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Implementation of Deep Breathing Relaxation Techniques in Patients with Dyspepsia Experiencing Pain Discomfort

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ABSTRACT

Basic human needs are elements needed by every human being to maintain life and health, one of which is the need to feel safe and comfortable. The need for security or safety is a need to protect oneself from physical danger. Security, often defined as a state of being free from physical and psychological harm, is a basic human need that must be met. Security is a physiological need where a person can feel free from discomfort. The research aims to provide nursing care to improve the client's health status. The research method used is a descriptive method with a case study approach. The results include the process of assessment, diagnosis, intervention, implementation, and evaluation. After providing nursing care to the client, Mrs. W obtained the results of changes in health status which improved including no pain, no grimaces, the client looked calm and the client was allowed to go home. Implementation of nursing care for patients with disorders in fulfilling basic needs, safe and comfortable for clients, Mrs. W between theory and case is appropriate. This can be proven in the application of theory to clients.

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INTRODUCTION

Basic human needs are elements needed by every human being to maintain life and health, one of which is the need to feel safe and comfortable. The need for security or safety is a need to protect oneself from physical danger. Threats to a person's safety can be categorized as mechanical, chemical and bacteriological threats. The need for safety is related to the physiological context and interpersonal relationships. Security, often defined as a state of being free from physical and psychological harm, is a basic human need that must be met. Security is a physiological need where a person can feel free from discomfort [1].

In general, in its application, fulfilling the need for comfort is the need for comfort, free from pain and hypo/hyperthermia. This is because pain and hypo/hyperthermia are conditions that affect the patient's feelings of discomfort as indicated by the appearance of symptoms and signs in the patient. The need for safety or security is the need to protect oneself from physical danger. Threats to a person's safety can be categorized as .
mechanical, chemical, physical and bacteriological threats. The need for safety is related to the physiological context and interpersonal relationships. Physiological safety relates to anything that threatens a person's body and life. The threat can be real or imagined (for example: disease, pain, anxiety, and so on) [1].
Relaxation techniques are non-pharmacological therapies that can reduce pain by relaxing muscle tension that supports pain. Done for 10-15 minutes in a relaxed position, sitting or lying on your back. Then instruct them to inhale deeply then exhale slowly and feel the air flowing from the hands and feet to the lungs, then the air is expelled [2].

Therefore, it is necessary to implement nursing care to disrupt the need for pain comfort in clients with complaints of pain so that it does not interfere with daily life activities. The author hopes that clients who experience pain complaints will receive appropriate knowledge and treatment regarding the problem of pain and comfort disorders that clients feel can be resolved.

Based on the description above, the author is interested in providing nursing care to disturb the need for safety and comfort in clients who are hospitalized in the Jimbaran Baru Room at Sumber Kasih Hospital, Cirebon City with the aim of providing nursing care to improve the client's health status

RESEARCH METHODS

The research method used is a descriptive method with a case study approach. A case study is where the researcher carries out an in-depth exploration of a program, event, process, activity, towards one or more people. A case bound by time and activity, researchers carried out detailed data collection using various data collection procedures and within 01-02 November 2023 in the Jimbaran Baru Room at Sumber Kasih General Hospital, Cirebon continuously [3].

RESULTS AND DISCUSSION

1. Case presentation

The nursing process starts from 01 November 2023 to 02 November 2023. This discussion is made with the steps of the nursing process which starts with assessment, diagnosis, intervention, implementation and evaluation.

A. Assessment

This stage is the first step taken in providing nursing care to clients. In carrying out the study the author did not encounter any difficulties, this was because the author received support from the client and family where the client and family were willing to provide information and were cooperative. Another support for this data collection is the basic assessment format that the author obtained from an educational institution, so that it can serve as a guide for obtaining complete information regarding the client's health condition.

The client named Mrs. W, 32 years old, works as a housewife, address in Tuk village, Kedawung subdistrict, was admitted to hospital on October 31 2023 and was assessed on November 1 2023 with a medical diagnosis of dyspepsia. When reviewing the medical history, the client's main complaint was heartburn. In the current health history, the client complains of heartburn all the way to the neck, P: The client says it hurts when eating, Q: The client says the pain feels stinging, R: The client says pain in the heartburn, S: The client says the pain scale is 4 from 1-10 , and Q: The client said the pain came and went every 10 minutes. The client's previous medical history stated that she had had surgery for a right breast tumor.

The client's daily activity pattern is eating 3 times, drinking 6-7 glasses, sleeping 8 hours at night, the client's elimination pattern says defecating once a day, urinating 4-6 times a day. On physical examination, it was found that the client's general condition appeared weak, the level of consciousness was compos mentis, blood pressure 100/60 mmHg, pulse 86x/minute, respiration 20x/minute, temperature 36.7 ℃, oxygen saturation 98%, body weight 48 kg, height 155 cm. Head to toe chest examination is symmetrical, no chest retractions, vascular, CRT <3 seconds, no edema, symmetrical abdomen, bowel sounds are heard, tenderness is present, normal skin turgor, IV is installed in the left upper extremity. The results of laboratory supporting examinations on October 31 2023 were, hemoglobin 13.9 grams d/L, hematocrit 41%, leukocytes 6,300 per microliter, platelets 183 cells/µL, and erythrocytes 4.46 million/µL. And received IVFD therapy RL 21 tpm, pantoprazole 1x1 40mg, ondansetron 2x 4mg, and santagesik 3x 1 ampoule.

B. Nursing Diagnosis

Nursing diagnosis is a clinical assessment of the client's response to the health problems or life processes they are experiencing, both actual and potential [4]. Based on this, researchers in cases of nursing care for clients establish nursing problems based on the assessments obtained.

In this case the researcher established a nursing diagnosis that disturbance of comfort was related to pain. Subjective Data: The patient stated that he felt pain when eating, the pain was stinging, pain from the heart to the neck, scale 4 from 1-10, the pain came and went every 10 minutes. Objective Data: The patient's facial expression grimaced in pain, vital signs: BP: 100/60mmHg, N: 86x/minute, RR: 20x/minute, S: 36.7□C and SPO2 98%. Nursing problems, disturbance of comfort.

C. Nursing Intervention

Nursing interventions are all treatments carried out by nurses based on knowledge and clinical judgment to achieve the expected outcomes. Meanwhile, nursing actions are specific behaviors or activities carried out by nurses to implement nursing interventions [5]

The third stage of the nursing process is planning, planning nursing actions for clients is prepared after all the collected data has been analyzed and prioritized. The steps in nursing planning consist of: establishing a nursing diagnosis, determining goals and objectives, determining criteria and evaluation, compiling nursing interventions and actions.

In this case, the researcher intervened with a nursing diagnosis of disturbance of comfort related to pain, after nursing action was carried out for 2 x 24 hours with the criteria for pain being reduced from 4 to 1 on a scale of 1-10, nausea was absent. Providing interventions to clients, identifying location, characteristics, duration, frequency, quantity, intensity of pain, monitoring the pain scale, providing non-pharmacological techniques, providing deep breathing techniques, and collaborating with doctors to administer medication.

D. Implementation

Implementation is the management and realization of the nursing plan that has been prepared at the planning stage of nursing interventions provided to clients related to support, treatment, actions to improve conditions, education for clients-families or actions to prevent health problems that arise in the future [6].

For successful implementation of nursing implementation to be in accordance with the nursing plan, nurses must have cognitive (intellectual) abilities, abilities in interpersonal relationships, and skills in taking action. The implementation process must be centered on client needs, other factors that influence nursing needs [6]. The implementation carried out is divided into four components, namely observation actions, therapeutic actions, educational actions, and collaborative actions. The implementation carried out by researchers was adjusted to the plans that had been prepared.

On the first day, Wednesday, November 1 2023 at 22.00-08.00 WIB, researchers carried out implementation on clients with nursing diagnoses of comfort disorders related to pain. Monitoring the client's TTV showed blood pressure 107/70 mmHg, pulse 88x/minute, respiration 23x/minute, temperature 36.6 ℃, and oxygen saturation 98%. Identifying the location, characteristics, duration, frequency, quantity and intensity of pain. It was found that the client said that the pain was painful when eating, the pain was stinging, the pain was from the pit of the stomach to the neck, the pain came and went every 10 minutes. Monitoring the pain scale, it was found that the client said the pain was on a scale of 3 from 1-10. Taught the client a deep breathing technique, the client seemed to follow the instructions, was able to practice it himself and the client said the pain was reduced. Collaborate with doctors to administer medication.

Thursday, November 2 2023 at 22.00-08.00 WIB, researchers continued the second day of implementation with the client Mrs. W. Monitoring the TTV showed blood pressure 110/70 mmHg, pulse 87x/minute, respiration 24x/minute, temperature 36.5 ℃, and oxygen saturation 99%. Identifying the location, characteristics, duration, frequency, quantity and intensity of pain found that the client said there was no pain, the client did not grimace. Monitoring the pain scale, it was found that the client said the pain was on a scale of 1 from 1-10, the client looked calm. Collaborate with doctors regarding medication administration and client discharge planning.

E. Evaluation

At the evaluation stage, the activities carried out are evaluating during the process using the SOAP method. Nursing evaluation is a nursing action activity to determine the effectiveness of actions taken on patients. Nursing care evaluation is the final phase of the nursing process regarding the nursing care provided [7]. The results of the first day's evaluation carried out by the researcher on the client were marked S: the patient said he still had pain in the solar plexus, pain scale 3 from 1-10. O: the patient looks slightly grimacing, TTV, BP: 107/70 mmHg, N: 88x/minute, RR: 23x/minute, S: 36.6℃ and spo2 98%. A: The problem has not been resolved. Q: Intervention continues. On the second day of evaluation, the result was S: the patient said he had no pain, the pain scale was 1 out of 1-10. O: patient looks calm, TTV, BP: 110/70 mmHg, N: 88x/minute, RR: 24x/minute, S: 36.5℃. A: Problem resolved. P: Intervention is stopped, the patient is planned to go home.

2. Discussion

Nursing care in this case study was designed to overcome the problem of disturbed sense of security and comfort related to pain. Pain management therapy uses deep breathing relaxation. Relaxation therapy is a technique that is related to human behavior and is effective in treating acute pain. The implementation of nursing in this case study was planned with the aim of overcoming pain problems.

Assessment

Basically, there are not many gaps between the literature review and the case review, namely in the literature review obtained on the patient's main complaint of abdominal pain. For clients with a medical diagnosis,

dyspepsia is a medical condition characterized by pain or discomfort in the upper abdomen or solar plexus [8]. Dyspepsia has an impact on quality of life because the natural course of dyspepsia is chronic and often recurs. Providing less effective therapy to control dyspepsia symptoms can disrupt daily activities and increase medical costs [9]. Most patients still feel abdominal pain so they have to stop daily activities. If pain is not treated immediately, it will cause other symptoms, for example, it can cause increased stress, cause a decrease in a person's immunity, metabolic disorders, and the disease gets worse. Irregular eating can influence gastric acid secretion [10].

Nursing diagnoses

In the literature review, the diagnosis that emerged was disturbed sense of security and comfort related to pain and in the case review it was also found that disturbances in the sense of security and comfort were related to pain. Marked as subjective data: the patient said he felt pain when eating, pain felt like a sting, pain from the heart to the neck, scale 4 from 1-10, the pain came and went every 10 minutes. Objective Data: The patient's facial expression grimaced in pain, vital signs: BP: 100/60mmHg, N: 86x/minute, RR: 20x/minute, S: 36.7□C and SPO2 98%. According to theory, nursing problems that disrupt feelings of security and comfort can arise due to certain injuries or illnesses.

Pain is a patient complaint that affects the level of comfort. Divide efforts to overcome pain into two ways, namely pharmacological and non-pharmacological, where one of the non-pharmacological actions is relaxation. Relaxation is an action to free mentally and physically from tension and stress so that it can increase tolerance to pain. The benefits that arise from deep breathing relaxation techniques are that they can reduce or eliminate pain, increase peace of mind, and reduce feelings of anxiety. These results are not in line with the theory where deep breathing relaxation techniques are included in actions that can reduce the pain scale. [11].

Intervention

The nursing problem that arises is a disturbance in the sense of security and comfort related to pain [4]. In theory, nursing plans are written in accordance with the plan and outcome criteria based on the Indonesian Nursing Intervention Standards (SIKI) and Indonesian Nursing Outcome Standards (SLKI)[12]. The intervention is structured based on a diagnosis of a disturbance in the sense of security and comfort related to persistent pain in pain management. In the intervention in theory, there are two interventions for pain management and giving analgesics. The intervention carried out on Mrs. W is pain management and giving analgesics to Mrs. W because of the pain. what is felt is still in the moderate pain category, namely 4.

Therefore, to reduce pain, namely providing deep breathing relaxation techniques as an intervention of choice to reduce pain, there are interventions that are not carried out in theory, such as compresses on the painful area and reducing environmental factors that relieve or aggravate pain and progressive muscle training, because of these factors. does not have much effect on the patient's condition.

According to [13] The deep breathing relaxation technique is a technique used to suppress pain in the thalamus which is delivered to the cerebral cortex where the cerebral cortex is the center of pain, which aims to enable the client to reduce pain as long as the pain occurs. The things that need to be considered during relaxation are that the client must be comfortable, the client's mind must be calm and the environment is calm. A relaxed atmosphere can increase endorphin hormones which function to inhibit the transmission of pain impulses along sensory nerves from peripheral nerve nociceptors to the dorsal horn then to the thalamus, cerebri, and ultimately have an impact on reducing the perception of pain. Diagnosis is based on major and minor data.

Implementation

A component of the nursing process is a category of nursing behavior in which the actions required to achieve the expected actions and outcomes of nursing care are carried out and completed [14]. The author provided nursing care for 2 days for Mrs W starting from November 1 2023. The implementation carried out on the first day was pain management, monitoring and identifying the cause, scale and frequency of pain, teaching non-pharmacological techniques, namely deep breathing relaxation techniques, and administering appropriate medication. doctor's prescription.

On the second day, namely November 2 2023, the implementation carried out monitoring of the pain scale and deep breathing technique and administering medication according to the doctor's prescription. On the second day the patient had no pain. Not all implementations that have been planned can be carried out on patients, such as controlling the environment that aggravates pain (eg room temperature, lighting, noise), facilitating rest and sleep for patients because the room temperature is constrained by air conditioning such as air conditioning that is not too cold, lighting and noise from other patients' families, and interventions recommend adequate rest.

According to [15], the intensity of pain after the intervention decreased because the deep breathing relaxation technique intervention was able to control or eliminate pain in patients with dyspepsia syndrome. This is due to

the provision of the deep breathing relaxation technique itself, if the deep breathing relaxation technique is carried out correctly it will cause the pain felt to be reduced and the patient will feel more comfortable than before.

This is in line with research by [16] in previous research on students at Muhammadiyah University Semarang that gastric pain before deep breathing relaxation techniques was carried out was mostly on a scale of 2 (moderate pain) as many as 31 people (62.0%), 3 (pain severe) 10 people (20.00%) while the lowest on scale 1 (mild pain) was 9 people (18.0%).

Evaluation

From the results of nursing care carried out 2x24 hours using the nursing process approach as a problem solving method in evaluation. On the second day of evaluation, it was found that the problem that occurred with the client was resolved, marked with result S: the patient said he did not feel pain, the pain scale was 1 from 1-10. O: patient looks calm, TTV, BP: 110/70 mmHg, N: 88x/minute, RR: 24x/minute, S: 36.5℃. A: Problem resolved. P: Intervention is stopped, the patient is planned to go home. It can be concluded that by implementing the intervention standards that have been prepared, the author succeeded in providing nursing care to fulfill the pain comfort needs of dyspepsia patients.

This is in line with research conducted by [17] which shows that before the deep breathing relaxation technique was carried out, respondents stated that the pain was moderate (65.6%) and after the deep breathing relaxation technique was carried out, the majority stated mild pain (59.4%) . The results of this study showed that pain was reduced after using the deep breathing relaxation technique.

CONCLUSION

Implementation of nursing care for patients with disorders in fulfilling basic needs, safe and comfortable for clients, Mrs. W between theory and case is appropriate. This can be proven in the application of theory to clients. The implementation of this case was carried out using the nursing process starting from assessment, nursing diagnosis, intervention/planning, implementation and evaluation. The results obtained were changes in the degree of health that improved.

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