The relationship between early mobilization and pain levels in post caesarean section patients using the ERACS method in the anisa ward of PKU Muhammadiyah Bantul General Hospital

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Abstract
Pain is the most common complaint after a cesarean section. Uncontrolled pain will impact the mother's physical health, behavior, and activities after a cesarean section. Pain can inhibit breastfeeding, and severe pain can increase the risk of developing baby blues. Early mobilization is a recommended activity to reduce pain. This study aims to determine the relationship between early mobilization and pain levels in post-cesarean section patients using the ERACS method in the Anisa Ward, RSU (General Hospital) PKU Muhammadiyah Bantul. This study employed a quantitative correlation method using a cross-sectional approach. The sample size was 35 respondents. Data analysis performed was the Spearman rank test. The results showed a relationship between early mobilization and pain levels in post-cesarean section patients in the Anisa Ward, RSU PKU Muhammadiyah Bantul, with a significance value (p-value 0.001 <0.05). The correlation coefficient was 0.531, indicating a moderately positive relationship.

Keywords: cesarean section; early mobilization; pain levels

1. Introduction
Childbirth is a normal event that every woman will experience. Childbirth can be performed in two ways: vaginally and by cesarean section (Titin et al. 2024). Cesarean section is a surgical technique for delivering a fetus from a pregnancy through an incision in the abdomen (Wardhana et al. 2022). Cesarean section is a surgical childbirth procedure proven to reduce maternal mortality rates, especially when vaginal childbirth is risky. According to the Ministry of Health through the Maternal Perinatal Death Notification (MPDN), the maternal mortality rate in 2022 reached 4,005 and increased to 4,129 per live birth in 2023.

Cesarean section has become one of the efforts to overcome various difficulties in the delivery process, resulting in an increasing number of cesarean sections (Titin et al. 2024). The World Health Organization (WHO) recommends a cesarean section rate of 5–15%, but the global cesarean section rate has risen from approximately 7% in 1990 to 21% in 2021. This percentage is projected to continue rising over the next decade, with nearly a third (29%) of all births expected to result in cesarean section by 2030. Globally, Asia ranks second. Data from the 2021 Indonesia Demographic and Health Survey (SKDI) shows that 17% of all births in healthcare facilities in Indonesia use the cesarean section method. Meanwhile, based on data from RISKESDAS in 2018, cesarean section births in Indonesia were recorded at 17.6%, with the Special Region of Yogyakarta ranking fifth with a cesarean section birth rate of 23.05%. The increase in the number of cesarean section surgeries worldwide has led to an increase in the need for perioperative care. One approach is to encourage earlier rehabilitation and discharge of patients. This method is known as Enhanced Recovery After Caesarean Surgery (ERACS) (Humaira et al. 2022).

Cesarean section delivery carries several risks, with common side effects following the procedure including significant increased pain, infection, bleeding, back pain, fatigue, sleep disturbances, and various psychological issues (Rachman, Purnamasari, and Trihandini 2023). Pain is the most commonly reported complaint (Desi 2024). According to data, cesarean section surgery has a higher pain rate of approximately 27.3% compared to normal or spontaneous childbirth (approximately 9%) (Ainiyah and Ratnawati 2024). Uncontrolled pain can affect the patient's physical condition, behavior, and activities. In more severe cases, it may lead to the onset of baby blues syndrome (Suastini and Pawestri 2021). One non-pharmacological technique that can be used to reduce post-operative pain is early mobilization (Santoso, Firdaus, and Mumpuni 2022). By performing early mobilization, it is hoped that the patient's

focus on the pain location can be diverted, reducing the activation of chemical mediators in the inflammatory process that enhance pain responses, and minimizing nerve transmission to the central nervous system (Desi 2024).

Early postpartum mobilization is a movement or activity performed by mothers a few hours after giving birth via cesarean section. Mobilization prevents thrombosis and thromboembolism, and also prevents muscle and joint stiffness, thereby reducing pain (Berkanis, Nubatonis Desliewi, and Lastari A.A Istri Fenny 2020). The gradual implementation of early mobilization in patients following a cesarean section can be an excellent option for reducing pain scores. Early mobilization is an effort to gradually help patients regain independence after a cesarean section, enabling mothers to recover quickly and care for their babies optimally (Syarifah, Ratnawati, and Kharisma 2019).

Previous research conducted by (Kumalasari et al. 2023) entitled The Effect of Early Mobilization on Pain Intensity in Post-Caesarean Section Patients in the Mother and Child Ward of Harapan Anda Islamic General Hospital in Tegal City found that early mobilization affects pain intensity in post-operative patients. A study conducted by (Handajanti 2024) titled "The Effect of Early Mobilization on the Level of Surgical Wound Pain in Post-Cesarean Section Mothers Using the ERACS Method at Darus Syifa Islamic General Hospital in Surabaya" found that early mobilization affects the level of wound pain in post-cesarean section mothers using the ERACS method. Further research by (Berkanis, Nubatonis Desliewi, and Lastari A.A Istri Fenny 2020) titled "The Effect of Early Mobilization on Pain Intensity in Postoperative Patients at RSUD S.K Lerik Kupang in 2018" showed that early mobilization influences pain intensity in postoperative patients. In line with the case study conducted by (Suastini and Pawestri 2021) titled Reduction in Post-Cesarean Section Wound Pain Intensity Using Early Mobilization, there was a decrease in pain intensity after early mobilization was performed gradually, with an average decrease of 5 points on the scale.

Preliminary study results conducted at PKU Muhammadiyah Bantul General Hospital showed that the number of deliveries from January 2024 to November 2024 was 842, with 456 cesarean deliveries using the ERACS method. Based on interviews with 6 patients, after being given early mobilization exercises starting 2 hours post-surgery by moving both legs, then tilting to the right and left, 4 hours of sitting exercises, 6 hours of catheter removal, and standing and walking exercises, 3 patients reported mild pain and no nausea or vomiting. One patient reported still experiencing severe pain and was not yet willing to move. One patient reported moderate pain during standing exercises. One patient reported nausea and vomiting during standing exercises. Patients experiencing moderate to severe pain and nausea and vomiting refused to undergo early mobilization immediately due to ongoing pain, which hindered the breastfeeding process. Observing this phenomenon, the author was interested in researching the relationship between early mobilization and pain levels in patients undergoing cesarean section surgery using the ERACS method at PKU Muhammadiyah Bantul Hospital.

2. Method

The study was conducted at the Anisa Ward of PKU Muhammadiyah General Hospital from May 9 to June 2, 2025. The study used a quantitative correlational research design with a cross-sectional approach. The population in this study consisted of all post-cesarean section patients who underwent ERACS, totaling 35 respondents. The sampling technique used was total sampling. The inclusion criteria for this study were mothers who had undergone a cesarean section using the ERACS method and were aged between 20 and 45 years. The exclusion criteria were mothers who experienced emergencies or complications such as bleeding and severe preeclampsia, and mothers who did not complete the study.

The instrument used to assess early mobilization was a questionnaire developed by the researcher based on the standard operating procedures (SOP) for cesarean section using the ERACS protocol at PKU Muhammadiyah Bantul General Hospital, which had undergone expert review and content validity testing. The researcher also observed the stages of early mobilization from 2 hours post-surgery to 6 hours post-surgery. To measure pain levels, the NRS (Numeric Rating Scale) questionnaire was used, which is a standardized pain measurement tool, so no validity and reliability tests were conducted in this study. The questionnaire was administered to respondents at 10 hours post-surgery. Statistical analysis was performed using the Spearman Rank test.

3. Results and Discussion

3.1. Results

Table 1. Frequency distribution of respondent characteristics

Respondent characteristics	Frequency (f)	Percentage (%)
Age		
20 - 25	3	8,6
26 - 35	28	80,0
36 – 45	4	11,4
Total	35	100,0
Levels of education		
Elementary school	0	0
Junior high school	2	5,7
senior high school	19	54,3
Associate degree	5	14,3
Bachelor's degree	9	25,7
Total	35	100,0
Work		
Working	14	40,0
Not working	21	60,0
Total	35	100,0
Parity status		
Primipara	11	31,4
Multipara	24	68,6
Total	35	100,0
History of cesarean section		
Once	19	54,3
More than once	16	45,7
Total	35	100,0

Primary data sources 2025

Table 1 shows that the most common age range among respondents was 26–35 years old, with 28 respondents (80.0%). Based on educational characteristics, the majority had a high school education, with 19 respondents (54.3%). Based on occupational characteristics, the majority were housewives, with 21 respondents (60.0%). Based on parity status, the majority of respondents were multiparous mothers, with 24 respondents (68.6%). Based on previous cesarean section history, the majority of respondents had undergone a cesarean section once before, with 19 respondents (54.3%).

Table 2. Cross tabulation of early mobilization with post-caesarean section pain levels using the ERACS method in the Anisa Ward of PKU Muhammadiyah Bantul General Hospital

Early mobilization	Pain level			Total
	Mild (f) (%)	Moderate (f) (%)	Severe (f) (%)	
Good	7	23	0	30
	23,3	76,7	0,0	100,0
Not good	0	2	3	5
	0,0	40,0	60,0	100,0
Total	7	25	3	35
	20,0	71,4	8,6	100.0

Primary data sources 2025

Table 2 shows that early mobilization is divided into two categories: good mobilization and poor mobilization. In terms of pain levels, there are three categories: mild pain, moderate pain, and severe pain. The results of the study on patients with good mobilization showed 30 respondents (85.7%), with the majority experiencing moderate pain (23 respondents, 76.7%) and mild pain (7 respondents, 23.3%).

Meanwhile, in the poor mobilization category, there were 5 respondents (14.28%), with 3 respondents (60%) experiencing severe pain and 2 respondents (40%) experiencing moderate pain.

Table 3. Relationship between early mobilization and pain levels in post-cesarean section patients using the ERACS method at the Anisa Ward of PKU Muhammadiyah Bantul General Hospital

Results		Mobilization	Pain level
Early mobilization	correlation coefficient	1,000	0,531
	Sign (2-tailed)		0,001
Pain level	correlation coefficient	0,531	1,000
	Sign(2-tailed)	0,001	

Primary data sources 2025

Table 3 shows the results of the Spearman Rank test, which indicates a relationship between early mobilization and pain levels in post-cesarean section patients using the ERACS method at the Anisa Ward of PKU Muhammadiyah Bantul General Hospital, with a significance value of 0.001 ($p < 0.05$). The correlation coefficient value is 0.531, indicating a moderate positive relationship between early mobilization and pain levels, meaning that the better the early mobilization, the lower the pain levels.

3.2. Discussion

3.2.1. Early Mobilization in Post-Caesarean Section Patients Using the ERACS Method in the Anisa Ward of PKU Muhammadiyah Hospital Bantul.

Early mobilization after cesarean section is movement performed by the mother a few hours after delivery. Early mobilization aims to gradually train the patient's independence and also to prevent various complications. The sooner mobilization occurs, the better. However, some mothers are afraid to perform early mobilization because of pain, even though early mobilization can reduce the sensation of pain.

Early mobilization involves moving as soon as possible while in bed, training the body to stretch, which is beneficial for healing wounds in mothers after a cesarean section (Ginting, Utami, and Novryanthi 2024). To prevent complications after surgery, mothers should immediately begin mobilization according to the appropriate stage. Therefore, after undergoing a cesarean section, mothers are advised to mobilize as soon as possible. Early mobilization exercises can also improve blood circulation, stimulate gastrointestinal function, and reduce pain intensity (Uzlifatul and Oktaviyana 2025). Active mobilization accelerates the healing process of surgical wounds, which helps mothers feel comfortable while breastfeeding and allows them to care for their children independently (Titin et al. 2024).

Based on the research results, it was found that the majority of respondents had good mobility, with 30 respondents (85.7%) and poor mobility in 5 respondents (14.28%). Based on the research results, it was found that the majority of respondents had good mobility, with 30 respondents (85.7%) and poor mobility in 5 respondents (14.28%). The majority of respondents were able to perform mobilization steps starting from the recovery room, where 30 minutes after surgery, patients were already drinking sweet drinks, then after 2 hours, they began exercises to move their arms, fingers, and ankles, as well as exercises to tilt to the right and left, and they had already started eating solid food. Four hours after surgery, the mother was able to sit up in bed. Six hours after surgery, she could dangle her legs over the edge of the bed. Most mothers still required assistance from family members during standing exercises, but the majority could walk around the bed independently. However, nearly all mothers were unable to breastfeed their babies independently six hours after surgery and still required assistance from family members or staff. Early mobilization can be performed by post-cesarean section patients, as prior to the cesarean section procedure, patients first receive education from healthcare providers about post-cesarean section care using the ERACS method.

Early mobilization can be influenced by several factors such as age, occupation, education level, parity, and history of cesarean section. The majority of respondents were in the 26-35 age range, with 28 respondents (80%) able to mobilize well, namely 25 respondents (89.3%). The age range of 26–35 years falls within the early adult and productive age group, where respondents are physically ready to become mothers and have mature mobility and motor function capabilities. At the age of 21–35,

individuals are considered adults, making it easier for them to understand and follow the mobilization steps provided to manage pain, as the ability to perform mobilization decreases with age. Muscle and spinal flexibility decreases with age, influenced by physical condition. Age is often associated with unstable psychological conditions, triggering anxiety, which can make the perceived pain more severe. Tolerance increases with age, along with understanding of pain (Dartiwen 2023).

The majority of respondents had a high school education level, with 19 respondents (54.3%) and 16 respondents (84.2%) able to mobilize well. High school education is classified as a secondary education level. At the secondary education level, individuals are considered capable of easily absorbing information, both formal and informal, compared to those with lower educational backgrounds. Individuals are more capable of thinking rationally to perform the skills provided by nurses in conducting early mobilization correctly. Mothers with higher educational levels tend to better understand the importance of early mobilization. An individual's educational level correlates with their understanding of information (Dartiwen 2023). Differences in educational background can influence an individual's level of knowledge in managing pain levels and their ability to perform early mobilization in accordance with the steps involved in early mobilization to control pain levels. Educational level can influence an individual's way of thinking, where the higher the educational level, the higher the knowledge (Aisyah Nilam Cahyani and Maryatun Maryatun 2023). The research findings indicate that the majority of mothers are not employed (21 respondents, 60%), with most being able to mobilize effectively (19 respondents, 90.5%). The results of this study are consistent with the research (Endang Ekawati, Meity Albertina, and Hesti Prawita Widiastuti 2024), with the majority being housewives, totaling 31 respondents, accounting for 61% of the sample. Occupation can influence an individual's ability to control pain levels through early mobilization (Endang Ekawati, Meity Albertina, and Hesti Prawita Widiastuti 2024). According to the researchers, mothers who do not work do not have the burden of work, unlike working mothers who face job demands that can lead to stress during the recovery period, affecting their ability to control pain levels through early mobilization.

The results of the analysis on parity status showed that the majority of mothers were multiparous, with 24 respondents (68.6%). Both multiparous and primiparous mothers had good mobility. This study is inconsistent with the findings of (Kumalasari et al. 2023), which reported that the majority were multiparous women, totaling 21 mothers (65.6%). First-time mothers tend to feel more anxious compared to those who have previously given birth. Multiparous mothers are more experienced compared to primiparous mothers.

Based on the history of previous cesarean sections, the majority of respondents were mothers who had undergone their first cesarean section, totaling 19 (54.3%), with 15 respondents (76.95%) being able to mobilize well. Theoretically, experience is one of the factors influencing the process of early mobilization, as knowledge gained from previous experiences provides an understanding of mobilization and the pain experienced. Mothers who have previously undergone a cesarean section are already aware of early mobilization and may have even undergone the early mobilization process. Therefore, these mothers should be better able to perform early mobilization effectively compared to those who have never undergone a cesarean section.

3.2.2. Pain Levels in Post-Caesarean Section Patients Using the ERACS Method in the Anisa Ward of PKU Muhammadiyah Bantul General Hospital

Pain can be divided into several levels, ranging from no pain (0), mild pain (1-3), moderate pain (4-6), severe pain (7-9), and very severe pain (10). In this study, pain intensity was measured using the Numeric Rating Scale (NRS) and assessed at 10 hours post-cesarean section. The results showed that most respondents were at the moderate pain level (25 respondents, 71.4%), mild pain (7 respondents, 20%), and severe pain (3 respondents, 8.5%). Moderate pain ranged from a scale of 4 to 6. On a pain scale of 4, there were 11 respondents (44%), on a pain scale of 5 there were 12 respondents (48%), and on a pain scale of 6 there were 2 respondents (8%). Patients with mild pain were all at level 3, while those with severe pain included 2 respondents (66.6%) at level 7 and 1 respondent (33.35%) at level 8.

Each patient experiences pain of varying intensity. Pain has a negative impact and can disrupt comfort for individuals who experience it (Nurani, Huda, and Argarini 2024). Factors that can influence an individual's pain level include incision wounds on the abdominal area. These wounds cause pain in patients. According to (Kumalasari et al. 2023), pain in post-operative patients is caused by mechanical

stimulation, specifically the incision wound, which triggers chemical mediators such as histamine, bradykinin, acetylcholine, and substance P. These substances increase the sensitivity of pain receptors, leading to pain sensations. In addition to substances that can stimulate pain sensitivity, the body also has substances that can inhibit pain, such as endorphins and dynorphins, which can reduce pain perception. Pain is a personal experience that is expressed differently in each individual (Dirgahayu 2020).

According to (Syarifah, Ratnawati, and Kharisma 2019), pain is influenced by several factors, including age, parity, and previous history of cesarean section. Age is very important in perceiving and expressing pain. Adult patients have different responses to pain compared to children and the elderly. Age influences pain response because pain is a subjective sensation experienced by each individual. The pain felt by each person varies depending on their pain threshold; as age increases, tolerance to pain also increases (Syarifah, Ratnawati, and Kharisma 2019). In this study, age did not significantly affect the pain scale in post-cesarean section mothers. This was because the characteristics of the respondents in this study were aged between 20 and 45 years. The most common age group was 26-35 years, with the majority experiencing moderate pain. The respondents fell into the young adult to late adult age category. Respondents with severe pain were in the age range of 36–45 years (2 respondents) and 26–35 years (1 respondent). Adults experience neurophysiological changes and may experience a decrease in sensory stimulus perception and an increase in pain threshold (Nisak, Kusumastuti, and Munawati 2023). According to (Marfuah et al. 2019), women in the 26-35 age range are in optimal reproductive condition and psychologically mature enough to control their emotions, including managing pain. As respondents age, the intensity of pain they experience increases. Pain intensity is higher in older patients than in younger adults (Rahmayati, Hardiansyah, and Nurhayati 2018).

According to (Syarifah, Ratnawati, and Kharisma 2019), past childbirth experiences can influence a mother's pain threshold. Primiparous mothers giving birth to their first child will experience more pain than multiparous mothers. This can be influenced by the psychological maturity and pain experiences of multiparous mothers during previous births. A decrease in pain intensity can be influenced by multiparous parity, which has prior childbirth experience. If the previous experience was positive in navigating the childbirth process, the mother will be better equipped to manage childbirth pain (Dartiwen 2023). The research findings indicate that the majority of primiparous and multiparous mothers experience moderate pain levels. This research does not align with the findings of (Syarifah, Ratnawati, and Kharisma 2019) which showed that respondents with multiparous parity predominantly experienced moderate pain levels, with 14 individuals (56%) reporting such levels.

Based on the history of previous cesarean sections, the majority of respondents were mothers who had undergone their first cesarean section, totaling 19 (54.3%). This study aligns with the findings of (Uzlifatul and Oktaviyana 2025), which reported that 21 respondents (70%) had never undergone surgery. According to Menurut (Syarifah, Ratnawati, and Kharisma 2019), someone who has successfully managed pain in the past will find it easier to manage the same pain if it reoccurs.

3.2.3. The relationship between early mobilization and pain levels in post-cesarean section patients using the ERACS method in the Anisa ward of PKU Muhammadiyah Bantul General Hospital.

The results of the cross-tabulation between early mobilization and pain levels showed that the majority of patients were able to mobilize well, with 30 respondents (85.7%) experiencing moderate pain levels, 23 respondents (76.7%) experiencing mild pain levels, and 7 respondents (23.3%) experiencing severe pain levels. Meanwhile, among those with poor mobilization, there were 5 respondents, with 2 respondents (40%) experiencing moderate pain and 3 respondents (60%) experiencing severe pain. There were 2 respondents with poor mobilization but at a moderate pain level, with the pain felt at a level of 6. The patients were only able to perform early mobilization according to the stages at 4 hours post-surgery, where they could sit leaning against the bed, with an early mobilization score < 5. The patients were aged between 26 and 35 years old, with primiparous and multiparous parity, but both were undergoing their first cesarean section. Patients with mild to moderate pain were able to mobilize early with a score > 6. However, patients with severe pain were only able to mobilize at the stage of moving their arms, fingers, and rotating their ankles. On scale 7 are mothers aged 36–45 years, with a high school education, employed, multiparous, but with a history of cesarean

section: 1 respondent underwent the procedure for the first time, and 1 respondent had previously undergone a cesarean section but not using the ERACS method. Patients with a pain scale of 8 were aged between 26 and 35 years old, had a DIII education, were working mothers, primiparas, and had undergone their first caesarean section. All patients with severe pain were afraid of early mobilization due to concerns about pain. Mothers with poor mobilization will hinder the process of combined care and breastfeeding their babies.

In pain management efforts, nurses and midwives have provided pharmacological therapy with analgesics. However, to maximize results, pharmacological therapy is performed in conjunction with non-pharmacological therapy. An example of non-pharmacological therapy is early mobilization, as it can distract the patient's concentration. If early mobilization is not performed, it can lead to significant disadvantages for the patient, one of which is an increase in pain intensity (Kumalasari et al. 2023). In patients who have undergone a cesarean section and are restricted in their movements or do not perform mobilization at all, it becomes increasingly difficult to begin walking (Karyati, Aulia, and Wardana 2021). Early mobilization management using a gradual approach and in accordance with standard operating procedures (SOPs) can accelerate the process of reducing pain levels in post-operative cesarean section patients (Nurvinanda et al. 2022). Proper implementation of early mobilization will help reduce concentration on the pain site, similar to distraction techniques. Early mobilization also has therapeutic effects, including reducing nerve conduction diameter, which decreases pain perception, reducing inflammatory responses in tissues, and reducing edema. Indirectly, early mobilization reduces inflammatory mediators that activate and sensitize pain nerve endings, thereby decreasing perceived pain (Novita Dwi Safitri and Annisa Andriyani 2024).

ERACS is a cesarean section surgical method with an approach to optimize maternal health before, during, and after surgery. The aim is to accelerate mobility and the postpartum healing process while minimizing pain experienced by the mother (Nisak, Kusumastuti, and Munawati 2023). Research findings indicate that the majority of patients are able to achieve early mobilization effectively and experience moderate pain levels. This study aligns with research by (Hanifah, Rostianingsih, and Siantar 2023), which found that 100% of postpartum mothers who underwent ERACS cesarean section were able to achieve early mobilization, whereas 90% of those who underwent conventional cesarean section were unable to do so. The majority of mothers who underwent cesarean section using the ERACS method experienced moderate pain (83.6%), while those who underwent the conventional method experienced severe pain (16.4%). The study does not align with the research by (Ainiyah and Ratnawati 2024), which showed that the majority of mothers who underwent the ERACS method at H.A Zaky Djunaid Hospital experienced mild pain on a scale of 1-3, with 47 respondents (90.4%).

The Spearman rank test results show a relationship between early mobilization and pain levels. This is supported by a p-value of 0.001, which is less than 0.005, so Ho is rejected and Ha is accepted. The correlation coefficient value is 0.531, which means that the relationship between early mobilization and pain levels is a moderate positive relationship, where the better the early mobilization, the lower the pain level.

This study is supported by research from ((Kumalasari et al. 2023) based on statistical calculations that the probability/significance level is 0.000 (p value $\leq$ 0.05). This can be concluded that there is a difference in pain intensity before and after the intervention, namely early mobilization. This study aligns with the research by (Nurvinanda et al. 2022), which showed a significant difference in pain levels among respondents between the pretest and posttest, with a p-value of 0.032, indicating that the p-value is less than 0.05 (<0.05). Thus, there is a significant effect on pain levels between the pretest and posttest, indicating that early mobilization in mothers with post-cesarean section is highly effective in reducing pain levels. Furthermore, research by (Rachman, Purnamasari, and Trihandini 2023) based on data analysis using the chi-square test yielded a significance value of 0.000. This means that with a p-value < 0.05, it can be concluded that early mobilization is associated with a reduction in pain intensity.

Based on this study, it appears that early mobilization has a significant effect in reducing pain intensity as an adjunct to pharmacological treatment. Early mobilization can be performed independently by post-cesarean section mothers with guidance according to the existing stages. The ERACS method is considered effective in accelerating post-operative mobilization following a cesarean

section. Early mobilization using the ERACS method is believed to help reduce discomfort in post-operative patients and shorten hospital stay duration.

4. Conclusion

Based on the study, it can be concluded that there is a relationship between early mobilization and pain levels in post-cesarean section patients using the ERACS method at the Anisa Ward of PKU Muhammadiyah Bantul General Hospital, with a p-value of 0.001 ($p<0.05$). Early mobilization in post-cesarean section patients using the ERACS method falls into the "good mobilization" category, with 30 respondents (85.7%). The pain level of post-cesarean section patients using the ERACS method is in the moderate pain category, with 25 respondents (71.4%). The correlation coefficient value of 0.531 indicates a moderate positive relationship between early mobilization and pain levels, meaning that the better the early mobilization, the lower the pain level.

This study is expected to provide information about the relationship between early mobilization and pain levels in post-cesarean section patients using the ERACS method. The results of this study can be used for the development and advancement of maternal nursing science related to the benefits of early mobilization as a non-pharmacological therapy to reduce pain intensity. For future researchers, this study can be used as material or a source of data for further research.

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