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The Effect of Application of The Benson Relaxation Technique on Reducing The Scale of Pain in Patients Post-Odontectomy Operation

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ABSTRACT

Pain can be controlled through pain management which aims to reduce pain to a comfort level. The Benson relaxation technique is a relaxation method that combines breathing with words that contain elements of belief that can help achieve a higher level of health and well-being. This study aims to determine the effect of the Benson relaxation technique on reducing the pain scale in patients after odontectomy surgery. This type of research is a pre-experimental design with a one-group pretest post-test design. Population: all 125 patients after odontectomy surgery. Patient selection was carried out using a purposive sampling technique of 56 patients. Data analysis used univariate and bivariate with the Mann-Whitney Test. The results of the study obtained a p-value of 0.000, which means that there was an influence before and after being given the Benson relaxation technique on reducing the pain scale after odontectomy surgery. Thus, it can be concluded that the Benson relaxation technique affect reducing the pain scale in patients after odontectomy surgery at RSKGM Bandung City.
Keywords: Benson relaxation technique; Pain Scale; Odontectomy

Introduction

Surgery is an invasive medical procedure that consists of three phases: preoperative, intraoperative, and postoperative. The post-operative phase begins when the client leaves the operating room, enters the recovery room and ends when the wound has healed completely [1].

WHO states that surgical cases are a public health problem [2]. The number of patients undergoing surgery according to WHO data in 2012 showed a gradual increase from year to year [3]. In 2012, there were 148 million patients in all hospitals in the world undergoing surgery, while in Indonesia as many as 1.2 million patients underwent surgery and ranked 11th out of 50 treatment methods in leading hospitals in Indonesia with surgical patients [3].

Patients after surgery often feel severe pain despite effective analgesic drugs. Severe pain is usually felt by patients in the first two hours after surgery when the effects of anesthesia wear off [1]. In Research conducted by Puspitasari (2019) on 77 patients after odontectomy, there were 17.2% of patients experienced severe pain on day 7 after odontectomy [4]. Research conducted by Naufal (2021) on 282 patients with acute postoperative pain at Dr. Mohammad Hoesin Palembang Hospital from October 13 to November 3, 2021. The data to be obtained is patient distribution data and the correlation between the two variables. Of the 282 patients, the most common range of acute postoperative pain patients was based on age 18 - 65 years (88.3%), female gender (53.9%), and general anesthesia technique (71.6%) [5].

Pain is a state of discomfort, whether mild or severe. Pain becomes a reason for individuals to seek nursing care. Sometimes patients cry and endure the pain they experience [6]. Pain can be controlled through pain management which aims to reduce the pain scale. There are two ways to reduce the pain scale, namely pharmacological and

non-pharmacological techniques. Long-term use of drugs can have side effects on the body such as kidney disorders. Relaxation techniques are drug-free methods used to relieve pain [7].

Benson relaxation is a technique that combines breathing with faith-infused words that can help achieve higher levels of health and well-being [8]. Benson relaxation is an easy, inexpensive, and side-effect-free relaxation technique. Benson relaxation is beneficial for relaxation, increasing self-confidence and faith, and the possibility of transcendence experiences. The resulting relaxation can relieve feelings of stress, anxiety, insomnia, and pain [9].

Bandung City Dental and Oral Hospital (RSKGM) is one of the hospitals engaged in dental and oral health services in Bandung City. Based on the results of preliminary studies, in 2020 there were 205 odontectomy patients, and this continued to increase until 2022 as many as 858 patients. Research on the effect of the Benson relaxation technique on postoperative odontectomy patients has never been conducted at RSKGM Bandung City. Therefore, researchers are interested in conducting research with the aim of knowing "Can the application of benson relaxation techniques have an effect on reducing the pain scale in patients after odontectomy surgery at the Bandung City Dental Hospital?"

Methods

This type of research is analytic with pre-experimental design with one group pretest posttest design. The research was conducted in the inpatient room of RSKGM Bandung City in February - March 2024. The population of this study were all patients after odontectomy surgery as many as 125 patients with a sample size of 56 patients. The sampling method used purposive sampling technique. The benson relaxation technique was performed for 5 minutes using a stopwatch on the patient 2 hours after odontectomy, data collection using a pretest - posttest sheet with a Numerical Rating Scale (NRS) measuring instrument to record the patient's pain scale before and after the benson relaxation technique was performed. Data analysis using univariate and bivariate with the Mann Whitney Test through the IBM SPSS Statistics 25 application.

Results and Discussion

Table 1.
Frequency Distribution of Pain Scale Before Given Benson Relaxation Technique

Pain Scale	Frequency	Percentage (%)
Mild Pain	1	1,8%
Moderate Pain	35	62,5%
Severe Pain	20	35,7%
Total	**56**	**100%**

Table 2.
Frequency Distribution of Pain Scale After Given Benson Relaxation Technique

Pain Scale	Frequency	Percentage (%)
Mild Pain	25	44,6%
Moderate Pain	31	55,4%
Total	**56**	**100%**

Table 3.
Analysis of the Effect of Application of Benson Relaxation Technique on Decreasing Pain Scale in Patients After Odontectomy Surgery

Research Results	Mean	Median (Minimum-Maksimum)	*p-value*
Pain Scale Before Intervention (pretest)	6,14	6(3-8)	0,000
Pain Scale After Intervention (posttest)	3,63	4(2-6)	

Table 1 shows that the pain scale of patients before the application of the benson relaxation technique mostly showed a moderate pain scale as many as 35 patients (62.5%).

Table 2 shows that the patient's pain scale after the application of the benson relaxation technique mostly shows a moderate pain scale as many as 31 patients (55.4%).

Table 3 shows that the significance value of p-value = 0.000 (p < 0.05) means that there is a significant difference before and after being given the benson relaxation technique. The average value before the benson relaxation technique was 6.14 and the average value after the benson relaxation technique was 3.63, which means there is a decrease in the pain scale after being given the benson relaxation technique. So it can be concluded that the application of benson relaxation techniques can affect the decrease in pain scale in patients after odontectomy surgery.

The calming benefits of benson relaxation techniques have been demonstrated to balance stress-related conditions, such as resentment, tension, cardiac dysrhythmias, chronic pain, hypertension, and insomnia. The advantages of the benson relaxation technique are that it is easier to perform under any circumstances, has no side effects, the benson relaxation technique procedure is easier for patients to perform, can reduce clinical costs, and to prevent stress [10].

Based on the results of the study of the application of the benson relaxation technique for 5 minutes in postoperative odontectomy patients after 2 hours in the inpatient room and have not been given analgesic drugs, the patient experienced a decrease in the level of pain scale. Bivariate data analysis shows that the average value of pain before the intervention of benson relaxation technique is 6.14 with a minimum value of 3 and a maximum value of 8. Meanwhile, the average value of pain after the intervention of benson relaxation technique has decreased to 3.63 with a minimum value of 2 and a maximum value of 6. These results are reinforced by the Mann Whitney analysis test which gets a p value = 0.000 (<0.05) which means that the application of benson relaxation technique can affect the decrease in pain scale in patients after odontectomy surgery.

Research by Puspitasari et al. (2019) showed that out of 302 patients, 53 patients felt mild to moderate pain after surgery [4]. In line with the results of Syaflida's research (2018) on the level of post odontectomy pain, which is on a moderate and severe scale [11]. Pain after surgery is normal, pain will appear when the effects of anesthesia begin to wear off. Complications that often occur after odontectomy are pain accompanied by swelling on day 2 to day 3 [12]. Septiana's research (2021) regarding the application of the benson relaxation technique to reduce the pain scale in postoperative appendicectomy patients before being given the benson relaxation technique was in the moderate category, after being given the benson relaxation technique it decreased to the mild category [13].

The results of this study support the results of previous studies, such as research conducted by Morita (2020) regarding the effect of benson relaxation technique on reducing pain in postoperative sectio caesarea patients at Dr. Achmad Mochtar Bukittinggi Hospital proves that there is an effect of benson relaxation technique on reducing pain in postoperative sectio caesarea patients by producing a p value = 0.001 [14]. Reinforced by Wahyuni (2019) about the effect of benson relaxation technique on the pain scale of post sectio caesarea patients explained that benson relaxation technique is effective for reducing pain scale in postoperative patients because there is a significant difference between before and after being given benson relaxation technique (p = 0.000) [15].

Research conducted by Dewiyanti (2022) in 19 patients post breast cancer surgery which states that there is a difference in the average value of pain before and after being given benson relaxation therapy (p = 0.003) [10]. In line with research Fatmawati (2023) regarding the application of benson relaxation therapy to reduce pain in 2 adult cancer patients at the Yayasan Kanker Inisiatif Zakat Indonesia Semarang stated that benson relaxation therapy was able to reduce pain in cancer patients, where respondent 1 experienced a decrease in pain by 66.7% and respondent 2 experienced a decrease in pain by 50% [16].

Research conducted by Marhamah (2020) that there is a difference in the value of the pain scale in postoperative patients before and after benson relaxation with an average value before that is 4.91 and the average value after that is 3.69 (p = 0.000) [1]. By the results of Wulandari's research (2022) on the effectiveness of benson relaxation therapy on pain scale in 30 postoperative patients which resulted in a p-value of 0.001 <0.05 which means that benson relaxation therapy is proven effective for reducing pain scale in postoperative patients [17]. Reinforced by Latifah (2023) regarding the effect of benson relaxation therapy on pain levels in 32 postoperative odontectomy patients with general anesthesia also proves that benson relaxation techniques can have an effect on pain levels in

postoperative odontectomy patients with p = 0.000 [18].

Pain response is influenced by various factors such as personality, emotional state, and patient background. Emotional distress, anxiety, and depression can increase the severity of postoperative pain. [19]. Based on research, a person's pain level is subjective and can be influenced by factors such as the number of teeth operated on, age, gender, culture, anxiety, previous experience, family and social support [20].

Benson relaxation technique is an effective non-pharmacological treatment technique to reduce pain scale in patients after odontectomy surgery if in accordance with standard operating procedures. This benson relaxation technique can make the patient's mood calmer and more comfortable. This technique also does not burden others, because in its implementation it can be done by the patient himself without the help of others. Benson relaxation therapy has the effect of improving blood flow, so that the physiological effects of pain in a person can be reduced. The more often you do the benson relaxation technique, the less the pain will be [14].

Based on the results of previous studies, it can be seen that the benson relaxation technique can not only be used in postoperative odontectomy patients, but can also be used in other postoperative patients with the aim of reducing the pain experienced by patients. In addition to not requiring costs, this relaxation technique can be easily performed by patients without worrying about the religion believed by the patient, because the benson relaxation technique can be used with regard to the beliefs of each patient.

Conclusion

Benson relaxation technique can affect the decrease in pain scale in patients after odontectomy surgery. This is proven to be statistically significant.

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