to identify exclusive breastfeeding behaviors in this group to promote breastfeeding for the baby.

Objective

The objective of this research was to study breastfeeding behaviors in Thai postpartum women at 2 periods.

1. To study breastfeeding behaviors at 24-72 hours postpartum of the 6-month postpartum mothers.

2. To study breastfeeding behaviors when the baby is 6 months old.

Methods

Design

A retrospective descriptive design was used to investigate the breastfeeding behaviors in Thai postpartum women.

Sample

This study is a survey with a sample size of 140 participants was determined via Cohen's power analysis (Munro, 2005). The level of statistical significance was set at an alpha of 0.05, a power of 0.80, and a medium effect size (0.13). One hundred forty potential participants were purposively recruited from the well-baby clinic of four public hospitals in northeastern Thailand. The hospitals were selected because of the large number of sixth month old babies whose mother bring them to receive vaccination they served each year.

The study's inclusion criteria consisted of 1. being a 6 months after delivery, 2. had at least one baby, 3. able to read and understand Thai, and 4. did not have a psychiatric diagnosis.

Instruments

The data were collected via questionnaires including personal characteristics questionnaire and breastfeeding behaviors interview.

Data Collection

After the ethical approval was obtained, the participants were identified, informed about the study and asked to participate in the study, by the researcher at the well-baby clinic of four public hospitals (Khon Kaen hospital, Mahasarakam hospital, Kalasin hospital, and Roi-et hospital) in the Northeastern part of Thailand used as the study sites. Once the postpartum women who bring their infant to receive the vaccination consented to take part the study, they were interviewed in a private area of the well-baby clinic by using the two questionnaires.

Data Analysis

Analyses of the data were based on the recordings in the form of transcriptions. The demographic characteristics data were determined using descriptive statistics while the content analysis was used to analyzed qualitative data.

Ethics of Research

An ethics approval to conduct the study was obtained from the Institutional Review Board of Srimahasarakham Nursing College (IRB SNC number 001/2555), Khon Kaen Hospital Thailand.

Results

1. Demographics of the Sample

Table 1 Frequency Distribution for Demographic Data (n=140)

Demographic	Frequency	Percent
Age		
< 20 years old	14	10.00
20-35 years old	115	82.14
> 35 years old	11	7.86

Table 1 (cont.)

Demographic	Frequency	Percent
Education		
Elementary education	7	5.00
High school or vocational education	54	38.57
Certificate of higher education	27	19.29
Bachelor's degree or higher	52	37.14
Marital Status		
Married	131	92.86
Unmarried (widowed, separated)	9	6.43
Occupation		
No occupation	44	31.43
Work at home/own business	37	26.43
Work outside	30	21.43
Government officer	29	20.71
Number of Children		
1	63	45.00
2	67	47.86
3	10	7.14
Type of Delivery		
Vaginal	71	50.71
Caesarean section or other	69	49.29
Complication		
No	42	30.00
Yes	98	70.00
Infant complications		
- Jaundice	22	15.71
- Pneumonia	6	4.29
- Preterm labor	3	2.14
- Low birth weight	3	2.14
- Trachynea	3	2.14
- G6PD	1	0.71
Mother Complications		
- Postpartum hemorrhage	1	0.71
- Pregnancy induced hypertension	1	0.71
- Cervicitis	1	0.71
- Fever cause	1	0.71

As shown in Table 1, the majority of sample had: 20-35 years old; high school or vocational education; and married. Most of them had: no occupation; two children; a vaginal delivery; and complication after giving birth. Most baby complications were physiological jaundice while pneumonia came second; meanwhile, mother complications were reactionary fever, postpartum hemorrhage, hypertension, and cervicitis (see table 1).

2. Breastfeeding Behaviors

The breastfeeding behaviors of the 6-month postpartum mothers were divided into 2 periods: 24 – 72 hours postpartum, and when the baby is 6 months old.

2.1. The mothers' breastfeeding behaviors during the 24-72 hour postpartum period revealed that 22.8% of the postpartum mothers began breastfeeding 30-45 minutes after delivery; 49.2% gave 1 – 6 feeds in 24 hours and the duration was 21 to 30 minutes which made up 24.3% each time. Furthermore, 32.1% of postpartum mothers gave complementary diets in addition to the breast milk during the first 24 to 72 hours after birth. The complementary diets the infants received during the 24 to 72 hours after birth were formula milk (15.7%), formula milk and water (1.4%), only water (2.8%), and blended protein (0.7%). The sample gave the following reasons for giving complementary diets:

"Breast milk is scarce. The baby keeps crying clamorously, so I give him water. The baby doesn't have enough milk. The breast is hard."

"Formula milk has been given since the day of delivery because breast milk doesn't flow."

2.2. The mothers' breastfeeding behaviors during the 6-month postpartum period.

2.2.1. The food the infant received: 26.4% which made up the largest group of the 6-month postpartum mothers breastfeed and gave a complementary diet to the infant; 21.40% breastfeed, gave formula milk and a complementary diet; 14.3% gave breast milk exclusively.

2.2.2. The frequency of breastfeeding: 34.2% of the 6-month postpartum mothers breastfed 6 times or more during the daytime (from 7 a.m. to 7 p.m.) while during the nighttime (from 7 p.m. to 7 a.m.) 36.4% which made up the largest group of the 6-month postpartum mothers breastfed 3 times within 12 hours.

2.2.3. Breast milk bottle-feeding: 65.7% of the 6-month postpartum mothers used to feed bottled breast milk to the infants; of whom 55.7% had the highest feeding frequency at 3 times a day, and that represents 18.0%. Traveling was the reason for feeding bottled breast milk. However, there was one mother who did it because she wanted to test whether the infant could suck milk from a bottle.

2.2.4. Feeding formula milk to the infant: 38.6% of the 6-month postpartum mothers did not feed their infants formula milk; 45.0% did it every day; most of them did 5 – 6 times a day. The largest group of infants, 12.1%, received formula milk for the first time right after birth, and another group of the same percentage age received formula milk for the first time at 3 months old. The reason for feeding the infant formula milk right after the birth was due to the newborn's health while the reason for feeding the infant formula milk at 3 months old was that the mother was not with the infant all the time. Some mothers gave their reasons for feeding the infant formula milk right after the birth as follows:

"I gave the baby formula milk right after birth because the baby had jaundice."

"My breast milk is too little while my baby's weight is a lot, 3,740 grams, and I have invert nipples."

And the sample gave the reason for feeding formula milk to the infant as follows: the mother had to go to work (27.1%); inadequate mother's breast milk; too little breast milk came out (22.9%); mother was in a classroom (2.9%); formula milk was given only when mother was away (2.9%), short nipples or invert nipples (4.3%). In addition, 5 of the sample gave some more reasons of feeding the infant formula milk while mother's breast milk was not enough.

2.2.5. Feeding water to the infant: 21.4% was the largest number of the 6-month postpartum mothers that began to feed water to the infant at 6 months old; the second largest group which constituted 19.3% did when the infant was 3 months old; 7.1% gave the infant water right after the birth; only 1.4% of the sample did not feed water to the infant at all for 6 months after birth. The reasons for giving water to the infant were: grandmothers told them to do so, the mother wanted to wash away the milk slime in the mouth with water. Giving water after having complementary diets had various reasons as follows:

"I want my baby to practice handling the milk bottle, so I had the baby drink water from the bottle."

"I think it is good to drink from the bottle."

"I think my baby is thirsty."

"I simply add water. "

2.2.6. Giving infants complementary diets: 42.1% was the largest number of the 6-month postpartum mothers that began to feed the infant a complementary diet at 6 months old, 1 – 2 times every day. The complementary diet used most was ready-made rice cereal; the inferior complementary diets in the line were rice cereal, ground banana, ground

pumpkin, yolk, ground liver, boiled ivy gourd, ground carrot, and orange juice. Most of the sample gave the reason that they got the information from the handbook. For those who fed their infant a complementary diet before 6 months, the reasons were that they were afraid that the infant would be hungry, relatives or the elders in the family advised them, the infant cried clamorously, and the mother's breast milk decreased. However, 7 mothers gave some different reasons as follows:

"I want my baby to learn how to swallow food."

"To increase brain nurture and development."

"I tried it with my baby, my baby loves it."

"I'm afraid my baby would not thrive."

"Constipation, difficult to defecate, so I gave orange juice"

2.2.7. The age of the infant when receiving the last breastfeeding: most 6 month postpartum mothers, 51.4%, did not cease breastfeeding. Infants receiving the last breastfeeding at 3 months old made up the largest number which was 10.0%. Infants receiving the last breastfeeding at 2 months old made up the second largest number which was 6.4%. The reasons for breastfeeding cessation were: the mother had to work outside the home; no breast milk; going to work in another province; short nipples and inadequate mother's breast milk. Moreover, 6 mothers gave some different reasons for breastfeeding cessation as follows:

"It's not convenient. It's difficult."

"The milk flows well, but I've no nipple and can't stand expressing the milk."

"The baby doesn't suck but the milk flows well."

"Must go back to continue my education."

2.2.8. Persons to ask in case of breastfeeding problems: mostly the 6-month postpartum mothers asked their own mother or their husband's mother. Next in the line were public health personnel, nurses or pharmacists, relatives or neighbors and asked the breast milk clinic or called the breast milk center. Moreover, some mothers asked some other sources such as breast milk websites, mother and child's handbooks, and drugstores.

2.2.9. What mothers did to increase breast milk: the 6-month postpartum mothers acquitted themselves in many ways. One mother may do several things to increase breast milk: drinking ginger ale or eating food composing of ginger; drinking warm water or very hot water; eating food composing of banana blossom; taking herbal medicine in the form of rubbed medicine, tablet, infusion, herbal liquid, and tonic; eating a good diet; letting the baby suck the breast milk often, pumping the milk and drinking milk. Moreover, some

mothers behaved in some different ways: massaging the breast, having a hot compress, and getting enough sleep.

2.2.10. Breast feeding when working outside the home: the 6-month postpartum mothers had different behaviors when they went to work. Most mothers expressed or pumped the milk, bottled it and later let the infant suck the milk from the bottle. Next in the line was giving formula milk to the infant when they went to work, and a number of postpartum mothers breastfed before going to work. Only a small number of mothers expressed milk, put it into a bag and kept it in the refrigerator for the baby sitter to feed the baby. There were mothers who did differently from the aforementioned behaviors when they went to work.

"I take my baby along. We never stay apart."

"I come home to breastfeed my baby because my workplace is not far from home."

"I give a complementary diet to my baby so it will feel full for a long time and does not cry."

Discussion

1. The breastfeeding behaviors during 24 – 72 hours postpartum period

The results of the study revealed the behaviors of the postpartum mothers during 24 – 72 hours after the delivery that while staying in the hospital, one fifth of the sample began breastfeeding 30 – 45 minutes after the delivery; nearly half of the sample gave 1 – 6 feeds in 24 hours and the duration mostly used was 21 - 30 minutes each time. Moreover, beside the mother's breast milk, they used to give complementary diets within 24 – 72 hours after birth. Thus, it can be said that the number of postpartum mothers who breastfed the infant during 24 – 72 hours which is the infant's sensitive period was small, and most postpartum mothers did not breastfeed every 2 hours as set by the Ministry of Public Health, but the interval was longer. The sample also had the behavior of feeding complementary diets beside the mother's breast milk during 24 – 72 hours. The behaviors might be explained as follows:

Firstly, most postpartum mothers had caesarean section before which they were given general anesthesia or spinal anesthesia. This caused the mother to recover in the operation room for 2 hours which the infant's sensitive period had already passed. Meanwhile, the infant born from the mother who was given a caesarean section was separated and taken care of in the delivery room before being returned to the mother after her recovery or when she had no complications resulting from the spinal anesthesia. The infant may have been given formula milk from a public health staffer if it had the problem of clamorous cry or a health

problem such as low blood sugar. This is consistent with the study of Piyaanant (2005) that deals with a study and comparison of mothers who give vaginal birth and who give birth through caesarean section. The findings revealed that the amount of breast milk of mothers who had caesarean section during the first 4 – 5 days after the delivery is less than that of mothers who give vaginal birth.

Secondly, it might have been caused by the abnormality of the mother's nipple and health condition of the mother and the infant after birth that made the mother unable to breastfeed every 2 hours and unable to give other complementary diets beside breast milk. For the postpartum mother who has short nipples, the infant cannot suck the milk fully, so formula milk and water have to be given together. After giving formula milk and water, the infant rarely sucks the mother's breast milk. This is consistent with the study of Potaworn, Pensuwan & Sriyanrak (2011) which reveals that adolescent postpartum mothers with big or short nipples feed formula milk to the infant, and the infant then refuses breast milk; it wants only formula milk. This might have been a reason that the 6-month postpartum mothers' breastfeeding behavior during 24 – 72 hours after the delivery did not meet the criterion of the suck-fast-suck-often concept of the Ministry of Public Health.

2. The breastfeeding behaviors during the 6-month postpartum period

From this study it was found that, regarding the breastfeeding behaviors during the 6-month postpartum period, only 14.3% of the sample breastfed. Therefore, it can be said that the sample had the breastfeeding behavior that was not consistent with the target of the Mother and Child Health Promotion Work in the 11th National Economic and Social Development Plan which sets the criterion that not less than 30.0% of newborn infants must be given mother's breast milk exclusively for at least 6 months. Regarding frequency of breastfeeding, 34.2% could breastfeed every 2 hours, and 65.7% of postpartum mothers used to feed bottled mother's milk to the infant. This might have been because most mothers in the sample took up a job outside of the home, and some mothers who had a job in another province and could not be with the infant all the time. Working outside of the home separated them, and the fatigue from work could result in the mother's stress and it caused the decrease of breast milk. This could be a cause of early cessation of breastfeeding of the mother (Buakham, Sinsuksai, Sareesatean & Wijitsukon, 2007). It is consistent with the study by Kehler, Tough & Chaput2009)) on risk factors of breastfeeding cessation before 6 months after birth in postpartum women in Alberta. It was found that breastfeeding cessation had relationship with full-time work outside the home and is consistent with the study of Chung,

Kim, and Nam (2008) on factors affecting the beginning of breastfeeding and the duration of breastfeeding of South Korean women. It was found that the mothers who had caesarean section had jobs outside the home, had low level of education, and they did not complete the appointments for antenatal care. There was a low breastfeeding rate, and they could not complete the 6-month period of exclusive breastfeeding, their duration of exclusive breastfeeding was shorter than in any other groups and because most postpartum mothers worked outside the home or were separated from the infant, it might be a reason for most of the sample to bottle-feed breast milk.

Beside breastfeeding, other behaviors found in this study was feeding formula milk to the infant (45.0%), feeding water (21.4%) and feeding complementary diets (42.10%). The first complementary diet feeding was at 2 months (5.7%). Most complementary diet fed was cerelac rice cereal (35%). The reasons for feeding a complementary diet to the infant before 6 months were: afraid that the baby would be hungry; was told by the elderly in the family; the baby cried clamorously, and the mother's breast milk decreased. Thus, it can be said that the postpartum mothers could not feed the baby breast milk exclusively for at least 6 months as advised by public health personnel. One of the 10 steps to success in breast-feeding states that postpartum mothers must not feed food, water or drinks to the newborn infant, but breast milk, and except there are medical indicators (Wijitsukon et al., 2012). The explanation could be that the sample's behavior of feeding other food rather than mother's breast milk depends on many factors such as mother factor, baby factor, factor of public health personnel concerned, and factor of social support. If postpartum mothers had a bad or wrong attitude, belief, idea, and understanding about breastfeeding, they would tend to feed the baby formula milk (Payakruang, 2012). The mother's knowledge and experience of breastfeeding is another factor that affects the success of feeding the baby breast milk exclusively for at least 6 months. This is consistent with the study by Biancuzzo (2003) which revealed that if the family members or relatives helped or supported the postpartum mother in breastfeeding, the breastfeeding would last longer than that of the mother whose family relationship is not good.

In addition, the lengths of time to let the baby be weaned are different. Most of the sample (33.6%) let the baby be weaned before 6 months. The main reasons are: going to work outside the home or another province; the mother does not have breast milk; the mother has short nipples. It can be said that the number of postpartum mothers who let their babies be weaned was small. The reasons might be as follows:

Firstly, most postpartum mothers were 20 – 35 years old, having the marital status

married which reflected the mother's characteristic of readiness for pregnancy and would be a mother who is capable of looking after the baby after birth. That is, mothers older than 25 years, having the marital status married, would breastfeed more than younger mothers (Meedya , Fahy, & Kably, 2010). This is consistent with Akter and Rahan (2010) who studied the duration of breastfeeding and factors relating to the duration of breastfeeding of postpartum women in Bangladesh. The findings revealed that the duration of mother's breastfeeding had a positive relationship with her age. Younger mothers had shorter duration of mother's breastfeeding. It is also consistent with the study by Ahluwalia, Morrow, and Hsia (2005) which found that young postpartum mothers whose economic and social status was limited ceased breastfeeding within the first month because of pain in the nipples, inadequate milk, the baby had health problems, and the mother felt that the baby was not content with the mother's nipples. Nevertheless, the findings were not consistent with Robins, Thomas, Brain, Lisi & Robbins (2011) who studied breastfeeding behaviors of postpartum women at Philadelphia Health Center and found that the age of postpartum women had no relationship with breastfeeding and duration of breastfeeding.

Secondly, the reason that postpartum mothers did not let their babies be weaned may have been that most of the sample were mothers with the latter pregnancy and neither mother nor the baby had health problems. Mother's experience is a mother factor that influences breastfeeding. Experience of breastfeeding a child and solving problems that occurred during the breastfeeding of the former pregnancy resulted in the success of breastfeeding (Wijitsukon et al., 2012). Furthermore, the well- being of the mother and the baby enables the mother to breastfeed as is needed. That is, if the mother and the baby are ill or have abnormality, the baby will not be able to suck the mother's milk right from the birth. The baby needs to receive the milk through another way. Thus, the state of being used to sucking the mother's milk is decreased or delayed and that makes the flow of the mother's milk inefficient. The milk is ready to flow only a little, and the mother will finally cease breastfeeding. The finding is consistent with the study by Senarath, Dibley & Agho (2007) on breastfeeding of postpartum women in Timor. It was found that the postpartum women had the breastfeeding period shorter than 6 months because of health problems of the babies which were caused by diarrhea and inspiratory system infection. Moreover, it is consistent with the study of Kristiansen, Lande, Overby & Andenson (2010) which found 3 main reasons explaining why mother could not breastfeed for the duration of 6 months. The reasons were: inadequate breast milk, the baby did not want milk, and the baby had a sucking problem.

The persons that most of the sample asked when they had problems of breastfeeding

were their own mother or their husband's mother (28.9%), public health personnel, nurses, or pharmacists (25.7%). It can be said that the postpartum mothers sought knowledge and opinions on breastfeeding from experienced persons, persons close to them, and family members. Therefore, it can be accepted that the persons aforementioned had their part in helping the mothers to breastfeed. It is an important social supporting factor (Biancuzzo, 2003). The reasons might be that most of the sample had the marital status married. In Thai culture, particularly in the Northeast, postpartum women often have their own mother or their husband's mother to help them and the baby during the postpartum period. It is regarded that advice and help from persons who the postpartum mother respects is something the postpartum mother wants to follow. This is consistent with the study by McCarter-Spaulding (2007) on breastfeeding experience of black postpartum mothers which found that most of the persons who supported or encouraged the mother to breastfeed were female relatives or experienced friends. However, a small number of the sample inquired, consulted or called the nurse or the public health staffer who work in the breast milk clinic (10.0%). This indicates that the postpartum mothers used the service from the breast milk clinic rather little. The reason might be that most of the postpartum mothers had the latter pregnancy and had experience of breastfeeding and were accustomed to requesting advice from the hospital after returning home, and also the postpartum mothers had a negative attitude toward the officer or health personnel who gave the service. This can be seen from the data from a mother who said "I asked the herbal drugstore that sells boiled herbs, because the nurse thought negatively, saying that whatever happens, there will be breast milk." Or there might have been retrieval of websites on breastfeeding which are easy for mothers to access nowadays. This is consistent with Biancuzzo (2003) who stated that concerned health officers or personnel are a factor of success in breastfeeding.

Regarding the behaviors of increasing breast milk, most 6-month postpartum mothers drank ginger ale or ate food mixed with ginger and drank warm or very hot water which were counted as postpartum mother's behaviors in summoning breast milk by eating food adequately with complete nutrients in order to make the body strong and normal and to be energy for producing milk for the baby. However, attempts to drink more water than needed for thirst naturally does not increase the amount of milk, but it may decrease the milk instead (Auepyrotkit & Wangphruk, 2007). This is consistent with Ketkowit, Thawornpitak, Juntaraposri, Kompor, Deesri, Laohasiriwong et al., (2005) who studied folk wisdom on the aspect of pregnant women and postpartum women in Nong Rue District, Khon Kaen Province, Thailand and found that most postpartum women practiced the traditional wisdom highly in eating food consisting

of banana blossom while refrained from eating Barbary duck, climbing wattle and giant water bugs. The 6-month postpartum mothers had the behavior of breastfeeding when they went to work outside the home by pumping or expressing the milk and bottled it for the baby to suck later; only a small number kept the milk in a bag for spoon-feeding (4.3%). It can be said that the postpartum mothers attempted to feed their own breast milk to the baby even though they were not with the baby at all time. Nevertheless, the method of feeding was not right. What the postpartum mothers should do before going out to work is to breastfeed the baby and then express the milk directly into the bottle. The milk should later be given to the baby in a small glass (Wijitsukon et al., 2012). The explanation might be that most postpartum mothers had secondary education, so their perception of correct breastfeeding was in the moderate level. This is consistent with many researchers who found that the level of education has a relationship with the duration of exclusive breastfeeding for 6 months (Camurdan, Ilhan, Benyazova, Sahin, & Vatandas, 2008; Chung, kim & Nam, 2008; Kehler, Chanput & Tough, 2009).

Recommendations

The study found that some breastfeeding behaviors of the postpartum mothers have not met the goals set by the Ministry of Public Health. Therefore, some applications of the findings are recommended as follows:

1. The nursing practice aspect to promote breastfeeding behaviors

1.1. Encourage postpartum mothers to behave in a better way in breastfeeding by encouraging the mother to breastfeed the baby immediately after birth and mother's milk is given to the baby within 30 – 45 minutes after birth. The baby is stimulated to suck the milk for at least 30 minutes in case the mother and the baby have no health problems or limitations of breastfeeding.

1.2. Provide additional data about the food that the baby should be fed during the postpartum period with the emphasis on the benefits and possibilities of exclusive milk feeding, with no water or complementary diets during the 6-month postpartum period.

1.3. Support public health personnel who work in mother and child nursing to regularly develop their knowledge and skills on breastfeeding and continuously encourage them to have good attitude toward giving service on promotion of breastfeeding to postpartum mothers.

1.4. Add more communication channels with public health personnel such as the call center system, e-mail, the access to websites relating to mother's breast milk of various organizations in order to ask for advice in case of breastfeeding problems.

1.5. Provide knowledge on mother's preparation for summoning milk during the postpartum period, in case of inadequate breast milk. The mother should be informed to eat enough food and receive complete nutrients and it is not necessary to drink more water than is naturally needed.

2. Research aspect

2.1. Study the results of counseling on breastfeeding or providing health education on breastfeeding in order to promote perception and behaviors of correct breastfeeding that is continuous for 6 months.

2.2. Study the development of breastfeeding promotion service model of the Hospital.

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