



The Effect of Relaxation Education to Reduce Pain in Post Operative Patients

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ABSTRACT

Pain can provide a peripheral vasoconstriction response which causes blood pressure and pulse to rise. Providing relaxation to post-operative patients can reduce post-operative pain. Relaxation education often proves effective in reducing pain levels in post-operative patients. Relaxation techniques such as deep breathing, meditation, and visualization can help reduce the physical and emotional tension that is often associated with pain. Apart from reducing physical pain, relaxation education can also improve the patient's psychological well-being. Patients can feel calmer, better able to deal with stress, and better able to control reactions to pain. By reducing pain levels, patients may require smaller amounts of pain medication or may not need medication at all. This can reduce the risk of side effects from painkillers and speed up the patient's recovery. By reducing pain and stress levels, relaxation education can help speed up the recovery process for post-operative patients. After this community service activity, patients feel more comfortable and are better able to move, which can help reduce the risk of post-operative complications.

KEYWORDS

Relaxation education, Reduce Pain, Post Operative Patient

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INTRODUCTION

Surgery is an invasive procedure that begins with making an incision in the body until closing the wound. Incision wounds after laparotomy surgery can cause pain, where this pain is caused by tissue damage that occurs due to incisions in the body. Apart from pain, blood pressure in surgical patients can also experience changes because pain caused by incisions during surgery can stimulate the cardiovascular system where the heart pumps blood faster resulting in an increase in blood pressure and also an increase in pulse (Potter et al., 2017). Post-operative patients have a greater risk of pain with a fairly high pain scale, namely moderate pain 2 to severe pain, this can be influenced by the incision technique given





during surgery.

Based on data obtained from the World Health Organization (WHO), the number of patients undergoing surgery has increased significantly from year to year. It was recorded that in 2017 there were 140 million patients in all hospitals in the world, while in 2019 the data experienced an increase of 148 million people. Meanwhile, in Indonesia in 2019 it reached 1.2 million people. According to data from the Ministry of Health of the Republic of Indonesia (Depkes RI) in 2019, it shows that surgical procedures rank 11th out of 50 diseases in Indonesian hospitals with a percentage of 12.8% and it is estimated that 32% are cases of laparotomy surgery (Krismananto J & Jenni I M , 2021).

Based on the results of a preliminary study at Lavalette Hospital, gynecological laparotomy patients were in first place with the largest number of patients in laparotomy surgery, namely 90 respondents after gynecological laparotomy surgery in the last 3 months. On average, gynecological laparotomy patients experience pain on an average scale of 3-7, while some patients also experience an increase in blood pressure and pulse, but not all patients experience this increase.

The impact that occurs if pain is not treated is that it can cause serious physical disorders, sleep disturbances, consequences for the patient's psychology, social life, and also finances (Potter et al., 2017). According to Yeager et al in Smeltzer (2001), if pain is not managed adequately it can be dangerous and can affect the pulmonary system, cardiovascular system, gastrointestinal, endocrine and immunological systems. The impact of increased blood pressure during post-surgery, if left untreated, there will be a risk of bleeding, cerebrovascular disorders, namely stroke and myocardial infarction, increased blood pressure can also cause hematoma 4 which can hinder or prolong the healing process of surgical wounds (Wallace MC & Haddadin AS, 2008) . Meanwhile, the impact of an abnormal increase in pulse rate can cause heart failure, stroke, sudden heart attack and even death (RSST Promkes Team, 2022).

Nurses play an important role in helping patients to manage pain. Appropriate nursing actions are needed to reduce pain so that it can improve the patient's quality of life, prevent complications, provide a sense of comfort, promote mobility in the patient and hopefully the patient can return to activities soon (Potter et al., 2017). By studying and understanding the pain experienced by patients, it is hoped that nurses will be able to develop appropriate treatment to reduce pain. So in this community service program the author wants to provide education about the effect of relaxation therapy on pain levels in post-operative patients at Lavalette Hospital, Malang City.

MATERIALS AND METHODS

Education was conducted about relaxation techniques for community service participants, namely post-operative patients at Lavalette Hospital, Malang City with

1. providing an explanation of relaxation techniques and their benefits
2. Providing leaflets for each participant so they can better understand the material provided.

The implementation method is carried out through several stages, namely:

1. Preparation Stage

This stage begins with asking permission from Lavalette Hospital to carry out community service activities, conveying goals and requests for support. After receiving a letter of approval from the director of Lavalette Hospital, Malang City, the next step is to convey the aims and objectives to the relevant parties. Apart from that, this activity also involved 3 students majoring in nursing at the Malang Ministry of Health Polytechnic to be able to apply the theories learned on campus to the community.





2. Implementation Stage

The implementation of this service activity is planned to use a problem solving approach based on agreement between the service team and participants through a participatory approach, which includes: Discussion/consultation methods to coordinate post-operative services so that cooperation can be established. Educational method by providing an explanation of pain relaxation techniques for post-operative patients. The material is provided both theoretically and given examples/practices regarding relaxation techniques to patients.

RESULTS AND DISCUSSION

This activity was carried out well and received very good enthusiasm from the community service participants, namely post-operative patients at Lavalette Hospital, Malang City and also their accompanying families. The objectives of the educational activities have been achieved, it is known from the evaluation that there has been an increase in knowledge before and after the counseling was carried out. The targets of community service outreach activities have also been achieved. Before carrying out counseling activities, the presenters introduce themselves first and then try to explore basic knowledge about pain and relaxation.

The speaker asked several questions regarding pain and relaxation. After exploring basic knowledge, the presenter began to explain health education material regarding pain relaxation and techniques that can be used. During the extension activities, participants appeared to be enthusiastic and paying attention to the contents of the extension material.

The educational activity lasted for approximately 30-45 minutes and at the end of the session the speaker gave participants the opportunity to ask questions related to the material that had been presented. There were 3 questions from the counseling participants regarding the content of the material. After answering questions from participants, the presenter carried out an evaluation regarding the material that had been presented by giving participants the opportunity to answer these questions. Participants who are able to answer questions will receive door prizes as a sign of appreciation.

After providing education about post-operative pain, pain relaxation and relaxation techniques that can be used to reduce pain, the results showed improvement. Providing education about relaxation techniques to manage pain in post-operative conditions can be a very valuable step in providing health benefits to the community. Postoperative patients often experience anxiety and pain. Anxiety can slow down the recovery process and increase the risk of complications.

Pain can cause discomfort and interfere with daily activities. Relaxation education can help patients manage post-operative anxiety and pain. Apart from being able to reduce post-operative pain felt by participants, the relaxation taught can also help patients reduce stress levels, improve sleep quality, speed up the recovery process and increase their sense of comfort and control. So it is hoped that the relaxation provided can reduce the discomfort felt, and have an impact on a faster healing process.

The results of previous research conducted by Widanti (2022) showed that treating pain by using relaxation techniques is a nursing action carried out to reduce pain. Several studies have shown that deep breathing relaxation is very effective in reducing postoperative pain. This is in accordance with the results of this community service, that the relaxation techniques taught to post-operative patients



reduce the pain and discomfort experienced by the participants.

CONCLUSIONS

It is hoped that the activities carried out will enable post-operative patients to know and be able to use relaxation techniques to reduce the post-operative pain they experience. Community service programs that teach relaxation techniques to manage pain can not only provide direct benefits to participants, but can also have a positive impact on the health and well-being of the community as a whole. Apart from that, a question and answer discussion forum was also opened with no limits on questions. The educational material presented was also clear and easy to understand by all members of the community. This makes people more enthusiastic about participating in this activity. Considering the large benefits that can be derived from this community service activity, it is hoped that in the future the community service program can include comprehensive education about various relaxation techniques that can be used to manage pain, such as deep breathing techniques, progressive muscle relaxation, and visualization. It is hoped that this community service activity can continue and provide benefits to the community.

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REFERENCES

- Cahyanti. (2017). Tentang penatalaksanaan teknik Relaksasi napas dalam pada pasien hipertensi untuk mengurangi nyeri di Rsud loekmoni hadi kodus,.
- Dezutter J, Wachholtz A, & Corveleyn J. (2011). Prayer and pain: The mediating role of positive re-appraisal,. J Behav Med.
- Latifah, H. (2022). Efektifitas Teknik Relaksasi Slow Deep Breathing (Sdb) Dan Relaksasi Benson Terhadap Nyeri Pada Pasien Post Operasi Modifikasi Radikal Mastektomi (Mrm) (Doctoral dissertation, Universitas Islam Sultan Agung Semarang).
- Nugroho, R. K., & Suyanto, S. (2023). Meta-Analisis Pengaruh Pemberian Teknik Relaksasi Napas Dalam terhadap Rasa Nyeri pada Pasien Post Operasi. *Jurnal Penelitian Perawat Profesional*, 5(3), 1039-1048.
- Oktavierla N R. (2020). Hubungan Nyeri Dengan Care Dependency Pada Pasien Post Operasi Di Rumah Sakit Tingkat III Baladhika Husada Jember.
- Potter, Perry, Stokert, & Hall. (2017). *Fundamental of nursing*, ninth edition. Elsevier
- Rustiawati, E., Binteriawati, Y., & Aminah, A. (2022). Efektifitas Teknik Relaksasi Napas dan Imajinasi Terbimbing terhadap Penurunan Nyeri pada Pasien Pasca Operasi di Ruang Bedah. *Faletehan Health Journal*, 9(03), 262-269.
- Widianti, S. (2022). Teknik Relaksasi Nafas Dalam Terhadap Penurunan Intensitas Nyeri Pada Pasien Post Operasi Fraktur (Studi Literatur). *Jurnal Kesehatan Dan Pembangunan*, 12(23), 92-99.
- Widodo, W., & Qoniah, N. (2020). Penerapan Teknik Relaksasi Nafas Dalam Menurunkan Intensitas Nyeri Pada Pasien Appendicitis Di Rsud Wates. *Nursing Science Journal (NSJ)*, 1(1), 25-28.