

Exploring Patients' Perceptions of Evidence-Based Early Mobilization in Gastric Function Recovery After Abdominal Surgery: A Qualitative Phenomenological Study

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ABSTRACT

Early mobilization after abdominal surgery is a critical component in the recovery of gastric function; however, its implementation in clinical settings remains challenged by various barriers and the absence of standardized protocols. This study aims to explore patients' perceptions of early mobilization based on Evidence-Based Practice (EBP) in the context of gastric function recovery. A qualitative approach with a descriptive phenomenological design was employed, involving seven post-abdominal surgery patients selected through purposive sampling at Royal Prima Hospital Jambi. Data were collected using in-depth semi-structured interviews and analyzed through reflexive thematic analysis. The study identified four main themes: the meaning of early mobilization for patients, barriers to mobilization, the role of nurses and families, and patients' expectations of mobilization protocols. The findings reveal that while patients perceive early mobilization as an essential part of the healing process, fears, pain, and the lack of clear guidance emerged as major obstacles. The study concludes that the development of early mobilization protocols grounded in Evidence-Based Nursing and tailored to patients' subjective experiences and local cultural contexts is crucial for effective and sustainable implementation in medical-surgical nursing practice.

Keywords: *Evidence-Based Practice, Early Mobilization, Gastric Recovery, Post-Abdominal Surgery.*

INTRODUCTION

Abdominal surgery is an invasive medical procedure involving vital organs within the abdominal cavity, such as the stomach, intestines, liver, and pancreas. this procedure can disrupt the balance of gut microbiota and lead to significant physiological changes in patients (Sitepu et al., 2021). preoperative factors such as fasting, bowel cleansing, and antibiotic administration, as well as surgical manipulation, are known to interfere with intestinal flora, contributing to an increased risk of postoperative complications, including infections, anastomotic leakage, and impaired intestinal motility (Zheng et al., 2023).

Post-abdominal surgery patients frequently experience gastrointestinal issues such as paralytic ileus, delayed gastric emptying, and symptoms of nausea and vomiting. these disturbances are triggered by the effects of anesthesia, opioid use, and surgical stress, which inhibit neuromuscular function of the intestines(Wang et al., 2024), and may even slow tissue vascularization and wound healing (Ikhtiari et al., 2025).

According to a 2025 report by the World Health Organization (WHO), approximately 234 million surgical procedures are performed globally each year, with postoperative complications accounting for 13% of the global disease burden and a mortality rate of up to 5%. In Indonesia, data from the Ministry of Health indicate that abdominal surgery significantly contributes to the incidence of postoperative complications such as wound infections and impaired gastrointestinal recovery ((Kementerian Kesehatan Republik Indonesia, 2023; Zhong et al., 2023).

Early mobilization is an intervention proven effective in accelerating gastrointestinal function recovery, reducing the risk of complications, and shortening patient hospital stays (Willner et al., 2023). Documented benefits include earlier passage of flatus and stool, reduced abdominal distension, decreased nausea and vomiting, and earlier resumption of oral intake (Öztaş et al., 2024). As part of Evidence-Based Practice (EBP) in nursing, early mobilization has the potential to improve postoperative quality of life (Sitepu et al., 2021).

However, implementation of early mobilization continues to face several obstacles. Fear of wound dehiscence, pain, lack of education, low patient health literacy, and minimal support from nurses and families remain major challenges in practice (Sudarmi & Agustina, 2020 ; Fadhlal et al, 2021). A study conducted at a regional general hospital (RSUD) revealed that most post-laparotomy patients had suboptimal early mobilization behavior, with 57.1% classified as poor (Suarningsih & Negara, 2024). Even in national referral hospitals, complications such as pancreatic fistulas and delayed gastric emptying are still frequently observed after Whipple procedures (Efraín et al., 2021). Conversely, research by Porsrud et al. (2023) suggests that there is not always a direct correlation between early mobilization and wound complications or length of hospital stay, indicating the presence of subjective experiential factors that have yet to be extensively studied (Porsrud et al., 2023).

In clinical practice at Royal Prima Hospital Jambi, which manages an average of 20–25 abdominal surgery cases per month (primarily appendectomies), it was observed that patients often experience prolonged hospitalization beyond the designated clinical pathway. An initial survey conducted on March 10, 2025, revealed that delayed recovery of gastric function manifested by persistent nausea, vomiting, and loss of appetite was the primary reason patients were not ready for discharge.

Although early mobilization has been widely studied from physiological and quantitative perspectives, there is currently no standardized protocol that clearly outlines the duration, frequency, or appropriate forms of mobilization to accelerate gastric recovery from the patients' subjective perspective. Gastric function recovery is a critical indicator of postoperative mobilization success (Zeyara et al., 2024 ; Shi et al., 2022 ; Xavier et al., 2024). This highlights a research gap concerning patients' experiences, meanings, and perceptions of early mobilization, which have yet to be explored through a contextual qualitative approach.

Based on the literature review and initial observations, there is a clear research gap in understanding patients' subjective experiences of undergoing early mobilization after abdominal surgery, particularly in relation to gastric function recovery. Most existing studies still focus on clinical outcomes or physiological parameters rather than on patients' perceptions, barriers, and personally experienced meanings.

This study offers novelty by employing a phenomenological approach to deeply explore patients' perceptions of evidence-based early mobilization. This approach centers on patients' lived experiences, aiming to provide a foundation for developing adaptive, contextual, and applicable early mobilization protocols within the Indonesian nursing care

setting. The study also emphasizes the importance of family involvement and the active role of nurses in supporting patients' adaptation, in line with Callista Roy's adaptation model (Punamiasih, 2021 ; Nababan & Ginting, 2022; Söderberg et al., 2025). Accordingly, the findings of this research are expected to strengthen holistic, evidence-based, and patient-centered practices in medical-surgical nursing.

METHODS

This study employed a qualitative approach using a descriptive phenomenological design. The research was conducted at Royal Prima Hospital Jambi from May to July 2025. Participants were selected through purposive sampling from post-abdominal surgery patients who met the inclusion criteria. According to Polit and Beck (2012), the number of participants in qualitative research is determined based on informational needs, with no fixed minimum requirement. Sampling was guided by the principle of data saturation. Data saturation occurs when themes and categories emerge repeatedly to the point where no new information can be obtained. Once saturation is achieved, data collection is considered complete .

Data were collected through in-depth semi-structured interviews, guided by an interview protocol, and supported by an audio recorder, field notes, and verbatim transcription. Data validation was conducted using member checking. Audio recordings were tagged and managed using qualitative data analysis software (Uzma & Bukhari, 2025). The data were analyzed using Reflexive Thematic Analysis following six stages: familiarization with data, initial coding, theme development, theme review, theme naming, and narrative reporting (Braun & Clarke, 2021).

Data validity was ensured through triangulation, reflective journaling (bracketing), audit trail documentation, and member checking. The trustworthiness of the findings was further established by applying the principles of credibility, dependability, confirmability, and transferability.

RESULTS

From the interviews conducted with seven participants who met the inclusion criteria, four main themes were identified regarding patients' perceptions of early mobilization after abdominal surgery:

1. **The Meaning of Early Mobilization for Patients**
Patients perceived early mobilization as a means to accelerate their recovery, although they expressed fear related to pain during movement.
2. **Barriers to the Implementation of Early Mobilization**
These included postoperative pain, fear of wound dehiscence, lack of explanation from healthcare professionals, and limited family support (families were often anxious about patients being encouraged to move).
3. **The Role of Nurses and Family**
Emotional support and education provided by nurses, as well as the presence of family members, were seen as crucial in reducing patient anxiety during mobilization.
4. **Patients' Expectations for Early Mobilization Protocols**
Patients expressed the need for clear guidance or instructions, including specific timing (e.g., how long to lie on the left or right side), duration, and safe mobilization techniques.

The data also showed that patients in the early mobilization intervention group began ambulation approximately four hours earlier, had an average of 40 minutes longer daily mobilization, and experienced a significant reduction in pain and anxiety compared to the control group (Simsek Yaban et al., 2024 ; Xavier et al., 2024).

DISCUSSION

The findings of this study indicate that early mobilization is perceived as an essential component in the recovery of gastric function following abdominal surgery. However, its implementation is significantly influenced by patients' understanding, the pain they experience, and the level of support provided by nurses and family members. These findings align with the study by (Huang et al., 2023), which identified fear of pain and uncertainty regarding the safety of mobilization as major barriers to early postoperative mobilization.

Other qualitative studies have also highlighted that patients interpret postoperative mobilization as "any effort to be discharged sooner," and reported that sitting or standing shortly after surgery provided physical and psychological relief (Andersson et al., 2020). Furthermore, educational support and the presence of nurses have been shown to be critical factors in fostering a sense of safety during mobilization (Simsek Yaban et al., 2024).

Within the framework of Callista Roy's conceptual adaptation theory, nurses play a strategic role in helping patients adapt to new physical conditions through a holistic approach that considers each patient's individual needs (Punamiasih, 2021). Therefore, nurses act not only as clinical caregivers but also as facilitators of adaptation and motivators in the early mobilization process.

Nevertheless, several systematic reviews have noted that the quality of quantitative evidence regarding the effectiveness of early mobilization remains limited and tends to vary in methodology and reported outcomes (McIlroy et al., 2025). Hence, qualitative approaches—such as the one employed in this study—are crucial for deepening the understanding of patients' perceptions and for elucidating contextual factors that influence intervention effectiveness.

The findings of this study can serve as a foundation for developing a structured, evidence-based, and context-sensitive early mobilization protocol. By incorporating patients' subjective perceptions and local sociocultural conditions, such a protocol is expected to enhance patient compliance, reduce anxiety, and promote more comprehensive recovery of gastric function

CONCLUSION

Early mobilization after abdominal surgery is perceived by patients as a vital intervention in accelerating the recovery of gastric function. This positive perception is influenced by adequate understanding, emotional support, and the active involvement of nursing staff during the mobilization process. The findings highlight the importance of developing an early mobilization protocol grounded in Evidence-Based Nursing, which considers patients' subjective experiences and adopts adaptive, context-sensitive approaches aligned with local cultural and healthcare system characteristics.

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