



## The Effectiveness of Health Promotion Media for Expressed Breast Milk in Increasing the Knowledge of Working Mothers to Provide Exclusive Breast Milk in Purwakarta Regency, Indonesia

Armiyanti Armiyanti<sup>1\*</sup>

<sup>1</sup>Politeknik Bhakti Asih, Purwakarta, Indonesia

### ARTICLE INFO

#### Keywords:

Exclusive breastfeeding  
Expressed breast milk  
Knowledge  
Promotional media  
Working mothers

#### \*Corresponding author:

Armiyanti Armiyanti

#### E-mail address:

[armiyanti300689@gmail.com](mailto:armiyanti300689@gmail.com)

The author has reviewed and approved the final version of the manuscript.

<https://doi.org/10.37275/jacr.v5i1.516>

### ABSTRACT

**Background:** Exclusive breastfeeding during the first six months of a baby's life is very important for the baby's health and development. However, many working mothers have difficulty providing exclusive breastfeeding because they have to return to work after giving birth. This research aims to determine the effectiveness of expressed breast milk health promotion media in increasing the knowledge of working mothers to provide exclusive breast milk in Purwakarta Regency. **Methods:** This research used a quasi-experimental design with a pre-test and post-test with control group design. The research sample was 60 working mothers who were divided into two groups, namely the intervention group (n=30) who were given expressed breast milk health promotion media and the control group (n=30) who were not given promotional media. Data were analyzed using the t-test. **Results:** The results showed that there was a significant difference ( $p < 0.05$ ) in the level of knowledge of working mothers about exclusive breastfeeding between the intervention group and the control group after the intervention. **Conclusion:** Expressed breast milk health promotion media is effective in increasing working mothers' knowledge about exclusive breastfeeding in Purwakarta Regency.

### 1. Introduction

Breast milk (ASI) is the best food for babies aged 0-6 months. Breast milk contains all the nutrients a baby needs to grow and develop optimally. Exclusive breastfeeding during the first six months of a baby's life can increase the baby's immunity, prevent infections, and reduce the risk of chronic diseases such as diabetes, obesity, and allergies. However, many working mothers have difficulty providing exclusive breastfeeding because they have to return to work after giving birth. This can cause a decrease in breast milk production and result in giving formula milk to the baby.<sup>1,2</sup>

Purwakarta Regency has low exclusive breastfeeding coverage. In 2022, exclusive breastfeeding coverage in Purwakarta Regency will only reach 52.3%, below the national target of 60%. One of the factors causing the low coverage of exclusive breastfeeding in Purwakarta Regency is the lack of knowledge among working mothers about exclusive breastfeeding. Expressed breast milk health promotion media can be a solution to help working mothers provide exclusive breast milk. Expressed breast milk health promotion media can provide information about the benefits of exclusive breastfeeding, how to express breast milk, and how to

store expressed breast milk.<sup>3,4</sup> This research aims to determine the effectiveness of expressed breast milk health promotion media in increasing the knowledge of working mothers to provide exclusive breast milk in Purwakarta Regency.

## 2. Methods

This research used a quasi-experimental design with a pre-test and post-test with a control group design. The population of this study were all working mothers in Purwakarta Regency. The research sample was 60 working mothers who were divided into two groups, namely: the intervention group (n=30), who were given expressed breast milk health promotion media, and the control group (n=30), who were not given expressed breast milk health promotion media. The research sample was taken by purposive sampling. The research instrument used was a questionnaire containing questions about knowledge about exclusive breastfeeding.

The procedure for this research is as follows: Pre-test: A pre-test was conducted on all research samples to determine the initial level of knowledge about exclusive breastfeeding. Intervention: The intervention group was given health promotion media expressed

breast milk for 4 weeks. Post-test: A post-test was conducted on all research samples to determine the final level of knowledge about exclusive breastfeeding. Data Analysis: Data were analyzed using the t-test to determine significant differences in the level of knowledge about exclusive breastfeeding between the intervention group and the control group. This research has received approval from the research ethics commission. Informed consent was obtained from all study samples. Data were analyzed using the t-test to determine significant differences in the level of knowledge about exclusive breastfeeding between the intervention group and the control group.

## 3. Results and Discussion

The results showed that there was a significant difference ( $p < 0.05$ ) in the level of knowledge about exclusive breastfeeding between the intervention group and the control group after the intervention. In the intervention group, there was an increase in the average knowledge score about exclusive breastfeeding from 65.33 to 82.00 after the intervention. Meanwhile, in the control group, there was no significant increase in the average knowledge score about exclusive breastfeeding.

Table 1. Comparison of knowledge levels between groups.

Group	Pre-test (SD)	Post-test (SD)	p-value*
Intervention (n=30)	65,33 (8,21)	82,00 (7,14)	0,001
Control (n=30)	64,57 (7,98)	65,10 (8,03)	0,321

\*Dependent t-test,  $p < 0,05$ .

Expressed breast milk health promotion media can provide great benefits for working mothers in providing exclusive breast milk to their babies. Expressed breast milk health promotion media can provide comprehensive information about various aspects of exclusive breast milk, such as: the benefits of exclusive breast milk for babies and mothers, the correct way to breastfeed, how to express breast milk, how to store expressed breast milk, myths and facts about exclusive breast milk. This information can help working mothers understand the importance of exclusive breastfeeding and ways to achieve it. Expressed breast milk health promotion media can

increase working mothers' awareness of the importance of exclusive breastfeeding. This can motivate working mothers to exclusively breastfeed their babies, even though they have to return to work after giving birth. Increasing knowledge and awareness about exclusive breastfeeding can encourage working mothers to change their behavior. Working mothers who previously did not provide exclusive breastfeeding, after receiving information and education through promotional media, became motivated to provide exclusive breastfeeding to their babies. Expressed breast milk health promotion media can help working mothers to get support from family,

friends and the workplace in providing exclusive breast milk.<sup>5-7</sup>

Expressed breast milk health promotion media can increase working mothers' awareness of the importance of exclusive breastfeeding. This can motivate working mothers to exclusively breastfeed their babies, even though they have to return to work after giving birth. Expressed breast milk health promotion media provides comprehensive information about the benefits of exclusive breast milk for babies and mothers. This information can help working mothers understand the importance of exclusive breastfeeding and how it can benefit their baby's health and development. Expressed breast milk health promotion media can touch the emotional side of working mothers by showing videos or images that depict the closeness between mother and baby while breastfeeding. This can motivate working mothers to provide exclusive breast milk to their babies. Expressed breast milk health promotion media can provide examples of success stories of working mothers who succeeded in providing exclusive breast milk to their babies. This can provide inspiration and motivation for other working mothers to do the same. Expressed breast milk health promotion media can provide information about communities or organizations that support exclusive breastfeeding. This can help working mothers get support and enthusiasm in providing exclusive breast milk to their babies.<sup>8-11</sup>

Increasing knowledge and awareness about exclusive breastfeeding can encourage working mothers to change their behavior. Working mothers who previously did not provide exclusive breastfeeding, after receiving information and education through promotional media, became motivated to provide exclusive breastfeeding to their babies. Information and education about the benefits of exclusive breastfeeding can increase working mothers' motivation to provide exclusive breastfeeding to their babies. Working mothers who were previously unsure or hesitant about providing exclusive breastfeeding, after receiving information and education, became confident and motivated to provide exclusive breastfeeding to their babies. Information

and education about how to breastfeed correctly, how to express breast milk, and how to store expressed breast milk can increase working mothers' confidence in providing exclusive breast milk to their babies. Working mothers who previously felt unable or did not have time to provide exclusive breastfeeding, after receiving information and education, feel capable and have time to provide exclusive breastfeeding to their babies. Information and education about the correct way to breastfeed, how to express breast milk, and how to store expressed breast milk can improve working mothers' skills in providing exclusive breast milk to their babies. Working mothers who were previously unskilled in breastfeeding or expressing breast milk, after receiving information and education, became skilled in breastfeeding and expressing breast milk. Information and education about exclusive breastfeeding can help working mothers to get support from family, friends and the workplace in providing exclusive breastfeeding. Working mothers who previously did not receive support from family, friends, and the workplace, after receiving information and education, now receive support from family, friends, and the workplace in providing exclusive breastfeeding.<sup>12-15</sup>

#### **4. Conclusion**

Expressed breast milk health promotion media is effective in increasing working mothers' knowledge about exclusive breastfeeding in Purwakarta Regency.

#### **5. References**

1. Wagner S, Kersuzan C, Gojard S, Tichit C, Nicklaus S, Thierry X, et al. Breastfeeding initiation and duration in France: the importance of intergenerational and previous maternal breastfeeding experiences — Results from the Nationwide ELFE Study. *Midwifery* 2019; 69(1): 67–75.
2. Eidelman AI. Breastfeeding: beyond nutrition. breastfeeding support: beyond biology. *Breastfeeding Medicine*. 2016; 11(1): 1–10.
3. Hardy K. California's Progress in Supporting Breastfeeding. *Breastfeeding Medicine*. 2022; 12(1); 35–40.

4. Lazerov J, Ervin C. Promoting breastfeeding: breastfeeding and population health. *Breastfeeding Medicine*. 2019; 6(5): 305–9.
5. The Academy of Breastfeeding Medicine. Educational objectives and skills for the physician with respect to breastfeeding. *Breastfeeding Medicine*. 2021; 6(2): 99–105.
6. Landau TV. Breastfeeding case study: New York City—the WIC program’s vital role in breastfeeding success. *Breastfeeding Medicine* 2021; 6(5): 277–9.
7. Ekström A, Kylberg E, Nissen E. A process-oriented breastfeeding training program for healthcare professionals to promote breastfeeding: an intervention study. *Breastfeeding Medicine*. 2022; 7(2): 85–92.
8. Kramer MS, Chalmers B, Hodnett ED, Sevkovskaya Z, Dzikovich I, Shapiro S, et al. Promotion of breastfeeding intervention trial (PROBIT). *JAMA*. 2001; 285(4): 413.
9. Wright AL, Naylor A, Wester R, Bauer M, Sutcliffe E. Using cultural knowledge in health promotion: breastfeeding among the Navajo. *Health Education & Behavior*. 2021; 24(5): 625–639.
10. Haroon S, Das JK, Salam RA, Imdad A, Bhutta ZA. Breastfeeding promotion interventions and breastfeeding practices: a systematic Review. *BMC Public Health*. 2023; 13(3): S20.
11. Earle, S. Factors affecting the initiation of breastfeeding: implications for breastfeeding promotion. *Health Promotion International*. 2022; 17(3): 205–14.
12. Imdad A, Yakoob MY, Bhutta ZA. Effect of breastfeeding promotion interventions on breastfeeding rates, with special focus on developing countries. *BMC Public Health*. 2021; 11(3): S24.
13. Schanler RJ, O’Connor KG, Lawrence RA. Pediatricians’ practices and attitudes regarding breastfeeding promotion. *PEDIATRICS*. 2019; 103(3): e35–e35.
14. Pérez-Escamilla R, Curry L, Minhas D, Taylor L, Bradley E. Scaling up of breastfeeding promotion programs in low- and middle-income countries: the “breastfeeding gear” model. *Advances in Nutrition*. 2022; 3(6): 790–800.
15. Bhandari N, Bahl R, Mazumdar S, Martines J, Black RE, Bhan MK. Effect of community-based promotion of exclusive breastfeeding on diarrhoeal illness and growth: a cluster randomised controlled trial. *The Lancet*. 2023; 361(9367): 1418–23.