



FACTORS AFFECTING ANXIETY IN EARLY MOBILIZATION AMONG POST-CAESAREAN SECTION MOTHERS AT AEK KANOPAN REGIONAL GENERAL HOSPITAL IN 2024

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ABSTRACT

Caesarean section (CS) is a surgical procedure involving incisions in the abdominal wall and uterus to deliver a baby. The trend of caesarean deliveries has increased globally and nationally, often exceeding the ideal rate recommended by the World Health Organization (WHO). Childbirth is a natural process eagerly awaited by every mother. However, under certain medical conditions, a Caesarean section (CS) becomes the primary option for the safety of both mother and fetus. Globally, the trend of Caesarean section deliveries continues to increase significantly in various parts of the world. The World Health Organization (WHO) notes that the ideal Caesarean section rate should be between 10% and 15%, but in reality, this rate continues to exceed this recommendation. This study aims to determine the factors influencing anxiety in performing early mobilization among post-caesarean section mothers at RSUD Aek Kanopan in 2024. This research utilized a quantitative design with a cross-sectional approach. The sample consisted of 40 post-caesarean section mothers selected using purposive sampling. Data were collected using knowledge questionnaires, the Numeric Rating Scale (NRS) for pain, and the Visual Analog Scale for Anxiety. Data analysis was conducted using univariate and bivariate methods with the Chi-Square test. The analysis revealed that most respondents were aged 20-35 years (73.1%), had a secondary education (78.8%), were employed (55.8%), and were multigravida (35.5%). The majority of respondents lacked family support (73.1%), experienced moderate pain post-operation (57.6%), and had moderate anxiety levels (57.6%). Bivariate analysis showed a significant relationship between family support and pain level with anxiety in performing early mobilization ($p = 0.02$). Mothers who received family support and experienced mild pain tended to have mild anxiety, while those lacking family support and experiencing severe pain tended to have severe anxiety. These findings highlight the importance of family support and pain management in reducing anxiety and accelerating early mobilization in post-caesarean section mothers.

Keywords: Factors Affecting Anxiety In Early Mobilization Among Post-Caesarean Section Mothers

Introduction

Caesarean section (CS) is a surgical procedure involving incisions in the abdominal wall and uterus to deliver a baby. The trend of caesarean deliveries has increased globally and nationally, often

exceeding the ideal rate recommended by the World Health Organization (WHO). (*Profil Kesehatan Indonesia, 2024*.)

In Indonesia, the prevalence of CS deliveries has risen significantly, reaching

31% in 2021, far above the ideal rate of 5-15%. Postoperative mothers often experience discomfort, particularly pain and anxiety, which can hinder early mobilization. Early mobilization is crucial for accelerating recovery, preventing complications, and improving the quality of life for mothers after CS. However, anxiety remains a significant barrier to its implementation, often due to fear of wound dehiscence or pain.

Childbirth is a natural process eagerly awaited by every mother. However, under certain medical conditions, a Caesarean section (CS) becomes the primary option for the safety of both mother and fetus. Globally, the trend of Caesarean section deliveries continues to increase significantly in various parts of the world. The World Health Organization (WHO) notes that the ideal Caesarean section rate should be between 10% and 15%, but in reality, this rate continues to exceed this recommendation. (*Profil-Kesehatan-Ibu-Dan-Anak-2024*, n.d.)

The rise in Caesarean section rates internationally reflects changes in modern obstetric practices and shifting patient preferences. The latest WHO data shows that globally, more than 1 in 5 (21%) deliveries are by Caesarean section. This figure is predicted to continue to rise to 29% by 2030, indicating that surgical intervention in childbirth has become a crucial public health phenomenon requiring attention. (WHO, 2020)

While Caesarean sections are lifesaving, they carry a greater risk of complications than vaginal deliveries. Post-operative complications can include bleeding, surgical site infections, and thromboembolic events. Therefore, post-surgical recovery requires special attention, particularly in the aspect of physical activity known as early mobilization to

accelerate the tissue healing process. (*Profil Kesehatan Indonesia, 2024*)

Early mobilization is an important policy in post-operative nursing care that requires patients to move as early as possible, usually within the first 6 to 24 hours. The benefits of early mobilization include improved blood circulation, prevention of joint stiffness, and accelerated intestinal peristalsis. However, in reality, many post-C-section mothers are reluctant or afraid to do so due to various physical and psychological constraints. (Manurung et al., 2022)

The main barrier that often arises in implementing early mobilization is anxiety. Anxiety is a complex emotional response, often arising from fear of pain in the stitches or fear that physical movement will harm the surgical outcome. Universally, anxiety in post-C-section postpartum mothers can hinder recovery progress and prolong hospital stays. (Nainggolan et al., 2025)

In Indonesia, the increasing trend in C-sections is also clearly visible through national data. According to the Basic Health Research (Risnkesdas) report, the prevalence of C-section deliveries continues to increase in various provinces. This is driven by increased access to healthcare facilities and medical indications such as narrow pelvis, breech presentation, or preeclampsia, which are increasingly common in pregnant women. (*Profil Kesehatan-Ibu-Dan-Anak-2024*, n.d.)

In North Sumatra, in particular, the rate of deliveries by CS is quite high compared to several other provinces on the island of Sumatra. The diverse population and accessibility of referral hospitals in this region make CS one of the most frequently performed major surgical procedures in surgical installations at both regional and private hospitals. (*Profil Kesehatan & Medan, 2025*)



Medan, the capital of North Sumatra Province and the region's primary medical referral center, records a very high volume of post-CS patients each year. Hospitals in Medan often face challenges in managing patient recovery. While education about early mobilization is provided, patient compliance remains variable due to psychological factors, particularly deep anxiety.(Profil Kesehatan & Medan, 2025)

The anxiety experienced by post-CS mothers in Medan is often influenced by internal factors such as a lack of knowledge about recovery procedures. Many mothers do not understand that movement actually reduces pain in the long term. This lack of understanding fuels the misperception that complete bed rest is the best way to protect surgical wounds from damage.(Fitria et al., 2022)

Preliminary data at RSUD Aek Kanopan from August 2023 to April 2024 showed that out of 118 caesarean deliveries, most mothers experienced pain and anxiety about early mobilization due to fear of wound complications. This study aims to analyze the factors influencing anxiety in early mobilization among post-caesarean section mothers at RSUD Aek Kanopan. Besides knowledge, age and previous childbirth experience also play a significant role. Mothers undergoing a first-time C-section (primiparas undergoing surgery) tend to have higher levels of anxiety than those who have undergone one before. Fear of the unknown creates negative images about the pain of first getting out of bed.

Family support is a crucial external factor in mitigating maternal anxiety. In Medan's strong family ties, the presence of a husband or parent can be a key motivator for mothers to mobilize. Conversely, overprotective families who forbid mothers from moving out of pity can actually

exacerbate anxiety levels and hinder the patient's independence.(Fitria et al., 2022)

Communication from healthcare professionals cannot be overlooked. Nurses and midwives in hospitals have a responsibility to provide empathetic guidance. Often, anxiety arises because mobilization instructions are given hastily without reassuring explanations, leaving patients feeling stressed and even more afraid to attempt their first physical activity.(Sembiring et al., 2022)

Post-operative pain is a direct trigger of this anxiety. The incision in the abdominal wall causes intense pain when the abdominal muscles contract to move. Anxiety arises when the mother projects the pain as a sign of danger, creating a vicious cycle in which pain triggers anxiety, and anxiety increases sensitivity to pain.(Pratiwi & Amanah, 2022)

The psychological state of the mother after a CS is also influenced by drastic hormonal changes. The postpartum period is a vulnerable period during which the mother transitions to parenthood while simultaneously healing physical wounds. The burden of immediately breastfeeding and caring for the baby often clashes with physical limitations post-surgery, ultimately increasing the mother's mental burden and anxiety.(Isyos Sari Sembiring et al., 2025)

Research shows that many mothers in Medan city hospitals delay mobilization for more than 24 hours because they feel they are not mentally ready. This delay risks complications such as paralytic ileus (cessation of bowel movements) or even lung infections due to the accumulation of secretions due to the mother's infrequent sleeping position.(Faturizky et al., 2024)

Identifying the factors influencing this anxiety is crucial to improve the quality of nursing care. If the dominant factors

causing anxiety can be identified, healthcare providers can design more personalized interventions, such as relaxation techniques, structured education, or intensive support during initial mobilization.(Iriani & Asrum, 2025)

The success of early mobilization depends not only on the administration of analgesics (painkillers), but also on the mother's mental readiness. Reducing anxiety means increasing the mother's confidence and enabling a faster recovery. This benefits not only the mother but also the well-being of the baby, who requires immediate care from her mother, regardless of the mother's physical limitations.

This research on anxiety factors in mobilization is expected to contribute to hospital policy in Medan in developing more comprehensive standard operating procedures (SOPs). Patient-centered care must encompass biopsychosocial aspects, not just focus on healing physical wounds.

Research Method

This study is a quantitative research with a cross-sectional design, where the variables are observed and measured at a specific point in time (Ari Setiawan, 2021). The purpose of this research is to determine the relationship between independent and dependent variables. The population in this study consisted of all mothers who delivered by caesarean section at RSUD Aek Kanopan. The population included 118 mothers who gave birth by caesarean section from January 2024 to April 2024.

The sampling technique used in this study was purposive sampling, in accordance with the predetermined criteria. The sample in this study consisted of breastfeeding mothers who gave birth via caesarean section at RSUD Aek Kanopan. These were mothers who met the inclusion criteria and agreed to participate as research

subjects. The required sample size for each group was determined using the Slovin formula (3)

This study uses primary data sources, which are sources that directly provide data to the data collector (Sugiyono, 2014). The data collection method employed is a questionnaire or survey, which is a technique of collecting data by giving a set of written questions or statements to respondents to be answered (Sudaryono, 2019).

Result

After conducting the research, the results regarding the factors influencing anxiety in performing early mobilization among post-caesarean section mothers at RSUD Aek Kanopan in 2024 can be described, with a total of 40 respondents.

Univariate Analysis
 The characteristics of respondents based on the factors influencing anxiety in performing early mobilization among post-caesarean section mothers at RSUD Aek Kanopan in 2024 can be seen in the table below:

Table 4.1 Frequency and Percentage Distribution Based on Respondent Characteristics at RSUD Aek Kanopan in 2024.

No Variabel	frekuensi (n)	presentase (%)
1 Mother's age		
<20 years old	2	3,8
20-35 years old	38	73,1
>35 years old	12	23,1
Total	52	100
2 Educational level of mother		
Low level of education	6	11,5
Secondary education	41	78,8
Higher education	5	9,6
Total	52	100

3 Employment status			
Employed	29	55,8	
Unemployed	23	44,2	
Total	52	100	
4 Paritas			
Primipara	4	5,3	
Multipara	21	27,6	
Grandmultipara	27	35,5	
Total	52	100	

Based on Table 4.1, it shows that the majority of respondents were aged 20-35 years, totaling 38 respondents (73.1%).

Table 4.5 Cross Tabulation of the Relationship Between Family Support and Anxiety in Performing Early Mobilization Among Post-Caesarean Section Mothers

Family support	Anxiety about early mobilization				Total		P-Value	
	Mild		Moderate		Severe	n		
	n	%	n	%				
Supportive	20	80	5	50	5	29,4	30 75 0,02	
Unsupportive	5	20	5	50	12	70,6	22 25	

Based on Table 4.5, it shows that the majority of mothers who received family support experienced mild anxiety during early mobilization, totaling 29 individuals (87%). In contrast, most mothers who did not receive family support experienced severe anxiety during mobilization, totaling 10 individuals (66.6%). The Chi-square test results with a 95% confidence level showed a p-value of 0.02, indicating a significant relationship between family support and anxiety during early mobilization.

Discussion

This study demonstrates that family support and pain level are the main factors influencing anxiety in mothers performing early mobilization after a caesarean section. Family support provides security and motivation, while controlled pain reduces both psychological and physical barriers to movement. These findings are consistent

Almost all respondents had a secondary education level, with 41 respondents (78.8%). Most respondents were employed, totaling 29 respondents (55.8%), and nearly one-third of the respondents were multigravida, with 27 respondents (35.5%).

Bivariate analysis

Bivariate analysis is used to determine the relationship between independent and dependent variables, analyzed using the Chi-Square statistical test.

Table 4.5 Cross Tabulation of the Relationship Between Family Support and Anxiety in Performing Early Mobilization Among Post-Caesarean Section Mothers

with previous research indicating that social support and effective pain management are essential for reducing anxiety in postoperative patients.(Manurung, 2023).

1. Respondent Characteristics

Respondent Age: The study results show that the majority of respondents are in the healthy reproductive age range, namely 20-35 years (73.1%). In theory, this age is ideal for childbirth and recovery due to optimal physical condition and organ function. However, despite being physically strong, mothers in this age group often carry a significant psychological burden related to their new role as parents, which, if not managed properly, can trigger anxiety when faced with the first physical mobilization after surgery.

Respondent Education: The majority of respondents had a secondary education (78.8%). Education level

significantly influences how a person receives and processes medical information. Respondents with a secondary education are assumed to have sufficient cognitive ability to understand nurses' instructions, but still require a more in-depth explanation of the benefits of early mobilization to minimize misperceptions about the risk of suture rupture.

Employment Status: The data shows that 55.8% of respondents were working mothers. Employment status is often associated with independence and social interaction. Working mothers tend to have broader access to information, but on the other hand, they may feel anxious about the long recovery time due to the pressure to quickly return to professional activities.

The results of the study showed a significant percentage of parity in the grandemultipara group (35.5%). This is interesting because, logically, mothers who have given birth frequently should be more experienced. However, in the case of a Caesarean section, each surgical experience presents a different physical trauma. Mothers with a higher parity may experience greater physical fatigue due to repeated pregnancies and deliveries, requiring extra motivation to mobilize early.

2. Relationship between Family Support and Anxiety During Early Mobilization

The results of the bivariate analysis showed a significant relationship between family support and maternal anxiety levels during early mobilization, with a p-value of 0.02 ($p < 0.05$). This demonstrates that external factors, such as the presence and support of those closest to them, are important determinants of a mother's psychological recovery process after a

Caesarean section at Aek Kanopan Regional Hospital.

Good Family Support Reduces Anxiety. Data shows that mothers who receive family support mostly experience only mild anxiety (87%). This support can take the form of physical assistance (helping the mother sit or stand), emotional support (providing encouragement and positive words), and informational support. The presence of family provides a sense of security for mothers, so that fear of pain when moving can be displaced by a feeling of support.

Impact of Lack of Family Support: Conversely, respondents who lack adequate family support mostly experience severe anxiety (66.6%). Without support, mothers tend to feel "alone" in the face of severe post-operative pain. This triggers negative thoughts about being unable to move or fears that the surgical wound will open if mobilization is performed. This unaddressed anxiety risks causing mothers to delay mobilization, which can ultimately lead to complications such as delayed uterine contractions or embolism.

Correlation with Psychological Theory: Psychologically, social (family) support functions as a buffer or buffer against stress. In post-C-section mothers at Aek Kanopan Regional Hospital, family support has been shown to be effective in reducing emotional tension. These research findings align with the concept that external motivation from loved ones can increase a person's pain tolerance threshold. When family members reassure them that "mobilization is safe and necessary," mothers feel more confident in confronting their pain.

3. Implications for Nursing Services

These findings emphasize that when providing post-CS nursing care, nurses must not only focus on technical mobilization instructions but also actively involve the family. Nurses at Aek Kanopan Regional Hospital are advised to provide education on early mobilization in pairs (mother and caregiver), so that families know how to properly assist without undue fear.

Family Support and Anxiety:

Family support plays a crucial role in reducing maternal anxiety. Emotional backing encourages mothers to engage in mobilization. The presence of supportive family members can serve as a psychological buffer, motivating mothers to overcome fear and discomfort.(5)

Pain and Anxiety:

Pain after CS contributes directly to anxiety and reluctance to mobilize. Higher pain levels often correlate with increased anxiety. Individual pain responses are influenced by prior experiences, environment, emotional state, and social support.(6)

This aligns with previous studies showing that inadequate pain management can exacerbate stress and delay recovery, highlighting the need for comprehensive post-surgical care

Conclusion

1. The majority of mothers who received family support experienced mild anxiety during early mobilization, totaling 29 individuals (87%). Meanwhile, most mothers who did not receive family support experienced severe anxiety during mobilization, totaling 10 individuals (66.6%). The Chi-square test with a 95% confidence level yielded a p-value

of 0.02, indicating a significant relationship between family support and anxiety during early mobilization.

2. The majority of post-caesarean section mothers with mild labor pain experienced mild anxiety during early mobilization, totaling 29 individuals (87%). In contrast, most post-caesarean section mothers with severe labor pain experienced severe anxiety during mobilization, totaling 10 individuals (66.6%). The Chi-square test with a 95% confidence level yielded a p-value of 0.02, indicating a significant relationship between labor pain and anxiety during early mobilization.

Suggestion

1. **For Hospitals:** Improve monitoring and standard operating procedures for early mobilization.
2. **For Healthcare Providers:** Provide intensive education and support to post-caesarean mothers.

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