

# Barriers to exclusive breastfeeding: A cross-sectional study among mothers in Ho Chi Minh City, Vietnam

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## Abstract

**Background:** Exclusive breastfeeding provides numerous benefits to the health of infants, mothers, economics, and the environment. However, during the exclusive breastfeeding period, the mothers face many barriers.

**Objective:** This study aimed to describe the perceived barrier of breastfeeding and compare its differences among mothers in Vietnam according to demographic and individual characteristics.

**Methods:** A cross-sectional study was conducted among 246 women in Ho Chi Minh City, Vietnam. Data were derived from the original survey using a self-administered questionnaire asking about the barriers of breastfeeding in three aspects: maternal, infant, and socio-environment. Descriptive statistics, Independent t-test, and ANOVA were used to describe the mothers' characteristics and the breastfeeding barriers.

**Results:** The barrier from the infants was the most noticeable, followed by socio-environment and maternal barriers, respectively. Breastfeeding in public places ( $M = 2.93$ ,  $SD = 0.92$ ), baby's illness ( $M = 2.74$ ,  $SD = 0.99$ ), and insufficient milk supply ( $M = 2.70$ ,  $SD = 0.99$ ) were considered as major barriers to six-month exclusive breastfeeding among mothers in Ho Chi Minh City, Vietnam. Among the age groups, mothers who were more than 35 years old perceived had lower breastfeeding barriers than the younger mothers ( $F = 3.67$ ,  $p = 0.03$ ).

**Conclusion:** The investigation of the barriers against exclusive breastfeeding practice can help nurses and midwives develop breastfeeding promotion programs to promote exclusive breastfeeding rate for women in Vietnam.

## Keywords

barrier; exclusive breastfeeding; perception; mothers; nurses; midwives; Vietnam

Breastfeeding is the most efficacious feeding method for the child, especially the exclusive breastfeeding in the first six months of infant's life provides irrefutable benefits for the infant's health, mother's health, economics, and the environment. To illustrate, a baby who receives only breast milk in the first six months of life is less mortality and morbidity of gastrointestinal infection diseases, pneumonia, asthma, or diarrhea compared to non-breastfed infants (Ballard & Morrow, 2013; Biks et al., 2015). Additionally, exclusive breastfeeding for infants in

the first six months is also significantly associated with higher scores in the intelligence quotient test than those who have no exclusively breastfed (Tasnim, 2014). Regarding the mother's health, exclusive breastfeeding significantly reduces breast cancer and ovarian cancer, and it postpones returning the menstrual period as a lactational amenorrhea method (Labbok, 2016; Victora et al., 2016). For economics, Walters et al. (2016) estimated the economic benefits of breastfeeding across seven countries in Southeast Asia; the results found that the

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health care treatment could be saved 300 million US dollars annually by reducing the incidence of diarrhea and pneumonia by providing adequate breastfeeding. Furthermore, breastfeeding is assumed as climate compatible because of the nature of breast milk, e.g., no need for heating, no need the refrigeration to store, and breast milk can be used at any time with the right temperature.

Because of the advantages of breast milk, World Health Organization (WHO) recommends mothers worldwide exclusively breastfeed their infants during the first six months after birth (WHO, 2011). However, globally only 40% of infants aged 0-6 months are exclusively breastfed (WHO, 2017). In Vietnam, only 24% of infants are breastfeeding exclusively for the first six months despite the multiple breastfeeding promotion programs that have been launched by the government (UNICEF, 2016).

During six-month exclusive breastfeeding, the mothers could face many challenges, barriers, or difficulties. The common barriers are the perception about insufficient breast milk, and breast milk does not provide all the necessary vitamins and supplements (Kim & Chapman, 2013; Nguyen et al., 2018; Xuan & Nguyen, 2018). Another barrier of exclusive breastfeeding is the mother's perception about foods and other liquids more nutritious than breast milk; therefore, formula milk, water, and solid food are commonly introduced before six months of age (Lundberg & Thu, 2012). In addition, mothers also face the barrier to exclusive breastfeeding due to the need to return to work outside the home or the feeling of uncomfortable to breastfeed in public places, such as restaurants, workplaces, shopping centers, and public transport (Coomson & Aryeetey, 2018). Besides, physical breast problems, such as mastitis, breast engorgement, sore nipples, and cracked or inverted nipples, become the challenge for mothers who breastfeed their children exclusively for six months (Babakazo et al., 2015; Karkee et al., 2014).

Additionally, each culture has its own belief when it comes to breastfeeding. Some of these are helpful to mothers and babies, while others could negatively impact a baby's health. For example, there is a widespread belief among Vietnamese mothers that colostrum is dirty milk and should throw away (Dixon, 1992). Discarding colostrum is associated with higher odds of non-exclusive breastfeeding during six months (Tamiru et al., 2012).

According to Health Promotion Model, perceived barriers to action are anticipated, imagined, or real blocks and costs of understanding a given behavior (Pender et al., 2011). In the context of exclusive breastfeeding, perceived barriers refer to perceptions about inconvenience, difficulty, or obstacles in performing exclusive breastfeeding to the babies; the higher the perceived barriers to breastfeeding, the less implementation of exclusive breastfeeding among them (Kim & Chapman, 2013). Few studies documented the barriers of exclusive breastfeeding in the Vietnam context (Kim & Chapman, 2013; Nguyen et al., 2018). These studies were conducted

in the Northern and Middle of Vietnam, where they have different cultures from the Southern of Vietnam. Therefore, conducting research in identifying the barriers of exclusive breastfeeding practices among mothers in the Southern of Vietnam was important. The findings from this study give comprehensive pictures about barriers of exclusive breastfeeding for six months among mothers in Ho Chi Minh City, Vietnam. It also provides baseline information for future researches on the relevant topic. In addition, the findings can help nurses and midwives to manage the exclusive breastfeeding practice and develop appropriate intervention to minimize the perception of barriers among Vietnamese mothers; hence, promoting the rate of exclusive breastfeeding among infants in Vietnam.

## Methods

### Study Design

This was a quantitative study with a cross-sectional design to identify breastfeeding barriers among mothers in Ho Chi Minh City, Vietnam. It relied on secondary data of the research on "Factors predicting six-month exclusive breastfeeding among mothers in Ho Chi Minh City, Vietnam", conducted by Nguyen et al. (2021). The data were collected from three hospitals named University Medical Center, Hung Vuong hospital, and Tu Du hospital at Ho Chi Minh City, Vietnam.

### Sample Size and Sampling Method

The population of the study was mothers who were having babies aged from six to nine months. The study inclusion criteria for mothers included a mother from 18 years old or older, having a baby from six to nine months, being able to communicate in the Vietnamese language. For infants, the criterion included a singleton baby with a gestational age of at least 37 weeks. The exclusion criteria for mothers were mothers with chronic disease or other diseases in which breastfeeding was not allowed by physicians. The exclusion criteria for infants were infants with congenital disabilities or admission to the hospital during the first six months.

The sample size was calculated using Cochran's formula (Cochran, 1977). The estimated proportion of exclusive breastfeeding in Vietnam was 20% (UNICEF, 2016), the error of precision was accepted at 5%, and the confidence interval of 95% was assumed. Therefore, the total sample size in the current study was 246 mothers.

### Instruments

The samples of this study were drawn from the secondary data of the original research, which was mentioned previously. The original survey was conducted using a self-administered questionnaire for collecting data. The Perceived Barriers to Breastfeeding Scale was developed by the first author based on the literature review (Babakazo et al., 2015; Coomson & Aryeetey, 2018; Kim & Chapman, 2013) and the concept of perceived barriers to action from the Health Promotion Model (Pender et al., 2011) to

measure mothers' perceptions of factors which were considered as breastfeeding barriers. The content validity of the scale was tested with three breastfeeding experts, and the item-level content validity (I-CVI) index of this scale was 0.91. Originally, this scale was developed in English and translated into the Vietnamese language using the back-translation technique.

The Perceived Barriers to Breastfeeding Scale consisted of 20 items that covered three aspects of breastfeeding barriers: maternal barriers (item 1-10), infant barriers (item 11-14), and socio-environment barrier (item 15-20). The maternal aspect reflects the negative attitude or belief of mothers about breastfeeding practice, the lack of breastfeeding technique or skills, lack of confidence, mother's physical and psychological changes that would bar the exclusive breastfeeding practice. The infant aspect reflects the false belief of mothers about the benefits of breast milk for infants and infant's physical and psychological conditions. The socio-environment aspect reflects the negative mothers' perception of inadequate support from family and health care providers, working status, and the adverse effect of formula advertisement against the exclusive breastfeeding practice. The response scale to each item was scored from 1 (strongly disagree) to 4 (strongly agree). Therefore, the total scores were ranged from 20 to 80, which a higher score means a higher level of perceived breastfeeding barrier. The psychometric properties of the scale were tested with internal consistency reliability of the scale was 0.92.

**Data Collection**

Data were derived from the secondary data of the original research; hence, the detailed information of the data collection could be seen in the study of [Nguyen et al. \(2021\)](#).

**Data Analysis**

Data were coded and analyzed using SPSS (statistical package for the social sciences) software program version 18.0. Descriptive statistics were used to describe the participant characteristics, compute the mean and standard deviation of the Perceived Barriers to Breastfeeding Scale. Independent t-test, one-way ANOVA were used to determine the different means between mother's characteristics and perceived barriers to breastfeeding. If a statistically significant difference was found when running ANOVA, a post hoc test was done to find a specific difference between the groups. Prior to performing the ANOVA, the assumptions were tested to ensure the accuracy of the findings and confirm no violation of statistical assumptions.

**Ethical Consideration**

The current study obtained approval for secondary use from the first author of the original survey with the agreement for using the data. Additionally, the Institutional Review Board (IRB) Committee from the University of Medicine and Pharmacy at Ho Chi Minh City

(no.992/HĐĐĐ-ĐHYD) approved this study. Furthermore, this study also received the mothers' agreement to participate in the study. Mothers were also informed that they had the right to withdraw from the research and were assured about confidentiality of the obtained information.

**Results**

**Participant's Characteristics**

Among 246 mothers, 61.4% of them aged 26 to 35 years. Slightly half of the mothers achieved the high school or diploma educational levels (52.0%), got the normal delivery (53.7%), and were the primiparous mothers (52.0%).

**Table 1** Mothers' characteristics by frequency and percentage (N=246)

Individual Characteristics	n	%
<b>Mother's age</b>		
< 25 years old	46	18.7
25 – 35 years old	151	61.4
> 35 years old	49	19.9
<b>Mother's education</b>		
Less than high school	62	25.2
High school or diploma	128	52.0
Bachelor or higher	56	22.8
<b>Delivery method</b>		
Normal delivery	132	53.7
Cesarean section	114	46.3
<b>Parity</b>		
Primiparous	128	52.0
Multiparous	118	48.0

**Perceived Barriers to Breastfeeding**

The average total score of perceived barriers to breastfeeding was 49.24 (SD = 14.57), which was ranged from 22 to 76. The score in each item was varied from 1 to 4, which a higher score means a higher level of perceived breastfeeding barrier. The details of each item were presented in Table 2.

For the maternal aspect, the results revealed that the item "My breastfeeding is not successful as expected due to insufficient breastmilk" had the highest mean score (M = 2.70, SD = 0.99), followed by the item "Lack of knowledge about breastfeeding technique results in my unsuccessful practice" (M = 2.69, SD = 0.99). The item "During breastfeeding, I often have negative emotion (such as feeling anxious, agitated, angry, disgusted, or rageful)" had the lowest mean score (M = 2.04, SD = 0.90).

For the infant aspect, the item "My baby's illness makes breastfeeding very hard" was the highest mean score (M = 2.74, SD = 0.99), followed by the item "My baby's irritating mood makes the breastfeeding harder" (M = 2.60, SD = 0.97), and the item "Exclusive breastfeeding does not provide my baby with enough nutrition" had the lowest mean score (M = 2.26, SD = 0.92).

For the socio-environment aspect, the results showed that item "Breastfeeding in public places is uncomfortable to me" had the highest mean score (M = 2.93, SD = 0.92), followed by the item "Lack of support from family members

makes my breastfeeding practice more difficult” ( $M = 2.45$ ,  $SD = 0.89$ ). The lowest mean score was the item “Formula advertisement from TV, parent magazines, etc., makes me feel unsure of continuing breastfeeding” ( $M = 2.31$ ,  $SD = 0.88$ ).

**Table 2** Descriptive statistics of perceived barriers to breastfeeding ( $N = 246$ )

Do you think that the following items were barriers to your breastfeeding?	<i>M</i>	<i>SD</i>
<b>Maternal</b>		
1. Breastfeeding is an exhausting process	2.34	0.84
2. Breastfeeding interferes with my sleeping pattern	2.56	0.97
3. Breastfeeding in front of family members is an embarrassing process for me	2.42	0.99
4. Experiencing physical breast problem (for example, sore or cracked nipple, breast engorgement) discourages me from continuing breastfeeding	2.52	1.01
5. Lack of knowledge about breastfeeding technique results in my unsuccessful practice	2.69	0.99
6. Breastfeeding makes me feel nervous about my body changes (such as weight gain, saggy breast)	2.27	0.87
7. I haven't enough skills to practice breastfeeding	2.45	0.92
8. My breastfeeding is not successful as expected due to insufficient breastmilk	2.70	0.99
9. Breastfeeding interferes with my daily life activities	2.31	0.83
10. During breastfeeding, I often have negative emotion (such as feeling anxious, agitated, angry, disgusted, or rageful)	2.04	0.90
<b>Infant</b>		
11. Exclusive breastfeeding does not provide my baby with enough nutrition.	2.26	0.92
12. It is difficult for me to keep my baby latch on my breast	2.46	0.94
13. My baby's irritating mood makes breastfeeding harder	2.60	0.97
14. My baby's illness makes breastfeeding very hard	2.74	0.99
<b>Socio-environment</b>		
15. Breastfeeding in public places is uncomfortable to me	2.93	0.92
16. Breastfeeding limits my social activities with others	2.43	0.83
17. Lack of support from family members makes my breastfeeding practice more difficult.	2.45	0.89
18. Return to work affects my breastfeeding adversely	2.43	0.79
19. Formula advertisement from TV, parent magazines, etc. makes me feel unsure of continuing breastfeeding	2.31	0.88
20. Lack of support from healthcare personnel makes my breastfeeding practice more difficult.	2.34	0.91

One-way ANOVA test showed a statistically significant difference between the mother's age and breastfeeding barriers score ( $F = 3.67$ ,  $p = 0.03$ ). The post hoc (LSD) test calculated the smallest significance between two means as if a test had been run on those two means (as opposed to all of the groups together in the case of Tukey's test). This

enabled us to make direct comparisons between two means from two individual groups. The post hoc (LSD) test revealed that the mothers who less than 25 years old and from 25 to 35 years old had higher breastfeeding barrier scores than those who greater than 35 years old (Table 3).

**Table 3** The difference in breastfeeding barriers scores and mothers' characteristics ( $N = 246$ )

Variable	<i>n</i>	Breastfeeding barriers		Post hoc <i>p</i>
		<i>M</i> ± <i>SD</i>	<i>t/F</i>	
<b>Mother's age</b>			3.67	0.03*
< 25 years old	46	53.30±15.31		(1), (2) > (3)
25 – 35 years old	151	49.28±13.92		
> 35 years old	49	45.29±15.03		
<b>Mother's education</b>			0.81	0.45
Less than high school	62	51.13±15.17		
High school or diploma	128	48.94±14.44		
Bachelor or higher	56	47.84±14.57		
<b>Delivery method</b>			-0.90	0.37
Normal delivery	132	48.46±14.86		
Cesarean section	114	50.14±14.23		
<b>Parity</b>			0.68	0.50
Primiparous	128	49.84±14.29		
Multiparous	118	48.58±14.90		

\* $p < 0.05$ ,  $t = t$ -test,  $F = ANOVA$ , post hoc (LSD)

## Discussion

The mothers in the current study were young adults, and the majority of them were in the appropriate range of childbearing ages between 25 to 35 years old. Slightly more than half of them were new mothers. The mothers' perception of breastfeeding barriers was at a moderate level. According to Health Promotion Model, perceived barriers mean the perception of an individual about the inconveniences or difficulties of an action (Pender et al., 2011). In a breastfeeding context, perceived barriers represent the perception of mothers about the difficulties, the inconveniences, the challenges that the mothers face during the breastfeeding period; the more perceived barriers to breastfeeding, the less breastfeeding for the babies (Al-Darweesh et al., 2016).

The top barrier by the perception of Vietnamese mothers in the current study with the highest score ( $M = 2.93$ ,  $SD = 0.92$ ) was "breastfeeding in public places was uncomfortable to the mothers". It seems to be a common barrier from the perceptions of Vietnamese mothers and mothers from other countries. Coomson and Aryeetey (2018) conducted mixed methods research to describe the breastfeeding experience in public among 300 women in Accra, Ghana; these women reported difficulties in breastfeeding baby in public places due to the feelings of shyness, embarrassment, discomfort to expose the breasts (Coomson & Aryeetey, 2018). According to the literature review, there are controversial views of breastfeeding in public places; some support this practice while others do not. The rejection or acceptance of breastfeeding in public places depends on the requisite social norms. For example, a study by Morris et al. (2016) in the United Kingdom revealed that breastfeeding in public places was inappropriate because breasts were viewed as sexual objects. Whereas people in China claimed to breastfeed in public was appropriate and did not violate social morality (Zhao et al., 2017). In Vietnamese culture, it is acceptable for mothers to breastfeed in public places with covered-up breasts to avoid the exposure of their breasts. Vietnamese mothers would find a discreet place to feed their baby to prevent discomforting others, guard against judgment, and protect themselves from males' unwanted gaze. Once a mother feels inconvenient or uncomfortable about breastfeeding in public, she is less likely to breastfeed her baby in public, which, in turn, more likely to stop exclusive breastfeeding before six months. Similarly, a study by Scott et al. (2015) indicated that mothers in European countries who had a negative attitude toward breastfeeding in public places were nearly never breastfed their babies in public (AOR = 0.05, 95% CI [0.12, 0.50]). Those mothers were also more likely to cease breastfeeding earlier compared to the others.

The second highest score was baby's illness and irritating mood ( $M = 2.74$ ,  $SD = 0.99$ ). These Vietnamese mothers identified this barrier as one of the most common. One can theorize that when a baby becomes ill, mothers feel uncertain about caring for him, including feeding.

Simultaneously, the baby's mood and appetite are likely to be altered, and the common baby/mother interactions towards feeding (Paintal & Aguayo, 2016). The best thing as we know that she should continue breastfeeding a sick baby to help the baby shorten the length of the illness and quickly recovery because breast milk contains antibodies (Manning et al., 2013). However, it is not easy to breastfeed an ill, irritated baby. To illustrate, the baby has a cold and stuffy nose; when he suckles the breast, it can be frustrating the baby, and he is fussier at the breast since he cannot breathe during suckling. Sharmin et al. (2016) reported that 64.8% of mothers in Bangladesh did not give exclusive breastfeeding during the baby's illness time. In the belief of Vietnamese people, breastfeeding is unnecessary for the sick baby since it is difficult to feed the baby during the baby's illness. Not surprisingly, the infant's illness is highly correlated to the inadequate practice of exclusive breastfeeding in Vietnam.

The third-highest score of barriers of exclusive breastfeeding from Vietnamese mothers' perception was the insufficient breast milk ( $M = 2.70$ ,  $SD = 0.99$ ). Interestingly, perception about insufficient milk seems to be a global barrier for exclusive breastfeeding among mothers worldwide. In a study by Osman et al. (2009), mothers in Lebanon perceived that they had insufficient breast milk because their babies still felt hunger and cried after feeding. Similarly, a study by Nasser et al. (2018) reported that 78% of the mothers in Qatar stopped giving exclusive breastfeeding for babies because they thought they did not have enough breast milk. A study in Vietnam reported that 60.9% of the mothers felt that their breast milk was not enough for the child and the child would be hungry; consequently, they considered stopping exclusive breastfeeding during the first six months (Nguyen et al., 2018). There are various reasons for insufficient milk supply, such as poor nutrition due to poor appetite of the mothers (Lou et al., 2014), poor sucking (Sharmin et al., 2016), not breastfeeding often enough, over anxiety, excessive fatigue, and lack of support and guidance from nurse-midwives (Sultana et al., 2013). However, insufficient milk is preventable; the finding implied the importance of educating, supporting, and coaching the mothers to overcome this barrier and successfully exclusive breastfeed for the first six months. A previous study confirmed that mothers having sufficient breast milk for the baby in the first six months were 24.89 times more likely to give exclusive breastfeeding than mothers with the perception of insufficient breast milk (Kim & Chapman, 2013).

Next, lack of knowledge about breastfeeding techniques resulting in unsuccessful practice was a barrier by the view of Vietnamese mothers in the current study ( $M = 2.69$ ,  $SD = 0.99$ ). A study by Nasser et al. (2018) revealed that approximately 53% of the mothers stopped exclusive breastfeeding their babies between zero and six months due to not knowing how to breastfeed the babies appropriately. Likewise, Sharmin et al. (2016) reported that 92.3% of mothers in Bangladesh who were in the non-

exclusive breastfeeding group using faulty breastfeeding techniques led to poor suckling and attachment. In Vietnam, the mothers with normal delivery will be discharged from the hospital after two to three days; with the short period, the mothers might not learn and absorb the breastfeeding techniques provided by the hospital. In fact, breastfeeding is a “learned skill”, more than instincts. Thus, it is difficult to be successful in the breastfeeding practice if the mothers have less knowledge and fewer skills about breastfeeding techniques. Mothers in the current study were new mothers who had no breastfeeding experience before, and that is why lack of techniques in breastfeeding was their concern as a barrier of breastfeeding. Therefore, the teaching about breastfeeding techniques for mothers during antenatal care visits is suggested for the hospital policy.

Last but not least, the fifth-highest score was the lack of support from family ( $M = 2.45$ ,  $SD = .89$ ). The Vietnamese mothers exposed this barrier as one of the most common. Researches have proved that family support played an essential role in the exclusive breastfeeding practice of mothers. For instance, a study by [Yenti et al. \(2018\)](#) revealed that mothers in Indonesia who got family support for breastfeeding were 2.67 times (95%CI [1.1, 6.4]) more likely to give exclusive breastfeeding than those who did not have. Likewise, another study in Yogyakarta, Indonesia, found that mothers who received family support were 2.86 times (95%CI [1.25, 6.58]) more likely to practice exclusive breastfeeding compared to those who did not ([Ratnasari et al., 2017](#)). Similarly, a study in Ethiopia reported that mothers who were supported by their husbands were 2.67 times (95%CI [1.04, 6.95]) more likely to breastfeed exclusively ([Tewabe et al., 2016](#)). Family plays a crucial role in breastfeeding practice; thus, receiving support from family was important during the breastfeeding period for the mothers. Not surprisingly, lack of support from family was perceived as one of the barriers of exclusive breastfeeding practice.

The current study provides the picture of perceived barriers to breastfeeding among mothers in Ho Chi Minh City, Vietnam; it is a piece of the puzzle to complete the picture of breastfeeding in Vietnam. In addition, it gives some implications for nursing and midwifery practice as mothers perceived they had insufficient milk and breastfeeding techniques to feed their babies. Therefore, nurses and midwives need to be with them in the first hours and days after birth to build their confidence when breastfeeding the babies. Also, nurses and midwives can develop the nursing interventions, such as the enhancement breastfeeding self-efficacy programs for mothers and students to build and boost self-efficacy so that the mothers or future mothers can confidently practice reaching the six-month exclusive breastfeeding. The top barrier perceived by mothers in this study was uncomfortable when breastfeeding in public places. It implies that the policy needs to have room for

breastfeeding in public places, such as hospitals, restaurants, parks, cinemas, etc.

The data from this study were drawn from convenience sampling; thus, the representativeness of this study was limited. It evokes a recommendation for further research. A cluster random sampling method should be used to obtain a sample with the best representativeness for the entire population in Vietnam. Besides, for comparison with the current study, further research should be conducted with the mothers in rural areas or other regions of the country to capture a broader picture of perceived barriers to breastfeeding practice in Vietnam.

## Conclusion

The failure of exclusive breastfeeding practice in the first six months was derived from the mothers' perception of different barriers. These barriers come from the three main factors, including maternal, infant, and socio-environment factors. The embarrassment, insufficient milk, baby's illness and irritating mood, lack of knowledge about breastfeeding techniques, and lack of support from family were the most perceived barriers. The investigations in this study help nurses, midwives, and healthcare providers identify the barriers that obstruct the exclusive breastfeeding practice; hence, the breastfeeding promotion program could be proposed and implemented to improve the exclusive breastfeeding practice.

## Declaration of Conflicting Interests

The authors declare that there is no conflict of interest in this study.

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## Authors' Contribution

NTN made significant contributions to the literature review (review of theory which can be applied in the study, recommendation from WHO, policies of Vietnamese government about exclusive breastfeeding, current situation of exclusive breastfeeding in Vietnam), design of the study, data acquisition, analysis/interpretation of the study. HTD and NTVP made significant contributions to the literature review (review the benefits of exclusive breastfeeding, the barriers of breastfeeding in other countries and Vietnam), study design, data acquisition, interpretation of the study findings. All authors drafted the manuscript, revised it critically for important intellectual content, approved the final version of the paper, and agreed to its submission for publication.

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#### Data Availability Statement

The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

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