

## นิพนธ์ต้นฉบับ

## Original Article

### ปัจจัยล้มเหลวที่ส่งผลต่อการเลี้ยงลูกด้วยนมแม่อย่างเดียวในโรงพยาบาลชัยภูมิ

### Failure Factor on Exclusive Breastfeeding in Chaiyaphum Hospital

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## บทคัดย่อ

**หลักการและเหตุผล** : ปัจจุบันมีการเลี้ยงลูกด้วยนมแม่อย่างเดียวลดลง ซึ่งอาจมีสาเหตุมาจากการไม่ได้รับข้อมูลและการช่วยเหลือที่ถูกต้อง มารดาขาดความรู้ ความเข้าใจ ขาดประสบการณ์ ปัญหาสุขภาพของมารดาและบุตร ปัจจัยทางด้านบุคลากรทางการแพทย์ ครอบครัว สังคม วัฒนธรรม และสื่อโฆษณา ดังนั้นผู้วิจัยจึงสนใจที่จะศึกษาวิเคราะห์ หาปัจจัยล้มเหลวที่มีผลต่อการเลี้ยงลูกด้วยนมแม่ เพื่อนำข้อมูลที่ได้มาใช้เป็นแนวทางในการดูแลผู้ป่วยในคลินิกนมแม่ของโรงพยาบาลชัยภูมิ รวมถึงเสนอเป็นนโยบายในการแก้ปัญหาในในระดับประเทศต่อไป

**วัตถุประสงค์** : เพื่อศึกษาปัจจัยที่มีผลต่อความล้มเหลวในการเลี้ยงลูกด้วยนมแม่อย่างเดียว 6 เดือน  
**วิธีการศึกษา** : การศึกษาเชิงพรรณนาไปข้างหน้า เก็บข้อมูลในหญิงตั้งครรภ์ที่มาฝากครรภ์และคลอดในโรงพยาบาลชัยภูมิ ตั้งแต่วันที่ 1 เมษายน พ.ศ.2562 ถึง วันที่ 30 เมษายน พ.ศ.2563 เก็บข้อมูลโดยการสอบถามจากแบบสอบถามทางโทรศัพท์ และทดสอบความสัมพันธ์ของข้อมูลโดยใช้สถิติ Chi-squared test

**ผลการศึกษา** : ผลการศึกษาสถานภาพสมรสของกลุ่มตัวอย่าง พบว่ากลุ่มตัวอย่างส่วนใหญ่มีสถานภาพสมรส ร้อยละ 95.7 มีระดับการศึกษาอยู่ในชั้นมัธยมศึกษา คิดเป็นร้อยละ 66.1 ส่วนใหญ่ประกอบอาชีพรับจ้างและแม่บ้าน คิดเป็นร้อยละ 41.7 มีรายได้ในช่วง 5,000 ถึง 10,000 บาท คิดเป็นร้อยละ 53.9 นับถือศาสนาพุทธเป็นส่วนใหญ่ มีโรคประจำตัว และใช้ยาประจำ ร้อยละ 7.8 และ 2.6 ตามลำดับ คลอดโดยการผ่าคลอดเป็นส่วนใหญ่ คิดเป็นร้อยละ 60.9 เริ่มให้นมบุตรเกิน 1 ชั่วโมงหลังคลอด คิดเป็นร้อยละ 67 สำหรับปัจจัยที่มีผลต่อความล้มเหลวในการให้นมบุตรมากที่สุดคือ ปัจจัยด้านครอบครัว คิดเป็นร้อยละ 50.9 รองลงมาคือปัจจัยด้านทารกคิดเป็นร้อยละ 26.7

**สรุป** : ผลการวิจัยในครั้งนี้ พบว่าปัจจัยล้มเหลวที่มีผลต่อการเลี้ยงลูกด้วยนมแม่จนครบ 6 เดือน คือ ปัจจัยด้านครอบครัว ซึ่งหมายรวมถึง ความเชื่อ ทศนคติ การศึกษา รายได้ในครัวเรือน รวมถึงความรู้และการตระหนักถึงความสำคัญต่อการเลี้ยงลูกด้วยนมแม่ รองลงมาคือปัจจัยด้านทารก โดยเฉพาะในรายที่มีปัญหาด้านการดูด ความเจ็บป่วยอื่นๆ และติดจุกยาง ซึ่งการศึกษาวิจัยในครั้งนี้ทำให้บุคลากรทางการแพทย์ มีความรู้ความเข้าใจ และตระหนักถึงความสำคัญของปัจจัยที่มีผลต่อความล้มเหลวในการเลี้ยงลูกด้วยนมแม่เพื่อนำไปใช้ในการวางแผนการดูแลผู้ป่วยในกลุ่มนี้ให้มีประสิทธิภาพมากยิ่งขึ้น

**คำสำคัญ** : การเลี้ยงลูกด้วยนมแม่อย่างเดียว 6 เดือน

## ABSTRACT

- Background** : Currently, only breastfeeding is decreasing because there are essential factors preventing mothers from continuously breastfeeding. It may be caused by not receiving the right information and the support for mothers, a lack of knowledge and understanding, a lack of experience, maternal and child health conditions, as well as medical-, family-, social-, and cultural issues, also the advertising media factors. Therefore, the researcher was interested in studying and analyzing the factors that affected breastfeeding failure to use the information obtained as a guideline for caring for patients in the breast milk clinic of Chaiyaphum Hospital as well as proposing a policy to solve this problem at the national level.
- Objective** : To assess the factor that affects the failure of exclusive breastfeeding.
- Methods** : Pregnancy patients with antenatal care (ANC) and had delivery at Chaiyaphum Hospital between April 1<sup>st</sup>. 2019 and April 30<sup>rd</sup>. 2020 were identified. The telephone questions were used for call data collection. The relationship between the data was tested using the Chi-squared test
- Results** : The hundred and fifteen pregnant patients had antenatal care (ANC) and delivery at Chaiyaphum Hospital between April 1<sup>st</sup>.2019 and April 30<sup>rd</sup>. 2020. The mean age of patients was 26.6 years (range, 15 to 42 years, SD 6.87). The mean gestational age (GA) was 38.3 weeks (range, 35 to 41 weeks, SD 1.13). The mean of GA at the first ANC was 12 weeks (range, 4 to 40, SD 8.07). The number of ANC was 10.1 (range, 0 to 21 weeks, SD 3.71), and the mean of fetal weight was 3,154.3 g. (range, 2,370 to 4,545 g, SD 401.41). The factors that affect the most breastfeeding failure are familial factors accounting for 50.9 percent. Next is the baby factor representing 26.7 percent.
- Conclusion** : The results of this research found that the failure factor affecting the full 6 months of breastfeeding was the family factor. It included beliefs, attitudes, education, household income as well as knowledge and awareness of the importance of breastfeeding. Following the infant factor, especially in cases with suction problems, other illnesses and sticking of rubber stoppers, this research study made medical personnel aware of the factors affecting breastfeeding failure to be used in planning the care of patients in this group more efficiently.
- Keyword** : Exclusive breastfeeding

## Introduction

According to the World Health Organization (WHO) definition, the exclusive breast-feeding is the only breastfeeding without water and other nutrients for at least 6 months after giving birth and breastfeeding with a supplement for 2 years<sup>(1,2)</sup>

Breast milk has benefits for the health of babies and mothers. It also benefits the economy and society because breast milk contains essential nutrients for the body and the brain's growth. It consists of more than 80 percent water, and a milk protein that is easily digested makes it well absorbed. Moreover, it contains fat that could create energy for babies. There are carbohydrates in the growth of the brain. Furthermore, breast milk can also prevent various infections organized in the prebiotic group. It helps lactobacillus Bifidus in the intestine to grow well.<sup>(3,4,5)</sup> In addition, breast milk has benefits for the external structure. The breast-fed baby will grow the jaw and facial bones more appropriately than the bottle-fed baby, making an orderly space for teeth to grow. There are also the right amount of nutrients in breast milk for the baby's body needs, such as protein or fat. This gives babies who are breastfed to have a chance to develop type 2 diabetes, and obesity decreases when grown as adults.<sup>(6)</sup>

Breastfeeding, aside from being beneficial to the baby, also benefits mothers that help reduce postpartum blood loss. It allows the uterus to return to its original state quickly,<sup>(3)</sup> while also reduces the cost of buying mixed milk and other essential equipment. Breastfeeding also reduces the risk of breast cancer, ovarian cancer, high blood pressure,

high blood cholesterol and heart disease.<sup>(4,7)</sup> It helps to reduce the chance of mother having type 2 diabetes as well.<sup>(8)</sup>

Because of many breastfeeding benefits, the WHO and the United Nations Children's Fund = UNICEF recommend that all mothers should breastfeed for 6 months after giving birth. After that, breastfeeding should be combined with food until the age of 2 years or more.

The 10 guideline steps for promoting breastfeeding to successful breastfeeding<sup>(9)</sup> were setting as the Department of Health Ministry of Public Health of Thailand saw the importance and have the policy to promote breastfeeding in the same way.

Chaiyaphum Hospital had a breastfeeding policy since birth, according to the Department of Health policy. There is a continuous promotion to the present as well.

Currently, only breastfeeding is decreasing because there are essential factors preventing mothers from continuously breastfeeding. It may be caused by not receiving the right information and the support for mothers, a lack of knowledge and understanding, a lack of experience, maternal and child health conditions, as well as medical, family, social, and cultural issues, also the advertising media factors. Studies and reviews of past research papers have shown that the significant factors affecting the breastfeeding rate are the parental leave period after delivery. The most common factor in discontinuing breastfeeding before 6 months is the adolescent mother. The important factors that reduce breastfeeding were the mother's education level, the unfavorable places of breastfeeding,

occupation of infant parents, and the family's well-being. Due to the length of time of maternity leave, lower-income mothers were more breastfeeding than high-income mothers. The mothers who received advice during pregnancy and after delivery were more likely to breastfeed. Moreover, mothers who had vaginal delivery were more likely to breastfeed than mothers who had a caesarean section.

Because the researcher foresaw the benefits of breastfeeding, including the mother's health, the baby, the family, the society, and the nation, it was found that exclusive breastfeeding for 6 months has decreased various factors. Therefore, the researcher was interested in studying and analyzing the factors that affected breastfeeding failure to use the information obtained as a guideline for caring for patients in the breast milk clinic of Chaiyaphum Hospital as well as proposing a policy to solve this problem at the national level.

## Materials and Methods

The study obtained approval from the Ethics Committee for Research involving Human Subjects of the institution. The COA number was CPH.REC NO 11/62. The pregnancy patients who had ANC and delivery at Chaiyaphum Hospital between April 1<sup>st</sup>, 2019 and April 30<sup>rd</sup>, 2020 were identified. The selection criteria were all pregnant women who had antenatal care and delivery at the hospital and could not breastfeed for 6 months. A total of 104 peoples for the exclusion criteria were the pregnancy patients with 6 months breastfeeding completion, preterm delivery, twin pregnancy and sick newborn.

Data collecting were age, body weight, Body Mass Index (BMI), height, weight, marital status, educational level, occupation, income, religion, Gestational Age (GA), parity, the first GA for ANC, underlying disease, medication used, number of ANC, the first hour of breastfeeding, history of the breastfeeding education, fetal weight, GA at time to delivery, APGAR score at 1,5 and 10 minute, route of delivery. For the breastfeeding education, the patient received advice from healthcare professionals about the importance of breastfeeding either before delivery, while in the delivery process, or after delivery. The failure factor on exclusive breastfeeding could be obtained from calling mothers, whether they were still breastfeeding.

In case a mother was still breastfeeding, she would be cut off. Nevertheless, if she did not keep breastfeed, she would be called and asked for the reasons for discontinuing breastfeeding for 6 months.

Data were analyzed using SPSS statistical software, version 22.0 (SPSS, Chicago, IL). Descriptive statistics were used to analyze demographic data and were summarized in numbers with a percentage or median with range.

## Results

**Table 1** General Information

	Minimum	Maximum	Mean	SD
Age(years)	15	42	26.6	6.87
Gestation Age (GA) (weeks)	35	41	38.3	1.13
GA at first ANC (weeks)	4	40	12.5	8.07
Number of ANC	0	21	10.1	3.71
Fetal Weight (gm.)	2,370	4,545	3,154.3	401.41

A total of 115 pregnant patients had Antenatal Care (ANC) and delivery at Chaiyaphum Hospital between March 1<sup>st</sup>, 2019 and April 30<sup>rd</sup>, 2020. The mean age of patients was 26.6 years (range, 15 to 42 years, SD 6.87). The mean gestational age (GA) was 38.3 weeks (range, 35 to 41 weeks, SD 1.13). The mean of GA at the first ANC was 12.5 weeks (range, 4 to 40, SD 8.07). The number of ANC was 10.1 (range, 0 to 21 weeks, SD 3.71), and the mean of fetal weight was 3,154.30 g (range, 2,370 to 4,545 g, SD 401.41). As shown in table 1.

**Table 2** Personal Information

	Frequency (%)
<b>Marital Status</b>	
Single	3(2.6%)
Married	110(95.7%)
Divorced	2(1.7%)
<b>Educational Level</b>	
Primary school	26(22.6%)
Middle school	76(66.1%)
Pre-Bachelor of Arts	6(5.2%)
Bachelor of Art	5(4.3%)
Others	2(1.7%)
<b>Occupation</b>	
Education	3(2.6%)
Employee	48(41.7%)
Housewife	48(41.7%)
Others	16(13.9%)
<b>Income</b>	
Non	5(4.3%)
Less than 5,000 bath/month	17(14.8%)
5,000-10,000 bath/month	62(53.9%)
10,000-20,000 bath/month	25(21.7%)
More than 20,000 bath/month	6(5.2%)

Table 2 Personal Information (continous)

	Frequency (%)
<b>Religion</b>	
Buddhism	112(97.4%)
Christian	1(0.9%)
Islam	2(1.7%)
<b>Underlying Disease</b>	
Yes	9(7.8%)
No	106(92.2%)
<b>Medication Used</b>	
Yes	3(2.6%)
No	112(97.4%)
<b>Delivery Method</b>	
Vaginal	45(39.1%)
Cesarean section	70(60.9%)
<b>The First Time for Breastfeeding</b>	
Within 1 hr. after delivery	38(33.0%)
More than 1 hr. after delivery	77(67.0%)
<b>Breastfeeding Education in ANC Unit</b>	
Yes	75(65.2%)
No	40(34.8%)
<b>Failure Factor</b>	
Maternal	13(11.2%)
Fetal	31(26.7%)
Family	59(50.9%)
Occupational	10(8.6%)
Others	3(2.6%)

The results of the sample's marital status study were that most of the samples were married that were 110 persons, accounting for 95.7 percent and the majority of the samples were in the secondary educational level that was 76 people, accounting for 66.1 percent. It was found that most of the samples were employees and housewives with an amount of 48, accounting for 41.7 percent. Most of them earned monthly income in the range of 5,000 to 10,000 baht, representing 53.9 percent. Most of the samples were Buddhists. The samples with chronic illness and had permanent medication

were 7.8 percent and 2.6 percent, respectively. Mostly had the delivery method of the cesarean section. Most of them could breastfeed their babies more than 1 hour after delivery, accounting for 67 percent. Mothers acquired breast milk knowledge since the antenatal and postnatal period, which was accounted for 56.5 percent and 65.2 percent, respectively. The factors that affected the most breastfeeding failure were family factors, accounting for 50.9 percent. Then, it was the baby factor, representing 26.7 percent. As shown in Table 2.

## Discussion

Because of many breastfeeding benefits to babies, the WHO and UNICEF recommend<sup>(2)</sup> that all mothers should breastfeed for 6 months after giving birth. Similarly to the Department of Health of the Ministry of Public Health (Thailand) that has also seen the importance of this point and has the policy to promote breastfeeding in the same way since 1979 by promoting with guidelines. All hospitals, both public and private, including Chaiyaphum Hospital, which has a policy of breastfeeding since birth, according to the Department of Health's policy. There has been a continuous promotion as well.<sup>(4)</sup>

However, nowadays, exclusive breastfeeding is reduced by many factors. As mentioned above, the researcher fore saw the importance of this issue. Relevant factors and influencing breastfeeding decisions could be divided into 4 factors; 1) maternal factors that included belief, attitude, education, health, experience, and length of maternity leave. 2) fetal factor that consisted of health, low absorption, sucking milk is not effective, or rubber nipple addiction. 3) familial factors such as low income families tied and had domestic violence, monthly income, family attitudes, beliefs, and culture and social standards. All of these factors affected all breastfeeding failures. 4) it was also found that the attitudes or beliefs of the medical staff or personnel who were involved with the mothers were very important to their decision to breastfeed the babies, especially nurses who took care of either mothers and infants. They were the person who provided information to mothers and their families. It was

a factor that whether the information was passed to the mother in an appropriate direction. It was a positive and encouraging factor for mothers to decide to start breastfeeding and continue breastfeeding once they returned home.

## Conclusion

This study made medical personnel acquire knowledge and understanding about the factors that affected exclusive breastfeeding failure to use in the planning of care for patients in this group to be more effective. The planning included advice, stimulation, and promotion of breastfeeding in pregnant women to understand the benefits of breast milk to the baby and the benefits that occurred to mothers in breastfeeding to recognize the importance of establishing a bond between the baby and the mother according to the 10 steps of the WHO to promote breastfeeding. In addition, the planning was to promote health and immunity in children to save family expenses. Therefore, the information would be useful to develop in the care of pregnant women who had antenatal care and delivery to be a guideline to solve future breastfeeding problems as well.<sup>(2)</sup>

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