

THE EFFECT OF PREOPERATIVE TEACHING ON THE ANXIETY LEVEL OF SECTIO CAESAREA PATIENTS WITH ERACS SYSTEM IN KARANGANYAR

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Article Info	ABSTRACT
<p>Correspondence Author:</p> <p>Rini Rahmawati Kusuma Husada University Surakarta Email: rini56564@gmail.com</p>	<p>Background: Cesarean section delivery(SC) is the removal of the fetus through initiation made on the abdominal wall and uterus. This procedure is considered major abdominal surgery. To reduce pain and increase early mobilization, a sectio caesarea delivery method was developed with the concept of ERACS (Enhanced Recovery After Cesarean Section) which is more comfortable because the surgery process is less painful and the recovery process after surgery is faster. This study aims to determine the effect of preoperative teaching on the anxiety level of sectio caesarea patients with the ERACS system at Jati Husada General Hospital Karanganyar.</p> <p>Methods: This type of research is a quantitative research with a quasi-experiment design. The sample size of this study was 30 women who gave birth by cesarean section with the ERACS system at Jati Husada General Hospital Karanganyar.</p> <p>Results: There is an influence of preoperative teaching on the anxiety level of caesarean section patients with the ERACS system at Jati Husada General Hospital, Karanganyar with a p value of $0.000 < 0.05$. The anxiety level of Sectio Caesarea delivery mothers with the ERACS System at Jati Husada General Hospital Karanganyar before being given preoperative teaching was included in the category of moderate anxiety (76.7%) and after being given preoperative teaching was included in the category of mild anxiety (100.0%).</p> <p>Conclusion: Preoperative teaching has been proven effective as an alternative to reduce the level of anxiety of caesarean section patients with the ERACS system.</p>
<p>Keywords: ERACS System, Sectio Caesarea, Preoperative Teaching, Delivery, Anxiety</p>	

INTRODUCTION

There are several methods in giving birth, starting from normal childbirth, which is childbirth that takes place with the mother's own strength through the mother's birth canal, recommended childbirth, which is childbirth that starts on its own but only takes place after the rupture of the amniotic membrane, the administration of pitocin and prostaglandins, artificial childbirth, which is childbirth assisted by external forces such as *Vacuum Extraction*, *Forcep*, or perform *Sectio Caesarea surgery* (Subiastutik, E. and Maryantri, 2022) Childbirth by the *sectio caesarea method* is carried out based on medical indications from both the mother and the fetus, such as placenta previa, abnormal presentation or location of the fetus, and other indications that can endanger the life of the mother and fetus (Lara Pramita, dan Hedy Hardiana, 2024)

Caesarean section does have advantages and disadvantages. The advantages of *Caesarean section* are that the patient can determine the date and schedule of the surgery himself, the patient does not want to feel pain or pain in childbirth, does not want to undergo the delivery process for a long time, does not want to experience injuries or trauma to the birth canal, trauma in vaginal delivery (previous bad obstetric history such as repeated miscarriages, IUFD), husband or family cannot bear to see the pain of childbirth experienced by the patient (Ayuningtyas et al., 2018)

A disadvantage in post *sectio caesarea* (SC) patients is the fear of early mobilization due to pain. About 60% of patients suffered from very severe pain, 25% moderate pain and 15% mild pain (Rizal et al., n.d.). The impact of non-early mobilization in post-SC patients can pose physiological hazards (Santoso et al., 2022). Physiological dangers include disrupting the body's metabolic system, decreased metabolic rate, disrupted carbohydrate, protein and fat metabolism, disrupted electrolyte and calcium balance, affecting the gastrointestinal system such as disrupted appetite, decreased peristaltics with fecal impaction and constipation (Zuleikha et al., 2022). Immobilization also increases the risk of complications in the respiratory system, including: hypostatic pneumonia and atelectasis and pulmonary embolism. In addition, the risk of urinary tract infections also increases and the risk of joint contractures and muscle atrophy (Ferinawati & Hartati, 2019)

To reduce pain and increase early mobilization, a *caesarean section method of delivery* was developed with the concept of ERACS (*Enhanced Recovery After Cesarean Section*) which

is more comfortable because the surgery process is less painful and the recovery process after surgery is faster than *conventional* cesarean section (Hanifah et al., 2023) The ERACS concept was developed from the ERAS (*Enhanced Recovery After Surgery*) concept which has been used in digestive surgery and has been proven to minimize the length of treatment and complications after surgery, resulting in increased patient satisfaction (Purnaningrum et al., 2023) The concept of ERAS has begun to be applied to surgeries other than digestive surgery, one of which is applied to *sectio caesarean surgery* (Tika et al., 2022)

The World Health Organization (WHO) says that between 5 to 15% of all births worldwide were performed by cesarean section in 2018. Every year, 19.06% of every 1000 births in Indonesia are performed by Caesarean section (WHO, 2019) The Ministry of Health's Working Report (2020) says that around 29.0% of women in Indonesia feel anxious during childbirth. Anxious and afraid of making mistakes or sinning. This fear stems from the belief and worry that babies will be born with defects (Widyastuti et al., 2020)

Anxiety is a person's feeling when they don't know what's wrong. Anxiety causes pre *sectio caesarea* (SC) patients, such as seeing pain during surgery, fear of surgery failure, bleeding, and so on (Fatmawati & Pawestri, 2021)

Nurses as healthcare providers play an important role in helping patients prepare before the implementation of surgery by determining possible solutions to identify, prevent, or reduce the causes of patients' anxiety and worries (dinas kesehatan, 2023) Perioperative nurses must have the knowledge and skills necessary to assess, diagnose, plan, intervene, and evaluate intervention outcomes. Before surgery, perioperative nurses should assess and prepare surgical patients by addressing their physiological, spiritual, and psychological reactions to surgery (Suparto et al., 2023)

Providing comprehensive and accurate information and education to preoperative patients *about* the action plan, procedures, and therapies to be carried out, along with all the dangers and side effects that may occur can help reduce the patient's anxiety before undergoing a *caesarean section* (Doan L & Blitz J, 2020) Previous research has shown that *preoperative teaching* with the brochure lecture method for heart patients in China can reduce anxiety and shorten the healing time (Guo et al., 2012)

Based on the results of a preliminary study at Jati Husada General Hospital, data was obtained on the number of patients who gave birth by *cesarean section* with the ERACS system in May 2024 as many as 34 people. The results of interviews conducted by researchers with 7 pregnant women who were going to give birth by cesarean section with the ERACS system, 5 people reported that they felt anxious about the possibility of giving birth by cesarean section because they had never experienced it, while 2 people stated that they were not too anxious because they were resigned to the destiny of Allah SWT. Patients who feel anxious also don't know how to cope with their anxiety about giving birth by caesarean section with the ERACS system. The hospital's efforts to lower the patient's anxiety level are to ask the patient to pray and ask the family to provide support to the expectant mother.

The decision to have a caesarean section (SC) is a stressful one. The process of cesarean section can be hampered by the patient's inability to control his anxiety which can worsen the patient's condition (Suciawati et al., 2023) High anxiety and depressive symptoms due to fear, worry and uncertainty about surgery can worsen physiological parameters before and during anesthesia, and can result in a long recovery (Annisa & Ifdil, 2016) This is in line with previous research which said that patients who undergo *cesarean delivery* tend to experience anxiety (Shinta Nur Rochmayani & Kholifatul Umma, 2019)

METHOD

The type of research used in this study is quantitative research, using a quasi-experiment *method*. The design of this study applies the *One Group Pretest-Post test design*. This research was carried out by carrying out observations twice before the experiment (*pretest*) and after the experiment (*posttest*) on the research subject. The sample in this study is all women who gave birth *sectio caesarea* with the ERACS system at Jati Husada General Hospital Karanganyar in September 2024 as many as 30 people. The sampling technique used is *purposive sampling*.

In this study, the research instrument used was the State-Trait Anxiety Inventory (STAI) questionnaire. STAI consists of two categories, namely State Anxiety and Trait Anxiety. The State Anxiety Scale consists of 20 statements used to evaluate the feelings of anxiety felt by respondents at this time that arise at a certain time such as facing an exam or surgery. While Trait Anxiety also consists of 20 statement items to evaluate general

anxiety. The State Trait Anxiety Inventory uses a Likert scale with four answer choices that respondents can choose according to what they feel, namely a score of 4 for the option of feeling very much, a score of 3 for the answer feeling quite a bit, a score of 2 for feeling a little, and a score of 1 for the answer not feeling. This score is used for items that indicate anxiety. For items of absence of anxiety, the assessment is carried out in reverse. The STAI score ranges from 20 to 80. This study uses the STAI-S because it aims to evaluate the feelings of anxiety felt by respondents at this time that arise when facing a CS operation. This study has obtained ethical permission from the Health Research Ethics Committee of Kusuma Husada University Surakarta with document number 2356/UKH.L.02/EC/X/2024.

RESULTS

Table 1. Distribution of Respondent Characteristics

Characteristics	Frequency	Percentage
Age		
< 20 Years	0	0,0%
20-35 Years	29	96,7%
> 35 Years Old	1	3,3%
Education		
SMP	4	13,3%
SMA	18	60,0%
Diploma	8	26,7%
Bachelor	0	0,0%
Work		
IRT	17	56,7%
Private Employees	13	43,3%
Paritas		
Primigravida	13	43,3%
Multigravity	17	56,7%

Source : Primary Data Processed 2024

Table 1. shows that based on age, the most respondents are maternity mothers aged 20-35 years, which is 29 people (96.7%). Based on education, the most respondents were maternity mothers with a high school education, namely 18 people (60.0%). Based on occupation, the most respondents were maternity mothers who worked as housewives, namely 17 people (56.7%). Based on the parity, the most respondents were multigravida maternity mothers, which were 17 people (56.7%).

Table 2. Anxiety Level Before Being Given Preoperative Teaching

Anxiety Level	Frequency	Percentage (%)
Light	1	3,3%
Keep	23	76,7%
Heavy	6	20,0%
Total	30	100,0%

Source : Primary Data Processed 2024

Table 2. shows that the level of anxiety of maternity mothers before being given *preoperative teaching* is included in the category of moderate anxiety in 23 people (76.7%).

Table 3. Anxiety Level After Being Given Preoperative Teaching

Anxiety Level	Frequency	Percentage (%)
Light	30	100,0%
Keep	0	0,0%
Heavy	0	0,0%
Total	30	100,0%

Source : Primary Data Processed 2024

Table 3. showed that the level of anxiety of maternity mothers after being given *preoperative teaching* was included in the category of mild anxiety as many as 30 people (100.0%).

Table 4. Normality Test Results

	Nilai Pretest	Nilai Posttest
<i>Asymp. Sig.</i>	0,000	0,040

Source : Primary Data Processed 2024

The results of the normality test in the pre and post value groups with the *Shapiro Wilk* test were obtained by *Asymp Sig.* 0.000 and 0.040 which are smaller than 0.05 which means that the data is abnormally distributed.

DISCUSSION

1. Characteristics of Sectio Caesarea Patients with ERACS System at Jati Husada General Hospital, Karanganyar

This study used 30 Sectio Caesarea patients with ERACS System at Jati Husada General Hospital, Karanganyar. The results showed that based on age, the most respondents were mothers in labor aged 20-35 years, namely 29 people (96.7%). According to Indonesian government regulations, this age is the adult age category, namely the age range of 19-44 years, so they already have mature thinking (Peraturan Menteri Kesehatan Nomor 25 Tahun 2016 Tentang Rencana Aksi

Nasional Kesehatan Lanjut Usia Tahun 2016-201, 2016). Maturity or maturity of an individual will affect a person's coping mechanism ability so that more mature individuals find it difficult to experience anxiety because individuals have a greater ability to adapt to anxiety compared to immature ages. It is proven in the study that mature ages, namely adults, have a lower prevalence of anxiety levels compared to adolescents. This proves that mature age has sufficient coping ability to overcome anxiety (Assyifa et al., 2023).

The results of the study showed that based on education, the most respondents were mothers who had high school education, namely 18 people (60.0%). An individual's level of education affects the ability to think. The higher the level of education, the easier it is for individuals to think rationally and capture new information, so that the higher a person's education, the higher a person's knowledge. A person's level of education influences responding to something that will come both from within and outside. People who have higher education will give a more rational response than those with lower education or those who are uneducated (Vellyana et al., 2013).

The results of the study showed that based on occupation, the most respondents were mothers who worked as housewives, namely 17 people (56.7%). The anxiety of people who work and do not work is certainly different. Individuals who do not work tend to have a lighter burden on their minds than those who work so that the workload which is one of the anxiety factors in these individuals is not felt, but the anxiety felt tends to be caused by other factors. Unlike people who work, anxiety tends to be caused by workload and household chores. People who work tend to experience stress due to the workload they have (Suyani, 2020).

The results of the study showed that based on parity, the largest number of respondents were multigravida mothers, namely 17 people (56.7%). Pregnancy experienced by primiparous mothers is the first experience, so entering the third trimester of pregnancy is felt to be increasingly worrying because the delivery process is getting closer so that mothers tend to feel anxious about their pregnancy,

restless, and afraid of facing childbirth, considering that ignorance is a supporting factor for anxiety. Meanwhile, mothers who have been pregnant before (multigravida), anxiety may be related to past experiences they have experienced (Susanti, Ni Made Dewi ; Utama, 2022).

2. **Anxiety Level of Caesarean Section Patients with the ERACS System at Jati Husada General Hospital, Karanganyar**

Before being given preoperative teaching, the results of the study showed that the level of anxiety of mothers giving birth before being given preoperative teaching was in the mild anxiety category of 1 person (3.3%), moderate anxiety of 23 people (76.7%), and severe anxiety of 6 people (20.0%). So it can be stated that the level of anxiety of mothers giving birth during Caesarean Section with the ERACS System at Jati Husada General Hospital, Karanganyar before being given preoperative teaching was included in the moderate anxiety category of 23 people (76.7%). This shows that mothers who will undergo CS surgery with the ERACS system experience anxiety. Surgery is a threat to children that can cause a stress response. One of the stress responses that can arise when someone undergoes surgery is anxiety. Anxiety is a response to unpleasant feelings such as fear and panic which is characterized by physical, behavioral, emotional and cognitive symptoms (Turgoose et al., 2021).

Emotional symptoms are one of the symptoms that arise when someone feels anxious. Mothers who will undergo a CS operation will experience anxiety which is indicated by restlessness, crying and even refusing to go to the hospital. Anxiety that occurs in mothers with CS can occur due to lack of knowledge about the operation, mothers with CS cannot control themselves, lack of proper explanation and patients do not understand psychological management (Suparto et al., 2023).

3. **Anxiety Level of Caesarean Section Patients with ERACS System at Jati Husada General Hospital, Karanganyar**

After being given preoperative teaching, the results of the study showed that the anxiety level of mothers giving birth after being given preoperative teaching was in the mild anxiety category of 30 people (100.0%), moderate anxiety of 0 people (0.0%), and severe anxiety of 0 people (0.0%). So it can be stated that the anxiety level of mothers giving birth during

Caesarean Section with ERACS System at Jati Husada General Hospital, Karanganyar after being given preoperative teaching is included in the mild anxiety category of 30 people (100.0%).

The anxiety level of mothers who will undergo surgery before and after being given preoperative education showed that the anxiety level before preoperative education which was previously at the moderate or even severe anxiety level decreased to mild anxiety after being given preoperative education. Preoperative teaching can help someone to understand and overcome the problems they feel according to their level of development and preoperative teaching is a good way to strengthen the relationship between nurses and patients, a sense of security and daily conditions and can help restore traumatic experiences in mothers (Susanti, Ni Made Dewi ; Utama, 2022).

The anxiety of patients who have received preoperative teaching decreased, spent less time in the intensive care unit and also stated that they experienced pain during sleep, and there was no significant difference between participants in terms of the duration of hospitalization. In addition, preoperative teaching has been associated with increased levels of performance in patient care activities, early extubation, less need for analgesics to cope with pain, shorter postoperative periods, shorter intensive care duration and fewer complications (Rostami, 2021).

4. **Effect of Preoperative Teaching on the Anxiety Level of Sectio Caesarea Patients with the ERACS System at Jati Husada General Hospital, Karanganyar**

The results of the study showed that based on the results of the analysis using the Wilcoxon Signed Rank Test, Asymp. Sig. 2 tailed value 0.000 ($p \leq 0.05$) was obtained statistically, so there was an effect of preoperative teaching on the anxiety level of sectio caesarea patients with the ERACS system at Jati Husada General Hospital, Karanganyar. The results of this study are supported by previous research which stated that the results of the statistical test obtained a value ($P < 0.05$), namely ($p = 0.000$) which means that there is an effect of preoperative teaching on the anxiety level of SC patients at Haryoto Lumajang Hospital (Suparto et al., 2023). Preoperative teaching is effective

in reducing the level of patient anxiety before undergoing a sectio caesarea surgical procedure. Reducing patient anxiety levels before surgery can have significant benefits, including improving patient satisfaction, reducing perioperative complications, and accelerating overall patient recovery. Comprehensive and accurate preoperative teaching regarding the planned action, procedure, and therapy to be performed, along with any potential dangers and side effects, can help reduce patient anxiety before undergoing a cesarean section (Doan L & Blitz J, 2020). Preoperative teaching has several advantages, such as instructors can interact directly with participants and answer their questions directly. This allows participants to gain a better understanding of the surgical procedure they will undergo (Cullen & Kaizer, n.d.). Preoperative teaching involves two-way interaction between health workers and patients. Patients have the opportunity to ask questions, express concerns, and share information about their health conditions. This allows health workers to better understand the patient's needs and preferences, and provide more specific and relevant explanations (Wibawa & Rahmat, 2018).

CONCLUSION

Health workers can carry out preoperative teaching to reduce the level of anxiety of cesarean section patients with the ERACS system.

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