# **Original Research**

# **Breastfeeding Self-Efficacy Related to Postpartum Depression Tendency**

# Arum Yunia Anjani<sup>1</sup>, Gita Kostania<sup>2\*</sup>, Afnani Toyibah<sup>3</sup>

<sup>1,2,3</sup> Department of Midwifery, Poltekkes Kemenkes Malang, Indonesia

## ABSTRACT

**Background:** Postpartum depression (PPD) is a psychological disorder linked to bonding issues and increased risk of maternal suicide. Breastfeeding self-efficacy (BSE), which supports postpartum adjustment, is a key factor influencing PPD. This study aims to analyse the relationship between BSE and the tendency towards postpartum depression.

**Methods:** The study had used a correlational analytic design with a cross-section. There were 48 samples, selected by quota sampling technique. The tool of collecting data was a questionnaire by the Breastfeeding Self-Efficacy Scale-Short Form (BSES-SF) and the Edinburgh Postnatal Depression Scale (EPDS). The analysis data procedure was using the Spearman correlation test.

**Results:** Data presents the age range of respondents as 20-35 years (83.3%); senior high school (50%); not working (75%); multipara (77.1%); high breastfeeding self-efficacy (66.7%); no tendency of postpartum depression (81.2%); and respondents with high BSE who experienced no tendency of PPD (66.6%). The result showed there was a correlation between breastfeeding self-efficacy and the tendency towards postpartum depression (p = < 0.001).

**Conclusion:** Respondents with high BSE tended not to experience postpartum depression, indicating that BSE significantly influences maternal mental health. Thus, further research on BSE-focused interventions is crucial for preventing postpartum depression and strengthening midwifery care.

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#### CONTACT

Gita Kostania

gita kostania@poltekkes-malang.ac.id Department of Midwifery, Poltekkes Kemenkes Malang. Jl. Besar Ijen No. 77C, Oro-oro Dowo, Kec. Klojen, Kota Malang, East Java, Indonesia 65119

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# **INTRODUCTION**

The period of postpartum is an adjustment for the mother to her new role because she is confronted with biological, physiological, and psychological changes, including role changes. The failure of the mother in making good adjustments can make the mother tend to experience postpartum emotional problems (Restarina, 2017). Postpartum emotional problems are generally divided into three, namely postpartum blues, postpartum depression, and postpartum psychosis. Postpartum depression is a moderate-to-severe mood disorder in a woman after she gives birth. This can happen immediately after giving birth or up to a year later. Most of them occur in the first 3 months after giving birth (Asmalinda et al., 2022). Based on the data from the World Health Organisation (WHO), studies conducted at HIC show that perinatal mental disorders have a prevalence of 10-15%. The rates of mild and severe depression are three times higher in the postpartum period compared to other periods of a woman's life (WHO, 2019).

In a meta-analysis study implicating 291 studies using 296,284 puerperium moms from 56 countries, it was shown that an average of 17.7% of mothers experienced postpartum depression (Hahn-Holbrook et al., 2018). Research conducted by Wurisastuti and Mubasyiroh, (2020) using Riskesdas data for 2018 in mothers who had babies aged 2-24 weeks totalling 8,769 showed that 5.4% of mothers experienced symptoms of depression. This figure is almost close to the 2018 national depression rate (6.1%). In Malang City, there is still no system to record the incidence of postpartum depression that has occurred.

However, from the research of Desiana and Tarsikah (2021) at the "S" Blimbing Independent Midwife Practice (*PMB*) in Malang City from March to April 2019, it was found that about 57 respondents (23%) of postpartum mothers who experienced postpartum depression had an EPDS score of  $\geq 10$ . Several studies have also linked postpartum depression to insecure relationships and poor bonding between mother and child. Disturbances in the mother-child bond are also correlated to lower cognitive function and poor emotional development among children. In addition, an increased risk of suicide can occur, especially if it is not diagnosed as soon as possible or a diagnosis has been made but there is no proper follow-up and treatment (Kroska & Stowe, 2020).

There are several factors that cause postpartum depression, one of which is selfefficacy. Self-efficacy is a person's personal attitude related to a sense of confidence in one's ability to carry out a competency or in an effort to complete a task (Munisah et al., 2021). One of the main tasks of postpartum mothers is to provide breast milk. This can be influenced by breastfeeding self-efficacy. Breastfeeding self-efficacy refers to a mother's self-confidence in breastfeeding her baby.

Women who have high breastfeeding self-efficacy show greater effort and persistence to overcome possible difficulties. They interpret existing difficulties as a challenge that can be resolved, not as a reason to despair. Meanwhile, low breastfeeding self-efficacy is associated with low physical and psychological compliance (Vieira et al., 2018a). Based on this background, there is a need to conduct research to analyse more deeply the correlation between breastfeeding self-efficacy and postpartum depression in order to increase the view that breastfeeding self-efficacy is an important factor influencing the incidence of postpartum depression.

There are still slightly both national and international research studies that explore the relationship between breastfeeding self-efficacy and postpartum depression, especially with respondents who focused on the seventh day of postpartum motherhood; hopefully this research can be used as input for further research. In addition, in the future it is also hoped that it will create better efforts to increase the breastfeeding selfefficacy of mothers as early as possible in preventing the risk of postpartum depression in the future. This study aims to analyse the relationship between BSE and the tendency towards postpartum depression.

#### **MATERIALS AND METHOD**

This study was conducted with informed consent from all respondents and was approved by the Health Research Ethics Committee of the Poltekkes Kemenkes Malang with ethics approval number 201/IV/KEPK POLKESMA 2023, dated April 6, 2023. The population in this study consisted of postpartum mothers on the seventh day after delivery who were breastfeeding their babies during the period of February–March 2023. The sample was determined using a quota sampling technique based on the Slovin formula from a total population of 51 individuals, with a precision level of 5% (d = 0.05). Based on this calculation, a total of 44 respondents were selected.

Inclusion criteria included mothers who had a normal vaginal delivery, were on their seventh postpartum day, and were actively breastfeeding. Exclusion criteria included mothers with a history of depression during pregnancy, a previous episode of postpartum depression, or a family history of depression. The independent variable in this study was breastfeeding self-efficacy, and the dependent variable was postpartum depression. To measure breastfeeding self-efficacy, the study used the Breastfeeding Self-Efficacy Scale–Short Form (BSES-SF). To measure postpartum depression, the Edinburgh Postnatal Depression Scale (EPDS) was used.

The BSES-SF consists of 14 items that assess a mother's confidence in her breastfeeding ability, including dimensions such as breastfeeding technique, management, and general self-efficacy perception. The EPDS comprises 10 items evaluating the emotional state of postpartum mothers, including feelings of sadness, anxiety, loss of interest, and the ability to enjoy daily activities. Prior to implementation, both instruments underwent validity and reliability testing. Validity testing showed that all items on the BSES-SF and EPDS had item-total correlation values greater than 0.30, indicating valid items. Reliability testing showed Cronbach's Alpha scores of 0.89 for BSES-SF and 0.85 for EPDS, confirming that both instruments are highly reliable.

Data collection was conducted through structured interviews, where the researcher (a midwife) read each questionnaire item to the respondent and recorded their answers directly. This approach ensured respondent understanding of each question and reduced the risk of inaccurate responses. Data were analysed to examine the correlation between the independent and dependent variables using the Spearman correlation test, as the data were ordinal and not normally distributed. A significance level of p < 0.05 was used to determine statistical significance.

## RESULTS

Sample characteristics of the study include the age of postpartum women, educational status, working status, and parity. The distribution of postpartum women at *PMB* "S" based on these characteristics is as follows:

Characteristics	Frequency (n)	Percentage (%)		
Age				
< 20 yo	1	2.1		
20-35 yo	40	83.3		
> 35 yo	7	14.6		
Educational status				
Elementary School	1	2.1		
Junior High School	10	20.8		

Tabel 1. Characteristic Respondents at PMB S Blimbing District, Malang City 2023

Characteristics	Frequency (n)	Percentage (%)		
Senior High School	24	50.0		
University	13	27.1		
Working status				
Working	12	25		
Not working	36	75		
Parity status				
Primipara	9	18.8		
Multipara	37	77.1		
Grandemultipara	2	4.2		

Table 1 showed the majority of respondent about 48 of total respondents are at the age of 20-35 years (83.3%), have high school education (50%), not working (75%), multipara (77.1%).

Breastfeeding self efficacy	Postpartum depression				Tatal		Р	Correlation
	Tendency		Not tendency		Total		value	coefficient
	n	%	n	%	n	%		
High	0	0	29	65.9	29	65.9	_	
Medium	3	6.8	5	11.4	8	18.2	< 0.001	-0.761
Low	6	13.7	1	2.3	7	15.9		
Total	9	20.5	35	79.5	44	100	_	

 Tabel 2. The Correlation Between Breastfeeding Self efficacy and Tendency of Postpartum Depression

Based on Table 2, the analysis showed that the p-value was <0.001 with an Asymp. Sig. < 0.05, indicating a statistically significant relationship between breastfeeding self-efficacy and the tendency of postpartum depression. The correlation coefficient of -0.761 suggests a strong negative correlation. This means that when postpartum mothers have high breastfeeding self-efficacy, their likelihood of experiencing postpartum depression tends to be lower, and vice versa. These findings support the hypothesis that self-confidence in breastfeeding plays a protective role in maternal mental health, emphasising the importance of interventions that enhance breastfeeding self-efficacy to help prevent postpartum depression.

# DISCUSSION

The results of this study indicate that BSE is related to the tendency of postpartum depression, highlighting a psychological link between maternal confidence in breastfeeding and emotional well-being after childbirth. Postpartum depression is a psychological disorder characterised by moderate to severe mood disturbances in women after delivery. According to Nurhayati (2017), contributing factors to postpartum depression include constitutional, physical, psychological, and social aspects.

This study focuses on psychological factors, particularly self-efficacy, which influences how a mother perceives and manages her new role. Breastfeeding self-efficacy, as a specific form of self-efficacy, plays a crucial role in maternal adaptation and may be protective against depressive symptoms in the postpartum period (Minamida et al., 2020). The findings revealed that most respondents who did not

exhibit postpartum depression tendencies had high BSE scores, while those who did tend to experience postpartum depression had lower BSE levels.

Statistical analysis confirmed a significant negative correlation between BSE and the tendency for postpartum depression. This is supported by Minamida et al., (2020) who found that low BSE in early postpartum was a predictive symptom of postpartum depression. Similarly, Mercan & Selcuk, (2021) identified a negative correlation between BSES-SF and EPDS scores, showing that increased self-efficacy was associated with lower depression levels.

Mothers with high BSE exhibit confidence in their role, particularly in breastfeeding, which contributes positively to mood and emotional responses. Early postpartum challenges, especially related to breastfeeding, often trigger negative emotions. However, mothers with high BSE tend to interpret difficulties as challenges rather than obstacles. The BSES-SF includes components that assess a mother's perceived ability to overcome breastfeeding challenges, and results showed that confident mothers addressed problems more effectively. This aligns with Vieira et al., (2018b) who stated that women with high BSE demonstrate greater persistence and view problems as solvable challenges.

Conversely, low BSE is associated with poor physical and psychological adjustment. Fattah, (2017) adds that self-efficacy significantly influences motivation, emotional reactions, and behavioural patterns. Most respondents with high BSE understood that breastfeeding requires time and commitment and remained motivated to continue despite challenges. This reflects a mother's adaptability and effort to fulfil her maternal role. Fathi et al., (2018) support this by explaining that mothers with high self-efficacy adjust better postpartum and show better functional outcomes.

Respondent characteristics also contributed to the BSE and depression outcomes. Generally, mothers aged 20–35, with a senior high school education, non-working status, and multiparous experience, had higher BSE and fewer depressive tendencies. Young adult mothers are more emotionally stable and capable of solving problems, including adapting to the demands of breastfeeding (Anne Agustina Suwargiani et al., 2024; Dini Afriani & Shinta Amelia Febriani, 2024; Solama et al., 2023). Education equips mothers with knowledge and critical thinking skills essential for stress management and informed decision-making (Hajjan, 2023; Putri & Hastutik, 2019; Vitasari et al., 2018).

Non-working mothers have more time to bond with their infants and carry out breastfeeding roles, reducing stress (Hairol et al., 2021). Multiparous mothers also tend to be more experienced and confident in managing breastfeeding challenges (Krol & Grossmann, 2018; Medforth et al., 2017). In addition to personal factors, family support—especially from husbands—has a significant role in enhancing maternal self-efficacy and preventing postpartum depression. Supportive partners can help reduce maternal stress, reinforce confidence, and assist in overcoming breastfeeding difficulties.

Studies have shown that emotional and practical support from spouses is positively correlated with higher BSE and reduced risk of depression (Azad et al., 2019; Hajjan, 2023). However, this study has several limitations. The sample was limited to one geographical area, which may not reflect broader population characteristics. In addition, data collection relied on self-report questionnaires, which may be subject to bias. Further research is recommended with larger, more diverse populations, longitudinal designs to assess changes over time, and inclusion of qualitative data to explore mothers' personal experiences more deeply.

In conclusion, the majority of postpartum mothers in this study had high breastfeeding self-efficacy and did not show tendencies toward postpartum depression. Nonetheless, because postpartum depression can emerge weeks after delivery (Desiana & Tarsikah, 2021b; Suparwati et al., 2018), early screening and preventive interventions are essential. Health workers play a vital role through verbal encouragement to increase BSE—ideally initiated during antenatal care and reinforced at discharge planning. Moreover, early screening for BSE and postpartum depression in the first week postpartum can serve as an early detection tool, prevent worsening conditions, and ensure that mothers receive prompt and appropriate care. As Gondo, (2012) explains early identification of postpartum depression risk in the first week can effectively predict outcomes at 4 to 8 weeks postpartum.

## CONCLUSION

This study concludes that there is a significant relationship between breastfeeding self-efficacy and the tendency towards postpartum depression. Mothers with higher levels of breastfeeding self-efficacy tend to have a lower risk of experiencing postpartum depression, while those with lower self-efficacy are more likely to show depressive symptoms. The findings also reveal that the majority of postpartum mothers in this study had high breastfeeding self-efficacy and did not exhibit signs of postpartum depression.

However, this does not eliminate the possibility that some mothers may experience a decline in self-efficacy and develop depressive symptoms in the following weeks, as postpartum depression may not manifest immediately after childbirth. Therefore, strengthening breastfeeding self-efficacy is crucial as it serves as a protective factor that can help prevent the onset of postpartum depression. Health professionals are encouraged to implement early interventions and continuous support strategies to promote maternal confidence and emotional well-being throughout the postpartum period.

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# REFERENCES

- Asmalinda, W., Miskiyah, Clarasani, N., Setiyawati, D., Sapada, E., Fatimah, S., Daimah, U., & Estiani, M. (2022). *Nifas sebuah periode transisi*. Literasi Nusantara Abadi.
- Azad, R., Fahmi, R., Shrestha, S., Joshi, H., Hasan, M., Khan, A. N. S., Chowdhury, M. A. K., Arifeen, S. El, & Billah, S. M. (2019). Prevalence and risk factors of postpartum depression within one year after birth in urban slums of Dhaka, Bangladesh. *PLoS ONE*, 14(5). <u>https://doi.org/10.1371/journal.pone.0215735</u>

- Desiana, W., & Tarsikah, T. (2021a). Screening of post partum depression on the seventh day puerperium. *Indonesian Midwifery and Health Sciences Journal*, 5(2), 198–208. <u>https://doi.org/10.20473/imhsj.v5i2.2021.198-208</u>
- Desiana, W., & Tarsikah, T. (2021b). Screening of postpartum depression on the seventh day puerperium. *Indonesian Midwifery and Health Sciences Journal*, 5(2), 198–208. <u>https://doi.org/10.20473/imhsj.v5i2.2021.198-208</u>
- Dini Afriani, & Shinta Amelia Febriani. (2024). Stunting prevention is Alan effort to reduce the risk of stunting. *ABDIMAS: Jurnal Pengabdian Masyarakat*, 7(3), 871–876. <u>https://doi.org/10.35568/abdimas.v7i3.4832</u>
- Fathi, F., Mohammad-Alizadeh-Charandabi, S., & Mirghafourvand, M. (2018). Maternal self-efficacy, postpartum depression, and their relationship with functional status in Iranian mothers. *Women and Health*, 58(2), 188–203. <u>https://doi.org/10.1080/03630242.2017.1292340</u>
- Fattah, H. (2017). Kepuasan kerja dan kinerja pegawai (Cetakan 1). Penerbit Elmatera.
- Gondo, H. K. (2012). Skrining Edinburgh Postnatal Depression Scale (EPDS) pada postpartum blues. *Jurnal Imliah Kedokteran*, 01(2), 1–14.
- Hahn-Holbrook, J., Cornwell-Hinrichs, T., & Anaya, I. (2018). Economic and health predictors of national postpartum depression prevalence: A systematic review, meta-analysis, and meta-regression of 291 studies from 56 countries. *Frontiers in Psychiatry*, 8(February). <u>https://doi.org/10.3389/fpsyt.2017.00248</u>
- Hairol, M. I., Ahmad, S., Sharanjeet-Kaur, S., Wee, L. H., Abdullah, F., & Ahmad, M. (2021). Incidence and predictors of postpartum depression among postpartum mothers in Kuala Lumpur, Malaysia: A cross-sectional study. *PLoS ONE*, 16(11 November), 1–12. <u>https://doi.org/10.1371/journal.pone.0259782</u>
- Hajjan, M. (2023). Faktor yang berpengaruh terhadap kejadian postpartum blues. In L. Amalia, T. Niswatin, & E. Dewi (Eds.), *Seminar Nasional Keperawatan Nasional* (pp. 16–23). Universitas Muhammadiyah Surakarta.
- Krol, K. M., & Grossmann, T. (2018). Psychological effects of breastfeeding on children and mothers. Bundesgesundheitsblatt - Gesundheitsforschung -Gesundheitsschutz, 61(8), 977–985. <u>https://doi.org/10.1007/s00103-018-2769-0</u>
- Kroska, E. B., & Stowe, Z. N. (2020). Postpartum depression: identification and treatment in the clinic setting. *Obstetrics and Gynecology Clinics of North America*, 47(3), 409–419. <u>https://doi.org/10.1016/j.ogc.2020.05.001</u>
- Medforth, J., Ball, L., Walker, A., Battersby, S., & Stables, S. (2017). Oxford handbook of midwifery (3rd ed.). Oxford University Press.

- Mercan, Y., & Selcuk, K. T. (2021). Association between postpartum depression level, social support level and breastfeeding attitude and breastfeeding self-efficacy in early postpartum women. *PLoS ONE*, 16(4 April 2021), 1–12. <u>https://doi.org/10.1371/journal.pone.0249538</u>
- Minamida, T., Iseki, A., Sakai, H., Imura, M., Okano, T., & Tanii, H. (2020). Do postpartum anxiety and breastfeeding self-efficacy and bonding at early postpartum predict postpartum depression and the breastfeeding method? *Infant Mental Health Journal*, 41(5), 662–676. <u>https://doi.org/10.1002/imhj.21866</u>
- Munisah, M., Ika, R., Yuliati, L., & Hanum, D. F. (2021). Faktor-faktor yang mempengaruhi terjadinya depresi pascapersalinan. *IJMT : Indonesian Journal of Midwifery Today*, 1(1), 1. <u>https://doi.org/10.30587/ijmt.v1i1.3318</u>
- Nurhayati, N. (2017). *Cortisol : Bendungan ASI dan maternity blues : Kajian berbasis riset*. Media Nusa Creative.
- Putri, N. K. S. E., & Hastutik. (2019). Hubungan tingkat pendidikan ibu dengan breastfeeding self efficacy di wilayah kerja Puskesmas Bulu Kabupaten Sukoharjo. *Jurnal MATERNAL*, *3*(1), 1–10.
- Restarina, D. (2017). Skripsi: Gambaran tingkat depresi ibu postpartum di wilayah kerja Puskesmas Ciputat Timur kota Tangerang Selatan tahun 2017. Universitas Islam Negeri Syarif Hidayatullah.
- Solama, W., Rivanica, R., Effendi, E., & Safitri, S. (2023). Analisis karakteristik ibu nifas tentang depresi post partum. *Jurnal 'Aisyiyah Palembang*, 8(1), 300–313. <u>https://doi.org/https://doi.org/10.36729/jam.v8i1.1008</u>
- Suparwati, I., Murwati, & Suwanti, E. (2018). Hubungan antara kelancaran pengeluaran ASI dengan kejadian postpartum blues di wilayah Puskesmas Trucuk II Klaten. *Jurnal Kebidanan Dan Kesehatan Tradisional*, *3*(1), 8–13.
- Vieira, E. de S., Caldeira, N. T., Eugênio, D. S., Di Lucca, M. M., & Silva, I. A. (2018a). Breastfeeding self-efficacy and postpartum depression: A cohort study. *Revista Latino-Americana de Enfermagem*, 26. <u>https://doi.org/10.1590/1518-8345.2110.3035</u>
- Vieira, E. de S., Caldeira, N. T., Eugênio, D. S., Di Lucca, M. M., & Silva, I. A. (2018b). Breastfeeding self-efficacy and postpartum depression: A cohort study. *Revista Latino-Americana de Enfermagem*, 26(e3035), 1–8. https://doi.org/10.1590/1518-8345.2110.3035
- Vitasari, D., Sabrian, F., & Ernawaty, J. (2018). Hubungan dukungan keluarga terhadap efikasi diri ibu menyusui dalam memberikan ASI eksklusif. *Jurnal Online Mahasiswa (JOM)*, 05(02), 201–210.

- WHO. (2019). *MhGAP Intervention Guide for Mental Neurological and Substance-use Disorders in non-specialized Health Settings : Mental health Gap Action Programme (mhGAP)*. World Health Organization.
- Wurisastuti, T., & Mubasyiroh, R. (2020). Prevalensi dan prediktor depresi pasca persalinan: Data komunitas Riskesdas 2018. Prosiding Seminar Nasional Kesehatan Masyarakat.