

TELELACTATION IMPLEMENTATION AMONG POSTPARTUM MOTHERS IN PRIMARY HEALTHCARE

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ABSTRACT

Background: Breastfeeding problems remain one of the causes of unsuccessful exclusive breastfeeding during the postpartum period. The advancement of digital technology enables lactation assistance services to be conducted remotely through telelactation. **Aim:** This study aimed to describe the implementation of telelactation among postpartum mothers in the working area of Baregbeg Public Health Center. **Methods:** This study used a descriptive quantitative design. The research was conducted at Baregbeg Public Health Center involving 22 postpartum mothers selected using purposive sampling techniques. Data were collected using a structured questionnaire consisting of maternal characteristics, access to telelactation services, frequency of consultation, types of breastfeeding complaints, and maternal satisfaction toward telelactation services. Data were analyzed using descriptive statistics. **Result:** The results showed that most respondents were aged 20–35 years (68%), multiparous (56%), and had secondary education (60%). The majority of mothers accessed telelactation services through WhatsApp (82%). The most common breastfeeding problems were improper breastfeeding attachment (46%), low milk production (32%), and nipple pain (22%). Most respondents stated that telelactation services were easy to access (88%), helped solve breastfeeding problems (84%), and increased breastfeeding confidence (80%). **Conclusion :** Telelactation implementation was considered beneficial in supporting postpartum mothers during breastfeeding, especially in improving access to lactation counseling services. Telelactation can be developed as an innovative maternal health service in primary healthcare settings.

Keywords: telelactation; postpartum mothers; breastfeeding; lactation counseling; primary healthcare

INTRODUCTION

Breastfeeding is recognized as one of the most effective interventions to improve maternal and child health outcomes (Purkiewicz et al., 2025). The World Health Organization (WHO) recommends exclusive breastfeeding during the first six months of life because breast milk provides complete nutrition, strengthens the infant immune system, and reduces the risk of infectious diseases and malnutrition (WHO, 2023). WHO and UNICEF reported that globally only approximately 48% of infants under six months receive exclusive breastfeeding, which remains below the global nutrition target of 70% by 2030 (WHO, 2025). In Indonesia, the coverage of exclusive breastfeeding reached 73.97% in 2023 (Kemenkes, 2024); however, disparities between regions and maternal access to breastfeeding support services remain significant.

The postpartum period is a critical phase in establishing successful breastfeeding practices. During this period, mothers frequently encounter various breastfeeding difficulties such as nipple pain, breast engorgement, poor infant attachment, inadequate milk production, maternal fatigue, and anxiety related to breastfeeding adequacy (El-Houfey et al., 2017). Studies have shown that approximately 60–80% of postpartum mothers experience

breastfeeding problems during the first weeks after delivery (Purkiewicz et al., 2025). These conditions often decrease maternal confidence and may lead to early cessation of breastfeeding. Primiparous mothers are particularly vulnerable because of limited breastfeeding experience and inadequate support systems.

Effective lactation counseling is essential in helping mothers overcome breastfeeding problems (Netri et al., 2025; Purnamasari et al., 2025). Evidence indicates that mothers who receive continuous breastfeeding counseling are more likely to successfully practice exclusive breastfeeding compared with mothers who receive limited support. Traditionally, breastfeeding support is provided through direct face-to-face counseling at healthcare facilities. However, several barriers limit the accessibility of conventional lactation services, including geographical distance, transportation difficulties, limited healthcare personnel, time constraints, and the physical condition of postpartum mothers. Data from the Indonesian Ministry of Health reported that the ratio of healthcare workers providing maternal counseling services in primary healthcare facilities is still inadequate in several regions, especially rural and semi-urban areas (Dewanti et al., 2024).

The rapid development of information and communication technology has encouraged the transformation of healthcare services into digital-based systems. Internet utilization in Indonesia continues to increase significantly. According to the Indonesian Internet Service Providers Association (APJII), internet penetration in Indonesia reached 79.5% in 2024, with smartphone use becoming increasingly common among women of reproductive age. This situation provides opportunities for healthcare providers to develop digital maternal healthcare services, including telehealth and telelactation programs (Bawamenewi et al., 2025; Netri et al., 2025).

Telehealth has become an innovative approach that enables healthcare professionals to provide remote consultation, education, and monitoring services through digital platforms. One form of telehealth application in maternal care is telelactation, which refers to the provision of breastfeeding counseling and support through communication technologies such as video calls, telephone consultations, mobile applications, and instant messaging services. Previous studies reported that telelactation interventions improved breastfeeding self-efficacy scores by more than 20% and increased exclusive breastfeeding continuation rates among postpartum mothers (Butzner & Cuffee, 2021; Uscher-Pines et al., 2023).

Telelactation offers several advantages for postpartum mothers. Through telelactation, mothers can obtain immediate breastfeeding assistance without the need to travel to healthcare facilities. This approach provides flexibility, reduces transportation costs, saves time, and increases access to professional breastfeeding support. Telelactation also allows healthcare providers to monitor breastfeeding progress continuously and provide emotional support during the postpartum period. Research conducted in several countries demonstrated that more than 80% of mothers expressed satisfaction with telelactation services because they were considered practical, responsive, and easy to access (Rhoads, 2018; Uscher-Pines et al., 2020).

In Indonesia, the utilization of digital health services increased rapidly after the COVID-19 pandemic accelerated the adoption of remote healthcare systems. Many healthcare providers started using digital communication platforms such as WhatsApp, Zoom, Google Meet, and telemedicine applications to deliver healthcare services, including maternal and child healthcare programs. Nevertheless, the implementation of telelactation services in primary healthcare settings remains limited and has not been optimally documented, particularly in community health centers (Couto et al., 2020).

Baregbeg Public Health Center is one of the primary healthcare facilities that has initiated digital communication approaches to support postpartum mothers experiencing breastfeeding problems. Healthcare workers provide education, consultation, and breastfeeding assistance through online communication media to improve maternal access to lactation counseling

services. Preliminary observations conducted at Baregbeg Public Health Center showed that several postpartum mothers experienced difficulties in accessing face-to-face lactation counseling due to transportation limitations, time constraints, and household responsibilities. Therefore, telelactation services were introduced as an alternative strategy to improve breastfeeding support.

Understanding the implementation of telelactation services is important to evaluate the potential of digital lactation counseling as an innovative strategy in maternal healthcare services. Evidence regarding telelactation implementation may contribute to the development of effective breastfeeding support programs and strengthen maternal healthcare systems, particularly in primary healthcare facilities.

Therefore, this study aimed to describe the implementation of telelactation among postpartum mothers in the working area of Baregbeg Public Health Center. The findings of this study are expected to provide information regarding the utilization of telelactation services and support the development of digital-based maternal healthcare innovations in Indonesia.

METHOD

This study used a quantitative descriptive research design to describe the implementation of telelactation among postpartum mothers in the working area of Baregbeg Public Health Center. The study was conducted from January to March 2026 at Baregbeg Public Health Center, Ciamis Regency, West Java, Indonesia. The target population consisted of postpartum mothers who received maternal and child healthcare services at the health center during the study period.

The sample in this study consisted of 22 postpartum mothers selected using a purposive sampling technique. The inclusion criteria were postpartum mothers within 0–42 days after delivery, able to communicate effectively using mobile communication media, willing to participate in the study, and having access to smartphones or WhatsApp applications. Mothers with severe maternal or neonatal complications and mothers who were unable to complete the telelactation sessions were excluded from the study.

Telelactation services were conducted through WhatsApp communication media in the form of chat consultations, educational materials, breastfeeding guidance, and online counseling sessions provided by healthcare workers. Mothers received breastfeeding assistance related to breastfeeding techniques, breast care, milk production problems, infant attachment, and breastfeeding difficulties experienced during the postpartum period.

Data were collected using a structured questionnaire developed by the researchers based on previous telehealth and lactation counseling studies. The questionnaire consisted of respondent characteristics including age, parity, education level, occupation, utilization of telelactation services, types of breastfeeding problems experienced, accessibility of services, and maternal perceptions regarding telelactation implementation. Prior to data collection, the instrument was reviewed for content appropriateness by maternal health experts.

The collected data were analyzed using descriptive statistical analysis and presented in the form of frequency distribution tables and percentages. The results were then interpreted narratively to describe the implementation of telelactation services among postpartum mothers at Baregbeg Public Health Center.

This study was conducted after obtaining permission from Baregbeg Public Health Center and informed consent from all respondents. Confidentiality and anonymity of respondents were maintained throughout the research process.

RESULTS AND DISCUSSION

Characteristics of Respondents

Table 1.
Distribution of Respondents' Characteristics (n = 22)

Characteristics	Frequency (n)	Percentage (%)
Age		
< 20 years	2	9.1
20–35 years	16	72.7
> 35 years	4	18.2
Parity		
Primipara	9	40.9
Multipara	13	59.1
Education		
Primary	3	13.6
Secondary	14	63.6
Higher Education	5	22.8

Based on Table 1, most respondents were aged 20–35 years (72.7%). This age group is considered a productive reproductive age with better physical and psychological readiness in caring for newborns and adapting to breastfeeding practices. Mothers in this age range are generally more capable of receiving health information and utilizing digital communication technologies, including telelactation services.

Most respondents were multiparous mothers (59.1%). Previous childbirth experience may influence maternal confidence and breastfeeding adaptation. Multiparous mothers usually have prior experience in breastfeeding; however, they may still encounter breastfeeding problems requiring professional support. Meanwhile, primiparous mothers often need more intensive guidance because they are still adapting to breastfeeding techniques and infant care.

Regarding educational background, the majority of respondents had secondary education levels (63.6%). Educational status may affect maternal understanding and acceptance of health information. Mothers with higher educational levels tend to have better digital literacy and are more capable of accessing telehealth services effectively. This finding indicates that education may play an important role in the successful implementation of telelactation programs.

Implementation of Telelactation

Table 2.
Implementation of Telelactation Services (n = 22)

Variables	Frequency (n)	Percentage (%)
Access through WhatsApp	20	90.9
Video Call Consultation	8	36.4
Breastfeeding Education Shared	19	86.4
Easy Access to Services	20	90.9
Helpful in Solving Problems	18	81.8
Increased Confidence	17	77.3

Table 2 shows that most respondents accessed telelactation services through WhatsApp (90.9%). WhatsApp became the most commonly used platform because it is easy to operate, widely accessible, and familiar to postpartum mothers. The application also allows healthcare workers to provide rapid responses, educational materials, and direct communication without requiring mothers to visit healthcare facilities. This finding demonstrates that simple digital

communication platforms can effectively support maternal healthcare services in primary healthcare settings.

Only 36.4% of respondents used video call consultations. Some mothers preferred text-based communication due to internet connectivity limitations, privacy concerns, or convenience factors. Nevertheless, video call consultations were considered useful in assisting healthcare workers to observe breastfeeding techniques, infant attachment positions, and maternal breastfeeding practices more directly.

Breastfeeding education materials were shared with 86.4% of respondents through telelactation services. Educational content included breastfeeding techniques, breast care, maternal nutrition, signs of adequate breastfeeding, and management of breastfeeding problems. Continuous education through digital platforms may improve maternal knowledge and breastfeeding self-efficacy during the postpartum period.

Most respondents reported that telelactation services were easy to access (90.9%). This finding indicates that telelactation may reduce barriers commonly experienced by postpartum mothers, including transportation difficulties, limited time, physical fatigue after childbirth, and geographical distance from healthcare facilities. Accessibility is an important factor influencing maternal participation in healthcare programs.

Furthermore, 81.8% of mothers stated that telelactation services helped solve breastfeeding problems. The most common breastfeeding complaints included improper breastfeeding attachment, insufficient milk production, breast engorgement, and nipple pain. Through telelactation, healthcare providers were able to provide early guidance and emotional support, helping mothers manage breastfeeding difficulties more effectively.

Approximately 77.3% of respondents reported increased confidence in breastfeeding after receiving telelactation support. Breastfeeding confidence is an important factor influencing exclusive breastfeeding success. Emotional encouragement and responsive counseling from healthcare workers may strengthen maternal motivation and reduce anxiety related to breastfeeding adequacy.

These findings are consistent with previous studies indicating that telelactation improves maternal satisfaction, breastfeeding confidence, and access to lactation counseling services (Rhoads, 2018). Digital-based maternal healthcare services provide flexibility and continuity of care, especially for postpartum mothers who experience mobility limitations after delivery. Telelactation may also strengthen communication between healthcare workers and mothers, enabling continuous monitoring during the postpartum period (Iamchareon & Maneesriwongul, 2025; Kapinos et al., 2019).

The implementation of telelactation in Baregebeg Public Health Center demonstrates the potential of digital healthcare innovation in supporting maternal and child health programs. Telelactation can become an effective strategy to improve breastfeeding support services in primary healthcare facilities, particularly in rural and semi-urban areas with limited access to lactation consultants. Therefore, strengthening digital infrastructure, healthcare worker training, and standardized telelactation guidelines are important to optimize future implementation.

LIMITATION OF THE STUDY

This study only used descriptive analysis and involved a limited number of respondents from one public health center. Therefore, the findings cannot be generalized broadly. Future studies are recommended to use analytical or experimental designs with larger sample sizes.

CONCLUSIONS AND SUGGESTIONS

Telelactation implementation among postpartum mothers in the working area of Baregebeg Public Health Center showed positive responses. Most mothers considered

telelactation services easy to access and beneficial in solving breastfeeding problems and improving breastfeeding confidence.

Telelactation has the potential to become an innovative maternal healthcare service in primary healthcare facilities. Health centers are encouraged to strengthen digital lactation counseling programs through structured guidelines and trained healthcare providers.

ETHICAL CONSIDERATIONS

The authors declare that there is no conflict of interest related to this study.

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