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The implementation and challenges of breastfeeding counselling program in Majene district, West Sulawesi: A qualitative study among health workers

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Abstract

Background: Inadequate breastfeeding practices increase the risk of malnutrition, infant deaths, and other related developmental problems. Counselling on breastfeeding promotion is one of the most effective ways to improve breastfeeding practices. Nevertheless, challenges in implementing the counselling hinder its effectiveness. Using the logic model framework, this study examines the implementation and challenges of breastfeeding counselling programs in Majene District, West Sulawesi

Objective: This study aims to gain an in-depth understanding of experiences and perspectives regarding the implementation of the breastfeeding counselling program using the Logic Model among health workers in Majene District.

Methods: From January to June 2024, a qualitative phenomenological approach was employed. Data collection included in-depth interviews with 12 trained breastfeeding counsellors, eight key informants, and focus group discussions with 24 mothers. Thematic analysis using NVivo 12, guided by the Logic Model framework, which grouped breastfeeding counselling into input, process, outputs, and outcomes aspects.

Results: Key challenges included a shortage of trained counsellors, limited infrastructure, and budget constraints. Health workers adapted by integrating counselling into maternal health services, conducting home visits, and collaborating with *Posyandu* cadres. Exclusive breastfeeding rates showed slight improvements but remained below national targets. Beneficiaries expressed satisfaction but highlighted the need for longer and more frequent counselling sessions.

Conclusions: The program faced significant resource challenges, including a shortage of skilled counsellors, budget constraints, and limited facilities. However, adaptive strategies by health workers crucial for overcoming logistical and resource constraints resulted in beneficiaries' satisfaction and positive developments in breastfeeding rates.

Keywords: breastfeeding, counsellors, experiences, prespectives, program management

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Introduction

Breastfeeding is a vital foundation for child health, development, and survival. The World Health Organization (WHO) recommends initiating breastfeeding within the first hour after birth, exclusive breastfeeding for the first six months, and continued breastfeeding until at least 24 months.¹ Despite its proven benefits, global rates remain low, with only 41% of infants under six months exclusively breastfeeding in the first six months of life have increased by 10 percentage points over the past decade and are at 48% for 2023, close to the World Health Assembly target of 50% by 2025.³

In Indonesia, the prevalence of exclusive breastfeeding has risen from 52.5% in 2021 to 55.5% in 2023; however, it remains below the government's target of 80%.^{4,5} This trend is concerning, as poor breastfeeding practices are linked to higher risks of malnutrition, increased infant mortality, and adverse developmental outcomes. Evidence suggests that improving exclusive breastfeeding rates could prevent up to 800,000 child deaths annually.⁶

Breastfeeding counselling is a key intervention to enhance breastfeeding practices. In Indonesia, integrated counselling services at primary health centres (PHCs) are supported by policies such as Presidential Regulation No. 33 of 2012 on Exclusive Breastfeeding. This regulation mandates the provision of trained counsellors and national advocacy for breastfeeding programs. However, Majene District, West Sulawesi, continues to report suboptimal exclusive breastfeeding rates, hindered by systemic barriers such as insufficient trained counsellors, inadequate infrastructure, and limited budgets.⁷ Studies from Thailand highlighted similar challenges, stressing the need for structured and well-supported counselling services.⁸ Existing studies on breastfeeding programs in Indonesia often focus on quantitative outcomes, such as breastfeeding rates, with limited exploration of health workers' lived experiences and challenges.⁹ The application of the Logic Model framework, which examines program inputs, processes, and outcomes, is rarely utilized, leaving a gap in

understanding how systemic barriers intersect with individual efforts.^{10,11}

This study aims to explore the experiences and perspectives of health workers involved in implementing breastfeeding counselling programs in Majene District. Using the Logic Model framework, it examines inputs, activities, outputs, and outcomes to provide a comprehensive understanding of the program's implementation and challenges. To capture the experiences of health workers effectively, a phenomenological qualitative approach was chosen to gain a deeper insight into their perspectives and adaptive strategies.¹²

Methods

This study employs a qualitative, phenomenological approach to interpret and describe individual life experiences, providing indepth insights into the actual encounters in Majene district. Data collection was conducted from January to June 2024 across seven PHCs, which were selected purposively due to their high prevalence of stunting and low coverage of exclusive breastfeeding.

The main informants included 12 trained breastfeeding counsellors, consisting of midwives and PHC nutrition officers who had received WHO-standard breastfeeding counselling training. Additionally, there were 32 key informants, including coordinators for Nutrition and Maternal and Child Health (NMCH) program, heads of PHCs, and mothers with children under two years old-

Interviews and focus group discussions (FGDs) utilized semi-structured questions were employed to facilitate in-depth discussions in both Indonesian and local languages. Main informants were selected considering maximum variation and purposive sampling to ensure diverse perspectives. The key informants, specifically stakeholders, were recruited purposively, while mothers of children under two were also chosen purposefully based on two criteria exclusive breastfeeding (EBF) practices (yes/no) and the child's age (0–<6 months and 6–24 months) utilizing the snowball sampling technique. Data collection methods included in-depth interviews with health workers and stakeholders, as well as FGDs with mothers grouped by breastfeeding practices (EBF and Not EBF) and child age (0-<6 months and 6-24 months).

The sample size was determined based on data saturation, defined as the point at which no new information emerged after conducting interviews with the 12 health workers. This was supported by triangulated information obtained from other participants to reduce potential bias.

Data analysis was arranged simultaneously during the data collection in the field. All gathered information from voice recordings and field notes transcribed verbatim and imported to Microsoft Word for content analysis and further analysed as codes. NVivo software version 12 was used to assist the coding process.

This study obtained ethical approval from the Health Research Ethics Committee, Faculty of Medicine, Universitas Indonesia on December 15th, 2023, number KET-1781/UN2.F1/ETIK/PPM.00.02/2023.

Results

Characteristics of the Informants

| | Table 1. | Characteristics | of the | main | informants |
|--|----------|-----------------|--------|------|------------|
|--|----------|-----------------|--------|------|------------|

| Characteristics | Number (n=12) | |
|-----------------------------|---------------|--|
| Gender | | |
| Female | 12 | |
| Age | | |
| 26-35 | 3 | |
| 36-45 | 7 | |
| 46-55 | 2 | |
| Education Level | | |
| Diploma Degree | 5 | |
| Bachelor's degree | 6 | |
| Master's degree | 1 | |
| Profession | | |
| Midwife | 7 | |
| Nutritionist | 5 | |
| Institution | | |
| PHC | 10 | |
| Auxiliary Health Centre | 2 | |
| Experiences as a Counsellor | | |
| ≤ 1 years | 5 | |
| >1 years | 7 | |

All counsellors who had been trained were female, and most of them were between 36 and 45 years old. Six informants had graduated with a bachelor's degree (**Table 1**).

Key informants consisted of seven Heads of PHC from various sub-districts in Majene, the Person in Charge of the NMCH Program at the District Health Office, along with 24 mothers who had children under two years old.

Table 2 below provides a summary of thethemes about the implementation of breastfeedingcounselling based on components of input, process,output and outcome of the program

 Table 2. The Themes on the breastfeeding counselling implementation

| Theme | Sub Theme | Category | |
|----------------|--|--|--|
| Input | Resources | Require skilled counsellor | |
| | | Limited program budget | |
| | | Insufficient facilities and infrastructure | |
| Process | Strategy | Flexibility in implementation of counselling session | |
| | | Collaboration and support | |
| | Implementation of BF counselling | Lack of awareness of counsellors in implementing counselling | |
| Output | Succes indicators | Counselling records | |
| and outcome | | Coverage | |
| | | Beneficiaries' satisfaction | |

Experiences and Perspectives of Component Input

All PHC's in Majene have breastfeeding counsellors with special training. A counsellor is forced, based on the data, to serve more than 20 mothers each month. This causes a high workload.

> "Currently, even though we have five trained counsellors at the PHC, the number of mothers who need counselling is huge and continues to increase every month. We are often overwhelmed to provide counselling to all these targets." (Counsellor#12, Nutritionist, trained 2023)

Although they have attended a 40-hour basic module training from WHO/United Nation Children's Fund (UNICEF), many counsellors feel that the training materials are not always relevant to real conditions in the field.

Counsellors expressed the need for a formal mechanism for sharing knowledge between senior and junior counsellors. Currently, knowledge transfer is done informally, resulting in variations in the quality of service between providers.

Budget for breastfeeding counselling programs at PHC in Majene generally come from the Non-Physical Special Allocation Fund (*Dana Alokasi Khusus Non Fisis/DAK Non Fisik*). However, these funds are not allocated specifically for breastfeeding counselling but are instead combined with other programs such as prenatal classes. This results in a lack of attention to the implementation of breastfeeding counselling.

> "We don't have a special budget for breastfeeding counselling. Usually, this activity is combined with other programs, so it often gets less attention." (Counsellor#7, Midwife, Trained 2010)

Several informants considered that budget limitations reflected the low priority of breastfeeding counselling programs at PHC. This was due to the PHCs greater focus on other programs that were supported by a larger budget.

Until 2015, all PHCs in Majene had a special breastfeeding counselling room equipped with counselling aids and educational media. However, the earthquake in 2021 caused significant damage to several PHCs, namely Ulumanda PHC lost all its space and equipment, while Malunda PHC lost its counselling aids and educational media.

In addition, several other PHCs had counselling rooms that were shared with other programs, or incomplete equipment, such as a lack of leaflets, posters, and other visual aids.

Informants assessed that the lack of facilities and infrastructure had a direct impact on the quality of counselling services. They felt that infrastructure improvements were needed to support the effectiveness of the program.

Experiences and Perspectives of Component Process

This component highlights the strategies and actions employed by counsellors to provide effective breastfeeding support. Flexibility emerged as a key strategy to overcome challenges such as time constraints, limited counsellors, and varied maternal needs. Counsellors adapted by conducting home visits, integrating counselling into mobile health centre activities, and providing spontaneous sessions at integrated health posts (Posyandu) or mother classes.

Collaboration was equally crucial, with counsellors working alongside health workers, community cadres, and families. Health workers helped identify mothers needing counselling, while community cadres mobilized participants and provided initial education. Families offered essential emotional and moral support.

Despite the existence of standardized counselling steps—introduction, breastfeeding guidance, and follow-up—numerous counsellors face difficulties. These challenges stem from limited training, a lack of refresher courses, and minimal supervision, which often emphasizes breastfeeding rates over the quality of counselling. Counsellors have expressed a strong need for regular feedback and evaluation to build their confidence and ensure their practices align with established guidelines.

Experiences and Perspectives of Components Output and Outcome

These components are essential in understanding the program's overall effectiveness and its impact felt by the community. Three main themes emerged: 1) counselling records: documentation and tracking of counselling activities; 2) coverage: the program's reach and its contribution to exclusive breastfeeding targets; and 3) beneficiaries' satisfaction: mothers' and families' experiences with and responses to counselling services.

1. Counselling Records

Counsellors primarily record activities in medical records or the Maternal and Child Health *(Kesehatan Ibu dan Anak/KIA)* Book. Some health centres use a register book in the breastfeeding counselling room. However, incomplete records remain a challenge due to high workloads. Medical records document services during antenatal and postnatal visits. *KIA* book is used to track exclusive breastfeeding practices.

Counsellors emphasized the importance of consistent and detailed recording for monitoring program success but cited barriers such as time constraints and lack of specific supervision. Informants acknowledged that supervision is limited to evaluating exclusive breastfeeding coverage, without directly assessing the quality of recorded data.

2. Coverage

Informants reported limited coverage of the breastfeeding counselling program. No specific target was set for the number of mothers to be counselled, but every mother attending antenatal or postnatal services was expected to receive counselling. Home visits and mobile health services were also conducted to reach more mothers.

Counsellors linked program success to exclusive breastfeeding rates, indirectly measured through electronic community-based nutrition recording and reporting (*elektronik pencatatan dan pelaporan gizi berbasis Masyarakat/e-PPGBM*). Despite increased exclusive breastfeeding coverage (64.8%), the figures remained below the national target (80%). Counsellors highlighted the need for structured monitoring and strategies to expand the program's reach.

3. Beneficiaries' Satisfaction

Informants observed that mothers expressed satisfaction with the counselling services. Mothers reported feeling supported and more confident in breastfeeding practices. However, short counselling sessions and lack of dedicated facilities were cited as areas for improvement. Counsellors believed satisfaction stemmed from the emotional support and information quality provided during counselling. However, they acknowledged the need for more frequent and extended sessions to address mothers' concerns comprehensively.

Discussion

The breastfeeding counselling program in Majene District, West Sulawesi, faced several significant challenges that impacted its effectiveness. One major issue was the scarcity of certified breastfeeding counsellors. Similar finding in China highlights the shortage in certified breastfeeding counsellors limits the program's reach and quality, as counsellors are often overburdened and unable to provide adequate support to mothers.¹³ To address this, standardized, continuous training and mentorship programs are essential to equip counsellors with the necessary skills and knowledge, as suggested by studies that highlight the positive impact of such interventions on counsellor competence and confidence.14,15

The lack of dedicated funding hampers the program's ability to provide essential resources such as training materials, equipment, and staff support. Integrating breastfeeding counselling into existing maternal health programs can dilute its impact and hinder its sustainability. To overcome this, securing dedicated funding and prioritizing breastfeeding counselling within health budgets are crucial, as evidenced by research demonstrating the positive correlation between adequate funding and program effectiveness.¹⁶

Infrastructure limitations, particularly followed the 2021 earthquake, have further compounded the challenges faced by the program. Damaged facilities and a shortage of dedicated counselling rooms and media resources hinder the provision of services.¹⁷ counselling Creating effective conducive counselling environments with adequate resources is essential to promote breastfeeding practices, as studies have shown that such environments can enhance mothers' understanding engagement breastfeeding and with information.^{18,19}

Despite these challenges, the program has shown resilience through the implementation of flexible strategies and collaborative approaches. Counsellors have adapted to the context by providing home visits, spontaneous counselling, and mobile health services. This flexibility ensures that mothers in remote and underserved areas receive essential support, aligning with research that highlights the importance of context-specific adaptations in improving program accessibility and effectiveness.^{20,21}

Furthermore, collaboration between health workers, community cadres, and family members has strengthened the program's impact. Family support plays a crucial role in promoting exclusive breastfeeding, while community health workers can extend the reach of counselling services.²² These findings are supported by research that emphasizes the role of family and community support in improving maternal and child health outcomes.^{23,24}

However, the program's effectiveness is hindered by inconsistent record-keeping and and limited supervision. Accurate timely documentation is essential for monitoring program identifying performance and areas for improvement.²⁵ Regular supervision and feedback can enhance the quality of counselling services and ensure adherence to guidelines. Studies have shown that effective supervision can significantly improve the quality and consistency of healthcare counselling-based delivery, including programs.25,26

То address challenges in breastfeeding counselling, stakeholders can implement several concrete strategies. Regular training programs should be conducted to increase the number of counsellors, with mandatory refresher courses to enhance their knowledge and confidence. Systematic evaluation and feedback protocols must be established, including consistent monitoring of counselling sessions, performance assessments based on session frequency and exclusive breastfeeding success rates, and structured monthly evaluation meetings or group case reviews to provide targeted feedback. Supervision should be strengthened by developing supplementary training tailored to improve counsellors' programs

competencies and ensure adherence to best practices. Clear roles and responsibilities must be defined, with scheduled coordination meetings among health workers, community members, and families to enhance collaboration and support for breastfeeding mothers. To improve accessibility and monitoring process, digital tools like mobile health App should be integrated for remote counselling, real-time documentation, and performance tracking. Lastly, active advocacy efforts should be pursued to secure increased funding and policy support, ensuring the long-term sustainability and expansion of breastfeeding counselling programs. Successful strategies from other countries, including the Mobile Health App digital platform in Thailand and structured community-based support in Thailand²⁷ and Vietnam,²⁸ may provide valuable insights for Maiene District.

While mothers' express satisfaction with the emotional support and guidance provided by counsellors, there is a need to address limitations such as short session durations and infrequent follow-ups. Longer and more frequent counselling sessions can provide mothers with adequate support and address their specific needs.^{29,30} Additionally, leveraging digital health interventions, such as mobile messaging, can improve accessibility and facilitate communication between counsellors and mothers. Research has demonstrated the effectiveness of digital health interventions in improving maternal health outcomes and increasing access to healthcare information.³¹ In the present study, we could not reflect whether mothers' satisfaction on the breastfeeding counselling was further manifested in the breastfeeding practices following the recommendation. Because we did not have the opportunity to assess individual breastfeeding practices of each mother participating in the FGDs. optimize the program's effectiveness. То addressing resource constraints, enhancing training and supervision, and improving record-keeping are crucial. By investing in skilled counsellors, securing adequate funding, and providing appropriate infrastructure, the program can significantly improve breastfeeding rates and maternal health outcomes in Majene District.^{32,33}

This study comprehensively applies the Logic Model framework, highlights the lived experiences of health workers, an often-overlooked perspective, and provides context-specific findings to improve program implementation in resourceconstrained settings. Resource constraints prevented the inclusion of more diverse informants, such as policymakers or additional community members such as Posyandu cadres and mothers who did not attend the counselling sessions.

Conclusion

The breastfeeding counselling program in Majene District, West Sulawesi, faced challenges due to a lack of qualified counsellors and inadequate facilities. Utilizing adaptive strategies and collaborating with local health workers and communities could help mitigate these challenges. challenges, Despite these beneficiaries' satisfaction and positive breastfeeding practices indicated progress. Increasing ongoing training and refresher course for breastfeeding counsellors, advocacy for improving commitment on resources allocation for breastfeeding counselling program, and exploring digital solutions for improving accessibility counselling services to and monitoring process are recommended for enhancing maternal and child health outcomes in Majene District.

Conflict of interest

There was no conflict of interest for this study.

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References

- 1. Rollins NC, Bhandari N, Hajeebhoy N, et al. Why invest, and what it will take to improve breastfeeding practices? *The Lancet*. 2016;387(10017):491-504. doi:10.1016/S0140-6736(15)01044-2
- 2. UNICEF. Infant and young child feeding . 2022. Accessed November 7, 2023. <u>https://data.unicef.org/topic/nutrition/infant-and-young-child-feeding/</u>).
- 3. WHO, UNICEF. Global Breastfeeding Scorecard 2023 Rates of Breastfeeding Increase Around The World Through Improved Protection and Support.; 2023. Accessed February 11, 2025. <u>https://www.who.int/publications/i/item/WHO-HEP-NFS-23.17</u>.
- Badan Kebijakan Pembangunan Kesehatan, Kementerian Kesehatan RI. Status Gizi SSGI 2022.; 2022. Accessed February 12, 2025. <u>https://layanandata.kemkes.go.id/katalogdata/ssgi/ketersediaan-data/ssgi-2022</u>.
- 5. Kemenkes, Badan Kebijakan Pembangunan Kesehatan. Survei Kesehatan Indonesia 2023 Dalam Angka.; 2023. Accessed February 11, 2025. <u>https://www.badankebijakan.kemkes.go.id/ski-2023-dalam-angka/</u>
- 6. Victora CG, Bahl R, Barros AJD, et al. *Breastfeeding 1 Breastfeeding in the 21st Century: Epidemiology, Mechanisms, and Lifelong Eff Ect.* Vol 387.; 2016. <u>http://mics</u>.
- 7. Pusdatin. *Profil Kesehatan Indonesia Tahun 2022*.; 2023. Accessed February 12, 2025. <u>http://www.kemkes/go.id</u>
- 8. Thepha T, Marais D, Bell J, Muangpin S. Facilitators and Barriers to Exclusive Breastfeeding in Thailand: A Narrative Review. *J Community Public Health Nurs*. 2017;03(01). doi:10.4172/2471-9846.1000160
- Rhodes EC, Zahid M, Abuwala N, et al. Experiences of breastfeeding peer counseling among women with low incomes in the US: a qualitative evaluation. *BMC Pregnancy Childbirth*. 2024;24(1). doi:10.1186/s12884-023-06213-0
- 10. Kellogg WK. Using Logic Models to Bring Together Planning, Evaluation, and Action Logic Model Development Guide.; 2004. <u>www.wkkf.org</u>.
- 11. Daniels L, Du Plessis LM, Mbhenyane X. Support for exclusive breastfeeding in the workplace: Development of a practice model for designated workplaces in the Breede Valley sub-district, Western Cape Province, South Africa. *Stellenbosch University Thesis Database*. 2020;(figure 1).

World Nutrition Journal 2025, 8(2). DOI: 10.25220/WNJ.V08.i2.0011

Accessed February 2025. http://hdl.handle.net/10019.1/108417.

- 12. Marjan M. A Comparative Analysis of Two Qualitative Methods: Deciding Between Grounded Theory and Phenomenology for Your Research. *Vocational Training: Research And Realities*. 2017;28(1):23-40. doi:10.2478/vtrr-2017-0003.
- Xu W, Pan Z, Li Z, Lu S, Zhang L. Job burnout among primary healthcare workers in rural china: A multilevel analysis. *Int J Environ Res Public Health*. 2020;17(3). doi:10.3390/ijerph17030727.
- 14. Correction: Who are the real community health workers in Tshopo Province, Democratic Republic of the Congo? (BMJ Global Health (2019) 4 (e001529) DOI: 10.1136/bmjgh-2019-001529). BMJ Glob Health. 2020;5(1). doi:10.1136/bmjgh-2019-001529corr1.
- 15. Manzi A, Hirschhorn LR, Sherr K, et al. Mentorship and coaching to support strengthening healthcare systems: Lessons learned across the five Population Health Implementation and Training partnership projects in sub-Saharan Africa. *BMC Health Serv Res.* 2017;17. doi:10.1186/s12913-017-2656-7.
- 16. Harris A, Jordan N, Carroll AJ, et al. A budget impact analysis of cost to implement a whole child health focused, family-based intervention in primary care for children with elevated BMI. *Implement Sci Commun.* 2023;4(1). doi:10.1186/s43058-023-00429-z.
- Salam A, Wireko AA, Jiffry R, et al. The impact of natural disasters on healthcare and surgical services in low- and middle-income countries. *Annals of Medicine & Surgery*. 2023;85(8):3774-3777.

doi:10.1097/ms9.000000000001041.

- Vakilian K, Tabarte Farahani O, Heidari T. Enhancing breastfeeding - Home-based education on self-efficacy: A preventive strategy. *Int J Prev Med.* 2020;11(1). doi:10.4103/ijpvm.IJPVM_494_17.
- Rai R, Khatun R, Inamdar P, Patil R. Impact of educational intervention on breastfeeding practices of mother undergoing institutional delivery. *Int J Contemp Pediatrics*. 2023;10(10):1550-1557. doi:10.18203/2349-3291.ijcp20232883.
- 20. Sarsak HI, Morales E, Chockalingam M. Editorial: Environmental adaptation for accessibility: a global perspective in the field of disability, rehabilitation and inclusion. *Frontiers in Rehabilitation Sciences*. 2024;5. doi:10.3389/fresc.2024.1514744.
- 21. Centers for Medicare T, Services M. Improving Access to Maternal Health Care In Rural Communities: An Issue Brief.; 2019. Accessed February 12, 2025. https://www.cms.gov/About-CMS/Agency-Information/OMH/equity-initiatives/ruralhealth/09032019-Maternal-Health-Care-in-Rural-Communities.pdf.
- 22. Mane UR, Salunkhe JA, Kakade S. Family Support to Women During Pregnancy and Its Impact on Maternal and Fetal Outcomes. *Cureus*. Published online June 9, 2024. doi:10.7759/cureus.62002.

- 23. Kesehatan J, Sundary S, Faletehan U. The Role Of Family Support In Childbirth: Implications For Maternal And Infant Well-Being. doi:10.62872/gbna7b66.
- 24. Sadewa DMA. Enabling the Grass Root: Health Cadres Empowerment Program in Efforts to Prevent and Manage Hypertension in the Tanjung Sub-Village Community. *Jurnal Pengabdian kepada Masyarakat (Indonesian Journal of Community Engagement)*. 2023;9(3):181. doi:10.22146/jpkm.86250.
- 25. O'Cathain A, Croot L, Duncan E, et al. Guidance on how to develop complex interventions to improve health and healthcare. *BMJ Open.* 2019;9(8). doi:10.1136/bmjopen-2019-029954.
- 26. Zulkifli SS, Hamzah H. The importance of supervisor support for the work outcomes and psychological wellbeing of Malaysian low-income working mothers. *Psikohumaniora*. 2024;9(1):159-178. doi:10.21580/pjpp.v9i1.20756.
- 27. Wang CJ, Chaovalit P, Pongnumkul S. A breastfeedpromoting mobile app intervention: Usability and usefulness study. *JMIR Mhealth Uhealth*. 2018;6(1). doi:10.2196/mhealth.8337.
- Doan TTD, Binns C, Pham NM, et al. Improving breastfeeding by empowering mothers in Vietnam: A randomised controlled trial of a mobile app. *Int J Environ Res Public Health*. 2020;17(15). doi:10.3390/ijerph17155552.
- 29. Huang HH, Lee TY, Lin XT, Duan HY. Maternal Confidence and Parenting Stress of First-Time Mothers in Taiwan: The Impact of Sources and Types of Social Support. *Healthcare (Switzerland)*. 2022;10(5). doi:10.3390/healthcare10050878.
- 30. Dias De Oliveira L, Justo Giugliani ER, Córdova Do Espírito Santo L, Meirelles Nunes L. Counselling sessions increased duration of exclusive breastfeeding: A randomized clinical trial with adolescent mothers and grandmothers. *Nutr J.* 2014;13(1). doi:10.1186/1475-2891-13-73.
- 31. De P, Pradhan MR. Effectiveness of mobile technology and utilization of maternal and neonatal healthcare in low and middle-income countries (LMICs): a systematic review. *BMC Womens Health*. 2023;23(1). doi:10.1186/s12905-023-02825-y.
- Awaliyah SN, Rachmawati IN, Rahmah H. Breastfeeding self-efficacy as a dominant factor affecting maternal breastfeeding satisfaction. *BMC Nurs.* 2019;18. doi:10.1186/s12912-019-0359-6.
- Vaithilingan S, Johnson A. Correlation of Breast Feeding Self Efficacy with Maternal Breastfeeding Satisfaction.; 2023. www.jchr.org