

FACTORS AFFECTING BREASTFEEDING SELF-EFFICACY AND ITS ROLE ON THE BREASTFEEDING DURATION

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ABSTRACT

Introduction: Breastfeeding is an effort to provide optimal nutrition for newborns through breast milk. Breast milk is the best food that helps optimal growth and development of children and protects against disease. Breastfeeding Self-Efficacy (BSE) has a role in determining breastfeeding duration. **Methodology:** The literature review is carried out using an online literature search was conducted in PubMed, NCBI, ProQuest, and Cochrane Database of systematic reviews. The articles used are 10 articles published in the last 10 years. **Research findings:** Factors that influence BSE based on literature review include the type of mother's experience, experience the success of others, verbal persuasion, spouse postpartum support, physiological and emotional factors which are significantly associated with BSE. BSE is significantly related to the duration of breastfeeding and the success of exclusive breastfeeding. The BSE-SF score can be assessed from the time of pregnancy to identify the level of continuity of the mother is breastfeeding her baby **Conclusions:** The Breastfeeding Self-Efficacy Scale instrument is considered valid in measuring BSE. BSES can be applied in midwifery clinical practice and midwifery care communities as a screening for the risk of early cessation of breastfeeding so that efforts to anticipate and improve the quality of care in assisting breastfeeding mothers can be optimized. However, there are still other factors that are potentially related to the breastfeeding process, such as the personality characteristics of the mother, as well as an in-depth exploration about breastfeeding and the reasons for early cessation of breastfeeding that have not been studied qualitatively.

Keywords: breastfeeding self-efficacy, breastfeeding duration

1. INTRODUCTION

Breastfeeding is an effort to provide optimal nutrition for newborns through breast milk (ASI). Breast milk is the best food for babies, which contains white blood cells, proteins and immune substances that are suitable for babies. Breast milk helps children grow and develop optimally and protects against disease.

Exclusive breastfeeding based on Government Regulation Number 33 of 2012 concerning the Provision of Mother's

Milk, Exclusive Breastfeeding is breast milk that is given to babies from birth for six months, without adding and/or replacing with other foods or drinks (except drugs, vitamins, and minerals). The survey results show that exclusive breastfeeding coverage in Indonesia has decreased from 67.74% in 2019 to 66.06% in 2020 [1][2].

Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered type of coronavirus, namely Severe Acute Respiratory Syndrome



Coronavirus 2 (SARS-CoV-2). The first case of COVID-19 was reported on December 31, 2019, in Wuhan City, Hubei Province, China. Since then, the disease has spread throughout the world and on March 11, 2020, WHO declared COVID-19 a pandemic. The COVID-19 pandemic is a challenge for breastfeeding mothers to continue to breastfeed their babies. Several conditions that can affect the success of breastfeeding include the health status of the mother, limited support, and a decrease in the number of visits by breastfeeding mothers to health care facilities [1].

Some of the conditions that affect the continuity of sustainability include; Maternal factors (health condition, experience, mother's attitude, partner support, self-confidence in breastfeeding), infant factors (cleft lip, gastrointestinal disorders), environmental factors, health care place policies, lack of support, the development of false beliefs that formula milk is better given to infants with low birth weight compared to breast milk [3][4].

The results of the study show that 3 factors are estimated to be significant in determining the success of exclusive breastfeeding for 6 months, namely: unemployment status of the mother, high Breastfeeding Self-Efficacy (BSE) in the immediate postpartum, and do not experience depression at 3 months postpartum. While the factors that are estimated to be significant in determining the continuity of breastfeeding after 6 months of exclusive breastfeeding, including maternal age, unemployment status of the mother, the implementation of Early Breastfeeding Initiation within the

first hour of delivery, high BSE, no signs of postpartum depression symptoms, and optimal breastfeeding support from family and friends [5].

Bandura's social cognitive theory states that self-efficacy is a cognitive dynamic process that assesses a person's beliefs and abilities to perform health behaviours. Breastfeeding Self-Efficacy (BSE) is defined as a mother's self-confidence in her ability to breastfeed. BSE includes the mother's choice to breastfeed or not, the amount of effort made, the mother's mindset, and the ability to control emotions in the face of breastfeeding difficulties [6].

Dennis and Faux developed an instrument to measure the level of self-efficacy in breastfeeding through the Breastfeeding Self-Efficacy Scale (BSES) and developed it again into the Breastfeeding Self-Efficacy Scale-Short Form (BSES-SF). This instrument has been used in many studies for several years to measure the level of self-efficacy in breastfeeding. BSES-SF consists of 14 short statement items relating to her confidence to be able to breastfeed [7][8][9].

The self-confidence that a mother has will be able to overcome the problems that may be faced during breastfeeding, the mother can control the demands of the environment or situations and conditions both physically and psychologically, which ultimately leads to the smooth process of breastfeeding. A study showed that self-efficacy in breastfeeding had a significant relationship with the success of exclusive breastfeeding for 6 months [4].

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2. METHODS

This literature review aims to conduct an examination of the latest or current literature, conduct a review of the literature that has been published or has undergone a peer-review process. In general, this literature review research involves several processes, including; identifying the literature that will be included in the article to be written, synthesizing it in textual form, making several analyzes of the selected literature so that it can contribute or provide new value to research, especially in the topic of breastfeeding self-efficacy.

A literature review is done by searching articles, the year the article was published in the last 10 years maximum. The keywords used are "breastfeeding self-efficacy" and "breastfeeding duration" a search of the ProQuest database found 957 articles. Based on the title of the article, 18 articles were obtained, then the articles were re-selected based on the purpose of the literature review to be carried out.

Next, the relevant research results were selected according to the literature review questions. Of the 18 articles that were re-selected, 10 articles were obtained that were following the purpose of the literature review.

An online literature search was conducted in PubMed, NCBI, ProQuest, and Cochrane Database of systematic reviews. The search strategy included the following keywords: breastfeeding, self-efficacy, duration, factors, affecting, newborn feeding. Additional studies were located and extracted from online publications of the Ministry of Health, Indonesia.

3. RESULTS

This literature review is not a meta-analysis so that statistical data is not combined so that the results of the study are explained in the text. Based on the results of studies from various scientific journals, several scientifically proven factors affect BSE.

a. Factors Affecting Breastfeeding Self-Efficacy (BSE)

1) Mother's Experience

A breastfeeding mother who has experienced successfully breastfeeding her previous child will affect her self-efficacy to be able to breastfeed in the next period [8].

A study was conducted by comparing BSE scores in nursing mothers in the hospital and looking at the factors that influence them. The results showed that the most influential factor on BSE is previous breastfeeding experience [10].

2) Experience the success of others

The experience of others will determine one's perception. Mothers who see the success of others in breastfeeding are expected to increase their confidence in being able to breastfeed their babies, so that

breastfeeding success is also achieved [8].

3) Verbal Persuasion

Verbal persuasion is carried out to reinforce breastfeeding mothers to help convince and motivate mothers to be able to breastfeed their babies. This reinforcement can be conveyed by people who are role models for mothers, such as health workers, husbands, families, and friends [8].

An intervention study using a randomized controlled trial method was conducted in Iran, to look at the level of BSE and its role in the duration of breastfeeding. The intervention carried out was the provision of education/training programs on breastfeeding, carried out on nulliparous pregnant women by assessing BSE scores before and after giving birth. The results showed that breastfeeding self-efficacy and duration of breastfeeding in the intervention group increased significantly compared to the control group, and there was a significant relationship between BSE and duration of breastfeeding. [11].

Another study in Turkey, conducted with a quasi-experimental method, involved mothers who had newborns with low birth weight. The intervention provided was breastfeeding education using booklets, given half an hour per day for the first 5 days of hospitalization. Home visits are carried out every month until the baby is 6 months old, both in the intervention group and in the control group [3].

The results showed that the provision of education about breastfeeding naturally can increase levels of breastfeeding self-efficacy and breastfeeding successfully. It was also found that in the intervention

group, exclusive breastfeeding was higher than in the control group [3].

Another study in Japan, developed the Breastfeeding Self Care (BSC) Program which is intended for mothers giving birth in hospitals during postnatal hospitalization, through the provision of effective support and education by midwives. The BSC program was developed so that mothers have the right measuring tools to be able to understand, confirm and evaluate for themselves how breastfeeding is processed, mothers will more easily and quickly overcome problems that may be experienced during the breastfeeding process. With the contribution made by the mother, when the mother is discharged from the hospital, it is hoped that the BSC program can increase the mother's self-confidence so that the duration of breastfeeding will increase further. [12].

The results showed that there was a greater increase in self-efficacy in the intervention group. These results prove that the BSC program can increase the mother's confidence so that it affects the mother's decision in determining the length of breastfeeding. [12].

4) Spouse Postpartum Support

Spouse or husband's support given during the postpartum period has a significant relationship with BSE. The support provided by the partner includes social, functional, and emotional support [13].

The study was conducted to determine the mother's perception based on husband's support and its relation to self-efficacy in

breastfeeding, involving 76 mothers in a health clinic. The results showed that mothers who reported actively receiving positive support from their partners, having higher BSE than mothers who received negative support. [14].

Positive support efforts provided by the couple include; participating in prenatal classes, accompanying the mother when breastfeeding, help correct the position of the baby. Mothers feel more able and confident to breastfeed when they see their partner support through words and from the partner's active involvement in breastfeeding activities. Positive feedback from a partner will further increase their self-efficacy abilities [14].

5) Physiological and Emotional Factors

6) The physiological state shows the ability, strength, and weakness of the body's physical condition. The emotional state (such as a sense of security, comfort, calm) experienced will affect the mother's confidence in breastfeeding her baby. The level of anxiety and depression experienced during the puerperium was significantly associated with BSE[13].

b. The Role of BSE on Breastfeeding Duration

Breastfeeding duration has an important role for both mother and baby. A study compared the difference in duration of exclusive breastfeeding between 6 months and 4 months periods. Based on the results of the study, it is known that exclusive breastfeeding for 6 months is better able to

reduce the incidence of gastrointestinal infections in infants, reduce maternal weight more quickly, and return to menstruation longer. However, this study also shows that the duration of breastfeeding does not reduce the risk of other infections, allergic diseases, obesity, dental caries, or cognitive and behavioural problems [15].

Jager et al, conducted a study of 125 pregnant women, to examine the effect of psychological factors on the duration of breastfeeding for 6 months postpartum. Measurement of BSE through BSES-SF which was measured in 3 times (32 weeks gestation, 2 months postpartum, and 6 months postpartum). The results showed that at 2 weeks and 6 weeks postpartum, BSE was the most influential factor on breastfeeding duration compared to other factors (stress level, body image, motivation, and previous breastfeeding status) [16].

A study was conducted on 586 mothers giving birth at a private clinic in Cyprus who met the research inclusion criteria, to analyze the relationship between BSE and breastfeeding duration and the success of exclusive breastfeeding, using the Greek version of the Breastfeeding self-efficacy scale short form (BSES-SF) instrument. The tool was used with permission by the developer who provided an existing Greek translation of the scale, even though at the time of designing the study protocol, no study that have used the Greek version of BSES or BSES-SF was identified in the literature.[9]

The study was carried out in 2 phases, namely, the first phase was cross-sectional

by assessing the extent to which the 10 steps for successful breastfeeding of WHO was implemented at 24-48 hours postpartum, the second phase was continued prospectively longitudinally by assessing BSE, infant feeding practices and exclusive breastfeeding status were assessed at all contacts with participants i.e 48 hours, 1st, 4th, and 6th months.[9]

The results of the study showed that moderate and low breastfeeding self-efficacy were primiparous breastfeeding mothers who gave birth by caesarean section. Other results showed that mothers who gave exclusive breastfeeding had higher self-efficacy scores during breastfeeding compared to mothers who breastfed non-exclusively and mothers who did not breastfeed. The results of the analysis showed that there was a significant relationship between breastfeeding self-efficacy and exclusive breastfeeding ($M = 3.04$, $SD = 1.09$; $p\text{-value} < 0.001$). Multivariate analysis showed that high breastfeeding self-efficacy scores at 48 hours postpartum were more likely to breastfeed exclusively in later periods.[9].

4. DISCUSSION

Research conducted by Ahmad, et al. Regarding Predictors of breastfeeding self-efficacy during the covid-19 pandemic, data show that type of infant feeding, a tendency to breastfeeding, postpartum anxiety and depression, partner support, and family support are significantly associated with BSE.[13]

Although fear of Covid-19 is not directly related to BSE, it may have an indirect effect on postpartum maternal anxiety or

mental health.

Based on the results of studies of various studies that have been carried out, further research related to the identification of factors related to or influencing BSE can be carried out by determining inclusion and exclusion criteria in the research sample to reduce bias and using qualitative methods to conduct in-depth studies related to the factors involved related to BSE.

Some of the results of these studies show that breastfeeding self-efficacy is significantly related to the breastfeeding duration and the success of exclusive breastfeeding. Then, it can also be seen that through the BSE-SF score which can be assessed from the time of pregnancy, the level of continuity of the mother is breastfeeding her baby can be identified. So that health workers, especially midwives, can determine follow-up efforts to help smooth the continuity of breastfeeding.

Research on the relationship between BSE and exclusive breastfeeding and breastfeeding duration in Cyprus using the BSES-EF instrument can clearly describe breastfeeding self-efficacy. The strength of the study was the use of a longitudinal study design that assessed infant feeding practices during the first 6 months, this was done as an effort to overcome the bias of retrospective studies conducted to consider other influencing factors, including socio-demographic characteristics.[9]

However, there are still other factors that are potentially related to the breastfeeding process, such as the personality characteristics of the mother, as well as an in-depth exploration about breastfeeding and the reasons for early cessation of



breastfeeding that have not been studied qualitatively.

5. CONCLUSIONS

Breastfeeding Self-Efficacy (BSE) is a mother's specific belief in the ability to breastfeed her baby. BSE is an important part of successful breastfeeding.

Factors that influence BSE based on literature review include the type of mother's experience, experience the success of others, verbal persuasion, spouse postpartum support, physiological and emotional factors which are significantly associated with BSE.

The Breastfeeding Self-Efficacy Scale instrument is considered valid in measuring breastfeeding self-efficacy. BSES can be applied in midwifery clinical practice and midwifery care communities as a screening for the risk of early cessation of breastfeeding so that efforts to anticipate and improve the quality of care in assisting breastfeeding mothers can be optimized.

Breastfeeding self-efficacy is significantly related to the duration of breastfeeding and the success of exclusive breastfeeding. The BSE-SF score can be assessed from the time of pregnancy to identify the level of continuity of the mother is breastfeeding her baby.

Health providers must always support and believe in the mother that she can breastfeed her baby. The provision of complete support and information related to breastfeeding should be carried out from the prenatal period. Health providers motivate couples to always care, giving positive support in the continuation of the breastfeeding process.

6. REFERENCE

1. (2020) Profil Kesehatan Ibu dan Anak 2020.
2. Kesehatan K, Indonesia R Profil Kesehatan Indonesia Tahun 2019.
3. Küçükoğlu S, Çelebioğlu A (2014) Effect of Natural-Feeding Education on Successful Exclusive Breast-Feeding and Breast-Feeding Self-Efficacy of Low-Birth-Weight Infants. *Iran J Pediatr* 24:49
4. Lee HC, Kurtin PS, Wight NE, et al (2012) A Quality Improvement Project to Increase Breast Milk Use in Very Low Birth Weight Infants. *Pediatrics* 130:e1679
5. Radwan H, Fakhry R, Metheny N, Baniissa W, Al Islam Faris ME, Shaker Obaid R, Al Marzooqi S, Al Ghazal H, ElHalik M, Dennis C-L (2021) Prevalence and multivariable predictors of breastfeeding outcomes in the United Arab Emirates: a prospective cohort study. <https://doi.org/10.1186/s13006-021-00428-7>
6. Keemer F (2013) Breastfeeding self-efficacy of women using second-line strategies for healthy term infants in the first week postpartum: an Australian observational study. *Int Breastfeed J* 2013 8:1–9
7. J I, D J, M C, C C, H T (2015) The development of a new breast feeding assessment tool and the relationship with breast feeding self-efficacy. *Midwifery* 31:132–137
8. Mcqueen KA IMPROVING BREASTFEEDING OUTCOMES: A PILOT RANDOMIZED

- CONTROLLED TRIAL OF A SELF-EFFICACY INTERVENTION WITH PRIMIPAROUS MOTHERS.
9. Economou M, Kolokotroni O, Paphiti-Demetriou I, Kouta C, Lambrinou E, Hadjigeorgiou E, Hadjiona V, Middleton N (2021) The association of breastfeeding self-efficacy with breastfeeding duration and exclusivity: longitudinal assessment of the predictive validity of the Greek version of the BSES-SF tool. <https://doi.org/10.1186/s12884-021-03878-3>
 10. Muaningsih author (2013) Studi komparasi antara breastfeeding self-efficacy pada ibu menyusui di RSSIB dengan non RSSIB dan faktor yang mempengaruhinya = Comparative study of mothers' breastfeeding self-efficacy in a baby-friendly hospital and non baby-friendly hospital and identification on influencing factors.
 11. Ansari S, Abedi P, Hasanpoor S, Bani S (2014) The Effect of Interventional Program on Breastfeeding Self-Efficacy and Duration of Exclusive Breastfeeding in Pregnant Women in Ahvaz, Iran. *Int Sch Res Not* 2014:1–6
 12. Awano M, Shimada K (2010) Development and evaluation of a self care program on breastfeeding in Japan: A quasi-experimental study. *Int Breastfeed J* 2010 51 5:1–10
 13. Ahmad Zadeh Beheshti M, Alimoradi Z, Bahrami N, Allen KA, Lissack K (2021) Predictors of breastfeeding self-efficacy during the covid-19 pandemic. *J Neonatal Nurs.* <https://doi.org/10.1016/J.JNN.2021.08.012>
 14. Mannion CA, Hobbs AJ, McDonald SW, Tough SC (2013) Maternal perceptions of partner support during breastfeeding. *Int Breastfeed J* 2013 81 8:1–7
 15. (2012) The optimal duration of exclusive breastfeeding. *Trop Doct* 32:62–63
 16. de Jager E, Broadbent J, Fuller-Tyszkiewicz M, Nagle C, McPhie S, Skouteris H (2015) A longitudinal study of the effect of psychosocial factors on exclusive breastfeeding duration. *Midwifery* 31:103–111.