

Conference Paper

The Effectiveness of Emo-Demo in Increasing the Knowledge and Attitudes in Mother Who Do Not Provide Exclusive Breastfeeding in the Working Area of Cisadae Public Health Center in Malang

Supriyadi¹, Septa Katmawanti², Rosyada Firdausi², and Dea Aflah Samah²¹Faculty of Sport Science, Universitas Negeri Malang, Malang, Indonesia²Department of Public Health, Faculty of Sport Science, Universitas Negeri Malang, Malang, Indonesia**ORCID:**Septa Katmawanti: <https://orcid.org/0000-0002-5115-0311>**Abstract**

The worldwide rate of exclusive breastfeeding is <40%. In Indonesia, only 42% of babies were exclusively breastfed for first six months by 96% of women (2013). Breast milk plays a vital role for both mother and baby. In 2018, the exclusive breastfeeding rate in East Java was 40%, which is far from the target set at 80%. The rate of exclusive breastfeeding is relatively higher in rural than in urban areas with a ratio of 57.22:54.77%. Meanwhile, in Malang, particularly in the Cisadae Public Health Center area, in 2019, the rate of exclusive breastfeeding was 64.8%. The knowledge and attitude of women are closely related to their behaviour towards exclusive breastfeeding. One way to increase the practice of exclusive breastfeeding is Emotional-Demonstration (Emo-Demo) education. The purpose of this study was to determine the effectiveness of Emo-Demo exclusive breastfeeding to increase the knowledge and attitudes of mothers who do not exclusively breastfeed in the working area of the Cisadae Public Health Center. The study used a pre-experimental research with one-group pre-post-test design. Data from the Wilcoxon signed rank test on maternal knowledge obtained an Asymp Sig (2-tailed) value of 0.011 and maternal attitude of 0.000. So, it can be concluded that the Emo-Demo method is effective in increasing the knowledge and attitude of mothers towards exclusive breastfeeding.

Keywords: demo, exclusive breastfeeding, knowledge, attitude

Corresponding Author:

Septa Katmawanti

septakatma.fik@um.ac.id

Published: 25 March 2021

Publishing services provided by
Knowledge E

© Supriyadi et al. This article is distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use and redistribution provided that the original author and source are credited.

Selection and Peer-review under the responsibility of the ISMoPHS 2020 Conference Committee.

OPEN ACCESS

1. Introduction

Exclusive breastfeeding is still a problem that often occurs in society. In fact, breast milk has an important role for babies, namely, to support the growth, health and survival of the baby because breast milk is rich in nutrients and antibodies. As for

the mother, breastfeeding can reduce morbidity and mortality due to breast feeding will stimulate uterine contractions, thereby reducing bleeding after childbirth (postpartum) [1]. Unfortunately, overall, the percentage of exclusively breastfed in the world is less than 40% of children under six months of age are exclusively breastfed [2]. Based on data from UNICEF (2013), as many as 1367 million babies were born worldwide and only 32% of them are exclusively breastfed in the first 6 months. In Indonesia, only 42% of the 96% women who exclusively breastfeed their babies until the age of 6 months [3]. Indonesia has not reached the target of national exclusive breastfeeding. The Ministry of Health of the Republic of Indonesia and the World Health Organization (WHO) recommend that mothers provide exclusive breastfeeding without any additional food or drink during the first 6 months of the baby's birth. In Indonesia, the baby is breastfed exclusively until 6 months of age at 29.5 % [4].

Based on the regulation No. 450 / Menkes / SK / IV / 2004 by setting a target of exclusive breastfeeding for 6 months of 80%. East Java in particular has not reached this target. According to the health profile of the East Java Provincial Health Office in 2017, infants who were exclusively breastfed in East Java were 35.7%, a decrease compared to 2016 of 74%. Exclusive breastfeeding for East Java Province was 40% [5]. The 2017 National Socio-Economic Survey data shows that the percentage of babies who are exclusively breastfed is relatively higher in rural areas than in urban areas, namely 57.22% versus 54.77%. Basic Health Research in East Java province in 2018, the lowest coverage of exclusive breastfeeding was found in several districts / cities, one of which was Malang City at 55%. Based on data from Malang City Health Department in 2016 Cisadea health centres in three years last row figures occupy the lowest exclusive breastfeeding. In 2016, 59.6% occupied the lowest level after Pandanwangi Health Center with a ratio of 0.2%, 58.7% in 2017 and 64.8% in 2019.

Interventions that can be done to change health behaviour by conducting education. The various kinds of education that have been carried out have not been effective in changing behaviour. Health education that inspires mother's emotion about the importance of exclusive breastfeeding should be encouraged. The low level of exclusive breastfeeding by mothers for babies is due to a lack of adequate knowledge, therefore participatory education is needed. Providing education can be done with the Emotional Demonstration method to convey simple messages in a fun and emotional way, so that it is very easy to remember and the impact is felt, thereby increasing behaviour change. Based on this background, the research aims to determine the effectiveness of Emo Demo in increasing the knowledge and attitudes of mothers who do not exclusively breastfeed.

2. Material and Method

This research is a quantitative research design in the form of pre-experimental one group pre-test–post-test design. This research was conducted in the work area of Cisadea Public Health Center, Malang in January-March 2020. The population in this study were 27 mothers who did not provide exclusive breastfeeding and were taken by purposive sampling technique. Mothers who do not provide exclusive breastfeeding are given an Emotional Demonstration (Emo Demo) intervention. The data collection instrument was a questionnaire. The data were analysed using the Wilcoxon signed rank test to determine the average value of the mother's knowledge and attitudes.

3. Results

Respondents who participated in this study were 38 people who were then grouped into the inclusion and exclusion criteria that had been determined because the sampling technique used in this study was purposive sampling. The inclusion criteria in this study were: 1) Mothers who have babies aged 0-6 months and are not exclusively breastfed, 2) Mother is a permanent resident of Purwantoro and Blimbing Villages, 3) Willing to be a respondent and fill out informed consent. While the exclusion criteria in this study were: 1) Mother had visual disturbances, 2) Mother had hearing loss, 3) Mother could not read or write. From the results of grouping respondents into inclusion and exclusion criteria, 27 people were included in the inclusion criteria.

3.1. Univariate analysis

Based on table 1, it is known that the majority of respondents are in the age range 21-30 years, namely 17 people (62.96%). As many as 8 people (29.63%) were at the age of 31-40 years, 2 people (7.41%) were in the age range \geq 41 years. It is known that the respondents have a level of education Diploma / Bachelor many as 15 people (55,6 %), the rest of high school education level were 9 people (33,3%), education level elementary, junior and master as many as 1 (3,7%). The majority of respondents as many as 16 people (59.3 %) do not work or are only housewives. The remaining 11 respondents (40.7%) worked. There are 9 babies aged 2 months (33.33%). While the rest, as many as 7 babies aged 4 months (25.93%), 5 months as many as 4 babies (14.81%), 3 months as many as 3 babies (11.11%), 1 month as many as 3 babies (11.11%) and 6 months of age as much as 1 baby (3.71%).

TABLE 1: Respondent's characteristics.

| Variable | Number (n) | Percentage (%) |
|----------------------|------------|----------------|
| Mother's age (yr) | | |
| 21–30 | 17 | 63 |
| 31–40 | 8 | 29.6 |
| ≥41 | 2 | 7.4 |
| Educational level | | |
| Primary school | 1 | 3.7 |
| Junior high school | 1 | 3.7 |
| Senior high school | 9 | 33.3 |
| Diploma/Bachelor | 15 | 55.6 |
| Magister | 1 | 3.7 |
| Working status | | |
| Yes | 11 | 40.7 |
| No | 16 | 59.3 |
| Child's age (months) | | |
| 1 | 3 | 11.1 |
| 2 | 9 | 33.3 |
| 3 | 3 | 11.1 |
| 4 | 7 | 25.9 |
| 5 | 4 | 14.8 |
| 6 | 1 | 3.7 |

Source: Author's own work.

TABLE 2: Distribution of knowledge and attitude category based on pre- and post-test scores.

| Variable | Pre-test | | Post-test | |
|------------------------|------------|----------------|------------|----------------|
| | Number (n) | Percentage (%) | Number (n) | Percentage (%) |
| Knowledge level | | | | |
| Good | 10 | 37.04 | 11 | 40.7 |
| Enough | 10 | 37.04 | 14 | 51.9 |
| Less | 7 | 25.92 | 2 | 7.4 |
| Attitude | | | | |
| Good | 11 | 40.7 | 24 | 88.9 |
| Enough | 14 | 51.9 | 3 | 11.1 |
| Less | 2 | 7.4 | 0 | 0 |

Source: Author's own work.

Based on Table 2, the frequency distribution of the pre-test score of knowledge above about exclusive breastfeeding was 10 people (37.04%) had good knowledge (score 76-100), 10 people (37.04%) had sufficient knowledge, and as many as 7 people (25.92%) had less knowledge. After getting health promotion, three mothers (11.1%) had enough knowledge about exclusive breastfeeding and 24 mothers (88.9%) were classified as

having good knowledge. The attitudes of mothers regarding exclusive breastfeeding before getting exclusive breastfeeding Emotional Demonstration (Emo Demo) education showed that 11 mothers (40.7 %) had good attitudes, as many as 14 mothers (51,9 %) had enough attitudes, and 2 mothers (7,4%) had poor attitude. It can be concluded that most respondents still had sufficient attitudes before being given education. After getting exclusive breastfeeding information by Emo Demo, 24 respondents (88.9 %) had a good attitude, 3 people (11,1 %) had enough attitudes in the sufficient category. It can be concluded that, most of the respondents already have a good attitude after being given exclusive breastfeeding Emotional Demonstration (Emo Demo) education.

3.2. Bivariate analysis

TABLE 3: Data analysis results of the Wilcoxon Signed Rank Test.

| | Wilcoxon Signed Rank Test | |
|--------------------|---------------------------|----------------------|
| | Z Score | Asymp.Sig (2-tailed) |
| Knowledge | | |
| Post-test–pre-test | -4.234b | 0.000 |
| Attitude | | |
| Post-test–pre-test | -4.546 | 0.000 |

Based on Table 3, it can be seen that the Asymp.Sig (2-tailed) value is equal to where the significance value of the knowledge variable is less than 0.05 (0.000 <0.05). Thus it can be concluded that Emo Demo exclusive breastfeeding is effective for increasing knowledge of mothers who do not provide exclusive breastfeeding in the work area of Cisadea Health Center, Malang City. The same result was also found in attitude variable. The Asymp.Sig (2-tailed) value is 0.000, where the significance value of the attitude variable is less than 0.05 (0.000 <0.05). Thus it can be concluded that Emo Demo exclusive breastfeeding is effective in increasing the attitude of mothers who do not provide exclusive breastfeeding in the working area of Puskesmas Cisadea, Malang City.

4. Discussion

On average, mothers who do not exclusively breastfeed in the working area of the Cisadea Health Center are in the age range of 21-30 years who are categorized as women of childbearing age. Based on this, it means that many young mothers would but did not give exclusive breastfeeding. This contradicts a study conducted in Organda

in the United States that shows that the younger the mothers who eat, tend to exclusively breastfeed their babies compared to older mothers [6]. The age factor can also affect a person's knowledge, the higher the age of a person, the better the mindset and the more experiences that are gained [7]. However, the knowledge in question is knowledge that is generally not specific, namely knowledge related to exclusive breastfeeding. There is no specific relationship between maternal age and exclusive breastfeeding, because in breastfeeding there are various things that affect the mother's courage, desire and support from health workers [8].

The next characteristic of respondent is based on education level. The majority in this study mothers who do not exclusively breastfeed are diploma / bachelor graduates. This indicates that there are still mothers with higher education levels who do not provide exclusive breastfeeding. This research is not in accordance with that conducted by Hidayah and Setyaningrum (2008) who say that the higher the education, the higher the level of knowledge obtained [9]. This is because there may still be mothers who are highly educated but are not selected as respondents. In addition, knowledge of the purpose of this research is to know that are specific or specifically associated with exclusive breastfeeding [10]. Meanwhile, the factors that influence attitudes are experience, the influence of other people who are considered important and the influence of a media [11].

The next characteristic is job status. Based on this study, the majority of mothers who do not exclusively breastfeed are not working or as housewives. This means that there are still mothers who do not work and do not exclusively breastfeed. This is not in accordance with research conducted by Anggania, et al (2018) which shows that mothers who do not work tend to provide exclusive breastfeeding compared to working mothers [12]. However, in reality, in this study, there were still mothers who did not work but did not provide exclusive breastfeeding. This incident certainly caused by several things, namely, the lack of knowledge and attitudes related to exclusive breastfeeding mothers, giving breastfeeding too early and a history of giving milk formula.

Further characteristics seen from the age of the baby, the majority of infants who are not exclusively breastfed are in the 2 month age range (33.3 %). The reason why mothers do not provide exclusive breastfeeding is due to the non-smooth release of breast milk. This can happen because the knowledge is still lacking about the importance of exclusive breastfeeding, this argument is reinforced by the results of research on factors associated with breastfeeding exclusively at Gowa, Southeast Africa [13].

In this study, the average score of maternal knowledge before Emo Demo or pre-test education was 72.36, indicating that the average mother still had sufficient knowledge.

Increased after a given educational knowledge score was 94.4. This shows that the mother's knowledge from the category is good enough after being given Emo Demo education. This is also supported by the results of the Wilcoxon signed rank test with the results of Asymp.Sig (2- tailed) of 0.000, where this significance value is less than 0.05 ($0.000 < 0.05$) or it can be interpreted that Emo Demo exclusive breastfeeding can increase mother's knowledge. This is in line with research conducted by Huriah (2017) which shows that education in lactation management using the Emo Demo method can increase knowledge compared to before Emo Demo.

The average score in the study related to the attitude of mothers on breastfeeding exclusively before conducted education or pre-test of 72.07. This shows that the attitude of the mother regarding exclusive breastfeeding is still in the sufficient category. Meanwhile, the average score of maternal attitude after treatment (post-test) was 88.88. This shows that there is an increase in the score of the attitude of the mother before and after giving the treatment, the attitude of the mother has increased from the moderate category to good. This statement is supported by the results of statistical analysis using the Wilcoxon signed rank test with the Asymp.Sig (2-tailed) result of 0.000, which means that the significance value is less than 0.05 ($0.000 < 0.05$) so that it can be concluded that there is an increase in attitude. Mothers before and after being given treatment. This research is in line with Hanifah (2019) that health education using Emo Demo media shows a difference in the increase in the average score of pregnant women after being given anaemia education in the Emo Demo group and the control group [14]. In addition, Amareta and Ardianto's research (2017) shows that there are significant differences in knowledge and attitudes before and after health education interventions with the Emo Demo method regarding the practice of hand washing with soap (CTPS) [15]. Research conducted by Alison et al. (2018) in Kenya that the absence of exclusive breastfeeding is because the mother has less knowledge regarding exclusive breastfeeding [15]. According to the Emo Demo method it can improve mothers' attitudes in giving exclusive breastfeeding because they get a picture of the difference in the amount of intake between babies who are breastfed alone compared to babies who are given breast milk and formula milk. Emo Demo can also change the habits of mothers who give white water or bananas to babies. In this study, baby crying was also given to upload the mother's feelings during the course of education. This is in line with the theory of Behaviour Centered Design that education is aimed at feelings [16].

5. Conclusion

Based on the results of research that has been done, it is known that Emo Demo exclusive breastfeeding is effective in increasing the knowledge and attitudes of mothers who do not provide exclusive breastfeeding. Suggestions to further researchers for other researchers, it is hoped that the variable effectiveness of the Emo Demo on exclusive breastfeeding is modified or the effectiveness of the Emo Demo from another health perspective.

Acknowledgement

None

Conflict of Interest

The authors declare that there is no conflict of interest.

References

- [1] Kemenkes RI. (2013). *Profil Kesehatan Indonesia Tahun 2013*. Jakarta: Ditjen Bina Gizi dan KIA.
- [2] WHO. (2015). *Sustainable Development Goals*. Jakarta: United Nation.
- [3] UNICEF. (2013). *ASI adalah penyelamat Hidup Paling Murah dan Efektif Dunia*. Jakarta: UNICEF.
- [4] Kemenkes RI. (2017). *Profil Kesehatan Indonesia tahun 2017*. Jakarta: Kementerian Kesehatan RI.
- [5] Kemenkes, RI. (2018). *Riset Kesehatan Dasar*. Jakarta: Kementerian Kesehatan Badan Penelitian dan Pengembangan Kesehatan.
- [6] Leah, N. M., *et al.* (2017). Factors Associated with Exclusive Breastfeeding in Kenya: A Systematic Review. *International Journal of Community Medicine and Public Health*, vol. 4, issue 12, pp. 4358-62.
- [7] Notoatmodjo, S. (2010). *Promosi Kesehatan Teori dan Aplikasi*. Jakarta: PT. Rineka Cipta.
- [8] Sugiarto, S, *et al.* (2016). Hubungan Antara Umur Ibu, Pekerjaan Ibu, Pendapatan Keluarga Dan Dukungan Petugas Dengan Pemberian ASI Eksklusif 6 Bulan Di

- Wilayah Kerja Puskesmas Kakaskasen Kecamatan Tomohon Utara.(Undergraduate Thesis, Poltekkes Kenkes Manado).
- [9] Hidayah, L. and Setyaningrum, U. (2018). Hubungan Pengetahuan Ibu Bekerja Tentang ASI Perah Dengan Sikap Terhadap ASI Perah. *Jurnal Ilmiah Bidan*, vol. 3, issue 1, pp. 1-8.
- [10] Maulida, A. (2018). Efektivitas Booklet Asi Eksklusif Terhadap Peningkatan Pengetahuan Mengenai ASI Eksklusif Pada Ibu yang Tidak Memberikan ASI Eksklusif Di Wilayah Kerja Puskesmas Cisadea Kota Malang. (Undergraduate Thesis, Fakultas Ilmu Keolahragaan Universitas Negeri Malang).
- [11] Wawan, A. and Dewi, M. (2010). *Pengetahuan, Sikap Dan Perilaku Manusia*. Yogyakarta: Nuha Medika.
- [12] Anggania, G. A. T., et al. (2018). Hubungan Status Pekerjaan Ibu Dengan Pemberian ASI Eksklusif di Wilayah Kerja Puskesmas Kawangkoan. *E-Jurnal Keperawatan*, vol. 6, issue 1, pp. 1-6.
- [13] Setegn, T., et al. (2018). Factors Associated with Exclusive Breastfeeding Practices Among Mothers in Goba District, South East Ethiopia: A CrossSectional Study. *International Breastfeeding Journal*, vol. 7, issue 1, pp. 1-17.
- [14] Hudrul, H. (2019). *Pengaruh Edukasi Gizi Menggunakan Media Emo Demo Terhadap Tingkat Pengetahuan Dan Sikap Ibu Hamil Terkait Anemia Di Puskesmas Sungai Lasi Kabupaten Solok, 2019*. Padang: Universitas Andalas.
- [15] Amareta, D. I. & Ardianto, E. T. (2017). Peningkatan Praktik Cuci Tangan Pakai Sabun pada Anak Usia Sekolah dengan Metode Emo Demo. *Jurnal Kesehatan Lingkungan. Poltekkes Kemenkes Yogyakarta*, vol. 9, issue 2, pp. 88-93.
- [16] Talbert, A. W., Tsofa, B., Mumbo, E., Berkley, J. A. & Mwangome, M. (2018). Knowledge of, and attitudes to giving expressed breastmilk to infants in rural coastal Kenya; focus group discussions of first time mothers and their advisers. *International Breastfeeding Journal*, vol. 13, issue 1, pp. 1–7.
- [17] Stein, D. and Valters, C. (2012). *Understanding Theory of Change in International Development*. London: London School of Economics.