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# ORIGINAL RESEARCH

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# AUTOGENIC RELAXATION FOR POSTOPERATIVE CAESAREAN SECTION PAIN IN RSAD KODAM V BRAWIJAYA SURABAYA

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#### ABSTRACT

**Background:** Caesarean section contribute labor pain is no longer pain of childbirth is physiological but from cuts in the area of surgery. Postoperative pain that is felt by the patient is influenced by several factors including age, sex, attention, culture, the meaning of pain, anxiety, fatigue, coping styles and family support. When postoperative pain in patients not treated immediately will result in the patient rehabilitation process will be delayed, the patient becomes longer hospitalization, high complication rate and require more cost. In granting the nurses action in reducing pain, the nurse can provide non-pharmacological technique to reduce postoperative pain.

**Objectives:** The purpose of this study was to exemine of autogenic relaxation on postoperative caesarean section pain in RSAD Kodam V Brawijaya.

**Methods:** The design of this study was experimental with one group pretest-posttest design. This study was conducted in RSAD Kodam V Brawijaya Surabaya, East Java, Indonesia. This research was Mother's population in postoperative caesareann section in RSAD Kodam V Brawijaya Regional Surabaya. The sample in this study was 30 respondents with the sampling method using purposive sampling. The measuring instrument used was a manual procedure for autogenic relaxation and the observation sheets Numeric Rating Scale (NRS).

**Results:** The inferential analysis with Wilcoxon signed rank test found that p value (sig.) is 0.000 ( $\alpha$ <0.05). This result means that there is a significant difference in the pain scale before and after treatment autogenic relaxation techniques.

Conclusion: Autogenic relaxation can reduce postoperative caesarean section pain in RSAD Kodam V Brawijaya Surabaya.

Key words: Autogenic relaxation, pain, caesarean section, postoperative.

# INTRODUCTION

Caesarean section contribute labor pain is no longer pain of childbirth is physiological but from cuts in the area of surgery. International Association for the Study of Pain (IASP) in 2017, defines pain as an unpleasant situation that comes from a certain area, which is caused by damage to tissue and associated with the past experience of the person concerned. Pain is subjective and there is no individual who experienced the same pain (Potter & Perry, 2006).

According to the World Health Organization (WHO) figures Caesarean section with fairly large at around are 10-15%, per 100,000 normal delivery since it increases the incidence of caesarean section in both the developed and developing countries (WHO, 2015). The rise of caesarean births has been the subject of continuing debate. Although often a necessary or desirable procedure, caesarean delivery medically may also be unnecessary (Dosa, 2001). The incidence Caesarean section in Indonesia,

according to national survey data in 2015 was 921,000 deliveries of 4.039 million or 22.8% of deliveries (Ministry of Health). Caesarean section tendency East Java, the number in 2014 - 2015 amounted to 3,401 operations of 170,000 deliveries, or about 20% of all deliveries (East Java Provincial Health Office, 2016).

According to research by Sommer et al (2008) the prevalence of patients with postoperative major surgery who experience moderate to severe pain as much as 41% of patients postoperatively on days 0, 30% of patients at 1, 19% of patients on day 2, 16% of patients on days 3 and 14% of patients on day 4. This is in line with research conducted Sandika et al, (2015) which states that 50% of patients experiencing severe pain postoperative and 10% of patients experienced moderate to severe pain.

Postoperative pain that is felt by the patient is influenced by several factors including age, sex, attention, culture, the meaning of pain, anxiety, fatigue, coping styles and family support (Potter & Perry, 2006). When postoperative pain in patients not treated immediately will result in the patient rehabilitation process will be delayed, the patient becomes longer hospitalization, high complication rate and require more cost. This is because the patient focuses all his attention on the pain felt (Smeltzer and Bare, 2008).

The role of the nurse in the management of postoperative pain which includes pain assessment. providing independent actions of nurses, collaboration and evaluation of pain. In the postoperative assessment of pain patients who used the nurse is reviewing the **OPQRSTUV** instruments (onset, provoking, quality, region, severity, treatment, understanding, value) (Tamsuri, 2007). The importance of nurses assessing pain is to determine the next course of action. Assessment of pain can be done by reviewing the patient's pain, observe the nonverbal reactions of the patient, using therapeutic communication techniques, environmental control patients (Bulechek, 2013; Sandika et al, 2015).

In granting the nurses action in reducing pain, the nurse can provide nonpharmacological and pharmacological action. Non-pharmacological actions include assessing pain, provide actions, monitor the pain felt by the patient, provide measures to prevent complications, educate patients and families. While pharmacological actions that nurses perform actions collaboration with physicians, namely analgesics (Tamsuri, 2007). Other nurses' action is to re-evaluate the patient's perceived pain postoperatively. All actions of nurses are very important because it can reduce the pain felt by the patient postoperatively (Sandika et al, 2015). From the background of the problem above the researcher was conducted research about "Autogenic Relaxation for Postoperative Caesarean Section Pain in RSAD Kodam V Brawijaya Surabaya". The purpose of this study was to exemine of autogenic relaxation on postoperative caesarean section pain in RSAD Kodam V Brawijaya.

# **METHODS**

Study Design

An experimental, one-group, pretest-posttest design was used.

Setting

This study was conducted in RSAD Kodam V Brawijaya Surabaya, East Java, Indonesia.

Research Subject

This research was Mother's population in postoperative caesareann section in RSAD Kodam V Brawijaya Regional

Surabaya, East Java, Indonesia who met the inclusion criteria: 1) level consciousness is compos mentis 2) adult age 3) can follow the instructions 4) can read and write. The sample in this study was 30 respondents with the sampling method using purposive sampling.

#### Instruments

The measuring instrument used was a manual procedure for autogenic relaxation and the observation sheets Numeric Rating Scale (NRS).

# Data Analysis

The data has been analyzed using Wilcoxon signed rank test with significance level of 5%.

# **Ethical Consideration**

This research has gone through a standard operating procedure in the Merdeka University Surabaya and obtained permission from the head of RSAD Kodam V Brawijaya Surabaya.

# **RESULTS**

Based on the results of the collection of data from 30 respondents obtained the general data of respondents that included age, educational level, and number of pregnancies.

Characteristics of Respondents by Age

**Table 1.** Distribution of Frequency of Respondents by Age in RSAD Kodam V Surabaya (n = 30).

No.	Age (Years)	Frequence (%)	
1	20-26	1 (3.3%)	
2	27-32	20 (66.7%)	
3	32-40	9 (30%)	
Total		30 (100%)	

Based on table 1 of the 30 respondents 20 years of age found that as many as 1 (3.3%), while those aged 21-30 years were 20 people (66.7%) and 31-40 years of age amounted to 9 people (30.0%).

Characteristics of Respondents by Educational Level

**Table 2.** Distribution of Frequency of Respondents by Education in RSAD Kodam V Brawijaya Surabaya (n = 30).

No.	Education	Frequency (%)
1	SD	0 (0%)
2	SMP	1 (3.3%)
3	High School	23 (76.7%)
4	College	6 (20%)
Total		30 (100%)

According to the table 2 from 30 respondents obtained educated respondents (SD) of 0 (0%), for (SMP) of 1 (3.3%), SMA as many as 23 people (76.7%), and highly educated (S1) of 6 (20.0%).

Characteristic of Respondents by Number of Pregnancies

**Table 3**. Distribution of Frequency of Respondents by Pregnancy in RSAD Kodam V Brawijaya Surabaya (n = 30).

No.	Gestation	Frequence (%)	
1	First	10 (33.3%)	
2	Second	20 (66.7%)	
Total		30 (100%)	

Based on table 3 of the 30 respondents obtained First Pregnancy as many as 10 people (33.3%) and second pregnancy were 20 people (66.7%).

Comparison of Level of Pain Before and After Giving Autogenic Relaxation in Post Caesarean Section in RSAD Kodam V Brawijaya Surabaya

**Table 4.** Comparison of Level of Pain Before and After Giving Autogenic Relaxation in Post Caesarean Section in RSAD Kodam V Brawijaya Surabaya (n = 30).

Intensity	Relaxation		
	Pre	Post	
Not Pain	0	0	
Mild Pain	3 (10%)	18 (60%)	
Moderate Pain	16 (53.3%)	10 (33.3%)	
Severe Pain	11 (36.7%)	2 (6.7%)	
Total	30 (100%)	30 (100%)	

From table 4 of the total 30 respondents obtained the following results, for mild pain after autogenic relaxation techniques there is an increase from 10.0% to 60.0%, for the pain was from 53.3% to 33.3%, while for the pain there is a weight reduction of 36.7% to 6.7%.

The inferential analysis with Wilcoxon signed rank test found that p value (sig.) is 0.000 ( $\alpha$ <0.05). This means that the autogenic relaxation can reduce post-operative caesarean section pain in RSAD Kodam V Brawijaya Surabaya.

# **DISCUSSION**

According to Potter & Perry (2006), pain is a condition that is uncomfortable feeling caused by a particular stimulus. Pain stimulus can be a stimulus that is both physically and mentally. Pain is subjective, so everyone is not the same response when they felt pain. Pain can't be measured objectively, such as by using a blood test. People who feel the pain that can measure the level of pain experienced.

Caesarean section is one alternative for a woman to choose childbirth in addition to their medical indications and indications of non-medical, caesarean section will decide the continuity or linkage network because incisions (cuts) that would create pain receptors so that the patient will feel pain, especially after effects anesthesia consumables. The pain can cause people to respond to the stressor which is biologically and this can lead to physical and psychological behavioral responses. Poor pain management will lead to decreased quality of life and prolong time to hospitalization, i.e. more than 4 days (Sariyem, 2016).

From the observations of researchers from a total of 30 respondents feel pain before being given autogenic relaxation techniques with mild pain level 3 respondents, 16 respondents moderate pain and severe pain 11 respondents. Before awarded autogenic relaxation techniques, respondents were only given analgesics to address the issues they are experiencing pain. The knowledge and skills of patients on non-pharmacological therapy to reduce pain intensity is still limited. Lack of education about non-pharmacological therapy to the respondent made the poor knowledge of the respondent in addressing problem of pain they feel (Gerbershagen et al, 2011).

From the research results Nisa, Murti, Qodrijati (2014), the perception of pain every patient is different so we need exploration to determine the value of such pain. According Nurdin, Kiling and Rottie (2013), differences in the level of pain perceived by respondents due to their ability to respond to individual attitudes and perception of pain experienced. The ability to perceive pain is influenced by several factors and vary among individuals. Although a person exposed to the same stimulus, one can experience a different pain intensity. In other words, although all respondents experiencing the same operation that is caesarean section, pain felt different because there are many factors that can affect the pain scale.

Factors that may affect pain scale in this study was the environment, general condition, situational, sex, emotions, past experiences, anxiety and personality, social and cultural, age, cognitive function, confidence. All these factors can combine to affect a person's pain scale. As to overcome the pain in every surgery showed that the use of pharmacological therapy therapeutic along with a pharmacological help patients adapt to the pain so as to improve the quality of life, reduced use of analgesics, patients can immediately return to work, and provide different views about the pain and impact in the lives of patients (Karlstrom et al, 2007).

Results of statistical test by Wilcoxon signed rank test with significance  $\alpha=0.05$  then obtained p value = 0.000, which means rejected the null hypothesis. This shows that there is a significant difference in the pain scale before and after treatment autogenic relaxation techniques.

Relaxation techniques autogenic a relaxation technique based on concentration using the body's perception that has health benefits that allow the body can feel the change in the physiological response of the body that is emotional, sensory and subjective such as decreased postoperative, Sensation quiet mild and warm that spreads throughout the body is the effect that can be felt from autogenic relaxation. Topcu and Findik (2012) found that, as that relaxation exercises play an effective role in pain control after surgery, even before the relaxation exercises, the pain was reduced with each passing postoperative day.

Relaxation autogenic a relaxation technique based on the concentration using the body's perception that has health benefits that allow the body can feel the change in the physiological response of the body that is emotional, sensory and subjective such as decreased postoperative pain is a very annoying problem in patients when the pain did not immediately addressed will be bad for the body. Smith et al. (2018) found that relaxation techniques may help women manage labour pain. The use of some relaxation therapies may possibly be helpful with reducing the intensity of pain, and in helping women feel more in control and satisfied with their experience of pain.

In autogenic relaxation, things become a principal recommendation is surrender herself so as to enable the various regions within the body (arms, hands, legs and feet) to be warm and heavy. Warm and heavy sensation is caused by the transition of blood flow (from the central body to the desired area of the body), which acts as an internal message, soothes and relaxes the muscles around it (Asmadi, Kusmiran, 2014). From the observation researchers noticed that administration of relaxation techniques autogenic effect on pain reduction and provide a positive impact to the respondent even able to change the mood, and emotion enhances memory and provides a unique opportunity to interact and build emotional closeness to nurses and anyone who helped give direction autogenic relaxation techniques.

# **CONCLUSION**

From the statistical test Wilcoxon signed rank test showed significant p value 0,000 with  $\alpha = 0.05$ , was found using SPSS as a support so that it can be concluded that the p = 0.00 <0.05, which means there is the influence of autogenic relaxation techniques with decreased post-operative caesarean section pain in RSAD Kodam V Brawijaya Surabaya.

# **SUGGESTION**

The use of autogenic relaxation techniques can be used as an alternative for nursing actions to reduce pain in post-operative caesarean section patients.

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