



COMMUNITY SERVICE COMMUNITY EMPOWERMENT TO OVERCOME HYPERTENSION WITH A COMBINATION OF FOOT MASSAGE THERAPY AND ROSELLA FLOWER TEA AT THE POSYANDU FOR THE ELDERLY, SERANG DUSUN MEKARJAYA VILLAGE, PURWASARI DISTRICT, KARAWANG REGENCY

By

Desty Lismayanti¹, Sarini², Yanti Rosmayanti³, Sumitro⁴, Okti Rahayu Asih⁵, Nining Sugihartati⁶, Yazin Azhari⁷, Cindy Destianty⁸, Mutiaraa Puspita Asih⁹

^{1,2,3,4,5,6,8,9}Department of Nursing, Sehati University of Indonesia

⁷Department of Public Health, Sehati University of Indonesia

Email: ¹keperawatan@usindo.ac.id

Article Info

Article history:

Received Sept 05, 2024

Revised Sept 15, 2024

Accepted Oct 28, 2024

Keywords:

Elderly, Hypertension, Health Education, Hypertension Exercise, Foot Massage, Rosela Tea

ABSTRACT

Hypertension is an abnormal increase in blood pressure in the arteries that carry blood from the heart and continuously pump blood to all tissues in the organs of the body for a certain period of time, untreated hypertension sufferers have twice the chance of developing stroke and heart disease. Non-pharmacological drugs can be used as an alternative in reducing high blood pressure, one of which is a combination of foot massage and utilization of rosella flower tea. The purpose of this service is for community understanding of the combination of foot massage management and utilization of rosella flower tea to reduce hypertension. This service is carried out by mentoring and health education in groups. Educational material on how to do foot massage and processing rosella flowers into drinking water to reduce high blood pressure to 20 respondents from Serang Hamlet, Mekarjaya Village, Purwasari Sub-district. The results of the evaluation showed an increase in the understanding of residents, pre-test most of them did not understand as many as 14 people (70%), and post-test all respondents had good understanding (100%). The results of blood pressure measurements in the elderly with hypertension in the elderly with hypertension, pre-test showed most of the 1st degree hypertension as many as 10 people (50%), 2nd degree hypertension as many as 8 people (40%), 3rd degree hypertension as many as 2 (10%). Assistance and education are very useful to increase residents' understanding of foot massage and rosella flower tea processing to reduce hypertension levels non-pharmacologically

This is an open access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



Corresponding Author:

Sarini

Department of Nursing, Faculty of Health

Sehati University of Indonesia,

Jl. Raya Kosambi-Telagasari, Pancawati, Klari, Karawang, Jawa Barat, Indonesia

Email: keperawatan@usindo.ac.id

1. INTRODUCTION

Hypertension is persistent blood pressure where the systolic pressure is above 140 mmHg and the diastolic pressure is above 90 mmHg. Hypertension is the main cause of heart failure and kidney failure. Hypertension can also kill sufferers suddenly because hypertension often has no symptoms (Fitriyana 2023).

Data from *World Health Organization* (WHO) in 2019 estimates that currently the prevalence of hypertension at world level is 22% of the total population in the world. Africa is the country with the highest cases of hypertension in the world, namely 27%, while Southeast Asia is in third place with a prevalence of 25%. The number of cases in adults is greater in people with poor economies, namely 31.5% or 1.04 billion compared to high economic countries which is only around 28.5% or 349 million people. Hypertension in Indonesia is one of the third highest causes of death for almost all ages, after stroke (15.4%) and tuberculosis (7.5%), which is around 6.8%.

According to Riskesdas in (Indonesian Ministry of Health, 2021) the prevalence of hypertension in Indonesia is 34.1%, an increase compared to the prevalence of hypertension in Riskesdas in 2018 which was 25.8%. The prevalence of hypertension in 2020 was obtained from 2018 Riskesdas data where the prevalence rate for West Java Province increased from 34.5% to 39.6% (West Java Health Office, 2020).

According to the Karawang Health Profile (2022), the estimated number of hypertension sufferers (≥ 15 years) in Karawang Regency in 2022 will be 625,156 people. A total of 262,221 people suffering from hypertension (41.9%) have received services. Both the number and coverage of health services for hypertension sufferers is increasing every year. Several sub-districts with the highest health service coverage for hypertension sufferers are in Tirtamulya District at 100.57%, meanwhile, the lowest hypertension sufferers are in Pakis Jaya District at 3.47%. From the description of the data above, it can be used as a reference for the Community Health Center as the regional person responsible for health problems at the sub-district level in creating priority programs in handling hypertension cases in their working area.

The role of nurses in providing nursing services has a role in improving the family's nursing ability to care for sick members. Family involvement is really needed, especially those closest to you, especially family members who live in the same house, to monitor the client's hypertension. This will have an impact on minimizing treatment costs and preventing hospitalization if your hypertension worsens or complications from hypertension itself occur. Non-pharmacological nursing interventions that are easy to teach and carry out by clients and family members, one of which is a combination of foot massage and giving rosella flower tea, will be safe to do and will not cause side effects. Foot massage is a complementary therapy that is safe and easy to administer and has the effect of increasing circulation, removing metabolic waste, increasing joint range of motion, reducing pain, relaxing muscles and providing a sense of comfort to patients (Afianti, 2017). Foot massage is manipulation of the soft tissue of the feet in general and is not focused on certain points on the soles of the feet which are connected to other parts of the body (Abduliansyah, 2018). Foot massage aims to lower blood pressure, reduce the heart's pumping activity, and reduce the shrinking of the walls of the fine arteries so that the pressure on the walls of the blood vessels is reduced and blood flow becomes smooth so that blood pressure will decrease (Patria, 2019).

Consuming rosella flower tea (*hibiscus sabdarifa* fam.) has been proven to do the trick lower blood pressure. Organic acids and flavonoid compounds present in rosella, which has the potential to reduce viscosity. Ethanol extract from rosella flower petals has antihypertensive properties, while rosella plant polyphenols have properties antioxidant, antibacterial, hypocholesterol, and antihypertensive.

A study at the outpatient cardiology clinic at Imam Reza Di Hospital Mashhad, Iran. Rosella tea consumption is used as a new way to reduce risk of heart disease. This plant has been clinically proven to reduce the number plaque that sticks to blood vessels, not only that, rosella also has the potential to reduces levels of bad cholesterol and fat in the body. This shows that rosella beneficial for reducing blood pressure in patients with hypertension (Ramezani, Sharifi, Ghiasi, & Jalalyazdi, 2019).

2. METHOD

This community service activity program is carried out using the method used in this community service, namely by collecting elderly people with hypertension problems, then the elderly people have their blood pressure measured and then a pre-test is held to determine the level of knowledge of respondents regarding hypertension. After that, health education is carried out about hypertension, the benefits of this method. management of foot massage, processing and benefits of giving rosella flower tea to reduce hypertension. The community service team carries out a post-test after health education to find out the evaluation of the results of the activities. After that, foot massage was administered and rosella flower tea was given to respondents who suffered from hypertension. as many as 20 people for 3 consecutive days. This community service activity will be carried out in November 2023.

3. RESULT

Implementation of activities

Instruments use leaflets, videos, SOPs, dried rosella flowers, pre-test and post-test sheets, spignomanometer, stethoscope, lotion/olive oil, hot water. Management of foot massage starts from preparation, preparing the patient, and carrying out the foot massage.

Patient preparation:

Check the blood pressure of participants (mild and moderate hypertension sufferers) before doing a foot massage and record the results.

The procedure for carrying out foot massage is as follows:

1. Place a towel under your thighs and heels.
2. Smear both palms with lotion or baby oil.
3. Do a foot massage starting from the soles of the feet to the toes for 15 seconds on each part of the foot.
4. Observe the patient's comfort level when performing massage.

The steps of Foot Massage are as follows:



1. Rub and massage the widest part of the foot using the heel of the hand.
2. Rub and massage the narrowest part of the foot using the heel of the foot
3. Hold the heel of your foot using your left hand, then your right hand holding your toes and then turning them clockwise
4. Move the patient's legs back and forth (towards the researcher) for 15 seconds. to determine the level of flexibility
5. Hold your toes using your right hand several times for 15 seconds.
6. Rotate and massage each toe three times for 15 seconds.
7. Move the patient's legs to the right and left for 15 seconds.

How to make rosella flower tea



Give steeped rosella flower tea for 3 days every morning after eating or take 3 rosella flowers in 200 ml of water in the morning

4. DISCUSSION

Community service activities were carried out smoothly, all respondents took part in a series of activities and continued the activities independently in their respective homes. After carrying out foot massage therapy activities and drinking roselle flower tea, there was an average reduction in blood pressure of 20-45 mmHg in the 20 patients who underwent the intervention. Respondents were also given roselle flower seeds to plant as family medicinal plants (TOGA) in their respective homes. Some are also given dried roselle flower tea to drink daily to help prevent hypertension.

Their level of knowledge and ability to deal with hypertension increases by doing a combination of foot massage and drinking rosella flower tea. For the next activity, Posbindu cadres will collaborate with partners in related sectors regarding the schedule for holding hypertension exercises in the POSBINDU environment in Serang Hamlet, Mekarjaya Village, Purwasari District.

REFERENCES

- [1] Ainun K, Kristina, Serdang D. "Terapi Foot Massage Untuk Menurunkan dan Menstabilkan Tekanan Darah pada Penderita Hipertensi". Jurnal Abdimas Galuh Vol 3 No 2, 2021;(9):328-336
- [2] Ardiansyah. & Huriah, T. (2019). Metode Massage terhadap Tekanan Darah Pada Penderita Hipertensi: a Literature Review. Jurnal Penelitian Keperawatan, 5(1). <https://doi.org/10.32660/jurnal.v5i1.334>.
- [3] Fandizal M, Astuti Y, Sani DN. Implementation of foot reflexology massage to decrease blood pressure in client with uncontrolled hypertension. J clients with uncontrolled hypertension. J Ilm Pamenang (Internet). 2019;2(1):17-21. Available from:
- [4] <https://jurnal.stikespamenang.ac.id/index.php/jip/article/view/64>
- [5] Ali, Zaidin. Dasar-Dasar Keperawatan Profesional. Jakarta: Widya Medika; 2001.
- [6] Aziz Alimul Hidayat. Pengantar Konsep Dasar Keperawatan. Jakarta: Salemba Medika; 2014.
- [7] Zaenurrohman DH, Rachmayanti RD. Hubungan Pengetahuan dan Riwayat Hipertensi dengan Tindakan Pengendalian Tekanan Darah pada Lansia. J Berk Epidemiol. 2017;5(2):174-84.
- [8] Rustiani (2020). Pengaruh Pemberian Rebusan Rosella Terhadap Perubahan Tekanan Darah Penderita Hipertensi. Universitas Diponegoro: Semarang.
- [9] Nugroho. I.A., Asrin, & Sarwono. (2021). Efektifitas Pijat Refleksi Kaki Dan Hipnoterapi Terhadap penurunan Tekanan Darah Pada Pasien Hipertensi. Jurnal Ilmiah Kesehatan Keperawatan, 8(2), 57–63.
- [10] Ardiansyah. & Huriah, T. (2019). Metode Massage Terhadap Tekanan Darah Pada Penderita Hipertensi: a Literatur Review. Jurnal Penelitian Keperawatan, 5(1). <https://doi.org/10.32660/jurnal.v5i1.334>
- [11] Gilang, Muhammad. 2020. pengaruh pemberian seduhan kering bunga rosella terhadap penurunan tekanan darah. wellness and healthy magazine. volume 2, nomor 1, february 2020, p. 159 issn 2655-9951 (print), issn 2656-0062. file:///c:/users/acer/downloads/81-249-1-pb%20(1).pdf