



Implementation Of Relaxation Therapy Listening To Music In Hypertensive Patients

Udin Sahrudin^{1*}

¹Universitas Yatsi Madani

Corresponding email : udinsahrudin@gmail.com

ABSTRACTS

Background : Hypertension causes the aorta and large arteries to reduce their ability to accommodate the volume of blood pumped by the heart, resulting in a decrease in heart rate. To overcome a decrease in cardiac output, this is by providing classical music therapy. **Objective:** This study aims to find out the description of nursing care for patients with reduced cardiovascular function and hypertension with the implementation of music listening therapy. **Methods:** This research was conducted using a case study. **Results:** The results of the assessment showed that the client said he had a history of hypertension, felt headache, shoulder and leg pain, was worried about his illness, and tired quickly. A nursing diagnosis of acute pain, ineffective health care and obesity was obtained. The intervention is by providing music therapy and health education. **Conclusion:** After carrying out these actions, the results showed that the problem of pain and health maintenance, while the problem of obesity was partially resolved. The evaluation results showed blood pressure in the range of 130/90 mmHg.

ARTICLE INFO

Article History:

Received 10 Jan 2024

Revised 17 February 2024

Accepted 21 March 2024

Available online March 2024

Keyword:

Hypertention, Music Therapy

1. INTRODUCTION

The success of health development efforts can be measured by decreasing morbidity rates, maternal and infant mortality rates and increasing Life Expectancy (UHH). In 2013, the value of Indonesia's life expectancy reached 70.07 years, higher than the value of life expectancy in 2012, namely 69.87 years. The proportion of the elderly population in 2012 was 7.59%. Since 2000, the percentage of the elderly population has exceeded 7%, which means that Indonesia has begun to enter the group of countries with an aging population, which will have an impact on shifting disease patterns (epidemiological transition) in society from infectious diseases to degenerative diseases (Ministry of Health of the Republic of Indonesia, 2014).

Hypertension is a degenerative disease that is common and has a fairly high mortality rate and affects a person's quality of life and productivity. Hypertension is often given the title the silent killer because this disease is a hidden killer. Systolic blood pressure (BBP) > 140 mmHg and/or diastolic blood pressure (BBP) > 90 mmHg. The joint National Committee on Prevention, Detection, Evaluation, and treatment of High Bloodpressure (JNC VI) and WHO/International Society of Hypertension guidelines subcommittees agree that TDS & both are used for the classification of hypertension. Systolic diastolic hypertension is diagnosed when the SBP is 140 mmHg and the SBP is 90 mmHg. Isolated systolic hypertension (HST) is when the SBP is 140 mmHg with a SBP <90 mmHg (Kuswardani, 2007).

Data from the World Health Organization (WHO) in 2015 shows that around 1.13 billion people in the world have hypertension, meaning that 1 in 3 people in the world are diagnosed with hypertension. The number of people with hypertension continues to increase every year, it is estimated that by 2025 there will be 1.5 billion people affected by hypertension, and it is estimated that every year 10.44 million people die from hypertension and its complications.

In 2017, the Institute for Health Metrics and Evaluation (IHME) stated that of the 53.3 million deaths in the world, 33.1% were caused by cardiovascular disease, 16.7% from cancer, 6% from DM and endocrine disorders and respiratory tract infections. down by 4.8%. Data on the causes of death in Indonesia in 2016 showed that the total number of deaths was 1.5 million, with the most common causes of death being cardiovascular disease at 36.9%, cancer at 9.7%,

DM and endocrine diseases at 9.3% and tuberculosis at 5.9%. IHME also stated that of the total of 1.7 million deaths in Indonesia, the risk factors that caused death were blood pressure (hypertension) at 23.7%, hyperglycemia at 18.4%, smoking at 12.7% and obesity at 7.7%. %.

Riskesdas 2018 stated that the prevalence of hypertension based on measurement results in residents aged ≥ 18 years was 34.1%, the highest in South Kalimantan (44.1%), while the lowest was in Papua (22.2%). The estimated number of hypertension cases in Indonesia is 63,309,620 people, while the death rate in Indonesia due to hypertension is 427,218 deaths. Hypertension occurred in the age group 31-44 years (31.6%), age 45-54 years (45.3%), age 55-64 years (55.2%). From the prevalence of hypertension of 34.1%, it is known that 8.8% were diagnosed with hypertension and 13.3% of people diagnosed with hypertension did not take medication and 32.3% did not regularly take medication. This shows that the majority of people with hypertension do not know that they have hypertension so they do not receive treatment.

Hypertension treatment should be carried out comprehensively, including promotive, preventive, curative and rehabilitative. Hypertension treatment aims to reduce blood pressure which includes pharmacological and non-pharmacological therapy, namely managing hypertension by administering antihypertensive drugs. Meanwhile, non-pharmacological therapy for hypertension sufferers is therapy without drugs which is also carried out to reduce blood pressure due to stress by managing a healthy lifestyle, namely by reducing salt and fat intake, increasing fruit and vegetable consumption, stopping smoking and alcohol habits, reducing excessive body weight. , get enough rest, exercise regularly and manage stress (Susanti, 2015).

The results of research conducted by Yuli Mulyawati (2013) entitled a combination of gamelan music and elderly exercise for elderly people with hypertension showed that before being given music therapy and elderly exercise the systolic blood pressure was 166 and diastolic 101 after being given music therapy and elderly exercise the systolic blood pressure was 146 and diastolic 89. This study is important as a basis for evidence-based practice in nursing care in the community.

2. METHODS

This study utilized a case report approach to provide an overview of nursing care for patients with reduced cardiovascular function and hypertension with the implementation of music listening therapy.

Patient Information

Client's name, Mrs. N, 60 years old, elementary school education, housewife, address at Kp Ketos RT 01/03 Pasar Kemis, with a medical diagnosis of hypertension. The client stated that he previously had a history of high blood pressure at the age of 54 and regularly took high blood pressure medication. Clients say they often get dizzy, the pain in the head and shoulders feels severe if they don't take blood pressure lowering medication, and they feel tired quickly. Sometimes you feel your ears ringing and your chest pounding. Pain in the legs. The client said he had a hereditary disease of hypertension.

Biological condition: Diet: usually consumes rice, vegetables, tofu, tempeh and side dishes 3 times a day. The client likes savory and fatty foods, drinks \pm 8 glasses of water/day. The client said he slept \pm 6 hours at night, never slept during the day. Experiencing sleep disturbances, namely dizziness/dizziness and body aches that occur when waking up and disappear spontaneously after a few hours. Elimination pattern: BAB is usually 1 time a day with a soft consistency while BAK is 3-4x a day yellow in color. Personal hygiene is carried out every day. The client said he carried out daily activities independently. Has no hobbies/interests and never goes on holiday or recreation with the family, mostly hanging out with his children and grandchildren at home.

Clinical Findings

Assessment of cognitive function (SPMQ): the client's intellectual function is intact, there is no cognitive impairment. The client's emotional response is stable, his appearance is neat and he is able to take care of himself, he talks a little loud. Clients and families have a good support system. The client's relationship with family and other people is good, there are no problems. Clients perform prayers 5 times a day and attend regular recitations. The client said he wanted to stay healthy and was trying to live a healthy life because he felt old. The client said he did not feel embarrassed by the condition/circumstances that had happened to him.

Physical examination: good AC, compos mentis awareness, BP 160/90 mmHg, pulse 90x/minute, temperature 37°C, RR 22x/minute, TB 155 cm, BB 80 kg, BMI 25.8 (overweight), black and gray hair, no dandruff. Elastic skin turgor. The conjunctiva is not anemic. Ears are symmetrical, ear sensitivity test results are normal. The nose is symmetrical, clean, no distractions. Oral examination of moist lip mucosa. There is no swelling of the thyroid or lymph glands in the neck. Examination of the breasts and armpits is symmetrical, no tenderness, no disturbances. Thorax examination: Inspection of the heart: symmetrical, no lesions, palpation: ictus cordis not palpable, percussion: dull, and regular auscultation. Pulmonary response is that the client has no respiratory system disease, the client's ability to breathe is good and normal, respiratory frequency is 22 x/minute and there are no disturbances. Lung examination Inspection: chest symmetrical right and left, no chest retraction, Palpation: right and left vocal fremitus are the same, Percussion: sonor, Auscultation: vesicular. Under normal circumstances, there is no pain and no additional sounds. Inspection abdominal examination: convex shape, symmetrical, palpation: no tenderness, tympanic percussion, auscultation heard intestinal peristalsis. Musculoskeletal: muscle strength 3. Medical therapy: The client takes the hypertension medication amlodipine 5mg 1x1 regularly.

Diagnostic Assessment

The diagnoses for the patient are acute pain, ineffective health maintenance, and obesity. All of these nursing diagnoses are related to the client's hypertension condition.

Therapeutic Intervention

Clients are given music therapy to increase relaxation for 30 minutes every day for 4 days. After carrying out nursing actions, the level of pain can decrease with the Result Criteria: Reduced complaints of pain, reduced grimaces, decreased protective attitude, and nervousness.

3. RESULTS AND DISCUSSION

Acute pain

Based on the results of the study regarding acute pain, subjective data was obtained from Mrs. N, 60 years old, complaining of pain, pain in the head and shoulders that felt severe

if she did not take blood pressure lowering medication, leg pain. The pain is felt like being hit, the pain is felt in the back of the head, neck and nape, with a pain scale of 5, the timing of the pain is felt when walking and sitting. Objective data obtained from the results showed that the client was grimacing and holding the painful part, BP 160/90 mmHg, pulse 90x/minute, temperature 37°C, RR 22x/minute, muscle strength 3. According to Smeltzer's theory (2013), hypertensive clients experience headaches up to the nape of the neck due to narrowing of the blood vessels as a result of vasoconstriction of blood vessels which will cause an increase in cerebral vascular pressure, this situation will cause headaches up to the nape of the neck in hypertensive clients.

According to (Nurarif & Kusuma, 2017) Hypertension management aims to prevent morbidity and mortality due to cardiovascular complications related to achieving and maintaining blood pressure below 140/90 mmHg. The author intervened with Mrs N using the Indonesian Nursing Outcome Standards (SLKI) and Indonesian Nursing Intervention Standards (SIKI) approaches. Nursing care provided to deal with pain is pain management, one of which is using relaxation techniques, listening to music.

According to Endang (2014) music has been used to treat patients of all ages from babies, children, adults and the elderly in reducing anxiety when being treated, helping people to relax, reducing pain, improving cognitive function, minimizing the effects of noise, increasing satisfaction with services. , increasing feelings of happiness, and increasing tolerance for invasive or unpleasant actions. Providing classical music therapy to Mrs N for 15 minutes consistently over four days was proven to be effective according to the results of research by Tangahu (2015) which stated that most of the research subjects looked relaxed and calm when listening to music therapy. The research results found that nursing actions were carried out for more than 30 minutes and the research subjects followed the music. This is in accordance with the intervention carried out in Raharjo's (2010) research which showed that therapy was carried out for 60 minutes/face to face. This is supported by research by Reuters Health (2008) which states that listening to classical music for 30 minutes lowers blood pressure.

Health Care is ineffective

Based on the results of the study regarding ineffective health maintenance, subjective data was found, Mrs. Objective data was obtained, the client looked confused about the disease he was suffering from, BP 160/90 mmHg, pulse: 90x/minute. According to the

Indonesian Ministry of Health (2014) There are risk factors for hypertension, such as age, gender, family history, genetics (risk factors that cannot be changed or controlled), smoking habits, salt consumption, saturated fat consumption, used cooking oil, alcoholic beverage consumption habits, obesity, lack of physical activity, stress and use of estrogen. The author intervened with Mrs N using the Indonesian Nursing Outcome Standards (SLKI) and Indonesian Nursing Intervention Standards (SIKI) approaches. Nursing care provided to overcome ineffective health maintenance is by identifying factors that can increase and decrease behavioral motivation living clean and healthy and providing health education. According to Nurhakim & Kusuma (2017), the aim of health education is to increase patient knowledge about hypertension and its management so that patients can maintain their lives and prevent further complications.

Nursing care for Mrs N which was carried out for four days was effective in maintaining health. According to Nurarif & Hakim (2017) To maintain long-term therapy requires good interaction and communication between patients and health workers (nurses, doctors) by providing health education. Things that must be considered in patient interactions with health workers are as follows: Every time the patient is examined, the patient is informed of the results of their blood pressure measurement. Discuss with the sufferer the goals they want to achieve regarding their blood pressure. Discuss with sufferers that hypertension cannot be cured, but can be controlled to reduce morbidity and mortality. Reassure the sufferer that the sufferer cannot say how high his blood pressure is based on what he feels, blood pressure can only be known by measuring it using a sphygmomanometer. Patients should not stop the drug without discussing it first. As far as possible, therapeutic actions are included in the sufferer's way of life. Involve the sufferer's family in the therapy process. For patients who are less compliant, try to visit more frequently, contact the patient immediately, if they do not come at the appointed time. Seeing the importance of patient compliance in treatment, it is very necessary for patient knowledge and attitudes regarding the understanding and implementation of hypertension treatment.

Obesity

Based on the results of the study regarding obesity, subjective data was obtained, Mrs N, 60 years old, said that she often felt tired and had limited movement due to obesity. Objective data obtained as a result: Body Weight 80 Kg, Height 155cm, BMI: 25.8, the client's gait appears to be holding an object to support it, such as a wall/stool.

According to several studies, obesity has a significant relationship with the incidence of hypertension. Based on the Framingham Study, overweight (overweight and obesity) accounts for around 26% of hypertension cases in men and 28% in women. Weight loss is the most important element in preventing and treating hypertension. Hypertensive patients are encouraged to lose weight if they are obese and this will have the effect of lowering blood pressure (Rokushwara & Syarif, 2016).

The author intervened with Mrs N using the Indonesian Nursing Outcome Standards (SLKI) and Indonesian Nursing Intervention Standards (SIKI) approaches. The nursing care provided to overcome obesity is effective weight education, namely by explaining how to maintain food intake, exercise to increase and decrease body weight. According to Nurarif and Kusuma (2017) the recommended diet for hypertension sufferers is: Moderate salt restriction from 10 gr/day to 5 gr/day, low cholesterol and low saturated fatty acid diet, weight loss, reduced ethanol intake, stopping smoking, High potassium diet. Regular and targeted physical exercise or exercise that is recommended for hypertension sufferers is exercise that has four principles, namely: Types of exercise, namely isotonic and dynamic, such as running, jogging, cycling, swimming and others. A good exercise intensity is between 60 -80% of aerobic capacity or 72-87% of maximum heart rate is called the training zone. The maximum heart rate can be determined using the formula $220 - \text{age}$. The duration of training is between 20 - 25 minutes in the training zone. The frequency of training should be 3 x per week and the best is 5 x per week.

Nursing care for Mrs N which was carried out for four days was partially effective in reducing weight. It takes a long and consistent time for participants to lose weight progressively. This is because when you are young, you can diet by making changes to your diet and activity patterns. However, this is even more difficult to do if you are over 40 years old to achieve maximum results. This is influenced by the difference between body condition and the activities carried out. As people get older, they won't be as active as they used to be. They will become tired more quickly and their ability to remain active will be hampered by their physical health. So, calories that should be burned for energy settle together with fat and can cause weight gain. According to the Indonesian Ministry of Health (2018).

Losing weight requires greater effort as you get older because it is influenced by the following factors:

- Muscle shrinkage

As we age, muscle tissue in the body shrinks. This is influenced by hormonal changes which make the body unable to repair damaged muscle cells. If muscle cells decrease, the existing calories are not burned normally. This causes the body to become fat.

- Reduced sleep quality

As you get older, the quality of your sleep will also decrease. This is caused by the emergence of sleep disorders related to disease and the effects of drug use. They will experience restless sleep and even wake up at night. Even though they have to get enough sleep, around eight hours per day.

If this continues, the body's biological clock will be disrupted. Finally, at night they will not be able to sleep and will be sleepy or choose to take a nap. Well, if your sleep time is disturbed, it will unbalance the hormones in your body. This then prevents calories from being burned properly and optimally.

- Metabolism changes

People who are 40 years old will experience a decrease in metabolism of 5 percent every ten years. Metabolism is the process of forming energy in the body. If this process slows down, fewer calories are burned. Therefore, as you get older, the calorie intake your body needs decreases to avoid being overweight.

4. CONCLUSION

The implementation of nursing through music therapy activities was carried out for 4 days in a comprehensive manner based on the nursing/intervention plan. The results of the evaluation carried out by the author showed that two nursing problems experienced by the patient were resolved and one problem was partially resolved. The diagnosis that was partially resolved was obesity, the diagnosis that was resolved was acute pain and ineffective health care.

5. REFERENCES

- Asyari, H., Rohaedi, S., Marsono, M., Hasni, N. I., & Darmawati, I. (2024). "TERKOMFIRMASI" Terapi Komplementer Relaksasi Nafas Dalam dan Relaksasi Otot Progresif Untuk Klien Hipertensi. *Yayasan DPI*.
- Bolton, E., & Rajkumar, C. (2011). The ageing cardiovascular system. *Reviews in Clinical Gerontology*, 21(2), 99–109. <http://doi.org/10.1017/S0959259810000389>
- Endang Triyanto. (2014). *Pelayanan Keperawatan Bagi penderita Hipertensi secara terpadu*. Yogyakarta: Graha Ilmu.
- James P.A., Oparil S., Carter B.L., Cushman W.C., Dennison-Himmelfarb C., Handler J., et al. (2014). Evidence-based guideline for the management of high blood pressure in adults: Report from the panel members appointed to the eighth Joint National Committee (JNC 8). *JAMA*. 2014; 311 (5): 507- 20. doi:10.1001/jama.2013.284427.
- Kementerian Kesehatan RI. (2014). *InfoDATIN: Pusat data dan informasi kementerian kesehatan RI, Hipertensi*. Jakarta: Pusat Data dan Informasi Kementerian Kesehatan RI
- Miller, C. A. (2012). *Nursing for wellness in order adults*, 6th edition. Philadelphia: Wolters Kluwer Health, Lippincott Williams & Wilkins.
- Nurarif dan Kusuma. 2017. *Aplikasi asuhan keparawatan berdasarkan diagnosa medis dan nanda nic-noc jilid 1*. Yogyakarta : Mediaction
- PPNI. 2018. *Standar Diagnosis Keperawatan Indonesia: Definisi dan Tindakan Keperawatan*. Edisi 1. Jakarta: DPP PPNI
- Reusters Health. 2008. Listening to music found to lower blood pressure. New York – Fri, May 16 2008. [Http://www. Reusters.com/article/ 2008/05/16/uslistening-music-idUSCOL6569042008-516](Http://www.Reusters.com/article/2008/05/16/uslistening-music-idUSCOL6569042008-516)
- Riskesdas. 2018. *Laporan Riset Kesehatan Dasar Tahun 2018*. Jakarta: Badan Penelitian dan Pengembangan Kesehatan Kementerian Kesehatan RI.
- Rokshawara Teguh & Syarif Syahrizal. 2016. *Hubungan Obesitas dengan Kejadian Hipertensi Derajat 1 di Pos Pembinaan Terpadu Penyakit Tidak Menular (Posbindu PTM) Kantor Kesehatan Pelabuhan Bandung*
- Stanley, M. & Beare, P.G diterjemahkan oleh Nety Juniarti. (2006). *Buku Ajar Keperawatan Gerontik*. Ed. 2. Jakarta: EGC

- Smeltzer C. Suxanne, Brunner dan Suddarth. 2013. Buku Ajar Keperawatan Medikal Bedah. Edisi 8. volume 2. Jakarta: EGC.
- Strait, J. & Lakatta, E. (2012). Aging-Associated Cardiovascular Changes and Their Relationship to Heart Failure. *Heart Failure Clinics*, 8 (1), 143- 164. <http://dx.doi.org/10.1016/j.hfc.2011.08.011>
- Tabloski, P. A. (2014). *Gerontological Nursing (3rd Ed)*. New Jersey: Pearson.
- Tangahu, AL, Rini F. Zees, Sitti Rahma. (2015). Pengaruh Terapi Musik Klasik Terhadap Penurunan Tekanan Darah Pada Lansia Di Wilayah Kerja Puskesmas Kabila Kabupaten Bone Bolango. *Jurnal*. 1-12. <http://kim.ung.ac.id/index.php/KIMFIKK/article/view/11250>
- Touhy, T. A & Jett, K. F. (2014). *Ebersole and Hess Gerontological Nursing & Healthy Aging (4th Ed)*. Missouri: Elsevier Mosby

