ปัจจัยที่มีความสัมพันธ์กับเวลาที่เริ่มให้ลูกดูดนมครั้งแรกของมารดาหลังคลอด โรงพยาบาลไทเหวียน ประเทศเวียดนาม

Factors associated with breastfeeding initiation among postpartum mothers in Thai Nguyen Hospital, Vietnam

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บทคัดย่อ

การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อศึกษาปัจจัยทำนายเวลาที่เริ่มให้ลูกดูดนมครั้งแรกภายหลังคลอด กลุ่มตัวอย่างเป็นมารดาหลังคลอดและสมาชิกครอบครัวผู้ที่มีอิทธิพลต่อการเลี้ยงลูกด้วยนมแม่มากที่สุด จำนวน 90 คู่ เลือกกลุ่มตัวอย่างโดยการสุ่มอย่างง่ายที่ตึกหลังคลอด เก็บข้อมูลโดยใช้แบบสอบถาม วิเคราะห์ข้อมูลด้วยสถิติพรรณนา สัมประสิทธิ์สหสัมพันธ์เพียร์สัน และการวิเคราะห์การถดถอยพหุคูณ ผลการวิจัยพบว่า เวลาเฉลี่ยที่เริ่มให้ลูกดูดนมครั้งแรกคือ 2.96 ชั่วโมงภายหลังคลอด (SD = 1.54) ร้อยละ 16.7 ของมารดาเริ่มให้ลูกดูดนมในชั่วโมงแรกหลังคลอด อายุและทัศนคติต่อการเลี้ยงลูกด้วยนมแม่ของมารดาหลังคลอดไม่มีความสัมพันธ์กับเวลาที่เริ่มให้ลูกดูดนมครั้งแรก ($p > .05$) ความรู้และความตั้งใจในการเลี้ยงลูกด้วยนมแม่ของมารดา และทัศนคติของสมาชิกครอบครัวต่อการเลี้ยงลูกด้วยนมแม่ มีความสัมพันธ์ทางลบกับเวลาที่เริ่มให้ลูกดูดนมครั้งแรกอย่างมีนัยสำคัญทางสถิติ ($r = -.43$, $p < .05$, $r = -.39$, $p < .05$, $r = -.49$, $p < .05$, ตามลำดับ)โดยทั้งสามปัจจัยร่วมกันทำนายความแปรปรวนของเวลาที่เริ่มให้ลูกดูดนมครั้งแรก ร้อยละ 33.0 ($R^2 = .33$, F [3, 86] =14.15, $p < .001$) ทัศนคติของสมาชิกครอบครัวต่อการเลี้ยงลูกด้วยนมแม่มีอิทธิพลมากที่สุด ($\beta = -.33$, $p < .001$) รองลงมาคือความรู้ในการเลี้ยงลูกด้วยนมแม่ของมารดา ($\beta = -.20$, $p < .05$) และความตั้งใจในการเลี้ยงลูกด้วยนมแม่ของมารดา ($\beta = -.20$, $p < .05$) ผลการวิจัยเสนอแนะว่าพยาบาลผดุงครรภ์ควรส่งเสริมความรู้และความตั้งใจในการเลี้ยงลูกด้วยนมแม่ของมารดาและสร้างทัศนคติที่ดีของสมาชิกครอบครัวต่อการเลี้ยงลูกด้วยนมแม่

คำสำคัญ: มารดาหลังคลอด การเริ่มต้นให้นมแม่ การเลี้ยงลูกด้วยนมแม่ สมาชิกครอบครัว

Abstract

This study aimed to identify the factors predicting hours to breastfeeding initiation. The ninety pairs of mothers and their family members were randomly selected from the postpartum ward to participate in the study and were asked to complete the self − report questionnaires. Data were analyzed by descriptive statistics, Pearson's correlation and standard multiple regression. The results revealed that the average time to breastfeeding initiation was 2.96 hours (*Mean* = 2.96, *SD* = 1.54) and only 16.7% of mothers initiated

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breastfeeding within one hour after delivery. Pearson correlation analysis showed that maternal breastfeeding knowledge and breastfeeding intention, and family member's attitude toward breastfeeding were negatively significantly correlated with hours until breastfeeding initiation ($r = -.43$, $p < .05$, $r = -.39$, $p < .05$, $r = -.49$, $p < .05$, respectively). However, there was no correlation between maternal age and attitude toward breastfeeding with hours until breastfeeding initiation ($p > .05$). The results of standard multiple regression indicated that the significant predictors of breastfeeding initiation were maternal breastfeeding knowledge ($\beta = -.20$, $p < .05$) and breastfeeding intention ($\beta = -.20$, $p < .05$), and family member's attitude ($\beta = -.33$, $p < .001$), which explained 33% of variance ($R^2 = .33$, $F[3, 86] = 14.15$, $p < .001$). Implications are that nurses should provide enough breastfeeding knowledge, encourage maternal breastfeeding intention and create a positive attitude of family members.

keywords: postpartum mother, breastfeeding initiation, family member

Introduction

Worldwide statistics in 2013 indicate 6.3 million children under the age of five died and major causes of early child deaths are preterm birth, asphyxia, diarrhea, respiratory infections and other infections, malnutrition directly or indirectly caused. About 45 % of child deaths are related to malnutrition.[1] Breastfeeding is well acknowledged for short and long-term health benefits. Breastfeeding is the simplest way to help reduce infant mortality rate, as well as protect against illnesses in babies. Providing breast milk for infants within one hour of birth is referred to as «early initiation breastfeeding» and ensures that children receive valuable nutrition, as well as colostrum, which protects the infant. Moreover, the early initiation of breastfeeding and increased frequency of breast-feeding can decrease the amount of blood loss during the fourth stage of labor.[2] as postpartum hemorrhage is controlled with secreted oxytocin hormone.[3] The first milk, colostrum, contains immunologic and nutritious properties not only to protect the newborn from infections[4] but also speeds up their normal intestinal functions.[5] The infants born in a ward where time of first suckling is earlier create a higher incidence of breastfeeding that contributes to success in exclusive breastfeeding.[6] Especially, early initiation of breast-feeding improves the mother and infant interaction as well as creating a strong relationship between mother and infant.[7] Furthermore, early breastfeeding has been seen to reduce neonatal and post-neonatal deaths with an estimated 6% of neonatal deaths that could be prevented if all infants were breastfed from day one and 22% if breastfeeding started within one hour.[8]

In Vietnam, breastfeeding is almost universal, however it is a developing country with population about 87,848,000 people and has one of the highest child malnutrition rates in Southeast Asia.[9] The timing of initial breastfeeding for infants has been noted to be rather late. More than half of infants do not receive breast milk within an hour of birth.[10] After birth, giving formula milk substitutes for breast milk as the newborn›s first meal is becoming common and increasing practice in Vietnam. An overwhelming majority of infants, 73.3% were

given prelacteal foods. Liquids, solids, and semi-solids are introduced as early as immediately after birth, increasing risk of nutritional imbalances and infectious disease and influencing the physical growth of the infant.[11] Vietnamese women had the low rate of breastfeeding initiation and more likely to give their baby formula in the first day of birth.[12]

The main inhibiting factors on breastfeeding initiation have already been found according to a large body of studies internationally. Many studies have showed that successful of breastfeeding initiation depends not only on maternal related factors such as maternal age, maternal attitude, breastfeeding knowledge, and breastfeeding intention[12-14] but also largely depends on the opinion of their family members.[13] To summarize those factors; firstly, maternal age was reported to be significantly associated with breastfeeding initiation, women who are older put the newborn child to breast milk early and had less risk of delaying breastfeeding initiation than younger mothers. Secondly, breastfeeding knowledge has been demonstrated to be significantly associated with breastfeeding initiation. Women who are knowledgeable about breastfeeding initiation were more likely to initiate breastfeeding early than those who were not knowledgeable.[12,15] Thirdly, breastfeeding attitude significantly influenced breastfeeding initiation. Women's positive attitude toward breastfeeding during antenatal period was an important predictor of initiating breastfeeding.[16-17] Fourthly, breastfeeding intention was found as one of the strong modifiable factors related with breastfeeding beha vior.[13,16] Finally, the opinion of family members can play an important role in the mother's decision to initiate breastfeeding. Women whose families prenatally preferred only breastfeeding were more likely to initiate breastfeeding.[12,18-19]

In Vietnam, unfortunately, these factors have not been well studied yet. Several studies conducted in Vietnam, survey the rate of early initiation of breastfeeding but do not delve into understanding its associated factors. Contributing to this problem are many correlated factors, which have the potential to influence breastfeeding initiation and often play an important role in delay breastfeeding initiation. Thus, the main purpose of the present study was to identify whether factors including maternal age, breastfeeding knowledge, breastfeeding intention, and attitude toward breastfeeding, and family member's attitude toward breastfeeding could predict breastfeeding initiation among postpartum mothers in Thai Nguyen City, Vietnam. Based on predictive models, it would be beneficial for nurses and related health care personnel to identify potential barriers to breastfeeding initiation in order to plan effective interventions for improving breastfeeding practice.

Theoretical Framework

The conceptual framework for this study is based on Social Cognitive Theory (SCT), which first was developed by Albert Bandura and was originally named Social Learning Theory in 1977. Social cognitive theory favors a model wherein behavior is depicted as being shaped and controlled either by environmental influences or by internal dispositions. The central model in SCT called Triadic Reciprocal Causation (TRC). This model proposed that human behaviors are influenced by personal factors (including cognitive, affective, and biological and environment factors.[7] According this

theory, cognitive factors and other personal factors regulate human behaviors, while environment factors either facilitate or hinder an individual to perform behavior,[8] and three factors are constantly influencing the other. In previous studies, the model has been used widely to examine factors that related to health behaviors. For this research the model was used to provide structure to the many predictors identified in the literature. Bandura's concepts of person and environment represent the predictors of breastfeeding initiation, while the concept of behavior represents the outcome behaviors of breastfeeding initiation. The predictors identified in literature reviews have been categorized into Bandura's concepts from the TRC model. Personal factors including maternal age, maternal breastfeeding knowledge and intention, maternal attitude toward breastfeeding, environment factors (family member's attitude toward breastfeeding) can be used to determine relationships with behavior (breastfeeding initiation) among postpartum women in Thai Nguyen province, Vietnam. The conceptual framework of the study was showed in the figure 1

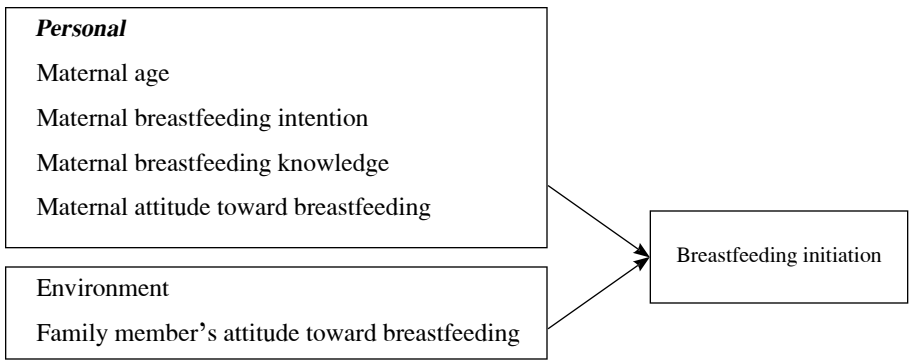

Figure 1: Conceptual framework of this study

Methodology

Design: A descriptive correlational design was used in this study

Ethical considerations: Approval was obtained from Faculty of Nursing Burapha University-Institutional Review Board (IRB No. 08-01-2558) and the granting permission from authorities of Thai Nguyen General Hospital. Participation in this study was entirely voluntary. Participants were given written information explaining the aims of the study and procedures. Confidentiality and anonymity were preserved. Participants were informed about their right to withdraw from the study at any time without losing any benefits of their health care service, and written consents were obtained.

Settings: The study was conducted at the postpartum ward in Obstetrics and Gynecology Department of Thai Nguyen General Hospital. It is a first-class hospital, under the Ministry of Health. Thai Nguyen General hospital was established in 1951 with over 1000 beds with 40 departments and centers. Obstetrics and Gynecology Department is one of four major departments of the hospital with average of 5,000 births per year.

Sample: Ninety pairs of mother and theirs family members were randomly selected to participate in this study. This sample size was calculated by using a formula from the rule of thumb: $N = 50 + 8m$[22] (Where N is sample size, m is number of independent variables). This formula identifies a = .05, β =.20, and assumes that the relation between predicting factors and breastfeeding initiation is medium-size.[22] Sample size was 90 pairs of mothers and their family members. Participants were recruited to this study by random sampling. In order to maintain quality of data collection, 2 to 3 mothers were recruited daily, each having an equal opportunity to be selected as the sample. Then, the researcher allowed mothers to decide their own significant family members participating in the study. If the significant family member was absent at the time to collect data, researchers made an appointment to come back on the following day. Data collection was collected from February to March and until 90 pairs of mothers and family members were interviewed. Inclusion criteria for mothers were: (1) full term vaginal birth; (2) first time mother; (3) able to be interviewed 12 hours after birth; (4) mother without contraindication breastfeed; (5) mother without any health problems and postnatal complications; and (6) able to speak and read Vietnamese. Inclusion criteria for family members were: (1) the most important person influencing to mother's breastfeeding, which will be identified by one item of a questionnaire: (2) > 18 years old: and (3) be able to speak and read Vietnamese.

Instruments: Five self-report questionnaires were employed for data collection. *The Demographic Questionnaire* was developed by the researcher. *A Breastfeeding Knowledge Questionnaire* was developed by the researcher based on literature review.[15,23] The questionnaire contained 12 items scored as yes, no and do not know. Responses to the knowledge questions were ranged from 0 to 12, depending on the number of correct answer. All items were equally weighted (0 point if not correct or response is "don't know", 1 point if correct). Higher scores indicate more knowledge about breastfeeding. The questionnaire has a content validity index (CVI) of 1.00 determined by 5 experts. The reliability of Breast-feeding Knowledge Questionnaire was tested by Kuder- Richardson Formula, with the result of KR20 = 0.76. *Breastfeeding Intention* was defined as the mothers planning to initiate breastfeeding and the strength of intention to provide the infant with human milk as the sole source of milk. Breastfeeding intention was measured by the Infant Feeding Intentions Scale, which was developed by Nommsen-Rivers & Dewey.[24] The questionnaire contained of 2 items assessing the degree of intention. Response to each statement scored from 0 (very much disagree) to 4(very much agree). Total score was calculated by summing the score of 2 items and ranged from 0 to 8. The higher scores indicate higher intention to breastfeeding. In this study, the reliability coefficient of this questionnaire was tested in the pilot study with 30 postpartum mothers. The Cronbach›s alpha coefficient of this questionnaire was .85.

Attitude toward breastfeeding was defined as the degree of positive or negative feelings about breastfeeding. It was measured by The Iowa Infant Feeding Attitude Scale (IIFAS), which was developed by Mora & Russell.[25] The scale contained 17 items

scored on a 5-point Likert scale ranging strong disagreement (1), to strong agreement (5). Items 1, 2, 4, 6, 8, 10, 11, 14, and 17 were reverse-scored and the scores for each item were then summed. Total scores ranged from low of 17 to high of 85 with higher scores reflecting attitudes more positive to breastfeeding. In this study, the reliability coefficient of this questionnaire was tested in the pilot study with 30 subjects (for both mothers and their family members). The results of pilot study showed the Cronbach's alpha coefficient of maternal attitude toward breastfeeding, and family member's attitude toward breastfeeding were .85, .81, respectively.

Breastfeeding initiation was defined as the period of time before mothers start to breastfeed the baby after birth. It was measured by Breastfeeding Initiation Questionnaire, which was developed by the researcher. The questionnaire contained 2 items, which assessed the initiation time for breastfeeding.

All questionnaires were translated from English to Vietnamese using the Back translation technique recommended by Cha, Kim, and Erlen.[26] Translation was performed by the researcher and three bilingual translators who are good at both English and Vietnamese language. The original questionnaires were translated to Vietnamese language by two translators who were bilingual expert in both English and Vietnamese language. The researcher and two translators discussed and combined the Vietnamese versions to be one upon agreement. Then, the questionnaires in Vietnamese language were translated back to English by another translator. Lastly, both versions were compared and checked by the researcher and major advisor for any inconsistencies or distortion in the meaning of word in the content of the instrument until the equivalence was achieved.

Data collection procedures: After gaining permission from IRB and authorities of Thai Nguyen General Hospital, data collection was conducted from February 2015 to March 2015. Participants who met in the study criteria and agreed to participate in the study signed a consent form. With their written consent, each participant was asked to complete the questionnaire in their room at the postpartum ward where data collection was taken place. The completed questionnaires were checked and immediately kept in a secure box accessible only by the researcher. Data were entered into a software computer program for subsequent analyses.

Data analyses: Data were analyzed using descriptive statistics, Pearson's correlation, and standard multiple regression. The significance level was set at $p<0.05$. Pearson's correlation coefficients were used to examine associations between maternal age, breastfeeding knowledge, breastfeeding intention, maternal attitude toward breastfeeding, family member's attitude toward breastfeeding and breastfeeding initiation among postpartum mothers. Standard multiple regression was employed to evaluate how much the selected factors could predict breastfeeding initiation.

Results

Ninety mothers participated in this study. Their average age was 26.49 years (SD = 4.99). More than half of the mothers (55.6%) lived in rural areas and the remaining 44.4% lived in urban areas. The majority of mothers were well-educated,

46.7% achieved higher education at college or university level. In regard to occupation, 25.6% mothers were employed by private companies, 17.8% were employed by the government, 17.8% were farmers, 16.7% had their own business while 14.4 % of them were housewives and 7.8% mothers worked on another occupation. Almost all of mothers was married (98.9%) and the average income was 5.746.666 VND/ month (approximately 287 USD/month) (SD = 2,724, 058). There were ninety family members of mothers who participated in this study. Majority of the important persons in family influencing the mother's breast-feeding were their husbands (40%), 36.7% of them are influenced most by their mothers, and the remaining by their mother-in-law (23.3%)(The data are presented in Table 1).

Table 1 Demographic Characteristics of the Sample (n= 90)

Characteristics	Frequency	Percentage
Maternal age (years)	Mean= 26.49, SD = 5.0, Range = 16 – 39	
Family's income (VND/month)	Mean = 5,746,666 (approximately 287 USD), SD = 2,724, 058, Range= 1,500,000 - 15,000,000	
Living location		
Rural	40	55.6
Urban	50	44.4
Maternal education level		
Primary education	1	1.1
Lower secondary education	18	20
Upper secondary education	29	32.2
Higher education (College/ University)	42	46.7
Maternal occupation		
Housewife	13	14.4
Employee for government	16	17.8
Employee for private company	23	25.6
Own business	15	16.7
Farmer	16	17.8
Other	7	7.8

Table 1 Demographic Characteristics of the Sample (N= 90) Cont.

Characteristics	Frequency	Percentage
Marital status		
Married	89	98.9
No partner/ husband	1	1.1
Family member		
Husband	36	40
Mother	33	36.7
Mother-in-law	21	23.3

The average time to breastfeeding initiation was 2.96 hours (SD = 1.54). However, only 16.7% of mothers initiated breastfeeding within one hour after delivery (Table 2).

Table 2 Breastfeeding initiation (n = 90)

Breastfeeding initiation	Frequency	Percentage
Within 1 hour	15	16.7
More than 1 hour	75	83.3
Hours of breastfeeding initiation	Min = 0.33, Max =6.25, Mean = 2.96, SD=1.54	

The result showed that almost of mothers displayed positive attitude toward breastfeeding (Mean = 65.05, SD = 7.73), had good knowledge of breastfeeding (Mean = 8.21, SD = 2.25), and high intention to breastfeed (Mean = 5.11, SD = *1.86*). In addition, their family member also expressed a positive attitude toward breastfeeding (Mean = 60.9, SD = 8.51). The description of independent variables is presented in Table 3.

Table 3: Description of variables

Variables	Possible range	Actual range	Mean	SD
Breastfeeding intention	0-8	1-8	5.11	1.86
Breastfeeding knowledge	0-12	4-12	8.21	2.25
Maternal attitude toward breastfeeding	17-85	48-79	65.05	7.73
Family member's attitude toward breastfeeding	17-85	42-77	60.9	8.51

Before multiple regression analysis was made, Pearson's test was performed in order to determine the association among variables. Pearson correlation analysis showed that maternal breastfeeding knowledge and intention, and family member's attitude toward breastfeeding had a significant negative correlation with hours to breastfeeding initiation (r =-.43, p <.05, r = -.39, p < .05, r =- .49, p <.05, respectively). Given this, mothers who have a family with favorable attitude toward breastfeeding, high score of breastfeeding knowledge as well as high intention to breastfeed were more likely to initiate breastfeeding early. Table 4 summarized the relationships among predicting factor and association with hours of breastfeeding initiation.

Table 4 Summary of Pearson's correlation coefficient analysis

Variables	1	2	3	4	5	6
1. Maternal age	-					
2. Breastfeeding intention	-.049	-				
3. Breastfeeding knowledge	.085	.37**	-			
4. Maternal attitude toward breastfeeding	0.78	.311**	.420**	-		
5. Family attitude toward breastfeeding	-.036	.359**	.467**	.426**	-	
6. Hours of breastfeeding initiation	.135	-.394*	-.434**	-.107	-.495**	-

*p< .05, **p<.01

Assumptions of multiple linear regression were met before running the analyses. Three correlated variables were entered into a regression model. Standard multiple regression indicated that all three variables, including maternal breastfeeding knowledge and intention, and family member's attitude toward breastfeeding, together explained a statistically significant 33% of variation of breastfeeding initiation (R^2 = .33, $F[3, 86]$ =14.15, p < .001). Results of the standard multiple regression analysis are illustrated in Table 5.

Table 5 Summary of Standard Multiple Regression Analysis

Variables	B	SE	β	t	P-value
Breastfeeding intention	-.162	.079	-.20	-2.046	.04
Breastfeeding knowledge	-.140	.070	-.207	-2.014	.04
Family attitude toward breastfeeding	-.059	.018	-.327	-2.180	.002
Constant = 8.549					
R^2 = .33					
Adjusted R^2 = .307					
F (3, 86) = 14.15					

Discussion

In this study, the rate of breastfeeding within one hour after delivery was still low (16.7%), and the average hours of breastfeeding initiation was about 2.96 hours. It was disconcerting to find out that the proportion of women started breastfeeding within one hour was less than a previous study in Vietnam. Huong et al. found that close to half of the infants in their Vietnamese sample started breastfeeding within the first hour after birth.[27] Result of this study consistent with existing practice in Vietnam. Thai Nguyen General Hospital does not have a Baby Friendly Hospital designation. Meanwhile recent overcrowding, along with the shortage of maternity staff as well as materials may be considered as causes of the decline in services quality, reducing the time for interaction between health care providers and postpartum mothers. Further, formula feeding trends are increasing among Vietnamese mothers while there are no strong policies stipulating the use of infant formula in hospitals. For every three mothers, there is one person who discarded colostrum after birth and two persons who feed the baby liquids other than breast milk within the first 3 days.[11] So freely using formula feeding not only creates barriers to starting breastfeeding but also contributed to delaying the time to breastfeeding after birth.

The average age of mothers was 26.49 years old. In bivariate relationship, there were no correlations between maternal age and breastfeeding initiation (r =.13, p >.05). This might be that age is not direct factor influencing breastfeeding initiation. Other studies have indicated that, breastfeeding initiation was significantly associated to the number of children that mothers had.[28] Otherwise, breastfeeding initiation can be inferred that associated with breastfeeding experiences. This study focused on the first time mothers. All of them had no breastfeeding experiences. Therefore, according to this result, maternal age may not appear to have effect on early initiation breastfeeding when subjects are women giving birth for the first time.

Findings from this study showed that maternal breastfeeding intention had a negatively significant correlation with breastfeeding initiation. It also was a significant predictor of breastfeeding initiation. This finding showed that mothers who have high intention for only breastfeed their baby without using any formula or other milks were more likely to initiate breastfeeding early. The result of this study was also compatible with previous studies.[13,16] In Vietnam most women decided during pregnancy which baby feeding method to use (65%),[29] this indicates the antenatal period is an effective time for concentrating efforts to encourage women intent to breastfeed. Mothers who had a positive antenatal intention to breastfeed postpartum were more likely to have early initiation of breastfeeding. In addition, this result was supported from Social Cognitive Theory of Bandura, which proposed that human behaviors are influenced by personal factors which in this study were intention of mother. Given this, breastfeeding intention was a factor in need for modification to improve breastfeeding practice in Vietnam.

Finding from this current study indicated that maternal breastfeeding knowledge had a negatively significant correlation with breastfeeding initiation and it was a significant predictor of

breastfeeding initiation as well. Women made the decision to breastfeed due to the known health benefits of breast milk. The result of this study showed that mothers with greater knowledge about breastfeeding benefits were more likely to initiate breastfeeding early. Consistent with results of other studies.[12,30] Mothers who were knowledgeable on breastfeeding were five times likely to initiate breastfeeding early.[15] Given this, breastfeeding knowledge was found as a predictor for intervention research to improve breastfeeding practice.

In this study, attitude toward breastfeeding of the mother was not significantly associated with breastfeeding initiation. It failed in Pearson correlation model, meaning that maternal attitude was not significantly correlated with breastfeeding initiation. Results are consistent with findings of Holbrook et al.,[17] which indicated that maternal attitude was not associated with breastfeeding initiation. This is quite consistent with reality in Vietnam, breastfeeding practice of Vietnamese women was generally influenced by family members.[29]

The result of current study showed that family's attitude toward breastfeeding was negatively significantly correlation and was a significant predictor of early breastfeeding initiation. Consistent with these associations, a wealth of evidence highlights the importance of family members in promoting breastfeeding initiation.[12,13,18,19] In breastfeeding practice, primary sources of information were from the family (33.9%), the physician and nurse (10.8%). Women who were advised and supported from family members, adopted to early breastfeeding, feed colostrum and did not give pre-lacteal foods.[18] Therefore, results from the present study also underscore the importance of positive encouragement from family member on early initiation breastfeeding. It is also important to create a positive view for family member about breastfeeding.

Limitation and Recommendation

One main limitation of this study is the sample which was recruited in only one setting in Thai Nguyen, Vietnam and may limit the generalization of the study findings. It is recommended that further studies be conducted in other settings and locations in Vietnam. This study was only interested in effects of maternal age, maternal breastfeeding knowledge and intention, family member's attitude toward breastfeeding on timely of breastfeeding initiation. Therefore, the important recommendation would be conduct other studies, which have additional factors that may affect to breastfeeding initiation.

Implication for Nursing Practice

Delayed initiation of breastfeeding behaviors stresses the need for nutrition interventions in Vietnam that focus on improving breastfeeding practices during the first days of an infant's life even in the antenatal period. To give mothers sufficient support to establish and continue optimal breastfeeding practices, it is critical to reach them as early as possible – during pregnancy and immediately after giving birth.

Nurses should pay more attention to providing enough breastfeeding knowledge, encourage women intent to breastfeeding, and create a positive attitude of family member.

Conclusion

Research results showed that the real rates of breastfeeding in the first hour after delivery is very low, the average time of breastfeeding initiation was rather late. This study identified that maternal breastfeeding knowledge and intention, and family member's attitude toward breastfeeding were significant predictors of breastfeeding initiation among Vietnamese mothers. Therefore, in order to improve practice of early initiation of breastfeeding, the predicting variables used in this study should be selected for developing an intervention to help provide enough breastfeeding knowledge for the mother, encourage mother intent to breastfeeding as well as create a positive attitude for their family members. Findings can help nurses to design an effective breastfeeding promotion intervention for further study.

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