

The Association between Attitude, knowledge, and Social Support and Breastfeeding Self-Efficacy in Postpartum Women in Indonesia

Abstract

Background: The problem faced during the puerperium period is the inability of some women to engage in breastfeeding. Several factors, including self-efficacy, influence the breastfeeding rate. This study aims to determine the relationship between self-efficacy and the level of knowledge, social support, and attitudes toward breastfeeding in early postpartum women. **Materials and Methods:** A cross-sectional design was used with postpartum primipara as the population from day 14 to 42 days. A total of 180 respondents were selected as samples, and the variables measured were breastfeeding self-efficacy, level of knowledge about breastfeeding, social support for breastfeeding, and attitudes toward breastfeeding. A total of 180 respondents were selected using purposive sampling, and the variables measured were breastfeeding self-efficacy, level of knowledge, social support, and attitudes toward breastfeeding using a questionnaire. Additionally, the data obtained were examined utilizing Multivariate Linear Regression Analysis. **Results:** The results indicated that breastfeeding women's knowledge, social support, and attitudes accounted for 26.36% of the variation in the score of breastfeeding self-efficacy. Breastfeeding self-efficacy scores, as well as knowledge ($t = 4.24$, $p < 0.001$), social support ($t = 2.56$, $p = 0.011$), and attitudes toward breastfeeding ($t = 4.44$, $p < 0.001$), were found to have significant relationships. **Conclusions:** Positive breastfeeding self-efficacy in breastfeeding can influence knowledge, social support, and improved attitudes.

Keywords: Attitude, breast feeding, knowledge, self-efficacy, social support

Introduction

Breastfeeding is crucial for the infant's development and growth and the overall health of families and communities.^[1] The Health Profile of Indonesia for 2020 showed that exclusive breastfeeding is received by only 40% of babies under 6 months old. This figure has decreased compared to 2019 at 67.7%.^[2] Furthermore, breastfeeding rates are influenced by several aspects, including sociodemographics, attitudes, knowledge, and self-efficacy.^[3,4] Self-efficacy is defined as the belief in influencing life-affecting events,^[5] which plays a significant role in the motivational, cognitive, selection, and emotional processes.^[6] It is also the determinant of various behaviors, such as breastfeeding.^[7] Breastfeeding self-efficacy is defined as a mother's confidence in her ability to breastfeed her new infant and has been positively associated with breastfeeding duration and exclusivity in various cultures

and age groups.^[8] Furthermore, as a modifiable factor, self-efficacy influences breastfeeding onset and duration.^[7,9] The level of self-efficacy changes with social systems experience, influenced by marital relationships, social status, parenting styles, family or professional roles, and support from partners.^[10] Similarly, previous studies reported that self-efficacy was influenced not only by performance but also by social support.^[3,11-13]

Perceived support refers to someone's belief or perception that individuals in their social network will assist when needed. However, acquired support is complex and multidimensional, measuring the support provided, its frequency, the network members involved, and the support quality.^[14] Family, friends, or other supports influenced general self-efficacy as well as postnatal depression. Additionally, it was found that general self-efficacy played a significant role in mediating the relationship

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between social support and postnatal depression.^[15] Prior examinations stated that an increased social support level improved the level of self-efficacy for breastfeeding.^[13,16]

Breastfeeding attitudes, beliefs, knowledge, and information affect women's feelings, thoughts, and behaviors.^[17] These attitudes influence social environment and support, as well as the success of breastfeeding and self-efficacy.^[4] An investigation in South Jordan reported that although around three-quarters of women initiated earlier breastfeeding, only one-fifth continued up to the early 6 months due to work-related reasons.^[18] Furthermore, increased maternal age decreased the intention to practice exclusive breastfeeding.^[12] Self-efficacy level, occupation, and family income adequacy were identified as breastfeeding performance predictors.^[3] Epidemiological studies have demonstrated important long-term effects of breastfeeding on children and mothers' nutrition, health, and growth.^[19] However, studies on self-efficacy and its implication on public health remain limited. Investigating self-efficacy, knowledge, social support, and attitudes toward breastfeeding in post-partum women is crucial for primary healthcare initiatives. This study aims to determine the relationship between self-efficacy and the level of knowledge, social support, and attitudes toward breastfeeding in early postpartum women.

Materials and Methods

A cross-sectional design was used in this study with postpartum women from day 14 to 42 days as the population. The sample size is calculated based on a certain population using the Krejcie and Morgan (1970) table in determining sample size.^[20] If the nearest population size is 360, the specified sample size is 180 subjects. The inclusion criteria for the sample included: 1) Primipara, 2) Can read and write, and 3) Able to communicate well in Indonesian. Furthermore, 180 subjects were selected using the purposive sampling technique. The variables assessed were breastfeeding self-efficacy, knowledge level, social support, and attitudes toward breastfeeding. This research was conducted from October to December 2023 at the community health center, Tuban Regency, East Java.

The research questionnaire consists of: 1) Personal information form containing questions related to educational and working status, age, and perceived income level, which was used to determine sociodemographic characteristics; 2) Dennis and Faux first designed Breastfeeding Self-Efficacy Scale-Short Form (BSES-SF) to assess the level of breastfeeding women's self-efficacy, and later, the abbreviated form was made by Dennis.^[10,21] The scale can define high-risk breastfeeding women, evaluate breastfeeding behavior and cognition to individualize confidence-building strategies, determine diverse intervention effectiveness, and direct prospective programs. The potential minimum–maximum scores obtainable from this scale were 14 and 70; 3) The knowledge questionnaire

consisted of 10 questions^[22] about Breastfeeding protection and Practice Advice with scores ranging between 0 and 100; 4) The Breastfeeding Attitudes Questionnaire consisted of 10 items in a 5-Point Likert style ranging from 0 and 40, with higher scores showing a positive breastfeeding attitude. Gerhardtsson developed this;^[23] and 5) Zimet designed the Multidimensional Scale of Perceived Social Support (MSPSS),^[24,25] with a 7-point Likert style and consisting of three subscales. This instrument has 12 items subjectively used to estimate the social support adequacy received from friends, family, and partners. It showed that 84 and 12 were the highest and lowest scores, respectively. All instruments must first be translated into Indonesian by a translator. Furthermore, the instrument was reviewed by two experts, and finally, a back translation was performed to see the similarity of the reflection of the statement's contents between the original and the translated versions. The final version was tested on 30 respondents to test the tool's validity. The Cronbach's alpha coefficient of the Short Form Breastfeeding Efficacy Scale was 0.91, that of the knowledge questionnaire was 0.91, that of the Breastfeeding Attitudes Questionnaire was 0.91, and that of the Multidimensional Scale of Perceived Social Support was 0.93.

To analyze frequency data, mean (SD) was used. A reliability examination was carried out on the scale, and the results were the coefficient value of Cronbach's alpha. Furthermore, age, level of education, perceived income, and occupation were considered covariates. The Student *t*-test was used to compare the mean scores between two independent groups related to socioeconomic status. The ANOVA test was employed to compare the mean scores in three or more independent groups based on age and perceived income level. The variables with a *p* value < 0.10 in the univariate analysis were entered into the model and included in the Multivariate Linear Regression Analysis. The explanatory value of the model was assessed by Adjusted R-square (Adj.R²). The *p* value < 0.05 was statistically considered significant, and the overall analysis was performed using STATA.

Ethical considerations

This study was supported by the Health Research Ethics Committee of the Faculty of Nursing, Airlangga University, under the no: 266-KEPK in July 2022. The authors certify that they have obtained all appropriate patient consent.

Results

The mean respondents' age was 24.41 years old (Min: 15, Max: 38), 64.44% were included in the age group of 17–25 years old, 58.34% were junior high school graduates, 63.89% were housewives, and 62.22% had income <USD 163.42 [Table 1]. A comparison of breastfeeding self-efficacy levels related to characteristics of sociodemographics is shown in Table 1. A significant

relationship was noticed between the breastfeeding self-efficacy scores and the educational level ($p = 0.045$). However, no significant relationship was found between the respondents' age, occupation, socioeconomic status, or breastfeeding self-efficacy scores ($p > 0.05$).

The mean (SD) self-efficacy score was 53.5 (7.12) with minimum and maximum values of 28 and 70, respectively. Regarding knowledge, social support, and attitudes of breastfeeding women, the mean (SD) scores were 48.15 (12.84), 752.65 (7.77), and 34.66 (5.63), respectively, as shown in Table 2. As shown in Table 2, the multivariate regression analysis adapted for knowledge, social support, and attitudes accounted for 26.3% of the respondents' self-efficacy. The study identified statistically significant relationships between self-efficacy scores, knowledge, social support, and attitudes, as shown in Table 2.

Discussion

This study investigated the relationship between self-efficacy and the level of knowledge, social support, and attitudes toward breastfeeding among early postpartum women in Tuban, East Java. It showed that self-efficacy plays a crucial role in influencing both the intention and duration of breastfeeding.^[4,7,11]

Table 1: The participants' sociodemographic characteristics and distribution of self-efficacy related to sociodemographic characteristics (n=180)

Variables	n (%)	p
Age (year)		
12-16	32 (17.78)	0.558
17-25	116 (64.44)	
26-35	32 (17.78)	
Education level		
Elementary school	38 (21.11)	0.045
Junior high school	105 (58.34)	
Senior high school	35 (19.44)	
Higher education	2 (1.11)	
Work		
Housewife	115 (63.89)	0.473
Private employees	45 (25)	
Government employees	20 (11.11)	
Socioeconomic		
<USD 163.42	112 (62.22)	0.131
>USD 163.42	68 (37.78)	

Women with low self-efficacy have problems initiating breastfeeding or tend to stop earlier, while those with moderate or high self-efficacy continue for a more extended period.^[11,26,27] The mean self-efficacy score 53.5 (± 7.12) was almost similar to those of puerperal women in British Columbia (55.88 ± 10.85) as well as Izmir Turkey $56.19 (\pm 8.62)$. However, it was lower than the value obtained in Brazil $63.51 (\pm 6.25)$ and Sakarya in Turkey $61.02 (\pm 8.44)$. The mean self-efficacy score obtained in this study was higher than the value in China, $47.28 (\pm 10.56)$.^[10,27-30]

Several studies have highlighted the positive influence of social support on breastfeeding self-efficacy, with support coming from the partner, mother, other family members, or nurses/midwives.^[13,30] A positive correlation was detected between self-efficacy and social support levels.^[4,31] Health professionals' support also plays a significant role in improving self-efficacy. According to previous examinations, health professionals' interventions targeted at mothers and fathers have shown considerable improvements in self-efficacy.^[27,32] A 1-point increase in breastfeeding self-efficacy, resulting from training or support interventions, was associated with a remarkable 10% improvement in breastfeeding rates in the intervention group, suggesting self-efficacy as a modifiable factor for women.^[9]

Attitudes are described as accidental and unexpected views about certain behaviors.^[33] Breastfeeding attitudes among women are related to various aspects, including determination, motivation, prior experience, psychological adjustment, and perception of pregnancy.^[15,34] Balogun *et al.*^[12] indicated that the progressive age of maternal and unwanted pregnancies harmed breastfeeding intentions among women. In addition, prenatal intentions were identified as a strong predictor of exclusive breastfeeding. A positive attitude and intention to breastfeed are essential to maintaining continuity, which creates powerful ties between a woman and the infant.^[4,34] Breastfeeding attitudes are affected by the woman's characteristics and some cultural aspects in the family, the social environment, or the geographical area. Motivational attitudes from husbands and caregivers influence the level of self-efficacy.^[30,32,34] This study revealed a positive correlation between breastfeeding attitudes and self-efficacy. Mothers who exhibited more positive attitudes toward breastfeeding also reported higher levels of self-efficacy. Therefore, healthcare providers recommend lactation training, such as storing breast milk in the refrigerator and using a cup or spoon to feed their babies, by recruiting caregivers.^[33]

Table 2: The mean scores distribution of the participants based on the scales and multivariate linear regression analysis with self-efficacy averages of the participants

Variable	n	Mean (SD)	Min.	Max.	Coef. (95% CI)	p
Breastfeeding self-efficacy	180	53.5 (7.12)	28	70	-	-
Knowledge about breastfeeding	180	48.15 (12.84)	16	70	0.15 (0.08,0.22)	0.000
Social support for breastfeeding	180	52.65 (7.77)	26	71	0.22 (0.05,0.39)	0.011
Attitudes of breastfeeding women	180	34.66 (5.63)	25	50	0.27 (0.15,0.40)	0.000

The strength of this study lies in the data provided concerning successful breastfeeding during the early postpartum period, specifically within the first 42 days. However, the results can only be generalized to the women attending the Tuban district health center, which served as a limitation of this study. A further constraint was the reliance on self-report measures to evaluate self-efficacy levels. This research has several limitations. This research is limited to one district. Thus, research findings can be generalized only to East Java districts with the same respondent characteristics.

Conclusion

In conclusion, self-efficacy increased with higher knowledge, improved social support, and positive breastfeeding attitudes among early postpartum women. Healthcare providers are recommended to assess women's self-efficacy and breastfeeding capacity regularly, during both the prenatal and postpartum periods, to detect problems early. Public health centers can be crucial in regularly screening women and providing necessary support. Healthcare providers are also encouraged to find sources of social support and provide adequate and effective use. In addition, training and counseling agendas should also be planned and implemented to encourage women to develop positive attitudes toward breastfeeding. Involving couples or families, specifically those from sociodemographically disadvantaged groups, can be prioritized to support breastfeeding more effectively.

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Conflicts of interest

Nothing to declare.

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