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Research Article

Application of Foot Massage Therapy Procedures Using Lavender Essential Oil on Clients With Hypertension

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Abstrak

Background: Hypertension is one of the main problems in the world of health in Indonesia and the world. According to WHO (2011) there are 1 billion people in the world suffer from hypertension and 2/3 of them are in developing countries. This condition requires pharmacological and nonpharmacological treatment. One of them, giving foot massage therapy using lavender essential oil.

Objective: This study aims to determine the effectiveness of applying foot massage procedures using lavender essential oil on hypertensive clients.

Methods: This study uses a qualitative design to describe in-depth information about the application of foot massage therapy procedures using lavender essential oil on clients who have hypertension.

Result: Foot massage is done using lavender essential oil for 15-20 minutes 2 x 1 day. Although the nursing problems are the same, the end result is different. After 3 days of intervention, there was a decrease in blood pressure in Mr D from 150/90 mmHg to 120/80 mmHg with a scale of pain from 4 to 0. While in Mr. S from 170/100 mmHg to 150/90 mmHg with a scale of pain from 5 to 1. Mr. D has decreased blood pressure more optimally than Mr. S because you do therapy regularly.

Conclusion: of the study is that foot massage therapy using lavender essential oil can reduce the value of blood pressure and the scale of pain. This therapy is effective if done routinely and client can take advantage of health facilities.

Keywords: foot massage therapy, lavender essential oil, hypertension, decreasing blood pressure.

Introduction

Hypertension is categorized as the silent disease because the patient does not know he has hypertension before checking his blood pressure. Whereas if there is continuous hypertension can trigger stroke, heart attack, heart failure and is the main cause of chronic kidney failure. Anyone can suffer from hypertension, from various age groups and social groups.¹ According to reported hypertension is the number 3 cause of death after stroke and tuberculosis, where the proportion of deaths reaches 6.7% of the population of deaths at all ages in Indonesia.² The results of the 2015 Balitbangkes Basic Health Research (Riskesdas) showed the national prevalence of hypertension was 25.8%. Hypertension sufferers in Indonesia are estimated at 15 million but only 4% have controlled hypertension. Controlled hypertension is those who suffer from hypertension and they know they are being treated for it. Treatment in overcoming hypertension can be done with pharmacological and non-pharmacological. Non-pharmacological therapy is proven to be able to control and maintain blood pressure so that it does not increase.³ Some complementary therapies can be done in patients with hypertension such as; laughter therapy, foot massage therapy using lavender essential oil, meditation therapy, classical music therapy.⁴

Foot massage therapy using lavender essential oil is a technique of touching or pressing on the feet, where on the feet many nerves relate to all organs, both external and internal organs of the human body using lavender essential oil, one of which functions to smooth blood circulation. From the results of ⁴, it shows that the decrease in systolic and diastolic blood pressure of respondents occurred after complementary foot massage therapy using lavender essential oil was carried out. The role of nurses in providing nursing care is to help hypertension sufferers to perform non-pharmacological treatment by performing nursing interventions on foot massage therapy using lavender essential oil.⁴ Researchers hope about the importance of this research to determine the effectiveness of the application of Foot Massage Therapy Procedures Using Lavender Essential Oil on Clients with Hypertension. This study aims to determine the effectiveness of applying foot massage procedures using lavender essential oil on hypertensive clients.

Methods

This study used a qualitative design to describe in-depth information about the application of foot massage therapy procedures using lavender essential oil on clients who have hypertension. In this study, the participants studied were individuals who suffered from hypertension in the Public health center Baru Village, Pasar Rebo District, East Jakarta. Participant recruitment was done by purposive sampling, The criteria for the participants in this study were: aged 40 years and over, male, had a history of hypertension, blood pressure more than 140/90 mmHg, not allergic to lavender essential oil, willing to give foot massage therapy procedures using lavender essential oil, willing to reduce smoking and reduce salt during the administration of therapy. This research was carried out in the Baru Village, Pasar Rebo District, East Jakarta in 2021. The time of the research was carried out in October 2020-January 2021. Ethical considerations in this study were carried out by fulfilling principles of the Five Rights of Human Subjects in Research. The five rights include the right to self-determination; the right to privacy and dignity; the right to anonymity and confidentiality; the right to get treatment fair; and the right to protection from inconvenience or loss.

This research data collection is based on interview guidelines and observation notes with the aim of obtaining as much information as possible to answer the research objectives. In collecting this data, the researcher not only conducted interviews, but also made field notes containing a description of the date, time, and basic information about the atmosphere during the environmental setting interview, social interactions, and informant activities that took place during the interview. While data collection is done by observation, namely observing directly on various subject activities, especially those that are following the research objectives. The tools used for data collection in this study were interview guides and observation notes that had been prepared and used writing aids, and a blood pressure meter. Furthermore, data from interviews, observations, and documentation studies

are poured in an assessment format and analyzed to find the main problem and then a non-formal nursing plan is drawn un pharmacology regarding foot massage procedure using lavender essential oil. At the implementation stage, it is carried out directly by nurses families and observed and documented the patient's response to foot massage therapy procedures. Data analysis in this study is based on a phenomenological approach. The process of data analysis was carried out throughout the study and carried out continuously from the beginning to the end of the study. The process of data analysis in this study is to collect all data from the results of interviews, observation notes, and field notes to informants and then compare them with the literature and existing assumptions. The data analysis used is the qualitative analysis and in its presentation, it starts from the data collected and then concluded.

Results and Discussion

The research subjects were 2 heads of families who were given the intervention together. Mr. D is 50 years old, high school education, currently working as a private employee, Muslim, with Javanese ethnicity, address Pasar Rebo. Mr. D is 50 years old, high school education, currently working as a private employee, Muslim, with Javanese ethnicity, address Pasar Rebo. While Mr. S is 59 years old, high school education, currently not working, Muslim, with Javanese ethnicity, address Pasar Rebo. Mr. D said he had hypertension for the past 1 year, had a history of smoking since his teens, and has now quit smoking. Mr. D has a habit of consuming fatty and salty foods because he likes to cook. So far, he has been diligent in monitoring health facilities such as health centers and hospitals. While Mr. S said he had hypertension since 3 years, had a history of smoking since his teens until now. Mr. So far, S has only taken over-the-counter medicine and it is difficult to ask him to go to the puskesmas.

Physical examination results in B. D blood pressure 150/90 mmHg, head feels dizzy and painful, neck feels stiff, complains of frequent soreness in the palms. The results of the examination of Mr. S obtained blood pressure 180/100 mmHg, Head feels dizzy and hurts, eyes are dizzy. Nursing diagnoses upheld by nurses include Disturbance of comfort: pain (headache) related to the inability of the family to care for sick family members and the risk of complications of hypertension related to the inability of the family to recognize the problem of hypertension. Nursing interventions include Observation of blood pressure and pain scale before and after foot massage therapy using lavender essential oil. Give an explanation to the family about how to reduce pain due to high blood pressure using flipcharts and leaflets, about the meaning of foot massage therapy, lavender essential oil, benefits, contraindications, necessary ingredients, and steps for giving foot massage therapy using lavender essential oil. Teach good and comfortable environment modification techniques for patients with pain due to hypertension and their families. Motivate the family to bring a sick family member to the nearest health facility. The implementation of the foot massage therapy procedure using lavender essential oil was carried out for 4 days. Nurses measured blood pressure and pain scales before the client carried out foot massage therapy procedures. Provide explanations to clients and families on how to reduce pain in hypertension using flipcharts, leaflets, and demonstration materials for a foot massage with lavender essential oil. Demonstrate how to give foot massage therapy with lavender essential oil. Measure blood pressure and pain scale after the client have done therapy.

On the 4th day of the implementation of the foot massage therapy procedure, Mr. D, October 25, 2020, before the administration of pain scale therapy Mr. D after receiving therapy the pain disappeared, while for the results of blood pressure before treatment it was 130/90 mmHg after receiving therapy it became 120/80 mmHg. It can be seen that the pain disappeared and the diastolic and systolic pressure decreased by 10 mmHg. While at Mr. S before giving pain scale therapy 2 after receiving pain scale therapy 1, while the results of blood pressure before giving therapy 160/90 mmHg after receiving therapy became 150/90 mmHg. It can be seen that the pain disappeared and the systolic pressure decreased by 10 mmHg.

The author will describe the differences or gaps between theoretical reviews and case reviews of applying foot massage therapy procedures using lavender essential oil on Mr. D (Client I) and Mr. S

(Client II) with hypertension health problems. At the time of the study, the author found some congruence between the data obtained and related to health problems found by the author in existing theories such as in ⁶ Among them are Mr. D complains of headache, or dizziness, fatigue and restlessness. The client does not experience all the symptoms of hypertension such as nausea, vomiting, shortness of breath, damage to the brain, eyes, heart, and kidneys, dizzy eyes, decreased consciousness because the patient often visits the health center and consumes herbal medicines such as star fruit juice, cucumber, and stew. garlic. While Mr. S complains of headaches, fatigue, and blurred vision. The client does not experience all the symptoms of hypertension such as nausea, vomiting, shortness of breath, damage to the brain, eyes, heart, and kidneys, decreased consciousness because the patient often consumes herbal medicines such as star fruit juice, cucumber, and celery. Explains that when a person gets older, he or she also experiences physiological changes, such as a decrease in arterial elasticity and stiffness of blood vessels, this causes the risk of hypertension to increase with age.^{7,8,9}

From the results of the study, it was found that Mr. D just found out that he had hypertension for the last 1 year. Symptoms that are often felt are headaches or dizziness and stiffness in the neck and easy fatigue. Factors causing hypertension in Mr. D is genetic, where Mr. D has a history of hypertension from his mother, besides that, he also has an unhealthy lifestyle, such as consuming fatty and salty foods and rarely exercising. While Mr. S just found out that he had hypertension for the last 3 years. Symptoms that are often felt are headaches or dizziness and firefly eyes so that vision becomes blurred. Factors causing hypertension in Mr. S are genetic, wherein Mr. S has a history of hypertension from both parents, besides that, he also has an unhealthy lifestyle such as rarely exercising and still actively smoking until now.

Mr. D and Mr. S found two health problems in patients with hypertension with the first nursing diagnosis, namely disturbance of comfort: pain (headache) in the family related to the inability of the family to care for sick family members. The author made the diagnosis because when interviewed Mr. D does not know how to treat family members with hypertension other than preparing herbal therapy and going to the Public health center, the family also does not know how to do foot massage using essential oils so that their blood pressure can drop. From various literatures it has been proven that the right complementary therapy in patients can reduce hypertension.¹⁰⁻¹³ While in the family of Mr. S if he is sick, he only feels it. Mrs. S usually already provides medicine from the Public health center or prepares herbal medicine. So far, the family doesn't know how to take care of sick family members other than going to the Puskesmas.

In recognizing health problems, the authors plan to provide health education about hypertension and the procedure for providing foot massage therapy using lavender essential oil, besides that the authors also provide leaflets to families so that families who are not present can receive information from the leaflets. In addition, the author will also provide opportunities for families to ask questions and discuss their illness. In making the right decision, the author will motivate families to use health facilities, especially for Mr. S who rarely controls blood pressure. In caring for family members, the author will demonstrate the procedure of foot massage therapy using lavender essential oil and motivate the family to do the therapy regularly. In addition, the authors will observe the pain scale and blood pressure results before and after therapy to see the effectiveness of the therapy for hypertension sufferers. Foot massage is a practice of massaging certain points on the feet with the aim of obtaining the health of all members of the body. Massaging the footpoints will certainly affect the parts of the body that are connected to these points. Stimuli in the form of pressure on the feet can facilitate waves of relaxation throughout the body.^{14,15,16}

In the implementation of nursing actions, Mr. D followed all the author's directions from the assessment to the evaluation of the demonstration of giving foot massage therapy using lavender essential oil because his desire to recover was very high so the author was very easy to motivate clients and teach how to give foot massage therapy using lavender essential oil, clients and families can do independently and regularly perform therapy. While Mr. S, when the health counseling was carried out, the family seemed less focused on listening to the counseling given, so that when the

author conducted an evaluation the family was still confused about explaining the information that had been conveyed. In addition, the lack of participation of family members to care for Mr. S in providing foot massage therapy using lavender essential oil, so that on the 3rd day of the meeting, the family has not been able to do it independently. On the 3rd day, the author also provided re-education regarding the action of giving foot massage therapy using lavender essential oil. After the author of nursing care repeatedly, the family began to be able to do it independently.

At the evaluation stage, the authors assess the success rate of the actions that the authors take, evaluation using SOAP on each diagnosis found in the family. On the 2nd day of action before giving therapy the client's pain scale of 5 after receiving therapy was reduced to 4, while for the results of blood pressure before giving therapy 170/100 mmHg after receiving therapy it became 160/100. It can be seen that there is a decrease in the pain scale because the patient feels relaxed and there is a decrease in systolic pressure as much as 10 mmHg. On the 4th day of action before giving therapy pain scale 2 after receiving pain scale therapy 1, while for blood pressure results before giving therapy 160/90 mmHg after receiving therapy it became 150/90 mmHg. It can be seen that the pain disappeared and the systolic pressure decreased by 10 mmHg. It can be concluded that giving foot massage therapy using lavender essential oil can lower blood pressure if it is done consistently. During therapy the patient is willing to reduce smoking and diligently exercise, this is because the nicotine substance in cigarettes affects blood pressure. So that the results obtained are maximized.

The results of this study indicate the effectiveness of significantly reducing blood pressure due to being given foot massage therapy, This is as explained by Wahyuni foot massage therapy improves blood circulation throughout the body, maintains good health, helps reduce pain and fatigue,⁵ launches the production of endorphins which function to relax the body so that blood pressure decreases. This is also explained massage techniques have an impact on the smooth circulation of blood flow, balance the flow of energy in the body, and relax muscle tension.¹⁷ Although massage techniques will not have much impact on patients with severe hypertension, several studies have shown that massage can lower blood pressure in patients with mild and moderate hypertension.

Conclusion

Based on nursing care to Mr. D and Mr. S for 4 days with complaints headache and dizziness in the flexion of the neck. From the results of the intervention done on Mr. D and Mr. S reflexology foot massage therapy using lavender essential oil is to help promote blood circulation. From the implementation carried out on Mr. D and Mr. S is found to exist an increase in blood pressure on the client's TD, therefore therapy is given Foot massage reflexology for clients 2x a day in the morning and evening monitored by Mr. D and Mr. S. The author concludes for the general-purpose achieved. The client seems to have been motivated to carry out what the author teaches, this success is due to the active participation of Mr.'s family. D and the family of Mr. S. Both clients have been motivated to do foot massage therapy using lavender essential oil more regularly and comply with dietary restrictions for people with hypertension and reduce smoking. It is hoped that the cadres and Puskesmas will always monitor and improve the quality of health services in accordance with advances in science and technology and the development of science, especially for monitoring the success of management for patients with hypertension, besides making an agenda to carry out non-pharmacological therapies such as foot massage for patients with hypertension. The results of this study can be used as an application for nursing actions independently for hypertensive patients. And for further writers, it is expected to further improve their knowledge and skills in carrying out nursing care for hypertension families by providing foot massage therapy using lavender essential oil.

Conflict of Interest Declaration

The author has received funding from Akper Yaspen Jakarta. In this regard, I certify as the author that I have fully disclosed this interest to the Indonesian Nursing Science Journal, and I have an approved plan to manage any potential conflicts arising from (the involvement).

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