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Empowering Family to Manage Fatigue using Back Massage

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ABSTRACT

The Postoperative phase is a critical period in the recovery of surgical patients. During this phase, many patients experience fatigue. Postoperative fatigue is challenging and affects quality of life. Back massage is a complementary therapy performed to manage fatigue and reduce muscle tension. For this reason, a family empowering program was conducted in one of the surgical wards in one of the government hospitals in Sumedang, which was attended by 10 participants consisting of patient families. Program participants are families of patients undergoing surgery. Based on the records obtained, the patient's family experienced an increase in knowledge measured through pre-test and post-test. At the pre-test stage, the percentage of participants who had poor knowledge was 50% and after participating in the program decreased to 30%. Meanwhile, the percentage at the good knowledge level at the pre-test was 20% and at the post-test there was an increase to 40%. Based on this percentage, it was found that there was an increase in participants' knowledge before and after the program related to the implementation of foot massage in order to manage fatigue. Back massage is recommended to be presented as an option in developing fatigue management strategies in postoperative patients.

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INTRODUCTION

Surgery is a medical procedure that is often required to treat various health conditions. The post-operative phase is a critical period in a patient's recovery after undergoing a surgical procedure. Although surgical techniques are constantly evolving, patients often experience postoperative fatigue. This fatigue can affect the patient's quality of life, mobility and recovery (Rousseaux et al., 2020). Postoperative fatigue not only affects physical aspects, but can also affect psychological and social aspects (Loh et al., 2022). Therefore, understanding the management of postoperative fatigue is key in designing appropriate interventions to improve patient well-being. Postoperative fatigue is a challenge and affects the quality of life in post-surgical patients. Fatigue is not only influenced by the type of surgery performed but also by other factors (Knoop et al., 2021) such as age, the patient's initial health condition, and the duration of surgery . Understanding and managing postoperative fatigue is important in providing holistic care and supporting patients' optimal recovery. Fatigue is a frequent symptom in patients with advanced disease, perceived as a subjective symptom affecting quality of life described by fatigue, generalized weakness, lack of energy, increased need for rest and sleep, loss of motivation loss of ability and attention and mood disturbance (Billones et al., 2021).

A complementary therapy that can be done to overcome fatigue is back massage which is an effective method to manage fatigue and muscle tension (Bahceli et al., 2022). Back Massage is a hand touch performed by means of stroking, petrissage, friction and skin rolling movements that aim to overcome the symptoms of insomnia, reduce complaints on a variety of health problems that indicate to be given a massage without introducing drugs to the body. Back massage can stimulate parasympathetic receptors in the back area directly so that patients feel relaxed. Physiologically, massage is a relaxation technique that affects the body physically and psychologically (Li et al., 2024). Back massage provides a relaxing effect by stimulating the release of endorphins in the brain which has the effect of suppressing sympathetic nerve activity and stimulating parasympathetic nerve activation (Yulita, 2021). With back massage, the blood vessels will be dilated, the muscles will be relaxed, and the psychological condition will be better due to the increase of endorphins and serotonin in the brain (Aeini, 2022). During this phase, circulation to systemic tissues will be increased. Changes in circulation will overcome the fatigue experienced. In addition, catabolism will occur, gluconeogenesis takes place properly so that the tissues get energy. An increase in the amount of strategic energy that directly overcomes fatigue (Stanculescu et al., 2021). Based on these conditions, it is important to make efforts to manage fatigue through back massage. this program involves the patient's family so that they can perform back massage on patients after undergoing surgery either in the hospital or while doing home care. families have an important role in the postoperative recovery process and fatigue management in order to improve quality of life.

METHOD

The methods used in this program were lectures and simulations using a video of back massage techniques displayed through an LCD projector and leaflets distributed to the families of patients who became participants. the program was held in the surgical ward of a government hospital in sumedang. The following is the problem solving framework for this program

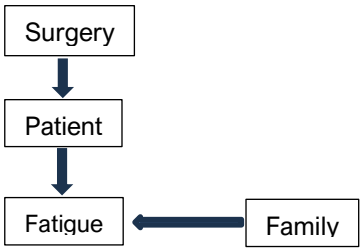

FIGURE 1. Problem Solving Framework

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Problem Solving Realization

Health education is carried out by providing information to the patient's family in advance that health education will be carried out related to back massage to overcome fatigue in postoperative patients. This program is carried out by providing education related to back massage which begins with a pretest. The things explained in this counseling include recognizing fatigue, back massage, the benefits of back massage, indications and contraindications of back massage, and the stages of performing back massage. The presentation was carried out using leaflet and video media interactively and by distributing material leaflets to the patient's family. After that, it was followed by a discussion and question and answer session related to matters related to what had been delivered. Then, an evaluation of the activity was carried out by giving a post test to participants who participated in the counseling. The intended target of this program is the patient's family in the surgical ward. Patient families can understand and demonstrate back massage techniques as one of the relaxation therapies that can be done to reduce or overcome fatigue. The technique can also be applied to patients or families who are waiting for patients in the hospital, where fatigue and sleep disturbances are also very likely to be experienced by them as caregivers.

Activity Procedure

The program begins with a contract and agreement with the families of prospective participants who will undergo surgery. Participants were placed in a room equipped with audiovisual equipment and where back massage simulations were carried out.

FIGURE 2. Lecture and Demonstration

The procedure for implementing back massage begins with the pre-interaction stage which consists of preparing tools, contracting with the client, explaining the procedure, asking for the last meal and maintaining privacy. Followed by the work stage which consists of positioning the client, sitting position with the chest supported by pillows, measuring vital signs (pulse, blood pressure, respiratory frequency and oxygen saturation), undressing the back area, performing massage with hand changing techniques, rubbing and twisting techniques with the thumb, efleurage technique is a type of massage by rubbing a slow and flexible massage, Petrissage technique and brushing pressure technique. Next Evaluation and termination phase. Pre and post tests were carried out to measure participants' understanding using questions related to the material presented.

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RESULT

The program was held on Tuesday, November 28 2023. Education regarding back massage was attended by 10 participants from the patient's family. Based on gender, 7 health education participants were female (70%) and 3 were male (30%). Health education participants are families of patients from one of the good surgical wards who will undergo surgery.

Before the lecture event began, a pre-test activity was carried out for participants regarding knowledge of the concept of fatigue and back massage therapy. Most participants did not know about back massage. During the lecture, the participants looked conducive, enthusiastic and the activities carried out were in the form of presenting material regarding back massage, then continued with giving leaflets and discussions.

Participants' knowledge was grouped into three categories with a value range of 10 - 40 (Poor), 50 - 70 (Fair), and 80 - 100 (Good). The following are the percentage results of participants' pre-test and post-test scores:

TABLE 1. Participant knowledge before and after the program

No	Category	Pre Test		Post Test	
		n	%	n	%
1	Poor	5	50	3	30
2	Fair	3	30	3	30
3	Good	2	20	4	40
Total		10	100	10	100

Based on the table above, it can be seen that there has been an increase in the number of participants with good knowledge from 5 (five) people to 3 (three) people. the number of participants with good knowledge increased from 2 (two) people to 4 (four) people and there was no change in the number of participants with intermediate knowledge 3 (three) people.

DISCUSION

Based on the percentage table, it was found that participants' knowledge increased during the pre-test and post-test. At the pre-test stage, the percentage of participants who had a lack of knowledge assessment was 50% and after the post-test this decreased to 30%. Meanwhile, the percentage of good knowledge level during the pre-test was 20% after the post-test increased to 40%. Based on this percentage, it can be said that there was an increase in participants' knowledge before and after health education was carried out. Similar programs show an increase in ability after education. Similar program conducted by (Rohmah et al., 2022) in overcoming hypertension using lecture and demonstration methods showed an increase in participant knowledge. Another similar program that proved that lecture and simulation can increase participants' knowledge was an educational program on progressive muscle relaxation to reduce anxiety during covid pandemic (Pratiwi et al., 2023). Consequently, one of the elements contributing to the program's success is the approach taken.

The implementation of health education activities will be optimal if the right media is used (Sudarmo et al., 2021) so that it is easily accepted by the audience, for example using leaflets with attractive packaging. In addition, the health education media used also uses audio-visual videos so as to increase understanding of the material being explained. The successful implementation of health education is not only seen from the pre-test and post-test evaluation results. Aspects of implementation such as the activities of the event running in an orderly manner and the enthusiasm of the participants are also a form of expected achievement. Based on the results of the process evaluation carried out in the discussion session, it shows that in general the activity runs smoothly and as expected because the participants feel entertained. This is

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similar to the educational program conducted by (Purnama et al., 2023) that focuses on stunting prevention with supplementary feeding, which was successfully held because participants felt entertained.

Education activities that have been carried out on patient families in the surgical ward regarding the effect of back massage on fatigue have increased their knowledge. Initially, it showed that none of the patient's families before being given health education knew what back massage was, the procedure and its benefits. Meanwhile, after being given the education, the patient's family can explain the material presented and can give an example of a good and correct back massage in accordance with the procedure as well as indications and contraindications. Based on the process during which health education was provided, the family seemed enthusiastic and paid close attention, several respondents asked questions regarding what the correct back massage should be like. This shows that the topics and material that have been presented can be digested and have a good impact on the patient's family who listen and have the desire to improve their health, both physical and psychological.

Health education regarding back massage is one of the nursing actions that can be taken to help overcome health problems in clients who experience disturbances in their sense of security and comfort, such as fatigue (Bahceli et al., 2022). The majority of patients in surgical wards with internal medicine have problems with feeling safe and comfortable after surgery. It is hoped that, following the health education activities, families will be able to apply the back massage techniques they have learnt to their sick family members themselves, given the many benefits that can be obtained from this therapy.

CONCLUSION

The educational program designed to help families overcome fatigue with back massage has been successful in improving family knowledge, as evidenced by an improvement in the number of program participants who had good knowledge prior to the program.

RECOMMENDATION

Back massage is recommended as an option for managing fatigue in post-operative patients which can be done by the family at home with further monitoring and evaluation.

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