

**THE EFFECT OF PROVIDING *DEEP BREATHING* RELAXATION
TECHNIQUES IN REDUCING ANXIETY LEVELS IN *SECTIO CAESAREAN*
SURGERY PATIENTS AT RSIA PASUTRI BOGOR**

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ABSTRACT

Background: In patients who will perform *sectio caesarea* surgery in general feel feelings of excessive anxiety due to worry in the process of surgery, and fear of the equipment used in the operating room. **Objective:** This study aims to determine and analyze the effect of *deep breathing* relaxation techniques in reducing the anxiety level of *sectio caesarea* surgery patients in the Operating Room of RSIA Pasutri Bogor. **Method:** This study used a *quasy experimental* research design with One Group *pre test - post test*. The population in the study was 55 mothers who performed *sectio caesarea* surgery in the operating room of RSIA Pasutri Bogor. The sample technique used in this study was *purposive sampling*. **Results:** From the results of the analysis in this study using the *Wilcoxon signed test* obtained *p value* = 0.000 ($\alpha < 0.05$). **Conclusion:** So it can be concluded that there is a significant effect of providing *deep breathing* relaxation techniques in reducing the anxiety level of *sectio caesarea* surgery patients at RSIA Pasutri Bogor. **Suggestion:** Conduct more studies and the application of *deep breathing* relaxation techniques in reducing anxiety levels in *cesarean section* surgery patients.

Keywords: *Anxiety, Deep Breathing Relaxation Technique, Sectio Caesarea*

INTRODUCTION

The World Health Organization (WHO), states that the overall number of surgery cases is increasing every year around the world. Research conducted in more than 50 countries in the world estimates that the number of surgeries per year reaches 230 million¹. Where more than 4 million patients undergo surgery and it is estimated that 50% to 75% experience anxiety during the period leading up to surgery. In the same sense, anxiety is considered a public health problem, given that it affects 15% of the global morbidity rate²

Based on data obtained from WHO, the incidence of anxiety worldwide in 2017 reached more than 200 million people with a ratio between the population and anxiety of 3.6%³. In 2015, anxiety data in Southeast Asia reached more than 60 million people or about 23% of the population⁴.

In Indonesia, the prevalence of anxiety is estimated at 9%-12% of the general population, while the population rate of preoperative patients who experience anxiety is 80%, of which 65% experience severe anxiety, 35% experience moderate anxiety⁵. Basic Health Research data in 2018, shows the percentage of emotional disorders including anxiety is 9.8% in the adult population. The total adult population in Indonesia is approximately 185 million, so it can be said that there are currently 18 million adults experiencing emotional disorders of anxiety³.

The percentage of SC delivery in Indonesia is 17.6%, the highest in the DKI Jakarta region at 31.3% and the lowest in Papua at 6.7%⁶. Based on data on the number of deliveries at RSIA Pasutri Bogor, the total number of deliveries with *cesarean section* in May 2023 was 152 patients. The indications for *cesarean section* surgery include labor with dystocia, hypertension in pregnancy, pre-eclampsia, fetal distress, fetal disproportion, *oligohydramnios*, premature rupture of membranes, *CPD* and a history of previous *cesarean section* surgery.

Although *sectio caesarea surgery* has become a common and routine procedure in modern obstetric practice, it is not uncommon for patients to experience high levels of anxiety before and during surgery. Surgery is a stressor for patients because it can pose potential and actual threats to one's body, integrity and spirit, resulting in emotional reactions such as fear, anger, anxiety, and agitation. Everyone in the face of anesthesia or surgery 99% will have the potential for anxiety⁷.

The peak of anxiety of most individuals while in the waiting room for surgery with symptoms in the form of frequent questions, anxiety, rapid pulse, increased tension of 20% to 30%⁸. Preoperative patient anxiety is very noteworthy, one of the nursing actions to overcome anxiety problems in patients can be independent actions by nurses such as teaching relaxation techniques and distraction techniques.

Babies who are born through *cesarean section* generally often experience respiratory distress because the birth is too fast. The baby does not adapt to the transition from the world inside the womb to outside the womb which can cause tachypnea in the baby. Complications that arise after SC in the mother such as pain in the incision area and the potential for thrombosis⁹. Other complications include the potential for decreased functional ability, decreased elasticity of the abdominal muscles and pelvic floor muscles, bleeding, bladder injury, infection, and acute pain¹⁰.

The selection of complementary therapies needs to be applied by nurses to support patient care and improve quality of life. The modality/complementary therapy will activate sensory perception to provide a relaxing effect, reducing physiological indicators such as pulse rate, blood pressure and respiration. Cognitive behavioral interventions include relaxation, the effects of relaxation are also beneficial in preventing sleep disorders, pain and anxiety.

Several types of relaxation techniques include pregressive muscle relaxation, diaphragmatic breathing, visualization, meditation, *massage*, music therapy, yoga and deep breath relaxation. The purpose of *deep breathing* relaxation techniques is to improve alveoli ventilation, maintain gas exchange, prevent lung atelectation, increase cough efficiency, reduce stress both physical and emotional stress, namely reducing pain intensity and also reducing anxiety¹¹.

Based on preliminary data from interviews on June 16, 2023 with 3 respondents, they tend to be anxious, afraid, worried about the operation process, afraid of all the equipment in the operating room and afraid after surgery whether the situation can return to its original state, whether it will be painful during surgery, whether when put to bed can wake up again as before. Based on this data, the researcher is interested in knowing how the effect of providing *deep breathing* relaxation techniques in reducing anxiety levels in *sectio caesarea* surgery patients at RSIA Pasutri Bogor.

Destination

Knowing and analyzing the effect of *deep breathing* relaxation techniques in reducing the anxiety level of *sectio caesarea* surgery patients in the Operating Room of RSIA Pasutri Bogor.

Methods

In this case the researchers used a quantitative type of research using the *Quasy Experiment* (Pre Test and Post Test) method¹². The population in this study were all *sectio caesarea* surgery patients in June 2023 in the operating room of RSIA Pasutri Bogor as many as 123 patients. The sampling technique used in this study used *purposive sampling* technique¹³. The sample size needed for this study was 55 samples¹⁴.

Research Results

A. Univariate Analysis

a. Anxiety Level

Table 1

***Pre-test* Frequency Distribution Based on Anxiety Level of SC Respondents at RSIA Pasutri Bogor**

Anxiety Level	Frequency	Percentage
No anxiety	0	0
Mild Anxiety	2	3,63
Moderate Anxiety	13	23,64
Severe Anxiety	29	52,73
Very Severe anxiety/panic	11	20
Total	55	100,0

Based on table 1, the results of the frequency distribution of the anxiety level of the most respondents were severe anxiety levels, namely 29 respondents or 52.73%.

Table 2

Frequency Distribution of *Post Test* given *Deep Breathing* Relaxation Technique to *Sectio Caesarea* respondents at RSIA Pasutri Bogor

Anxiety Level	Frequency	Percentage
No anxiety	5	9,1
Mild Anxiety	24	43,63
Moderate Anxiety	11	20
Severe Anxiety	15	27,27
Very Severe anxiety/panic	0	0

Total	55	100,0
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Based on table 2, the results of the frequency distribution of the anxiety level of respondents who appeared a lot were mild anxiety levels, namely 24 respondents or 43.63%

C. Bivariate Analysis

Table 3

Differences in *Pre Test* and *Post Test* Anxiety Levels given *Deep Breathing* relaxation techniques to Sectio Caesarea respondents at RSIA Pasutri Bogor

Anxiety Level	N	Min	Max	Mean	Median	SD	P value
<i>Pre Test</i>	55	20	48	33.40	32.00	7.420	0.000
<i>Post Test</i>	55	8	36	21.65	20.00	7.019	

Discussion

A. *Pre* and *Post* operative anxiety levels

The results of descriptive data processing showed that the average anxiety of respondents, namely in severe anxiety during the *pre-test* was 52.73% while the *post-test* decreased to 27.27%. In the observation of respondents, it was found that out of 55 respondents, 11 respondents experienced a decrease in anxiety from severe anxiety / panic to 0, a decrease was also found in the level of severe anxiety from the initial 29 respondents to 15, at the moderate anxiety level a decrease of 2 respondents, an increase was experienced by 22 respondents at the mild anxiety level, and at no anxiety increased to 5 people, after the *post-test*.

In developing countries, the incidence is even higher with 15.6% of pregnant women in developing countries experiencing anxiety during their pregnancy, and this increases to 19.8% in the lead up to and after delivery. In some cases, mothers who experience high levels of anxiety even contemplate suicide. In addition, mothers who experience anxiety will have a negative impact on the growth and development of their children, in this case, the fetus they are carrying will be negatively affected as well. This can certainly be overcome through the provision of effective interventions by health workers. In addition, WHO also said that 1 in 10 women in developed countries and 1 in 5 women in developing countries will experience anxiety during pregnancy or after childbirth. This is because many women experience changes, one of which is changes in mental health during pregnancy or after childbirth⁶.

Patients who are about to undergo *sectio caesarea* surgery experience anxiety because they often think, such as fear of pain after surgery, fear of malignancy, fear of facing the operating room and fear of surgery failure. Decreasing anxiety and fear is very important during the pre-anesthesia period, because emotional stress coupled with physical stress increases the risk of surgery. Empowering the patient by taking control of the situation can reduce anxiety. Involving the patient to make decisions or participate in care

management will make the patient feel in control of the situation. Patients can also be assisted in choosing activities or exercises that can reduce anxiety such as distraction, relaxation, providing pre-surgical information and spiritual support (Anjar, 2019). In addition, non-pharmacological therapy is also given, namely *deep breathing* relaxation therapy to respondents in reducing their anxiety level.

Research conducted by Arifin et al., (2021), states that of the 70 respondents who experienced surgery 2 or 2.9% experienced mild anxiety, 26 people or 37.1% experienced moderate anxiety, 41 people or 58.6% experienced severe anxiety and 1 person or 1.4% experienced panic.

In the author's opinion, the success of reducing the anxiety level of preoperative *sectio caesaria* patients by giving *deep breathing* relaxation techniques is strongly influenced by the frequency and duration of implementation. Where the effective time to perform this technique is 1 hour before surgery or when the patient is in the operation preparation room. Because in this period if the relaxation technique is given, it affects the decrease in anxiety felt by the respondent.

B. Effect of *deep breathing* relaxation technique on anxiety level of *sectio caesarea* surgery

In the results of bivariate data processing that compares between groups before giving *deep breathing* relaxation techniques and re-measuring anxiety levels after *sectio caesarea* surgery, the *p value* is 0.000 ($p < 0.05$), this means that there is a significant difference between anxiety levels in *sectio caesarea* surgery respondents before and after being given *deep breathing* relaxation techniques. Based on the results of the author's research, it can be concluded that H_0 is rejected and H_a is accepted, which means that there is a significant relationship between the provision of *deep breathing* relaxation techniques in reducing the anxiety level of *cesarean section* surgery patients at RSIA Pasutri Bogor.

The results of this study are in line with research conducted by Miming (2018) with the existence of therapeutic communication carried out which aims to approach, provide complete information, and focus on patient recovery can reduce anxiety in Pre Operative patients will help patients to reduce and eliminate anxiety.

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efficiency, reduce stress both physical and emotional stress, namely reducing pain intensity and also reducing anxiety¹¹ .

Anxiety management in the form of providing *deep breathing* relaxation techniques in preparation 1 hour before surgery is proven to significantly reduce the anxiety level of preoperative patients at RSIA Pasutri Bogor. The results of this study can be used as a basis for improving surgical services at the RSIA Pasutri Bogor.

Limitations

From the results of direct experience in the research process, there are several limitations experienced so that it can be a number of factors that can be considered for future researchers to further refine their research, because this researcher himself certainly still has shortcomings that need to be improved. Some of these limitations include: There is no data on what actions were taken by midwives / nurses in an effort to reduce anxiety, In the questionnaire there were no specific anxiety statements, such as: the cause of fear of *cesarean section* surgery, *the* extent of knowledge related to *cesarean section* surgery.

Conclusion

Based on the results of the study, it can be concluded that there is a significant effect of providing *deep breathing* relaxation techniques in reducing the anxiety level of *sectio caesarea* surgery patients at RSIA Pasutri Bogor. For further researchers it is recommended to take a more diverse sample, conduct ongoing research to be able to see and assess any changes in respondent behavior over time and the addition of other variables that can affect anxiety levels before *cesarean section* surgery.

ETHICAL CONSIDERATIONS

This research has conducted an ethical test with Number:
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