Improving The Ability of Posyandu Cadres and Breastfeeding Mothers in Oxytocin Stimulation and Breastfeeding SEFT "SOS Menyusui" as an Effort to Prevent Stunting

Tetet Kartilah^{1,a)}, Sofia Februanti^{2,b)}, and Syaukia Adini^{3,c)}

¹Prodi Sarjana Terapan Keperawatan, Poltekkes Kemenkes Tasikmalaya, Tasikmalaya, Indonesia
²Prodi Profesi Ners, Poltekkes Kemenkes Tasikmalaya, Tasikmalaya, Indonesia
³Prodi D3 Keperawatan Tasikmalaya, Poltekkes Kemenkes Tasikmalaya, Tasikmalaya, Indonesia

^{a)}Corresponding author: tetet.kertilah@dosen.poltekkestasikmalaya.ac.id ^{b)}sofia.februanti@dosen.poltekkestasikmalaya.ac.id ^{c)}syaukia.adini@dosen.poltekkestasikmalaya.ac.id

ABSTRACT

Malnutrition is one of the biggest causes of morbidity and mortality in children under 5 years of age in developing countries related to metabolic, social, and environmental risk factors during the first 1000 days of life/HPK (from conception to the first 2 years of life). Stunting is the most common form of malnutrition in children, and exclusive breastfeeding for infants aged 0-6 months and continued until the child is 2 years old is an effort to prevent stunting. Breastfeeding mothers can experience various problems in the breastfeeding process, such as decreased production and smoothness of breast milk which can cause failure of exclusive breastfeeding. Breastfeeding training using Oxytocin Stimulation and SEFT breastfeeding (SOS Breastfeeding) for cadres and breastfeeding mothers with their families is an effort to maintain breast milk production and smoothness, through relaxation techniques and reducing stress levels to help minimize prolactin inhibitors and gentle massage for oxytocin stimulation to increase smoothness of breast milk. The training was attended by 7 cadres and 15 breastfeeding mothers with their families. The training method was conducted directly with lecture techniques, simulations, and demonstrations to Posyandu cadres, breastfeeding mothers, and their families. Participants were given a pretest, an explanation of the process of breast milk production and release, a simulation and demonstration of SOS breastfeeding, and a post-test. The results of the training showed an increase in the knowledge, attitude, and skills scores of cadres and breastfeeding mothers before and after training with an average knowledge and attitude score of 6.8 pretests (with the lowest score of 4 and the highest score of 8) and an average posttest score of 8.6 (the lowest score of 6 and the highest score of 10), and breastfeeding mothers and cadres were able to redemonstrate the SOS breastfeeding technique according to the guidelines. To maximize the results of the training, this activity requires ongoing cooperation between families with breastfeeding mothers, cadres, and regional midwives, to continue to improve the support system and interest in breastfeeding until the child is 2 years old.

ARTICLE INFO

Article History: Submitted/Received 16 Oct 2024 First Revised 19 Oct 2024 Accepted 20 Oct 2024 First Available online 21 Oct 2024

Publication Date 21 Oct 2024

Keyword :

Oxytocin stimulation SEFT stunting

INTRODUCTION

Malnutrition can be caused by metabolic, social, and environmental risk factors during the first 1000 days of life/HPK (from conception to the first 2 years) and beyond (Campos et al., 2015; Tello et al., 2022). Babies who are not breastfed are at risk of malnutrition. Malnutrition is one of the biggest causes of morbidity and mortality in children under 5 years of age, especially in developing countries (Tello et al., 2022; Ekholuenetale et al., 2022). Stunting is the most common form of malnutrition in children, which is identified as short or very short based on length/height for an age of less than -2 standard deviations (SD) on the WHO growth curve (Susanti, 2022).

The prevalence of underweight and stunting in children in India reached 35.8% (Kankane et al., 2022). Meanwhile, in Indonesia, in 2022, the incidence of stunting reached 21.6% and the target was 14% in 2024 (Humas BKPK, 2023). The highest number of stunting sufferers include the provinces of West Java, East Java, Central Java, North Sumatra, and Banten. The stunting rate in Tasikmalaya City is still around 22 percent or around 1,720 children. The percentage is said to be still above the national average, which is around 21 percent (Adji, 2023).

The first 1000 days of life and beyond are a critical period for intervening and preventing stunting (A. P. Campos et al., 2020). A good prevention strategy is needed to reduce the prevalence of stunting more effectively. Exclusive breastfeeding has been proven effective in maintaining optimal growth for early childhood (Hadi et al., 2021; Norimarna et al., 2020). Breastfeeding is one of the best investments for survival and improving health for both mothers and children (Karabayir et al., 2022). Breastfeeding greatly supports the social and economic development of individuals and the nation. However, only 40% receive exclusive breastfeeding (Kesmas Kemkes, 2022).

Although various methods have been implemented by the government to increase breastfeeding, in reality, many mothers have difficulty breastfeeding (Pramesti et al., 2022). This causes mothers to stop breastfeeding. Mothers who experience breastfeeding interruption and want to breastfeed their children again are called relactation (Galbany-Estragués et al., 2020; Camacho et al., 2023). Relactation is very important as an effort to improve the health of mothers and babies such as preventing and overcoming stunting, emergencies, or disasters (Lawrence, 2022; Valencia & Rueda-guevara, 2021). Stunting can be prevented in one way, namely by providing exclusive breastfeeding to babies aged 0-6 months and continuing with breastfeeding for up to 2 years (A. P. Campos et al., 2020).

Although breastfeeding is considered a natural physiological process, many postpartum mothers experience breastfeeding anxiety. Anxiety related to maternal stress reduces milk production by inhibiting the milk ejection reflex, interfering with the release of oxytocin, and has adverse physiological effects on breastfeeding such as reducing the incidence of Early Initiation of Breastfeeding (IMD), reducing the duration of breastfeeding, reducing the incidence of exclusive breastfeeding (Meedya et al., 2021; Hoff et al., 2019). Difficulty breastfeeding can also have an impact on mental health to depression (Coo et al., 2020). Therefore, accessible and effective treatment is important. One innovative treatment approach is through an android-based application, which can be done alone or with the support of a health care professional. During breastfeeding, the potential advantage of this approach is that mothers can access information and interventions at any time and do not require time-consuming or uncomfortable face-to-face sessions (Ashford et al., 2017; Hamzehgardeshi et al., 2021).

Ways to overcome stress and anxiety while breastfeeding include meditation relaxation (relaxation exercises, guided imagery, music therapy, yoga, progressive muscle relaxation), music, lighting relaxation, and a combination of the three that can increase breast milk production, cortisol levels, anxiety-related behaviors, and self-reported relaxation and anxiety (Yu et al., 2018; Meedya et al., 2021). In addition, the Stimulation of Endorphin, Oxytocin, and Suggestive (SPEOS) method is a preferred intervention to stimulate the release of oxytocin through oxytocin and endorphin massage, providing comfort and

instilling confidence in mothers that breast milk should come out and mothers can breastfeed exclusively (Lestari et al., 2019).

Another way to calm down while breastfeeding is the Spiritual Emotional Freedom Technique (SEFT), a new EFT method (Kustiawan, 2021). SEFT is a clinical procedure to relieve psychological stress such as anxiety and physical stress (Rancour, 2016; Kalla et al., 2017; Karmiyati & Sari, 2018).

The purpose of this community service activity is to improve the ability of Posyandu cadres and breastfeeding mothers in oxytocin stimulation and SEFT breastfeeding "SOS Breastfeeding" as an effort to prevent stunting.

METHOD

The program implementation uses a training method with lectures, simulation, and demonstration techniques to cadres and breastfeeding mothers. The evaluation model used is the Kirkpatrick evaluation model which consists of four levels of evaluation. This study will focus on measuring evaluation at level 2, namely testing how well training participants understand the material that has been received during training with a paper-pencil test. The measurement design is a pretest-posttest design, where the dependent variable or outcome is measured before and after several events (lectures, simulations and demonstrations) are given (Delucchi, 2014). The pretest is to provide an initial/baseline assessment before the intervention begins (pretest) and then re-provide the same assessment after the intervention is complete (posttest). The test score data obtained are classified as a ratio measurement scale. Data were analyzed descriptively.

Implementation Of Activities

PREPARATION STAGE: Identification of targets, coordination with health centers, development of media and measuring instruments



IMPLEMENTATION STAGE: 1. Pre-Test, material explanation, demonstration 2. Redemonstration & Post-test

FIGURE 1. Implementation of activites

Preparation stage. Activities carried out include identifying targets and coordinating and arranging activity plans with health centers. As well as developing appropriate media and measuring instruments.

Implementation stage. The activity was carried out for 2 days, the first day included the provision of a pre-test of 10 paper-based questions, an explanation of breastfeeding physiology and the factors that influence it interactively using display media and leaflets, a simulation of Oxytocin Stimulation Massage (OSM) and SEFT to phantoms, a demonstration of OSM and SEFT to breastfeeding mothers and cadres, followed by a redemonstration by breastfeeding mothers and cadres and a post-test. The second day was an evaluation of the implementation of OSM and SEFT, as well as an evaluation of the implementation experience and its impact

RESULT AND DISCUSSION

The training activity was carried out on 23 people consisting of 17 breastfeeding mothers accompanied by their families, and 6 health cadres. The characteristics of the training participants are shown in the following table 1:

Description	Total	%	Description
Mother's Age			
< 20 years	1	5.9	
20-35 years	14	82.3	
> 35 years	2	11.8	
Total	17	100	
Current age of baby/child			
< 6 months	8	47.1	
Using formula milk	2		Breast milk a little
6-24 months	9	52.9	
Total	17	100	
Exclusive breastfeeding			
Only breast milk until 6 months	12	70.5%	
Breast milk mixed with formula milk since the baby	2	11.8%	Because breast milk is little, the
is <6 months			baby is fussy.
top breastfeeding and replace with formula milk since the baby is <6 months	2	11.8%	Because breast milk is little and finally stops
Not given breast milk	1	5.9%	Adopted child
Total	17	100%	
Education			
Elementary School	4	23.5	
Middle School	6	35.4	
High School	4	23.5	
College	3	17.6	
Total	17	100	
Occupation			
Working (every day/intermittent days)	10	59	
Not working	7	41	
Total	17	100	
Age			
<40	0	0	
40-50	2	33.3	
>50	4	66.7	
Total	6	100	
Job			
Working	4	66.7	
Not working	2	33.3	
Total	6	100	

TABLE 1. Distribution Frequency Number of Breastfeeding Mothers based on mother's age, baby's age,Education, and occupation. (N mothers = 17, N cadres = 6)

Table 1 shows that the majority of breastfeeding mothers are of productive age, with a range of 20-35 years, and of the 17 babies under 2 years old, there were 4 babies (23.6%) who did not receive exclusive breastfeeding because breast milk production was considered insufficient, so it was supplemented and replaced with formula milk.

The level of knowledge and attitudes of breastfeeding mothers before and after training is shown in the following table 2:

	n	Min	Max	Average
Breastfeeding Mothe	er			
Pre-Test	17	7	10	8
Post Test	17	8	10	9.4
Cadre				
PreTest	6	7	9	7.6
Post Test	6	10	10	9.5

TABLE 2. Pre-Test and Post-Test Scores of Breastfeeding Mothers and Cadres

From Table 2 it can be seen that there was an increase in the knowledge and attitude scores of breastfeeding mothers (1.4 points) and cadres (1.9 points) regarding exclusive breastfeeding and the factors that influence it.

Meanwhile, the skill level of breastfeeding mothers and cadres, in assisting in maintaining and increasing the smoothness of breast milk, through the SOS breastfeeding technique, has increased significantly. This is evidenced by the results of observations of the abilities of training participants before being given a simulation and demonstration of the SOS breastfeeding technique, all training participants were not yet able to perform oxytocin massage and SEFT, but after being given examples and independent practice to other participants, through massage practices along the back and guidance to reduce stress through a prayer approach and building awareness of the importance of breast milk for babies, most of them were able to do it well, although some still needed the help of a checklist sheet to remember the steps of action. The results of the evaluation on the second day, it was found that breastfeeding mothers felt comfortable when they received a gentle massage on the back by their families, and felt the pleasure of having the opportunity to breastfeed after implementing SEFT, so that breastfeeding activities became more relaxed and comfortable (Marifah et al., 2022; Wahyuni et al., 2022; Fadli et al., 2020a).

Health cadres are selected residents who are trained by local health centers or health service facilities. One form of community participation is becoming a health cadre, which means leading or managing a community health program. Health cadres are an important part of the community that helps run various health programs, both preventive and promotive, including the exclusive breastfeeding program (Sukmawati et al., 2021).

Training and mentoring of posyandu cadres is very useful to improve their knowledge and skills. The role of cadres in exclusive breastfeeding is very important because they are expected to provide the right information on how to overcome problems arising from lactation and increase their knowledge of exclusive breastfeeding. Because cadres are close to the community, they can directly handle the problems of breastfeeding mothers, allowing them to provide breast milk without difficulty (Pawestri; et al., 2023).

CONCLUSION

SOS breastfeeding technique training through lecture and practice methods (simulation, demonstration, and redemonstration) in breastfeeding mother groups, and effective cadres in increasing knowledge, awareness and skills to maintain and increase the smoothness of breast milk. Breastfeeding mothers and their families directly enjoy the benefits of SOS techniques in daily breastfeeding and cadres can be a source of information and companions for the implementation of exclusive breastfeeding for breastfeeding mothers.

The family as the closest person can provide good physical and psychological environmental support for the mother during breastfeeding, and cadres participate as companions and mediators in the implementation of exclusive breastfeeding through information and motivation services coordinated with the health center.

ACKNOWLEDGEMENTS

We would like to express our gratitude to the Director of Poltekkes Kemenkes Tasikmalaya who has provided financial assistance for community service, the community or participants involved in community service activities.

REFERENCES

- Adji, B. (2023). Wali Kota Tasikmalaya Minta Mahasiswa Pantau Kondisi Anak Stunting. *Republika*. https://rejabar.republika.co.id/berita/rpt5cg432/wali-kota-tasikmalaya-minta-mahasiswa-pantaukondisi-anak-stunting
- Ashford, M. T., Ayers, S., & Olander, E. K. (2017). Interest in web-based treatments for postpartum anxiety: an exploratory survey. *Journal of Reproductive and Infant Psychology*, *35*(4), 394–409. https://doi.org/10.1080/02646838.2017.1320364
- Camacho, N. A., Schreeb, J. Von, Corte, F. Della, & Kolokotroni, O. (2023). Interventions to support the re - establishment of breastfeeding and their application in humanitarian settings : A systematic review. *Maternal & Child Nutrition, September 2022*, 1–15. https://doi.org/10.1111/mcn.13440
- Campos, A. P., Vilar-compte, M., & Hawkins, S. S. (2020). Association Between Breastfeeding and Child Stunting in Mexico. *Annals of Global Health, 86*(1), 1–14.
- Coo, S., García, M. I., Mira, A., & Valdés, V. (2020). The Role of Perinatal Anxiety and Depression in Breastfeeding Practices. *Breastfeeding Medicine*, *15*(8), 1–6. https://doi.org/10.1089/bfm.2020.0091
- Delucchi, M. (2014). Measuring Student Learning in Social Statistics: A Pretest-Posttest Study of Knowledge Gain. *Teaching Sociology*, 42(3), 231–239. https://doi.org/10.1177/0092055X14527909
- Ekholuenetale, M., Okonji, O. C., Nzoputam, C. I., & Barrow, A. (2022). Inequalities in the prevalence of stunting, anemia and exclusive breastfeeding among African children. *BMC Pediatrics*, 22(333), 1– 14. https://doi.org/10.1186/s12887-022-03395-y
- Fadli, R. P., Putri, Y. E., Amalianita, B., Zola, N., & Ifdil, I. (2020). Treatment for anxiety using spiritual emotional freedom technique. *Journal of Counseling and Educational Technology*, *3*(1), 41–46. https://doi.org/10.32698/01151
- Galbany-Estragués, P., Cazorla-Ortiz, G., Obregón-gutiérrez, N., & Goberna-tricas, J. (2020). Understanding the Challenges of Induction of Lactation and Relactation for Non-Gestating Spanish Mothers. *Journal of Human Lactation*, *36*(3), 528–536. https://doi.org/10.1177/0890334419852939
- Hadi, H., Fatimatasari, F., Irwanti, W., Kusuma, C., Alfiana, R. D., Asshiddiqi, M. I. N., Nugroho, S., Lewis, E. C., & Gittelsohn, J. (2021). Exclusive Breastfeeding Protects Young Children from Stunting in a Low-Income Population : A Study from Eastern Indonesia. *Nutrients*, *13*, 1–14.
- Hamzehgardeshi, Z., Omidvar, S., Amoli, A. A., & Firouzbakht, M. (2021). Pregnancy-related anxiety and its associated factors during COVID-19 pandemic in Iranian pregnant women: a web-based crosssectional study. *BMC Pregnancy and Childbirth*, *21*(1), 1–9. https://doi.org/10.1186/s12884-021-03694-9
- Hoff, C. E., Movva, N., Rosen Vollmar, A. K., & Pérez-Escamilla, R. (2019). Impact of Maternal Anxiety on Breastfeeding Outcomes: A Systematic Review. *Advances in Nutrition*, *10*(5), 816–826. https://doi.org/10.1093/advances/nmy132
- Humas BKPK. (2023). *Angka Stunting Tahun 2022 Turun Menjadi 21,6 Persen*. Badan Kebijakan Pembangunan Kesehatan.
- Kalla, M., Simmons, M., Robinson, A., & Stapleton, P. (2017). Emotional freedom techniques (EFT) as a practice for supporting chronic disease healthcare: a practitioners ' perspective. *Disability and Rehabilitation*, 40(14), 1654–1662. https://doi.org/10.1080/09638288.2017.1306125
- Kankane, A., Lalwani, D., Chhabra, K., & Chaurasiya, O. S. (2022). Management outcome and risk factor in children with severe acute malnutrition in <6 months of age and role of supplementary suckling

technique in re-establishing breastfeeding. *Indian J Child Health*, *9*(7), 122–125. https://doi.org/10.32677/ijch.v9i7.3434

- Karabayir, N., Potak, E. M., Karaman, S., Sebirli, M. F., Istanbullu, M. B., Potak, M., & Teber, B. G. (2022). The Finger Feeding Method and Relactation. *Cureus*, *14*(4), 1–7. https://doi.org/10.7759/cureus.24044
- Karmiyati, D., & Sari, S. Z. (2018). The Comparison Between Laughter and SEFT Therapies Effect Towards Stress For The Elderly People. *3rd ASEAN Conference on Psychology, Counselling, and Humanities (ACPCH 2017), 133,* 76–81.
- Kesmas Kemkes. (2022). *Mari Dukung Ibu Untuk Menyusui*. Kemenkes RI, Dirjennakes. https://kesmas.kemkes.go.id/konten/133/0/mari-dukung-ibu-untuk-menyusui
- Kustiawan, R. (2021). *Aplikasi SEFT pada kasus psikososial*. LPPM. https://lppm.umtas.ac.id/download/aplikasi-seft-pada-kasus-psikososial/
- Lawrence, R. A. (2022). 19 Induced Lactation and Relactation (Including Nursing an Adopted Baby) and Cross-Nursing. *Breastfeeding (Ninth Edition) 2022, Pages 628-645*, 628–645.
- Lestari, I., Rahmawati, I., & Windarti, E. (2019). SPEOS (Stimulation of Endorphin, Oxytocin and Suggestive): Intervention to Improvement of Breastfeeding Production. *Medico-Legal Update*, *19*(1), 210–215.
- Marifah, A. R., Setyowati, S., & Afiyanti, Y. (2022). the Effect of the Spiritual Emotional Freedom Technique (Seft) on Anxiety Reduction in Hydatidiform Mole Patients. *Journal of Maternity Care and Reproductive Health*, *5*(2), 69–77. https://doi.org/10.36780/jmcrh.v5i2.233
- Meedya, S., Win, K., Yeatman, H., Fahy, K., Walton, K., Burgess, L., McGregor, D., Shojaei, P. S., Wheatley, E., & Halcomb, E. (2021). Developing and testing a mobile application for breastfeeding support: The Milky Way application. *Women and Birth*, *34*(2), e196–e203. https://doi.org/10.1016/j.wombi.2020.02.006
- Pawestri;, Rachmawati, A., Simatupang, N. C., Aprilia, S., & Dhamanik, R. (2023). PEMBERDAYAAN KADER DALAM MANAGEMEN PENATALAKSANAAN ASI EKSKLUSIF DENGAN PIJAT OKSITOSIN, PIJAT ENDORPIN DAN NUTRISI IBU HAMIL EMPOWERMENT OF CADRES IN EXCLUSIVE BREAST MILK MANAGEMENT WITH OXYTOCIN MASSAGE, ENDORPINE MASSAGE AND PREGNANT WOMEN NUTRITION. *Jurnal Pengabdian Masyarakat Kebidanan, 5*(2), 35–43.
- Pramesti, L. D., Dewi, M., & Gayatri, M. (2022). Literature Review: Pengaruh Relaktasi Suplementer Dikombinasikan Dengan Metode "SPEOS" (Stimulasi Pijat Endorfin, Oksitosin, Dan Sugestif) Terhadap Durasi Relaktasi Pada Ibu Menyusui. *Journal of Issues in Midwifery*, *6*(2), 88–96. https://doi.org/10.21776/ub.JOIM.2022.006.02.3
- Rancour, P. (2016). The Emotional Freedom Technique Finally, a Unifying Theory for the Practice of Holistic Nursing, or Too Good to Be True? *Journal of Holistic Nursing*, *XX*(X), 1–7.
- Sirajuddin, Asbar, R., Nursalim, & Tamrin, A. (2020). Breastfeeding practices can potential to prevent stunting for poor family. *Enfermería Clínica*, *30*(4), 13–17.
- Sukmawati, E., Imanah, N. D. N., & Suwariyah, P. (2021). Pengaruh Pendampingan Kader Kesehatan Terhadap Keberhasilan Menyusui Untuk Memberikan Asi Eksklusif. *Jurnal Kebidanan Indonesia*, *12*(2), 91–98. https://doi.org/10.36419/jki.v12i2.500
- Susanti, D. F. (2022). *Mengenal Apa Itu Stunting*. Kemkes. https://yankes.kemkes.go.id/view_artikel/1388/mengenal-apa-itu-stunting
- Tello, B., Rivadeneira, M. F., Moncayo, A. L., Buitrón, J., Astudillo, F., Estrella, A., & Torres, A. L. (2022). Breastfeeding, feeding practices and stunting in indigenous Ecuadorians under 2 years of age. *International Breastfeeding Journal*, 17(19), 1–15. https://doi.org/10.1186/s13006-022-00461-0
- Valencia, O., & Rueda-guevara, P. (2021). Breastfeeding, Relactation, and High Impact Factors in Treating Moderately and Severely Malnourished Children Under Two Years of age in Colombia : A Mixed Community Study Protocol. *Research Square*, 1–5.
- Wahyuni, D., Effendi, Z., & Mukarima, Y. (2022). Spiritual Emotional Freedom Technique (SEFT) Reduce Sleep Disorder. *Malaysian Journal of Medicine and Health Sciences*, *18*(11), 115–120.
- Yu, J., Wells, J., Wei, Z., & Fewtrell, M. (2018). Randomized Trial Comparing the Physiological and Psychological Effects of Different Relaxation Interventions in Chinese Women Breastfeeding Their Healthy Term Infant. BREASTFEEDING MEDICINE, XX(Xx), 1–6. https://doi.org/10.1089/bfm.2018.0148