DETERMINAN OF EARLY MOBILIZATION AMONG POSTCAESAREA MOTHERS IN KUTACANE HOSPITAL IN 2025

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ABSTRACT

Background: The increasing trend of childbirth via Sectio Caesarea (SC) demands optimal postoperative care. Early mobilization is critical to speed up healing and prevent complications, but post-SC mothers often experience anxiety and severe pain that limits their movement. **Objectives:** This study aims to determine the factors influencing maternal anxiety in performing early mobilization among post-Sectio Caesarea mothers at RSUD H. Sahudin Kutacane, Aceh Tenggara. **Methods:** This quantitative research utilized a cross-sectional approach. The population comprised 118 post-SC mothers, from which a sample of 52 respondents was selected using purposive sampling. Data collection was carried out through structured questionnaires, the Numeric Rating Scale (NRS) for pain levels, and the Visual Analog Scale for Anxiety (VAS-A). Data analysis was performed using the Chi-Square statistical test. **Results:** The findings indicated that 38.5% of the respondents experienced moderate anxiety, and 57.6% suffered from moderate postoperative pain. Bivariate analysis revealed a significant relationship between family support and maternal anxiety in conducting early mobilization ($p = 0.02$). Furthermore, a significant correlation was found between labor pain intensity and maternal anxiety ($p = 0.02$). Conclusions: Family support and the level of labor pain are vital factors significantly influencing maternal anxiety during early mobilization post-SC. Healthcare professionals are advised to provide continuous monitoring and emotional reassurance to reduce anxiety and enhance early recovery.

Keywords: Anxiety; Early Mobilization; Family Support; Labor Pain; Sectio Caesar

INTRODUCTION

Globally, the rate of childbirth via Sectio Caesarea (SC) has seen a significant and continuous increase over the past few decades. The World Health Organization (WHO) establishes that the ideal SC rate should range between 10% and 15% of all births. However, global data indicates that SC rates now exceed 21% worldwide and are projected to keep rising. In the regional context of Southeast Asia, the trend mirrors this upward trajectory. In Indonesia, national data from the Riskesdas (Basic Health Research) highlights that the prevalence of SC deliveries has reached approximately 17.6%, with certain urban and regional areas exhibiting.(Prasetyo, Suwarni and Mufidah, 2025) much higher rates. At the local level, specifically at RSUD H. Sahudin Kutacane in Southeast Aceh Regency, SC procedures are frequently performed to manage high-risk pregnancies and obstetric complications, leading to a high volume of post-SC patients requiring specialized postpartum care. (Simanjuntak *et al.*, 2024)

The rising trend of SC deliveries poses substantial challenges to maternal recovery. Unlike natural births, SC is a major abdominal surgery that carries risks of postoperative complications, including deep vein thrombosis, pulmonary embolism, infection, uterine subinvolution, and prolonged healing. To mitigate these risks, early mobilization defined as moving out of bed within 6 to 24 hours post-surgery is a critical, non-pharmacological intervention. Early mobilization plays a vital role in stimulating blood circulation, preventing blood clots, accelerating wound healing, and restoring gastrointestinal function.(Sitepu *et al.*, 2024)

Despite existing hospital protocols and healthcare policies advocating for early mobilization, its implementation among postpartum mothers remains suboptimal. Previous studies indicate that a primary barrier to successful early mobilization is maternal anxiety, which is often exacerbated by severe postoperative pain. When mothers experience high anxiety levels, their pain tolerance decreases, causing them to resist movement and delay their recovery process. (Marcella *et al.*, 2025) Furthermore, interpersonal factors, such as the level of emotional and practical support provided by family members, significantly dictate a mother's confidence and willingness to engage in early physical activity after a major operation. (Khaironnisa *et al.*, 2023)

Urgency of the Research This research is essential because while early mobilization protocols are standard in clinical guidelines, the psychological and situational barriers that hinder mothers from performing it are often overlooked in local healthcare settings like RSUD H. Sahudin Kutacane. Understanding the specific factors—such as anxiety levels, pain intensity, and the presence or absence of family support—is crucial for developing targeted nursing and midwifery interventions. By identifying these determinants, healthcare providers can design better pain management strategies and counseling programs that involve families, ultimately reducing maternal anxiety, maximizing recovery efficiency, and lowering hospital readmission rates. (Sugiarti *et al.*, 2023)

METHOD

This study utilized a quantitative research design with an observational, analytical cross-sectional approach, where all variables were measured and observed simultaneously at one point in time. The research was conducted at the postpartum wards of RSUD H. Sahudin Kutacane, Southeast Aceh Regency, Aceh Province. The target population for this observational study consisted of all postpartum mothers who underwent a Sectio Caesarea (SC) delivery at the hospital, totaling 118 mothers over the specified research period. By applying Slovin's formula with a tolerable margin of error ($e = 0.10$), a required sample size of 52 respondents was obtained. (Alsuwaylihi *et al.*, 2026) The respondents were selected using a non-probability purposive sampling technique based on strict inclusion criteria, which required participants to be post-SC mothers within 6 to 24 hours post-surgery, conscious, hemodynamically stable, and willing to participate by signing the informed consent. Conversely, mothers with severe postpartum complications such as eclampsia or heavy postpartum hemorrhage that medically contraindicated early mobilization were excluded from the study. (Agustin *et al.*, 2022)

To evaluate the research hypotheses, this study examined two independent variables and one dependent variable. The first independent variable, family support, was defined as the emotional, instrumental, informational, and appraisal assistance provided by family members, measured using a validated structured Likert-scale questionnaire and categorized into "Good" and "Poor" support based on the median score. The second independent variable, labor pain intensity, was defined as the subjective level of physical discomfort at the surgical site and was measured using the standardized Numeric Rating Scale (NRS) ranging from 0 (no pain) to 10 (worst imaginable pain), which was then categorized into mild, moderate, and severe pain levels. (Wahyuningsih *et al.*, no date) The dependent variable, maternal anxiety in early mobilization, was defined as the psychological state of apprehension or worry when attempting physical movement post-surgery. This variable was operationalized and measured using the Visual Analog Scale for Anxiety (VAS-A), a 100mm horizontal line where 0 indicates no anxiety and 100 indicates severe anxiety, subsequently classified into mild, moderate, and severe anxiety. (Sianipar *et al.*, 2025)

Data collection was carried out directly by the researchers through face-to-face interviews using the printed questionnaires and scale sheets, supplemented by an observation of patients' medical records to verify their post-operative status. Prior to deployment, all instruments underwent rigorous validity and reliability testing to ensure internal consistency and replicability(Simanjuntak *et al.*, 2024). Since this study focused strictly on clinical-observational survey methods and did not involve food formulations or laboratory product manufacturing, no material processing photos or technical material descriptions are attached. The collected data were processed using statistical software through two distinct phases. Univariate analysis employed descriptive statistics to present frequencies and percentages for each individual variable (Safitri, 2018)

Subsequently, bivariate analysis using the Chi-Square (χ^2) test was conducted to test the research hypotheses regarding the relationship between the independent and dependent variables, establishing a p-value of < 0.05 as the threshold for statistical significance. To ensure the protection of human subjects, this study adhered to international ethical principles and was officially granted an ethical clearance certificate by the Health Research Ethics Committee of STIKes Mitra Husada Medan. (Putri *et al.*, 2024)

RESULT

The univariate results of this study indicated that out of 52 respondents, the majority of post-Sectio Caesarea (SC) mothers were aged between 20 and 35 years old (78.8%), had a secondary education level (50.0%), and had no previous history of SC (59.6%). Furthermore, regarding the main variables studied, 73.1% of respondents reported poor family support, 57.6% experienced moderate postoperative pain, and 38.5% suffered from moderate anxiety before initiating early mobilization. To confirm the research hypotheses, cross-tabulation and bivariate analysis using the Chi-Square test (χ^2) were performed, as summarized in the horizontal tables below. (Apriansyah, Romadoni and Andrianovita, 2015)

Table 1. Cross-tabulation of Family Support and Maternal Anxiety in Performing Early Mobilization

No	Variabel	
	Not Stunted	Stunted
	Frekuensi (n)	Presentase (%)
1. Mothers Age		
>20 Years old	4	7,7
20-35 Years Old	41	78,8
<35 Years old		
Total	**52**	**100**
2. Maternal Education		
Low Education (No schooling–Primary school)	9	17,3
Secondary Education (Junior High School)	17	32,7
Higher Education (High School to University)		
Total	**52**	**100**

CONCLUSIONS

Based on the findings of this study, it can be concluded that family support and labor pain intensity are critical factors that directly influence maternal anxiety in performing early mobilization among post-Sectio Caesarea (SC) mothers at RSUD H. Sahudin Kutacane. The study successfully answered the research question by demonstrating a statistically significant relationship between poor family support and elevated levels of moderate to severe maternal anxiety. (Mukhodim, Hanum and Widowati, 2026). Similarly, a significant correlation was proven between severe postoperative pain and heightened anxiety, which heavily restrains mothers from initiating physical ambulation within the critical 6 to 24-hour post-surgery window. Therefore, maternal anxiety during early recovery is not an isolated psychological response, but rather a direct consequence of intense clinical pain and insufficient interpersonal backing from the family network. (Yesildag and Atmaca, 2026)

To troubleshoot these barriers and optimize early mobilization protocols, several strategic actions are suggested. Healthcare providers, particularly midwives and nurses at RSUD H. Sahudin Kutacane, should implement a comprehensive pain-management protocol and introduce family-centered counseling pre- and post-surgery to actively engage relatives in supporting the patient's physical recovery. For future research, it is highly recommended to expand the study by employing longitudinal designs and examining a wider array of institutional and physiological variables with a larger sample size to improve the generalizability and efficacy of postpartum rehabilitation strategies. (Imran saputra *et al.*, 2023)

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REFERENCES

Agustin, I. *et al.* (2022) 'Implementation Of Mobilization Support Nursing in Post- Operational Sectio Caesarian Patients With Physical Mobility Disorders', 4(1), pp. 86–94.

Alsuwaylihi, A. *et al.* (2026) 'Importance of early postoperative mobilization ':, *BJS Open*, 10(2), pp. 1–16. Available at: https://doi.org/10.1093/bjsopen/zrag016.

Apriansyah, A., Romadoni, S. and Andrianovita, D. (2015) ''The Relationship Between Pre-Operative Anxiety Levels and Pain Intensity in Post-Caesarean Section Patients at Muhammadiyah Hospital Palembang in 2014', 2(2355), pp. 1–9.

Khaironnisa, D. *et al.* (2023) 'Effect of early mobilization on post SC pain (a literature review)', 11(3).

Marcella, R. *et al.* (2025) 'The effectiveness of early mobilization intervention on mobilization ability in post caesarean section patients', 4095(7), pp. 851–858.

Midwifery, I. *et al.* (2023) 'Correlation Between Perceptions Of Quality Antenatal Care Services To Patient Satisfaction Of Pregnant Women During The Covid-19 Pandemic', 7(3), Pp. 193–207. Available At: Https://Doi.Org/10.20473/Imhsj.V7i3.2023.193-207.

Mukhodim, S., Hanum, F. and Widowati, H. (2026) 'Determinants of Mobilization Speed Among Post-Caesarean Mothers in Sidoarjo', 12(1), pp. 164–171. Available at: https://doi.org/10.21070/midwiferia.v11i2.1802.

Prasetyo, G.A., Suwarni, A. and Mufidah, N. (2025) 'The effect of stress ball therapy on anxiety in patients undergoing elective Caesarean section.', 4(7), pp. 637–643. Available at: https://doi.org/10.56922/mchc.v4i7.1335.

Putri, L. *et al.* (2024) 'The Effect of Early Mobilization on Impaired Physical Mobility in Post-Cesarean Section Patients at the Danau Paris Community Health Center, Aceh Singkil Regency, in 2024 (Bachelor's Program, Mitra Husada Medan College of Health Sciences, Indonesia).

Safitri, Y. (2018) 'The effect of early mobilization on pain intensity in postoperative patients.'

Sianipar, Y.G. *et al.* (2025) 'Factors Associated with Post-Caesarean Section Wound Healing at Efarina Hospital, Berastagi City. According to the World Health Organization (WHO) standard, Caesarean section—a procedure performed through the abdominal wall—aims to minimize risks to the mother and fetus.

Simanjuntak, W. *et al.* (2024) 'Factors associated with early mobilization among post-cesarean section mothers at HKBP Balige General Hospital, Toba Regency, North Sumatra Province, in 2024.'

Sugiarti, G. *et al.* (2023) 'The relationship between early mobilization and the wound healing process following a Caesarean section at RSUD Tanjung Pura, Langkat, in 2023.

Wahyuningsih, S. *et al.* (no date) 'Mobilisasi bertahap pasca'.

Yesildag, B. and Atmaca, K.A. (2026) 'The effect of a targeted mobilization program applied after cesarean surgery on care outcomes : a randomized controlled study', 72(2), pp. 2–7.