



Patient Satisfaction Level of Enhanced Recovery after C-Section at Abby Maternal and Child Hospital Lhokseumawe

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ABSTRACT

Enhanced recovery after surgery (ERAS) is a multimodal approach to optimize perioperative management and postoperative outcome. In the field of obstetrics, the implementation of ERAS, called enhanced recovery after caesarian section (ERACS), is still quite lagging behind compared to other surgical specialties. This study aims to describe patient satisfaction with the ERACS method in anesthesia services at Abby Maternal and Child Hospital, Lhokseumawe. This study is a descriptive study and was conducted on post-caesarean section patients who were treated at Abby Maternal and Child Hospital, Lhokseumawe. The sampling technique used purposive sampling technique with a population of 46 respondents. The results of the analysis showed that 45 respondents (97.8%) were satisfied with the service at the hospital after undergoing a cesarean section with the ERACS method of pain management at Abby Maternal and Child Hospital, Lhokseumawe. Most respondents experienced mild pain (87%) and were able to mobilize early after cesarean section and carry the baby for breastfeeding (95.7%). The side effects felt were nausea and vomiting in 8 patients (17.4%) and chills in 11 patients (23.6%). In conclusion, the majority of respondents stated that they were satisfied with the ERACS method of pain management at postoperative C-sections.

1. Introduction

Caesarian section (C-section) is a birth method by making an incision in the uterine wall through the anterior abdominal wall, and uterine wall provided the uterus is intact and the fetus weighs more than 500 grams. The incidence of cesarean section in Indonesia has increased, with the percentage of mothers giving birth using a cesarean section in 2005 as many as 51.59%, in 2006 as many as 53.68%, and in 2009 as many as 22.8%.¹⁻³

Enhanced recovery after surgery (ERAS) aims to reduce patient stress during surgery, promote rehabilitation and accelerate recovery. The ERAS method of pain management has been shown to

reduce patient length of stay, reduce postoperative complications, and increase patient satisfaction. The use of ERAS has been applied in the field of surgery, one of which is in the field of obstetrics. Enhanced recovery after caesarian section (ERACS) is a recovery program after caesarian section (C-section) that is considered to be able to provide faster functional recovery results, as well as other benefits such as minimizing the occurrence of complications and shortening the length of hospital stay. The implementation of the ERACS program is also considered to provide other benefits, such as improving the quality of care and reducing exposure to

and addiction to opioids. ERACS aims to provide patient comfort with an excellent service experience as well as speed up patient care & recovery process by prioritizing patient safety.⁴⁻⁶ This study aimed to describe patient satisfaction with the ERACS method in anesthesia services at Abby Maternal and Child Hospital, Lhokseumawe.

2. Methods

The method used in this research is the descriptive method. The study was conducted at Abby Maternal and Child Hospital, Lhokseumawe. The population of this study was patients who underwent C-Section surgery and postoperative pain management with the ERACS method. The sample inclusion criteria were mothers aged 20-40 years and willing to participate in this study. Sampling using a purposive sampling technique. A total of 46 mothers participated in this study. All respondents have given informed consent and signed consent to participate in the study. This

study has received approval from the ethical committee of the Faculty of Medicine, Universitas Malikussaleh, Lhokseumawe, Indonesia.

The data collection period is for 3 months, starting from June-August 2022. Data collection is carried out using a structured questionnaire. Assessment of patient satisfaction was measured by a Likert scale. The data obtained will be presented descriptively in the form of tables and narratives.

3. Results and Discussion

The results showed that the majority of mothers who underwent C-sections with ERACS pain management were aged 20-35 years (87%), highly educated (73.9%), multiparity (73.9%), and unemployed (58.7%) (Table 1). The majority of patients expressed satisfaction with pain management with the ERACS method (97.8%) (Table 2). Patient satisfaction is generally influenced by their perceptions and expectations of the medical services they receive.^{6,7}

Table 1. Characteristics of respondents.

Characteristics	Frequency (n=46)	Percentage (%)
Maternal age		
< 20 years	0	0
20-35 years	40	87
> 35 years	6	13
Education		
High school	12	26.1
University/equivalent	34	73.9
Parity		
Primiparous	12	26.1
Multipara	34	73.9
Occupation		
Working	19	41.3
Not Working	27	58.7
History of C-section		
Ever	27	58.7
Never	19	41.3

Table 2. Respondents' satisfaction level with the ERACS method.

Level of satisfaction	Frequency	Percentage (%)
Satisfied (score 81-135)	45	97.8
Dissatisfied (score 26-80)	1	2.2
Total	46	100

Table 3. Pain level after ERACS method of pain management.

Category	Frequency	Percentage (%)
No pain	6	13.0
Mild pain	40	87.0
Moderate-severe pain	0	0

Table 3 shows the distribution of respondents' pain levels after undergoing C-section with ERACS pain management. The majority of patients experience mild pain after undergoing surgery. In this study, none of the patients experienced moderate or severe pain. The low postoperative pain scale with the ERACS method is very likely due to optimal postoperative multimodal analgesia, which can be achieved through a multidisciplinary approach. Postoperative pain management has become an important issue related to faster recovery after surgery. Meanwhile, the use of

opioids is an important aspect of postoperative pain control in patients undergoing cesarean section, where excessive use of opioids will bring side effects that affect the health of mothers and newborns.^{8,9} In particular, the multimodal approach to opioid-sparing pain control (non-opioid drugs or opioid substitutes) used in the ERACS method also brings other benefits, such as earlier restoration of gastrointestinal function, early ambulation, fetal protection, and reduced risk of maternal abuse of opioids.

Table 4. Mobilization of postoperative C-section patients.

Early mobilization	Frequency	Percentage (%)
Yes	44	95.7
No	2	4.3
Total	46	100

Table 4 states that most of the patients were able to mobilize early post-cesarean section with the ERACS method of pain management (95.7%). A mother who has just undergone a cesarean section will experience dependence when carrying out activities.

Mobilization as soon as possible after the C-section will help the recovery process, help the patient to move independently as before, and avoid complications due to prolonged bed rest.¹⁰

Table 5. Carried babies by respondents.

Category	Frequency	Percentage (%)
Yes	44	95.7
No	2	6.5
Total	46	100

Table 5 shows the majority of patients were able to hold the baby postoperatively (95.7%). Delivery by the caesarian section will have an impact on the mother and baby. Pain in the incision after cesarean section makes the mother reluctant to move her body, even though early mobilization is highly recommended in order to gain strength, assist the recovery process and facilitate the work of the colon and bladder. A study states that the ERACS method can increase maternal

satisfaction and maternal and infant attachment.¹¹ Pain management with the ERACS method makes it easier for mothers to start exclusive breastfeeding for their babies.

Another study stated that complications in the postoperative caesarian section could be prevented by early mobilization as soon as possible, according to the stages. In the ERACS protocol, early mobilization begins in the treatment room by 1) Level 1 mobilization

is carried out by sitting back in bed for 15 to 30 minutes; 2) Level 2 mobilization is done by sitting on the side of the bed with legs dangling for 5 to 15 minutes; 3) Level 3 mobilization is done standing up; 4) Level 4 mobilization is done by walking. A reduction in the length of hospitalization <1 day already

represents a faster recovery and accelerated clinical significance. Early mobilization can improve pulmonary tissue function and oxygenation, reduce the risk of thromboembolism, and shorten the duration of hospitalization.¹¹

Table 6. Postoperative C-section side effects in patients.

Side effects	Frequency (n, %)
Nausea and vomiting	
Yes	8 (17.4)
No	38 (82.6)
Shivering	
Yes	11 (23.6)
No	35 (73.4)

Based on the side effects experienced by patients, the majority of patients did not experience nausea and vomiting (82.6%). Nausea and vomiting is a complication that often occurs due to spinal anesthesia. Postoperative nausea and vomiting can cause morbidity, including dehydration, electrolyte imbalance, suture tension, bleeding, vascular hypertension, esophageal rupture, and airway problems. This, of course will result in delays in the discharge of patients, which will have an impact on increasing treatment costs. Women who are about to give birth have experienced nausea and vomiting because of their own pregnancy. This applies not only to the first 3 months of pregnancy but also to the third and final trimesters due to reduced esophagogastric protrusion and increased intra-abdominal pressure. There is no single drug or type that can effectively completely control postoperative nausea and vomiting. The multimodality approach to the ERACS method needs to consider risk factors for nausea and vomiting in patients. Patients with 1-2 risk factors should ideally require a combination of 2 prophylactic drugs, whereas patients with more than 2 risk factors should receive 2-3 types of antiemetics.¹²

Most of the patients in this study did not experience the side effect of chills (73.4%). Patients who underwent cesarean section reported chills associated with the use of spinal anesthesia. Shivering

has the potential to have adverse effects on the patient, including increased oxygen consumption and hypoxaemia, aggravating surgical pain, and hindering the patient's observation process. In addition, shivering is also considered an important clinical problem to receive attention, especially because it affects patient comfort and increases metabolic demands, which can cause cardiovascular problems and complications. Postoperative shivering not only causes a bad feeling for the patient but also increases the body's metabolism and, as a result, increases heart rate, cardiac output, and ventilation volume. In addition, increased tension in the incision area and postoperative shivering can cause vasoconstriction, hypoperfusion, and metabolic acidosis. Shivering can also affect platelet function, interfere with cardiac repolarization, and delay most drug metabolism.¹³⁻¹⁵

4. Conclusion

Most of the patients stated that they were satisfied with the pain management using the ERACS method.

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