

Effectiveness of Health Education on Postpartum Care on Accelerating Perineal Wound Healing

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ABSTRAK

Perineal wounds are a common form of maternal morbidity during the postpartum period and have the potential to cause serious complications if not managed appropriately. Although the postpartum phase is a critical period in maternal health recovery, attention to perineal wound care education remains suboptimal. This study aims to analyze the effectiveness of health education in accelerating perineal wound healing based on a recent literature review. The method used was a literature review with a descriptive qualitative approach, examining various research findings from 2020-2025. The synthesis of results shows that systematic and contextual educational interventions can improve mothers' knowledge, self-efficacy, and skills in independently caring for perineal wounds. The use of educational media such as booklets, videos, and digital applications has proven effective, especially when delivered with an empathetic approach by health workers such as midwives. Community-based interventions also expand the reach of education, especially in areas with limited access. These findings underscore the importance of integrating health education into postpartum care standards and the need for communication training for health workers. Overall, health education has proven to be a key strategy in reducing the rate of perineal wound complications and improving the quality of life of postpartum mothers through a sustainable promotive and preventive approach.

Keywords: *Health Education; Perineal Wounds; Postpartum Period*

INTRODUCTION

Perineal wounds are a common maternal morbidity in the postpartum period, resulting from both spontaneous tears and episiotomy. According to the World Health Organization (WHO), approximately 60-70% of women who deliver vaginally experience perineal trauma, and most require an episiotomy. These wounds, if not optimally managed, can contribute to an increased risk of infection, prolonged pain, sexual dysfunction, and impaired mobility. Therefore, a multidimensional approach encompassing both clinical and educational aspects is essential to accelerate the healing process of perineal wounds.

The postpartum period, or puerperium, is a critical period in maternal health recovery, during which various physiological changes require adequate medical attention and informational support. However, in clinical practice, the focus of care often predominates on the pregnancy and delivery phase, while postpartum care is often neglected. This results in low maternal literacy regarding self-care practices, particularly perineal wound care. Educational interventions during this period have been shown to increase maternal awareness and skills in supporting independent and safe wound healing.

Postpartum mothers' lack of knowledge about perineal wound care is a determining factor that delays healing and increases the risk of complications. A study by Kusumawati et al. (2022) showed that mothers with low levels of knowledge tended to fail to practice standard care practices, such as maintaining wound hygiene, changing dressings regularly, or performing sitz baths. These limitations were generally caused by limited information provided by healthcare professionals, limited educational time during hospitalization, and a lack of interactive and applicable educational media.

Health education has been proven to be an effective intervention for improving mothers' understanding and motivation to perform independent wound care. Health education delivered systematically, contextually, and based on individual needs can increase maternal self-efficacy in postpartum care practices. According to the Health Belief Model (HBM), mothers' perceptions of the susceptibility and severity of perineal wound complications will influence their preventive behavior. Therefore, education that emphasizes the immediate benefits of appropriate care can encourage healthier behavior changes.

Health education plays a central role in bridging the gap between theoretical knowledge and actual practice. Hands-on training on wound cleansing, sitz bath techniques, and the use of natural or medical antiseptics can improve mothers' self-care competencies. In an experimental study by Rahmawati (2023), it was found that the group of mothers who received a health education intervention experienced significantly faster perineal wound healing times than the control group. These results demonstrate a positive relationship between educational interventions and clinical wound healing outcomes.

Implementing an effective health education program requires an evidence-based approach and a local context. Educational materials need to be tailored to the culture, education level, and access to information of postpartum mothers. Delivery methods should also be varied, including a combination of individual counseling, booklets, educational videos, and the use of health apps. The availability and continuity of support from health workers, particularly midwives as the frontline providers of maternal care, are crucial factors in the success of such an education program. This intervention can also be an integral part of postpartum home visits or integrated health service posts (Posyandu).

In the context of primary healthcare, integration of education and routine monitoring of perineal wound healing should be standard practice. Regular evaluation of wound condition and the mother's understanding of care practices can facilitate early detection of complications and provide space for further

educational reinforcement. With this approach, healthcare becomes not only curative, but also promotive and preventative. Improving the capacity of healthcare workers to provide education based on effective interpersonal communication is also highly recommended to support this goal.

Considering the complexity of perineal wound healing and the active involvement of mothers in the care process, health education is a strategic intervention that cannot be ignored. The effectiveness of this intervention not only accelerates wound healing but also improves the mother's overall quality of life. In the long term, increasing health literacy among postpartum mothers will have an impact on strengthening the public health system, particularly in reducing maternal morbidity and increasing satisfaction with midwifery services.

RESEARCH METHODS

This study used a descriptive qualitative approach with a literature review method, which aimed to analyze and synthesize various published research results regarding the effectiveness of health education in accelerating perineal wound healing during the postpartum period. A qualitative approach was chosen because it is considered capable of providing a deep understanding of social phenomena and health behaviors that cannot be measured quantitatively alone. According to Creswell (2014), qualitative research allows researchers to interpret the meaning of data contextually and reflectively, making it highly suitable for exploring the relationship between educational interventions and behavioral change in the context of postpartum maternal care.

The data collection process was conducted through a search of scientific articles and other academic documents relevant to the topic. This secondary data was obtained from various trusted scientific databases such as Scopus, ScienceDirect, Google Scholar, and Garuda Ristekdikti, with search keywords including: "perineal wound care," "postpartum maternal health education," "postpartum healing," and "episiotomy." Literature selection was based on inclusion criteria, namely articles published within the last five years (2019–2024), with full-text access, and containing relevant empirical data or theoretical reviews. Articles in Indonesian and English were equally considered to create a diversity of perspectives.

After the literature was collected, the researchers conducted a selection process and critical appraisal of the content of each article. This assessment involved checking methodological validity, source credibility, and the relevance of the topic to the research focus. According to Grant and Booth (2009), a good literature review should not simply summarize the results of previous research but rather develop a conceptual synthesis that can reveal patterns, gaps, and directions of research development in the field. Therefore, at this stage, the researchers identified several thematic categories such as the type of educational intervention used, the method of delivery, the involvement of health workers, and their impact on maternal behavior and wound healing.

Data analysis was conducted using a thematic analysis approach, a qualitative technique that allows researchers to discover meaningful patterns

within the collected data. Each article analyzed was mapped based on key themes, such as the effectiveness of health education on maternal knowledge, changes in care behavior, and the duration of perineal wound healing. This analysis was conducted interpretively and was open to the complexity of the context, such as the cultural and socioeconomic backgrounds and the diversity of health care systems in each study. As emphasized by Braun & Clarke (2006), thematic analysis helps researchers organize large data sets into narratives that can be understood systematically and scientifically.

The entire research process aims to provide theoretical and practical contributions to understanding the importance of health education in supporting postpartum maternal recovery. This approach also allows for the identification of best practices in the design and implementation of postpartum education programs. This aligns with the opinion of Polit & Beck (2021), who stated that literature reviews in the nursing and midwifery context are a strategic method for evaluating the effectiveness of interventions and recommending evidence-based practice standards.

RESULTS AND DISCUSSION

1. The Strategic Role of Health Education in Improving Knowledge and Practice of Perineal Wound Care

Health education plays a central role in facilitating behavioral changes among postpartum mothers regarding postpartum perineal wound care practices. Poorly cared for perineal wounds can lead to serious complications such as infection, prolonged pain, or impaired recovery, making educational interventions a highly relevant preventive measure. Maternal health literacy, acquired through structured education, has been shown to be directly proportional to adherence to wound care protocols. As explained by Fitriana et al. (2021), increasing postpartum mothers' knowledge through focused counseling significantly impacts the frequency of appropriate wound care, including hygiene, antiseptic use, and early identification of abnormal symptoms. These findings are supported by several studies detailing the effectiveness of health education, as shown in the following table:

No	Location & Year	Intervention Method	Knowledge Results	Significance
1	Sumedang Hospital, 2019	Regional Lecture + booklet vs lecture only (n=80)	Knowledge increased significantly; correlation $r = 0.378$	$p = 0.000$
2	Muara Nasal Center, 2024	Health Prepost test of health education (n=18)	Score increased from 9.5 → 12.59	$p = 0.000$ (<0.05)
3	PMB West Bandung, 2024	Midwife "P", Educational booklets (n=30)	Mothers' knowledge increased significantly	$p = 0.000$
4	Nurul Hasanah Hospital, Southeast Aceh, 2023	Audiovisual educational media (n=62)	& The majority initially had less; media after education increased significantly	Pre-post test

The effectiveness of health education is greatly influenced by the delivery method and type of media used. Audiovisual media, booklets, and animation-based educational videos have been shown to improve postpartum mothers' understanding and retention of information, especially when compared to conventional lectures (Rahmi & Novita, 2020). The selection of appropriate media also takes into account the mother's education level, age, and cultural background, ensuring that the information conveyed is not only understandable but also psychologically acceptable. Furthermore, the involvement of health workers, particularly midwives, as communicators of health messages plays a vital role in ensuring accurate and empathetic information transfer.

The principles of humanistic and empathetic interpersonal communication are crucial for the success of health education. Postpartum mothers are more responsive to health messages delivered in a dialogue and with empathy, as this builds trust and strengthens intrinsic motivation to better care for themselves. This approach aligns with the concept of patient-centered education, which emphasizes understanding the patient's emotional, psychological, and social conditions in the health education process (Notoatmodjo, 2019). Therefore, healthcare workers trained to communicate effectively have significant potential in fostering critical maternal awareness of the importance of perineal wound care.

Equally important is the local context in developing health education materials. Local wisdom, cultural values, and the mother tongue serve as a medium that facilitates the internalization of health messages. For example, in communities with strong postpartum taboo traditions, educational messages need to be adapted so they don't directly conflict with these values, while still incorporating scientific health implications. According to a study by Wahyuni et al. (2022), a contextual approach based on local culture in rural communities has been shown to increase maternal engagement in postpartum health programs, including independent perineal wound care.

Furthermore, health education also serves as a tool for empowering postpartum mothers, making them active participants in their own care. Within the paradigm of promotive and preventive health, mothers with sufficient knowledge can make informed decisions, understand when to seek help, and avoid traditional practices that are unsterile or potentially harmful to the perineal wound. This independence aligns with the empowerment approach in maternal and child health services, which promotes individual autonomy as the foundation of family- and community-based care.

Thus, health education serves not only as a means of knowledge transfer, but as a holistic strategy that addresses the affective, social, and cognitive aspects of postpartum mothers. The effectiveness of educational interventions in this context depends heavily on the continuity of information, the active involvement of midwives and families, and a supportive environment conducive to behavioral change. Therefore, the role of health education in perineal wound care is integral to efforts to reduce postpartum maternal morbidity overall.

2. Effectiveness of Educational Interventions on Accelerating Wound Healing: Empirical and Conceptual Evidence

The effectiveness of educational interventions in postpartum perineal wound healing has been extensively studied, both quantitatively and qualitatively. Physiologically, structured health education plays a crucial role in reducing the risk of secondary infections and accelerating tissue regeneration. According to Adegoke et al. (2020), wound healing is strongly influenced by proper hygiene practices, nutritional patterns, and care techniques – all three of which are significantly improved through an educational approach. Their study noted that patients who received comprehensive wound care education demonstrated increased fibroblast proliferation and vascularization, two key indicators of effective healing.

Educational approaches that integrate information technology and video-based media or interactive leaflets have also been shown to improve mothers' understanding of the stages of perineal wound care. Research by Balsamo et al. (2021) highlighted that the use of behaviorally-based educational videos increased information retention by up to 60% compared to traditional oral counseling. This is highly relevant to cognitive learning theory, which emphasizes the importance of visual media in building a better conceptual understanding of preventive and promotive measures.

From a psychosocial perspective, Bandura's Self-Efficacy Theory also provides a strong conceptual framework for understanding the effects of educational interventions on wound care behavior. Individuals who feel confident (efficacious) in their ability to perform an action tend to be more consistent and persistent in carrying out self-care. In their study, Fitriyani et al. (2022) found that providing education increased postpartum mothers' self-efficacy, which was statistically positively correlated with wound care frequency and healing acceleration ($r = 0.61$; $p < 0.01$).

A meta-analysis conducted by Zhao et al. (2020) of 15 experimental studies in Asia showed that structured educational interventions significantly accelerated perineal wound healing, with an average of 10 days of full healing in the intervention group, compared to 14 days in the control group. This effect was primarily due to increased maternal understanding of the importance of keeping the wound area clean and dry, and avoiding physical activities that could exacerbate tissue trauma.

Community-based education approaches have also proven more effective in reaching mothers in rural areas or those with limited access to healthcare facilities. A study by Situmorang and Hartini (2021) showed that involving health cadres in providing education increased accessibility and increased maternal engagement in wound care practices. This model aligns with the principle of participatory empowerment, where mothers are not merely recipients of information but also active participants in the healing process.

3. Practical and Policy Implications: Integration of Health Education in Evidence-Based Postpartum Services

The importance of health education during the postpartum period has been emphasized by numerous studies. For example, according to Yonemoto et al. (2017), in a systematic review published in the *Journal of Global Health*, education-based postnatal interventions significantly improve maternal and infant health outcomes, including early infection detection, breast care, and exclusive breastfeeding practices. This knowledge empowers mothers to make informed decisions about risks, which are often overlooked due to limited access to information during the postpartum recovery period.

Furthermore, evidence-based education approaches have become standard in modern maternal care. Gamble & Creedy (2019) in the *Midwifery Journal* stated that postnatal services that integrate evidence-based education tend to result in higher maternal satisfaction and increased confidence in caring for their infants. This aligns with the Health Belief Model (HBM), which states that perceptions of vulnerabilities and benefits will increase an individual's motivation to take health actions.

In a policy context, many countries have developed health education models integrated into primary care systems. In Indonesia, Minister of Health Regulation No. 97 of 2014 concerning Postpartum Health Services outlines the importance of monitoring maternal conditions and providing systematic information. However, a study by Yanti et al. (2020) found that implementation at the community health center level is inconsistent, with most health workers still viewing education as a supplementary, rather than a primary, obligation. This indicates gaps in implementation that need to be strengthened by more concrete and measurable policies.

Community-based education strategies have strong support in the public health literature. Glanz et al. (2015) in their book, *Health Behavior: Theory, Research, and Practice*, emphasized that participatory, community-based interventions are more effective than top-down interventions because they build ownership and enhance program sustainability. Another study by Suharmiati et al. (2021) in East Java showed that involving community health workers (cadres) in postpartum education significantly increased postnatal visit coverage. This demonstrates that collaboration between the community and medical personnel yields more optimal results.

Adapting digital technology in postpartum education is also increasingly gaining ground. Lee et al. (2020) in *BMC Pregnancy and Childbirth* found that the use of mobile apps for postpartum maternal education increased knowledge, reduced anxiety, and increased father involvement in infant care. This opens up significant opportunities for the Indonesian health system, particularly in reaching mothers in remote areas or with limited mobility. However, Setiawan et al. (2023) emphasized the need for digital literacy training for both health workers and target mothers to ensure the technology's effective use and avoid barriers.

The midwife's role as the primary facilitator of education is also widely supported by science. Carolan-Olah et al. (2019) emphasized that empathetic two-way communication can improve mothers' understanding of health materials and strengthen trusting relationships between patients and providers. The client-centered care approach developed by Carl Rogers also serves as an important foundation for communication training for midwives, emphasizing authentic presence, empathy, and active listening. This is crucial given the emotionally and psychologically vulnerable period of the postpartum period.

Training for healthcare workers should be more than just technical, but also encompass social and psychological approaches. Schmied et al. (2018) in their study showed that mothers who receive emotional support during the postpartum period tend to be better able to cope with the challenges of breastfeeding, postpartum depression, and the stress of adapting to motherhood. Therefore, training should include simulations, role-playing, and case reflection as methods for improving empathic competence.

Thus, these arguments collectively demonstrate that integrating health education into evidence-based postpartum care is not only crucial, but also urgent. Support from empirical data, health behavior theory, and visionary policies are the foundation for developing an inclusive, responsive, and humane maternal care system. Implementing such policies will ensure that every mother has an equal right to understand her body, care for herself, and take an active role in the postpartum recovery process.

CONCLUSION

Health education plays a strategic role in improving knowledge and practice of perineal wound care in postpartum mothers, as it can encourage information-based behavioral changes. Various studies have shown that structured education can improve adherence to wound care standards, prevent complications, and accelerate healing. Media such as booklets, audiovisuals, and digital applications have proven effective in increasing maternal understanding, especially when tailored to the sociocultural characteristics and literacy levels of the target population. The effectiveness of education is also influenced by an empathetic communication approach from health workers, particularly midwives, which is key to building maternal trust. In addition to cognitive aspects, health education based on empowerment principles also increases self-efficacy and maternal active participation in self-care. A community-based approach involving health cadres increases the reach and sustainability of interventions, particularly in remote areas. Empirical evidence shows that educational interventions have a significant impact on accelerating wound healing and improving maternal health outcomes after delivery. Practical implications require the systematic and consistent integration of health education into postpartum services, as stipulated in national policies such as Minister of Health Regulation No. 97 of 2014. However, implementation of this policy still faces implementation challenges at the primary care level. Therefore, training for health workers

needs to include socio-psychological and technology-based approaches to be more adaptive to maternal needs. Maternal care policies that are responsive to evidence and mothers' emotional needs will result in a more inclusive and humane system. These findings collectively emphasize that health education is a crucial foundation for reducing morbidity and improving the quality of life of postpartum mothers.

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