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# APPLICATION OF SWEDISH MASSAGE TO RISK PERIPHERAL PERFUSION IN EFFECTIVE PATIENT HYPERTENSION IN THE WORK AREA SIMPANG PERIUK PUBLIC HEALTH CENTER LUBUK LINGGAU CITY YEAR 2022

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#### **ABSTRACT**

Background: According to the World Health Organization (WHO), hypertension is a condition where the increase in systolic blood is above the normal limit, which is more than 140 mmHg and diastolic blood pressure is more than 90 mmHg. Hypertension can increase the workload of the heart and arteries which if it continues can cause damage to the heart and blood vessels. Swedish massage therapy is a complementary therapy that is believed to be able to provide a relaxation response, beside that it can also reduce blood pressure. Research Purpose: The purpose of this research was to obtain an overview of nursing care in the implementation of Swedish Massage to elderly hypertension sufferers at the Simpang Periuk Public Health Center, Lubuklinggau City. The Research Method: The research method was descriptive with a case study approach. The subjects of this study were two elderly people in the work area of Simpang Periuk Public Health Center, Lubuklinggau City. The Evaluation Results: The evaluation results that was obtained from the management of a decrease in blood pressure after the Swedish Massage intervention was done to the hypertensive patients with both elderly subjects with the changes in blood pressure of 10 mmHg. The conclusion: The conclusion from the research was that the implementation of Swedish Massage is an intervention that can be done to reduce the symptoms that arise due to high blood pressure. This technique is one of the non-pharmacological techniques that can be used to minimize high blood pressure. Suggestions: Suggestions were expected to increase knowledge and can be done independently to lower blood pressure.

Keywords: Hypertension, Blood Pressure, Swedish Massage

## INTRODUCTION

According to the World Health Organization (WHO 2017), hypertension is a condition where the increase in systolic blood is above the normal limit of more than 140 mmHg and diastolic blood pressure of more than 90 mmHg. The etiology of hypertension includes age, sex, heredity (genetic), obesity, certain races, environment, lifestyle, smoking, stress or emotions, excessive alcohol consumption, increased salt intake, excessive fat consumption, lack of physical activity, and economic status. Hypertension is a deadly disease if not treated properly and is at risk of heart attack and stroke.

Basic health research (Riskedas 2018) stated that the prevalence of hypertension based on the measurement results of the population aged 18 years was 34.1%, the highest was in South Kalimantan (44.1%), while the lowest was in Papua (22.2%). The estimated number of hypertension cases in Indonesia is 63,309,520 people, while the death rate in Indonesia due to hypertension is 427,218 deaths.

According to the Disease Prevention and Control Division of the South Sumatra Province Health Office, in 2018 the number of hypertension sufferers aged > 15 years in South Sumatra Province was 5,572,379 people. The city of Palembang contributed the highest number of 1,130,254 people with hypertension. Meanwhile, Pagaralam is the area with the lowest hypertension sufferers (94,154 people) and Lubuklinggau with hypertension sufferers (150,207 people). Of the 5,572,379 patients with hypertension, only 137,299 patients received health services according to standards (2.5%)

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In Lubuklinggau City, based on data from the Simpang Periuk Health Center in 2021 regarding the incidence of hypertension in the female sex with an age gap of over 60 years, the data obtained is that in January there were 12 visits, 19 in February, 18 in March. people, in April as many as 16 people, in May as many as 21 people, in June as many as 31 people. So the number of visits in January-June 2021 is 117.

One of the nursing problems that can arise in hypertensive patients is the risk of ineffective peripheral perfusion. The risk of ineffective peripheral perfusion can be defined as the risk of experiencing a decrease in blood circulation at the capillary level which can interfere with the body's metabolism. In addition to hypertension, other contributing factors are sedentary lifestyle, hyperglycemia, decreased arterial and/or venous flow, endovascular procedures, lack of exposure to information about aggravating factors, for example, smoking, monotonous lifestyle, trauma, obesity, salt intake, immobility. The risk of unresolved peripheral perfusion can cause a decrease in blood circulation at the capillary level which can disrupt the body's metabolism. (PPNI, 2016)

There are two types of hypertension treatment methods, namely medical treatment and traditional medicine. Each type of treatment has a different effect. The use of medical treatment in the long term can cause liver and kidney damage. Types and types of traditional medicine vary, including: consumption of herbal medicine or often called herbal medicine, treatment through music, yoga, relaxation, imagery, reflexology, neck massage, and hypnotherapy (Intari W, et al. 2018)

Swedish massage therapy (Swedish Massage Therapy) is a complementary therapy that can be believed to be able to provide a relaxation response, but it can also reduce blood pressure caused by stress. Compared with other traditional medicine such as herbal medicine. (Robiatul Adawiyah, and Dina Fithriana 2017)

Swedish massage techniques include; effleurage (touching gently), petrissage (squeezing muscles), friction (circular rubbing motion), tapotement (percussion movement) and vibration (vibration) (Robiatul Adawiyah, and Dina Fithriana 2017)

Swedish massage was developed by a doctor from the Netherlands, namely Johan Mezger (1839-1909) by using a long and smooth pressure system that creates a very relaxed or relaxing experience or feeling. (Purnomo 2016)

According to research that has been conducted under the title "Effect of Swedish Massage Therapy on Blood Pressure, Heart Rate, and Inflammatory Markers in Hypertensive Women", it shows that Swedish massage can significantly reduce blood pressure and heart rate in women with hypertension. (Supa'at, et al. 2013)

Research conducted by (Supa'at, et al. 2013) shows that SMT is effective in reducing blood pressure in mothers with hypertension. The systolic blood pressure decreased by 12 MmHg and the diastolic pressure decreased by 5 MmHg.

Based on an interview study with the implementing nurse, she said that so far, the Simpang Periuk Health Center has provided pharmacological therapy for patients with hypertension, namely antihypertensive drugs, while for non-pharmacological implementation, the Puskesmas only provides education to get plenty of rest and don't stress too much.

In connection with the above description, the authors are interested in conducting research on the application of Swedish massage to overcome the risk of ineffective peripheral perfusion in hypertensive patients in the Simpang Periuk Health Center Work Area in 2022.

#### **METHOD**

The design of this research is descriptive using a case study approach. Case study is research is research conducted by examining a problem through a case consisting of a single unit. A single unit can mean one person or group of people who are affected by a problem (Notoatmodjo, 2012)

The result expected by researchers is to find out how the application of Swedish Massage to the Risk of Ineffective Peripheral Perfusion in Patients with Hypertension in the Simpang Periuk Health Center Work Area in 2022.

The subjects in this study were 2 people with hypertension in the Simpang Periuk Health Center working area who had the following subject criteria:

Inclusion criteria: Patients who are willing to be research respondents, Patients with a medical diagnosis of Hypertension, Patients who do not have complications, Patients who are more than 60 years old, Patients who are female.

Exclusion criteria: Patients not with hypertension, Patients who are more than 60 years old. This research was conducted in the Simpang Periuk Health Center Work Area, Lubuklinggau City. Research time in April 11 – April 16 2022.

Ethical considerations in this research are carried out by fulfilling the principles of human rights as the subject of the research.

#### RESULTS

On subject 1 with the initials Mrs. K as a housewife who is 68 years old, the study was conducted on April 11, 2022. Ny. K is Muslim. Mrs. K last education Elementary School, Blood pressure examination results 150/90 mmHg, temperature 36.5 c, pulse 75x/m, respiration 22x/m, CRT less than 2 seconds. Mrs. K said he was often dizzy with pain at the nape of his head. When pain and dizziness arise, the activity becomes disrupted. Mrs. K said that he often consumes salty food and does not understand the recommended diet for people with hypertension. Mrs. K said often tingling in both lower extremities Mrs. K looks weak, skin color is pale, akral feels cold.

On subject 2 with the initials Mrs. E as the head of the household aged 63 years was assessed on April 14, 2022. Ny. E is Muslim. Last education Mrs. E is Junior High School (SMP). Blood pressure examination results 160/90 mmHg, temperature 36.4 c, pulse 86x/m, respiration 22x/m, CRT less than 2 seconds. Mrs. E said that he often felt dizzy and had pain at the nape of his head. When the pain and dizziness occurred, Mrs. E just rest and take medicine. Mrs. E said frequent tingling in both lower extremities. Mrs. E looks weak, skin color is pale, akral feels cold.

### I. Nursing Diagnosis

Risk of ineffective peripheral perfusion related to the inability of the family to care for sick family members. This diagnosis makes the writer the first priority in addition to being in accordance with the priority of the problem. Controlled hypertension is one of the risk factors for increasing blood pressure, causing the risk of ineffective peripheral perfusion. According to the IDHS diagnosis that appears in hypertension, there are 4 diagnoses including acute pain, activity intolerance, knowledge deficit, risk of ineffective perfusion (IDHS, 2016).

From the two subjects obtained subjectively, both clients said both right and left feet often complained of tingling if they walked too far or around the home environment. 150/90 mmHg and subject II with a blood pressure of 160/90 mmHg. In this paper, the focus of the diagnosis of ineffective peripheral perfusion risk is related to the inability of the family to recognize the health problems of family members.

## II. Planning (intervention)

In Subject 1 and Subject 2 for nursing problems the Ineffective Perfusion Risk did Swedish massage, for Acute Pain problems the researchers taught breathing techniques, for Knowledge Deficit nursing problems Researchers gave Health Education to the Subjects and Subjects' families to understand about hypertension.

## III. Implementation (implementation)

In Subject 1, the intervention was more focused on reducing blood pressure by doing Swedish Massage. This intervention was carried out to overcome the nursing problem of Ineffective Peripheral Perfusion risk in subject 1 who complained of tingling in the lower extremities. In addition to doing Swedish massage, he also provides health education to families and subjects about hypertension and teaches breathing techniques in an effort to relieve headaches in subjects. The intervention of Subject 2 which was carried out was not much different from that of Subject 1, namely by doing Swedish massage also providing Health Education to families and subjects about hypertension and teaching breathing techniques in an effort to relieve headaches in Subjects.

At the implementation stage, nurses need to carry out a previous time (socialize the nursing diagnosis contract) implementation which includes when it is carried out, how long it will take, materials or topics to be discussed, who is doing it, family members who need to get information, and perhaps the equipment needed prepared This activity aims to make families and nurses physically and psychologically prepared at the time of implementation (Siregar, et al. 2020)

The implementation given by the researcher to Subject 1 for 3 days on April 11, April 12, April 13, 2022. The implementation was given according to the intervention that had been prepared, namely for Nursing Problems with Ineffective Peripheral Perfusion Risk, the teacher taught Swedish massage. On the first day the researcher conducted a time contract to conduct the study, after the time contract the researcher studied Daran pressure and CRT comprehensively before doing the Swedish massage, after which the subject was asked to position the body prone. Then the researchers did a Swedish massage starting from the legs then the back and continued on the upper arms using eflaurage (rubbing), petrisage (massage), Tapotemen (blow), friction (scour), vibration (vibration) on each part of the body. massage done. Swedish massage is done for 30 minutes. On the second and third days the researchers also did the same thing. And for the problem of knowledge deficit, implementation is also given in accordance with previously planned interventions, namely the provision of health education and a hypertension diet.

#### **EVALUATION RESULT**

The results obtained are similarities between Subject 1 and Subject 2 of the verbal and non-verbal responses shown by the two subjects. Both subjects on average said that the paraesthesia (tingling) in the lower extremities had reduced after applying the Swedish Massage. This is supported by blood pressure which decreased from 150/90 to 140/80 in Subject 1 and 160/90 to 130/80, besides that non-verbal responses were also characterized by warm and not pale Akral. Although not too significant but this is enough to lower blood pressure. The same results based on research conducted by (Robiatul Adawiyah, and Dina Fithriana 2017) a decrease in systolic blood pressure after massage in elderly people.

In the journal (Supa'at, et al. 2013) research conducted showed that Swedish massage was effective in reducing blood pressure in mothers with hypertension. The systolic blood pressure decreased by 12 MmHg and the diastolic pressure decreased by 5 MmHg.

The results of the research on the implementation of lowering blood pressure using Swedish massage can be applied in nursing care, especially in hypertensive patients to prevent the risk of ineffective peripheral perfusion and lower blood pressure. There are similarities between the results of research from (Supa'at, et al. 2013) on Swedish massage to lower blood pressure with those that have been applied by the author. On Subject 1 age 68 In Subject 1 aged 68 years, based on the results of the study, the prevention of the risk of ineffective peripheral perfusion was indicated by a slightly slower decrease in blood pressure, while in Subject 2, aged 63 years, the prevention of the risk of ineffective peripheral perfusion was indicated by a faster decrease in blood pressure due to the assistance of pharmacological therapy. Lifestyle factors (lifestyle) and family supporting factors can affect the health of a person with elderly hypertension. In the elderly who experience an increase in blood pressure, it is necessary to have full support and supervision. However, many families do not understand a disease and how to care for sick family members. Therefore, elderly people with hypertension will feel symptoms such as physical fatigue, peresticia (tingling), headaches, and other symptoms for a longer time if they cannot treat them properly. Knowledge of a disease will affect health conditions.

#### CONCLUSION

Based on the results of nursing care research on Subject I, the family of Mrs. K and subject 2 The family of Mrs. E with hypertension, researchers can draw conclusions from the results of the study on subject 1 and subject 2 who have hypertension with the results of the study complaining of frequent tingling and fatigue. The planned intervention was in accordance with the problems found in the families of Subjects 1 and 2, namely family care with a five-task approach to family care functions, collective implementation adapted to the prepared action plan. Implementation was carried out for 3 days by providing Swedish massage therapy to both subjects. There is an effect of Swedish massage on changes in Blood Pressure and Parastisia (tingling) in both subjects before being given an application with a given application.

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