



ACUTE PAIN'S NURSING PROBLEM OR NURSING DIAGNOSIS IN HYPERTENSIVE PATIENTS BASED ON SDKI AND SIKI: A CASE STUDY

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ABSTRACT

Background: Complications of Hypertension due to hypertension can be suppressed with an appropriate, effective, and efficient nursing process approach, by knowing more specifically the signs and interventions. However, research on this matter is still very limited. **Objectives:** Identify signs and symptoms of major/minor acute pain nursing problems in hypertensive patients and identify the implementation of independent nursing actions to overcome these problems. **Methods:** This study uses a descriptive research design with a secondary data analysis approach sourced from nursing care documentation of 20 respondents in project reports of the D3 Nursing Study Program UNEJ for the period 2018 to 2020. Data on major/minor signs and symptoms, as well as the implementation of actions independent nursing care (based on SDKI and SIKI) identified, are presented in the distribution table for further discussion. **Results:** There are 6 major and minor signs of acute pain problems according to the SDKI that most often appear, namely complaining of pain, grimacing, restlessness, unable to complete activities, increased blood pressure, and changes in appetite and there are also 9 interventions that most often appear, namely: Identification Location, duration, frequency, quality, the intensity of pain Identify pain scales Identify knowledge and beliefs about pain Provide non-pharmacological techniques to reduce pain Facilitate rest and sleep Explain causes, periods and triggers of pain Explain strategies pain reliever, Teach non-pharmacological techniques to reduce pain. **Conclusion:** Knowing the most dominant symptoms and signs, complaints of increased pain, and blood pressure can be done with the right intervention, effective and efficient.

Keywords: Acute pain; Hypertensive; Nursing Problem

Introduction

Hypertension is the most common health problem in many countries, including Indonesia. One of the symptoms that hypertension sufferers often complain about is pain. If not treated properly, pain can worsen the condition of hypertension. (Wirakhmi et al., 2018) Hypertension that is not treated immediately has an impact on the emergence of degenerative diseases, such as heart disease, kidney failure, and peripheral vascular disease. (Setyawan and Ismahmudi, 2018) Hypertension is often referred to as the "silent killer" because it can appear without symptoms or warning signs, so many do not realize it (Ariyanti et al., 2020) Of all hypertension patients 90-95 report essential hypertension or hypertension. Primary hypertension is one of the most dangerous health problems worldwide. Hypertension is a major risk factor (WHO, 2018). The elderly are diagnosed with hypertension if they have a blood pressure of more than 139/89 mmHg, carried out after measuring at least 2 times with a distance of 1 week (P2PTM Ministry of Health RI, 2018).

The results of the survey from the Framingham Heart Study showed that those aged over 35 years had the most cases of hypertension because it was caused by obesity. Data from the East Java Provincial Health Office in 2016 stated that the prevalence of hypertension reached 26.9%. The most PTM diagnoses in 2017 were in East Java Province with several 9254, it can be seen that the diagnosis of hypertension in 2017 in East Java was ranked first with 9254 cases and ranked third with 1184 cases, and the coverage of blood pressure measurements in 2017 in January, February, March, April, and May which are increasing every month. The decline occurred in May 2017. (Ainsyah et al., 2018)

Sugiharto (2007) in Masriadi (2016), suggests that secondary hypertension is hypertension whose cause can be known, often associated with several diseases such as kidney, coronary heart, and diabetes, central nervous system disorders. Meanwhile, according to Brunner & Suddart, (2015), the cause of Primary hypertension is emotional disturbance, obesity, excessive alcohol consumption, coffee, drugs, and hereditary factors. Complications that occur if high blood pressure is not treated and handled, in the long term will cause damage to arteries in the body to organs that receive blood supply from these arteries. Complications of hypertension can occur in the heart, brain, kidneys, and eyes, which can lead to heart failure, risk of stroke, kidney damage, and blindness (Yolanda, 2017).

Management is needed to reduce the impact of hypertension, namely pharmacological therapy and non-pharmacological therapy. One of the non-pharmacological treatments that can be done is relaxation techniques. Relaxation is a self-management technique based on the workings of the sympathetic and parasympathetic nervous systems. Handgrip relaxation (finger grip relaxation) is an easy way to manage feelings and emotions and develop emotional intelligence in a person. Along our fingers are energy channels or meridians that are connected to various organs and emotions. Reflection points on the hands provide reflex (spontaneous) stimulation at the time of grip (Liana, 2014) Based on this, this case study aims to determine the nursing process of patients with hypertension through indirect observation and study of the Alumni Final Project Report documents in a library.

Some of the therapies used in acute pain patients are teaching non-pharmacological techniques to reduce pain. and there are several additional interventions, one of which is soaking the feet with ginger water, cucumber juice therapy, rose aromatherapy therapy, slow stroke back massage, and classical music therapy. The purpose of this study was to determine the major, and minor signs and symptoms that often appear as well as the main and additional interventions that are often performed in patients with hypertension with acute pain nursing problems.

Method

This study is research using quantitative methods with instruments in the form of an observation sheet in the form of a checklist containing signs and symptoms of major, minor, and interventions on nursing problems. Acute pain is sourced from the 2018 IDHS and SIKI. The source of the research data was obtained from secondary data of 20 patients obtained from the Case Report of the D3 Nursing Study Program at the University of Jember, Lumajang Campus for the period 2018 – 2021.

The research design used an instrument in the form of an observation sheet in the form of a checklist containing signs and symptoms of major, minor, and interventions on acute pain nursing problems originating in the 2018 IDHS and SIKI. years with acute pain nursing problems in Hypertensive patients.

The study was conducted on September 9, 2022, to September 14, 2022. The study was conducted at the D3 Nursing Study Program, Faculty of Nursing, University of Jember, Lumajang Campus. The instrument that the author uses is to use a checklist on the observation sheet to determine the percentage of symptoms and signs of

major, minor, major interventions, and additional interventions in Hypertensive patients with acute pain nursing problems.

The data collection procedure was carried out by making an observation sheet with a checklist and rating scale method to find the percentage of data on major, minor signs and symptoms that often appeared as well as major and additional interventions that were often performed in patients with hypertension with acute pain nursing problems. Where the results obtained from the observation sheet will be summarized back into tables and diagrams to get conclusions from the data obtained.

Result

Table 1 Major Signs and Symptoms of Acute Pain 20 Patients with Hypertension

NO	MAJOR DATA	PERCENT
1	complaining of pain	35%
2	feeling depressed	25%
3	looks grim	20%
4	nervous	5%
5	Unable to complete activities	15%

Table 1 shows that from 20 secondary data, 7 patients with major signs and symptoms complained of pain (35%) 5 patients grimaced (27%) Unable to complete activities 4 patients (22%) Felt depressed as much as 1 (4%) and Restless as much as 3 (12%)

Table 2 Minor Signs and Symptoms Acute Pain 20 Patients with Hypertension

NO	DATA MINOR	PERCENT
1	increased blood pressure	76%
2	breathing pattern changes	5%
3	change in appetite	19%

Table 2 shows that from 20 secondary data, patients with minor signs and symptoms increased blood pressure in 16 patients (82%), breathing patterns changed in 1 patient (4%), and appetite changed in 3 patients (14%).

Table 3 Main Interventions for Acute Pain in 20 Patients with Hypertension

NO	INTERVENTION	PERCENT
1	Identify location, duration, frequency, quality, intensity of pain	64%
2	Pain scale identification	35%
3	Identification of non-verbal responses	52%
4	Identify knowledge and beliefs about pain	29%
5	Provide non-pharmacological techniques to reduce pain	70%
6	Facilitation of rest and sleep	47%
7	Describe the causes, priodes, and triggers of pain	47%

8	Describe pain relief strategies	23%
9	Teach non pharmacological techniques to reduce pain	70%

Table 3 can show that of the 9 hypertension treatment interventions, 2 interventions have been fulfilled by 20 patients, and 7 interventions have not been fulfilled optimally.

Discussion

Based on table 1, it can be seen that the major signs and symptoms in the objective data of ineffective airway clearance according to the PPNI DPP (2018) consist of 5 components including Complaining of pain, Appearing grimacing, Feeling depressed or depressed, Restless, unable to complete activities. The results of the data show that the 3 major symptoms that often appear include 35% complaining of pain, 27% grimacing, and 22% unable to complete activities. According to the author's assumption that these 3 components often appear because they are the main symptoms of hypertension clients, however, the results from secondary data show that there is one major symptom that is the data that most often appears in 20 patients with a percentage of 35%, namely complaining of pain. According to the author's assumption, this has become a typical symptom of acute pain disorder, and this is in line with the theory. Following the theory, symptoms that commonly accompany hypertension, namely headache, and fatigue, are the most common in hypertensive patients. Some of the complaints felt by people with hypertension are: complaining of headaches, dizziness, weakness,

fatigue, shortness of breath, anxiety, nausea, vomiting, epistaxis, and decreased consciousness.

Theoretically, the signs and symptoms that often occur in patients with hypertension, one of which is a headache. The process of pain in patients with hypertension is caused by a blockage in the blood vessels, resulting in changes in blood vessels and vasoconstriction. As a result of this vasoconstriction causes blood vessel resistance in the brain, resulting in headaches. Pain is an unpleasant emotional and subjective experience as a result of actual or potential tissue damage and is felt at the site of the damage (Murtiono and Ngurah, 2020). So it can be concluded that the major signs that often appear in hypertensive patients with a diagnosis of acute pain are: complaints of pain due to blockage in the blood vessels which causes pain, especially in the head

From the data in table 2, it can be seen that the major signs and symptoms in the objective data of hypertension according to the PPNI DPP (2018) consist of 7 components, but the most prominent are 3 which include: Increased BP (blood pressure), Changes in breathing patterns Changes in appetite. The results of the data show that 3 major symptoms that often appear include 82% BP (blood pressure) Increased, 14% Changed appetite, and 4% Changed breathing pattern. According to the author's assumption that these 3 components often appear because they are the main symptoms of hypertension clients, this is in line with the theory. According to the theory, blood pressure is one of the factors that has a very important effect on the circulatory system. High or low blood pressure will affect homeostasis in the human body (Zainuddin et al., 2018). In young adults, blood pressure ranges from 120/70 mmHg in the resting position. However, physiologically, blood

pressure varies from time to time due to several influencing factors. Blood pressure above 140/90 mmHg measured on three separate occasions is called hypertension or high blood pressure (Stefani, Mascherini, Tosi, & Galanti, 2019).

Hypertension is a disease caused by an increase in systolic blood pressure 140 mmHg and diastolic blood pressure 90 mmHg which is carried out in 2 measurements with a minute difference in resting conditions (Ministry of Health, 2019). Based on the data table, minor clinical manifestations that often appear in hypertensive patients with a diagnosis of acute pain are increased blood pressure, which can cause pain, especially in the head. So it can be concluded that a minor sign that often appears in hypertensive patients with a diagnosis of acute pain is increased blood pressure

From the data in table 3, it can be known that hypertensive intervention according to DPP PPNI (2018) consists of the 9 most prominent components including Identification of Location, duration, frequency, quality, the intensity of pain, Identification of pain scales, Identification of non-verbal responses, Identification of knowledge and beliefs about pain, Provide non-pharmacological techniques to reduce pain, Facilitate rest and sleep, Explain the causes, prides, and triggers of pain, Describe pain relief strategies, Teach non-pharmacological techniques to reduce pain. According to the author's assumption that these 9 components often appear because they are interventions that are often used in Hypertension clients, there are several non-pharmacological techniques to reduce pain. and there are several additional interventions, one of which is foot soaking with ginger water, cucumber juice therapy, rose aromatherapy therapy, slow stroke back massage, and classical music therapy.

This is in line with the theory based on research conducted previously in 2015 by Hastuti and Insiyah about the effect of deep breath relaxation techniques on blood pressure in patients with moderate-severe hypertension, showing that deep breath relaxation techniques can reduce blood pressure in hypertension sufferers, where the systole blood pressure of Hypertension patients before the deep breathing relaxation technique is carried out, which is an average of 177.33 mmHg and average diastole of 95.87 mmHg, while after the breath technique is carried out in the patient's blood pressure at systole pressure, which is an average of 173.20 mmHg and an average diastole pressure of 90.57 (Murtiono dan Ngurah, 2020)

The relaxation mechanism of a deep breath in the respiratory system is in the form of a state of inspiration and expiration which is carried out as much as 6-10 times breathing in 1 minute. This breathing can cause increased cardiopulmonary stretching, resulting in a decrease in heart rate and speed. This relaxation of a deep breath can be done every day. Previous research conducted at the Budi Dharma Elderly Service House Yogyakarta showed a decrease in systole and diastole blood pressure with deep breath relaxation techniques carried out for 15 minutes which was given for 2 weeks and accompanied by a decrease in the pain scale. This decrease in blood pressure is also influenced by the responses of different individuals' bodies, the administration of deep breath relaxation techniques as much as 15 times per day with a time lag of 5 breaks for 2 days can reduce the scale of pain felt by clients Based on this, this case study aims to find out the nursing process of patients with mental hypertension

Based on the intervention data table, the planning that is often given to hypertensive patients with acute pain

diagnosis is to provide non-pharmacological techniques to reduce pain, one of which is the breath relaxation technique in terms of sudah which is proven through research conducted by Hastuti and Insiyah that this deep breath relaxation therapy is very effective for reducing pain in hypertensive patients, so it can be concluded that the intervention or planning that is often done to overcome pain in hypertensive patients is to provide non-pharmacological techniques because this has been proven through research conducted by Hastuti and Insiyah

Conclusion

Nursing diagnoses of acute pain suppression are determined more quickly. The most prevalent are complaints of pain, frank flinching, restlessness, inability to complete activities, elevated blood pressure, and changes in appetite. Pain location, characteristics, duration, frequency, quality, and intensity. identification of pain scales; identification of non-verbal pain; identification of knowledge and beliefs about pain; It explains causes, causes, and triggers, describes pain relief strategies, and teaches non-pharmacological techniques for pain relief. There are some additional interventions. One of them is Ginger Water Foot Bath, Cucumber Juice Therapy, Rose Aromatherapy, Throwback Massage and Classical Music Therapy. And that's been done in some of these interventions.

Suggestion

When conducting the study, nurse practitioners and academics are required to carry out the nursing process effectively and efficiently, therefore this research is to be able to use as a reference in finding major, and minor signs and nursing interventions in hypertensive patients with a diagnosis of acute pain

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