



Journal of Health and Medical Sciences

Damayani, A. D., Harsanti, I., Delilah, S., & Ridayani. (2023), Exclusive Breastfeeding Coverage Increase Using Breastfeeding Readiness Scale. *Journal of Health and Medical Sciences*, 6(2), 16-21.

ISSN 2622-7258

DOI: 10.31014/aior.1994.06.02.264

The online version of this article can be found at:
<https://www.asianinstituteofresearch.org/>

Published by:
The Asian Institute of Research

The *Journal of Health and Medical Sciences* is an Open Access publication. It may be read, copied, and distributed free of charge according to the conditions of the Creative Commons Attribution 4.0 International license.

The Asian Institute of Research *Journal of Health and Medical Sciences* is a peer-reviewed International Journal. The journal covers scholarly articles in the fields of Medicine and Public Health, including medicine, surgery, ophthalmology, gynecology and obstetrics, psychiatry, anesthesia, pediatrics, orthopedics, microbiology, pathology and laboratory medicine, medical education, research methodology, forensic medicine, medical ethics, community medicine, public health, community health, behavioral health, health policy, health service, health education, health economics, medical ethics, health protection, environmental health, and equity in health. As the journal is Open Access, it ensures high visibility and the increase of citations for all research articles published. The *Journal of Health and Medical Sciences* aims to facilitate scholarly work on recent theoretical and practical aspects of Health and Medical Sciences.



ASIAN INSTITUTE OF RESEARCH
Connecting Scholars Worldwide

Exclusive Breastfeeding Coverage Increase Using Breastfeeding Readiness Scale

Ayi Diah Damayani¹, Intaglia Harsanti², Susan Delilah³, Ridayani³

¹ Center of Excellence for Maternal and Child Health Poltekkes Kemenkes Pangkalpinang, Indonesia

² Faculty of Psychology, Gunadarma University, Indonesia

³ Midwifery Department, Poltekkes Kemenkes Pangkalpinang, Indonesia

Correspondence: Ayi Diah Damayani, Center of Excellence for Maternal and Child Health Poltekkes Kemenkes Pangkalpinang, Indonesia. E-mail: damayani.ayidiah@gmail.com

Abstract

Exclusive breastfeeding is an indispensable need for baby. However, the coverage of exclusive breastfeeding still becomes an issue. This study aims to develop self-efficacy measurement tools for breastfeeding mothers in Central Bangka Regency, Indonesia. This study was a mixed method research with a total of 72 test respondents. The research was started from June to November 2021. The process and analysis used alpha Cronbach and SPSS application version 24. Based on the results of the CVR (Content Validity Ratio) test, all 20 items are considered to have a CVR above 0.8. The results of the item discrimination test on the breastfeeding readiness scale show 19 items had good discriminatory power and 1 item failed. The reliability coefficient on the prosocial behavior scale has high value consistency and stability. The early breastfeeding readiness scale can be used to assess the level of readiness of mothers in the breastfeeding process. This scale is practicable for all mothers, both those who have had children/given birth and those who are still in the pregnancy.

Keywords: Breastfeeding Readiness Scale, Exclusive Breastfeeding, Self-Efficacy

1. Introduction

Exclusive breastfeeding coverage in Indonesia has become a prolonged problem (Gayatri, 2021; Qurniyawati & Syahrul, 2022). In general, the number of babies get exclusive breastfeeding are still low, both at the provincial and district or city levels. At the provincial level, it only reached 58.33%, an increase compared to the coverage in 2014 of 56.6%, and in 2013 of 46.9%. This achievement is still far below the target set by both the province (67%) and the national target (70%). The highest coverage was achieved by Bangka Regency at 67.84%, while the lowest coverage was West Bangka Regency at 43.88% and Central Bangka Regency (45.10%). Meanwhile the tendency for exclusive breastfeeding coverage in the last seven years has tended to increase, from 21.9% in 2009, to 35.7% in 2012, in 2014 it was 56.6% and it increased in 2015 by 58.33% (Provincial Head Office of Bangka Belitung, 2015). Self-efficacy in breastfeeding mothers has been shown to be a supporting factor for exclusive

breastfeeding, while postpartum depression is a risk factor for exclusive breastfeeding (Ferraro & Vieira, 2010; Marshall et al., 2022a; Tuthill et al., 2020).

Exclusive breastfeeding is influenced by many factors, one of which is the mother's readiness to breastfeed (Maharlouei et al., 2018; Primo et al., 2016). However, exclusive breastfeeding can provide benefits not only physically (nutritionally), but also socially and psychologically for babies. Pregnant adolescents are at risk of giving birth prematurely so that with exclusive breastfeeding it is expected that the baby's growth and development can run optimally (Marshall et al., 2022b; Talbert et al., 2020).

There is a significantly positive correlation between the basic value of self-efficacy in breastfeeding mothers and the duration of breastfeeding at 6 months postpartum, which means that the higher the self-efficacy, the longer breastfeeding will be (Hartati & Hakim, 2021). Zheng's research stated that from 6 - 12 weeks of postpartum, the level of self-efficacy and social support is statistically increased, and the risk of postpartum is statistically decreased (Zheng et al., 2018). Meanwhile, according to Dennis (2010) develops Bandura's theory of several sources that can influence self-efficacy in breastfeeding (Breastfeeding Self-Efficacy), namely: experience of success (previous breastfeeding experience), experience of others (seeing other people breastfeeding), and husband's support in breast-feed (Jacobzon et al., 2022), experience of success in this case breastfeeding experience in the past. A mother who has successfully breastfed can increase her self-confidence and can develop a strong desire for herself to carry out the act or habit of breastfeeding (Li et al., 2021).

2. Method

This research is descriptive research which was conducted in Central Bangka district. The data collection was carried out in June - November 2021. The population used in this study were mothers who gave birth in the Central Bangka Regency Region. Meanwhile the sample were mothers who gave birth in Central Bangka district and were able to take part in Focus Group Discussions (FGD). The total number of respondents who participated in the FGD was 40 people.

The steps of the research are as follows: Survey, FGD, validity test (CVR), data collection, discrimination test and reliability test. The inclusion criteria in the FGD group were: postpartum women and midwives in Central Bangka. The research was conducted qualitatively to obtain the items and dimensions of maternal readiness and then was carried out quantitatively to test the items obtained.

The processing and analysis were performed using alpha Cronbach carried out with SPSS 24 statistical program tool. This research has passed the ethical test from KEPK Poltekkes Pangkalpinang no 07/EC/KEPK-PKP/V/2021. The preparations made to carry out the research consisted of preparing a measuring tool in the form of a breastfeeding readiness questionnaire consisting of 20 statement items, 17 favorable items and 3 unfavorable items.

This research began by conducting an online survey to find out what factors form the readiness to breastfeed in women in Bangka. The researcher conducted this survey and got 114 respondents. This data collection was carried out in May - June 2021.

After processing the survey data, the results were obtained regarding the factors shaping breastfeeding readiness. The results of this survey were then tested again in FGD to see whether the existing survey results were in accordance with the community's understanding. This activity was carried out in 4 Central Bangka regions, namely the Pangkalan Baru Health Center, Sungai Selan Health Center, Koba Health Center and Namang Health Center in June 2021 involving 10-12 respondents from each region. The results of the FGD showed that the survey results are in accordance with the understanding and opinion of postpartum mothers. Next, a design for measuring readiness for breastfeeding was created.

The survey results that were discussed in the FGD were then coded to obtain the aspects that emerged based on the responses from the research respondents. Based on the results of the data grouping, there are 5 aspects that

make up breastfeeding readiness and their indicators. Furthermore, these aspects and indicators are developed into statement items.

Questionnaires were distributed using online media, Google form and 72 respondents were willing to fill out the questionnaire. Of the 72 respondents who filled in, the data that could be processed were as many as 60 respondents, the remaining 12 respondents did not fill in completely so they could not be analyzed.

3. Results

The results of the survey with 114 respondents obtained the detail as shown in Table 1.

Table 1: Respondent's Characteristics

Respondent's characteristics	Total	Percentage (%)
Age		
< 35 years old	78	68
> 35 years old	36	32
Educational background		
Elementary school	7	6
Junior High School	6	5
Senior High School	47	41
Bachelor	44	39
Master	10	9

Table 1 shows that most of the survey respondents (78 respondents) were less than 35 years old and 47 of them had high school education. In testing the questionnaire, there were 72 respondents who filled out a questionnaire with the following characteristics (Table 2):

Table 2: Respondent's Characteristics for Questionnaire Test

Respondent's Characteristics	Total	Percentage (%)
Age		
<35 years old	55	76
>35 years old	17	24
Educational background		
Elementary school	1	1
Junior High School	1	1
Senior High School	40	55
Bachelor	27	37
Master	5	6
Working status		
Yes	44	61
No	28	39

4. Discussion

4.1 Validity test

In this study, the item validity test used was content validity shown in Table 3. Content validity is the validity that is estimated through testing the feasibility or relevance through an analysis of judgment by expert. The validity of this study was obtained from expert judgment made by eight panelists. Based on the results of the CVR (Content Validity Ratio) test, it is known that all 20 items are considered to have a CVR number above 0.8. This means that all items can be used for testing.

Table 3: Item Validity Test

Dimension	Indicator	Weight
Breastfeeding knowledge	a. information from Internet	20%
	b. information from health practitioners	
	c. hereditary information	
Environment support	a. Husband	20%
	b. Parents	
	c. Health practitioners	
Past experience	a. Past pregnancy	20%
	b. Experience of close people	
Emotional	a. Proud of being mother	20%
	b. Proud of giving breastfeeding	
Responsibility	a. Fulfilling the task of taking care of children	20%
	b. Giving children's rights	
Total		100%

4.2 Item Discrimination Test

The item discrimination power test on the breastfeeding readiness scale is expected to have a coefficient of ≥ 0.30 so that it can be considered satisfactory (Azwar, 2016). The discriminating power of an item is the extent to which an item is able to distinguish between individuals or groups of individuals who have and do not have the attributes being measured. The reliability test on this scale was carried out using the Alpha Cronbach technique. Empirically high and low reliability are shown by a number called the reliability coefficient, where theoretically the reliability coefficient ranges from 0 to 1. The reliability coefficient standard used by researchers in this study is ≥ 0.70 . In this study, the validity and reliability tests were carried out using SPSS version 22 for windows.

4.3 Item Reliability Test

Testing the reliability of this measuring instrument was carried out by testing Alpha Cronbach analysis with the help of SPSS. Based on the results of this reliability test, the reliability coefficient shows 0.881. This shows the reliability coefficient on the scale of prosocial behavior has a high value consistency and stability. The distribution of item can be seen in Table 4 below:

Table 4: BFSE Scale Item Distribution (Run 1)

Dimension	Indicator	Item
Breastfeeding knowledge	a. information from Internet	3
	b. information from health practitioners	1, 7
	c. hereditary information	9
Environment support	a. Husband	4, 10(*)
	b. Parents	2
	c. Health practitioners	6
Past experience	a. Past pregnancy	12
	b. Experience of close people	14, 5, 13(*)
Emotional	a. Proud of being mother	8, 15
	b. Proud of giving breastfeeding	16, 19(*, **)

Responsibility	a. Fulfilling the task of taking care of children	11, 20
	b. Giving children's rights	17, 18
Total		20
Remark:		
*item unfavorable		
** the discrimination test item failed		

Table 5: BFSE Scale Item Distribution (Run 2)

Dimension	Indicator	Item
Breastfeeding knowledge	a. information from Internet	3
	b. information from health practitioners	1, 7
	c. hereditary information	9
Environment support	a. Husband	4, 10(*)
	b. Parents	2
	c. Health practitioners	6
Past experience	a. Past pregnancy	12 5,
	b. Experience of close people	13(*),14
Emotional	a. Proud of being mother	8, 15
	b. Proud of giving breastfeeding	16
Responsibility	a. Fulfilling the task of taking care of children	11, 20
	b. Giving children's rights	17, 18
Total		19
Remark: * item unfavorable		

The early breastfeeding readiness scale can be used to assess the level of readiness of mothers in the breastfeeding process. This scale can be used by all mothers, both those who have had children/given birth and those who are still in the process of pregnancy.

References

- Ferraro, M., & Vieira, A. R. (2010). Explaining Gender Differences in Caries: A Multifactorial Approach to a Multifactorial Disease. *International Journal of Dentistry*, 2010(649643), 1–5. <https://doi.org/10.1155/2010/649643>
- Gayatri, M. (2021). Exclusive Breastfeeding Practice in Indonesia: A Population-Based Study. *Korean Journal of Family Medicine*, 42(5), 395–402. <https://doi.org/10.4082/kjfm.20.0131>
- Hartati, S., & Hakim, N. (2021). A New Exclusive Breastfeeding Booklet to Improve Self-Efficacy. *KnE Life Sciences*, 870–880. <https://doi.org/10.18502/cls.v6i1.8765>
- Jacobzon, A., Engström, Å., Lindberg, B., & Gustafsson, S. R. (2022). Mothers' strategies for creating positive breastfeeding experiences: a critical incident study from Northern Sweden. *International Breastfeeding Journal*, 17(1). <https://doi.org/10.1186/s13006-022-00474-9>
- Li, J., Zhao, C., Wang, Y., Wang, Y. P., Chen, C. Y., Huang, Y., Gao, Y. Q., Fang, J., & Zhou, H. (2021). Factors associated with exclusive breastfeeding practice among mothers in nine community health centres in Nanning city, China: a cross-sectional study. *International Breastfeeding Journal*, 16(1). <https://doi.org/10.1186/s13006-021-00416-x>
- Marshall, N. E., Abrams, B., Barbour, L. A., Catalano, P., Christian, P., Friedman, J. E., Hay, W. W., Hernandez, T. L., Krebs, N. F., Oken, E., Purnell, J. Q., Roberts, J. M., Soltani, H., Wallace, J., & Thornburg, K. L. (2022a). The importance of nutrition in pregnancy and lactation: lifelong consequences. In *American Journal of Obstetrics and Gynecology* (Vol. 226, Issue 5, pp. 607–632). Elsevier Inc. <https://doi.org/10.1016/j.ajog.2021.12.035>
- Marshall, N. E., Abrams, B., Barbour, L. A., Catalano, P., Christian, P., Friedman, J. E., Hay, W. W., Hernandez, T. L., Krebs, N. F., Oken, E., Purnell, J. Q., Roberts, J. M., Soltani, H., Wallace, J., & Thornburg, K. L. (2022b). The importance of nutrition in pregnancy and lactation: lifelong consequences. In *American Journal*

- of Obstetrics and Gynecology* (Vol. 226, Issue 5, pp. 607–632). Elsevier Inc. <https://doi.org/10.1016/j.ajog.2021.12.035>
- Primo, C. C., De Oliveira Nunes, B., De Fátima Almeida Lima, E., Leite, F. M. C., De Pontes, M. B., & Brandão, M. A. G. (2016). Which factors influence women in the decision to breastfeed? *Investigacion y Educacion En Enfermeria*, 34(1), 198–210. <https://doi.org/10.17533/udea.iee.v34n1a22>
- Provincial Head Office of Bangka Belitung. (2015). *Profil Kesehatan Dinas Kesehatan Provinsi Bangka Belitung*.
- Qurniyawati, E., & Syahrul, F. (2022). Correlation Study Coverage of Exclusive Breastfeeding and Risk Factors in Indonesia. *The Indonesian Journal of Public Health*, 17(1), 158–170. <https://doi.org/10.20473/ijph.v17i1.2022.158-170>
- Maharlouei, N., Pourhaghighi, A., Raeisi Shahraki, H., Zohoori, D., & Lankarani, K. B. (2018). Factors Affecting Exclusive Breastfeeding, Using Adaptive LASSO Regression. *International Journal of Community-Based Nursing and Midwifery*, 6(3), 260–271.
- Talbert, A., Jones, C., Mataza, C., Berkley, J. A., & Mwangome, M. (2020). Exclusive breastfeeding in first-time mothers in rural Kenya: A longitudinal observational study of feeding patterns in the first six months of life. *International Breastfeeding Journal*, 15(1). <https://doi.org/10.1186/s13006-020-00260-5>
- Tuthill, E. L., Miller, J. D., Collins, S. M., Widen, E. M., Onono, M., & Young, S. L. (2020). HIV infection, hunger, breastfeeding self-efficacy, and depressive symptoms are associated with exclusive breastfeeding to six months among women in western Kenya: A longitudinal observational study. *International Breastfeeding Journal*, 15(1). <https://doi.org/10.1186/s13006-019-0251-8>
- Zheng, X., Morrell, J., & Watts, K. (2018). Changes in maternal self-efficacy, postnatal depression symptoms and social support among Chinese primiparous women during the initial postpartum period: A longitudinal study. *Midwifery*, 62, 151–160. <https://doi.org/10.1016/j.midw.2018.04.005>