

Original Articles: Case Study

**ANALYSIS OF FAMILY NURSING CARE WITH THE IMPLEMENTATION OF
BRISK WALKING EXERCISE ON CLIENTS HYPERTENSION TO OVERCOME
MANAGEMENT INEFFECTIVE HEALTH IN THE TANDES AREA**

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Abstract

Background: Hypertension sufferers who rarely exercise, smoke, consume alcohol, are overweight, cannot manage stress, often stay up late, do not comply with taking medication and eat whatever they want without paying attention to salt intake can cause uncontrolled blood pressure which can lead to hypertension complications and even death. This behavior is an ineffective health management caused by lack of exposure to information related to hypertension and ineffective health care patterns in the family.

Objective: The aim of this research was to analyze family nursing care by applying brisk walking exercise to hypertensive clients to overcome ineffective health management in the Tandes Subdistrict, Surabaya.

Methods: The research design used a case method with the subject used being 1 patient with ineffective health management nursing problems. The research was conducted in the Tandes area for 2 weeks with data collection methods including assessment, diagnosis, intervention, action and evaluation.

Result: The results of case studies on hypertensive clients with ineffective health management nursing problems show that after being given nursing care therapy by implementing 5 family tasks using a modified brisk walking exercise, the results of improved health management were obtained, which was indicated by the client and family understanding more about hypertension (understanding, risk factors, signs of symptoms and diet), the client's body looks fitter, the client's blood pressure which was initially 170/100 mmHg at the time of the assessment gradually dropped to 140/90 mmHg, the client began to pay attention to diet, the family was willing to help with treatment and took the client for control to a health facility nearest.

Conclusion: Evidence based nursing implementation of brisk walking exercise which is carried out with a training frequency of 3 times a week, for 15-30 minutes with an average walking speed of 4-6 km/hour is shown to be effective in reducing ineffective health management.

INTRODUCTION

Hypertension is often given the title The Silent Killer because this disease is a hidden killer, where people do not know they have hypertension before checking their blood pressure (Mayasari et

al, 2019). Individuals who enter old age will experience changes in the cardiovascular system in the form of decreased elasticity in peripheral tissues which causes widening of blood vessels and atherosclerosis. This is what triggers an increase in the prevalence of hypertension in the elderly (Muharni & Wardhani, 2020).

According to the World Health Organization (WHO), the incidence of hypertension in the world is quite high, namely 10%. In the United States, one in three adults suffers from hypertension, which generally causes complaints, even though it has been experienced for years (WHO, 2021). Basic Health Research (Riskesdas) in 2018 said that the most common diseases in the elderly include hypertension (57.6%), osteoarthritis (51.9%) dental and oral problems (19.1%).

Hypertension cannot be separated from the family's role in caring for sick family members. Hypertension sufferers who rarely exercise, smoke, consume alcohol, are overweight, cannot manage stress, often stay up late, do not comply with taking medication and eat whatever they want without paying attention to salt intake can cause uncontrolled blood pressure which can lead to hypertension complications and even death. This behavior represents ineffective health management which may be caused by lack of exposure to information related to hypertension and ineffective health care patterns in the family. The family's ability to care for sick family members and the full awareness of hypertension sufferers to change their lifestyle are the goals of achieving the desired health status. One non-pharmacological action that can prevent recurrence is by doing physical activity in the form of brisk walking exercise. The advantage of brisk walking exercise is that this exercise is quite effective in increasing the maximum capacity of the heart rate, stimulating muscle contractions, breaking down glycogen and increasing tissue oxygen (Satria et al., 2022).

METHODS

Study Design

This research was descriptive research with a case study approach through the process of nursing.

Settings

This case study was carried out at the client's house located on Jalan Darmo Indah Sari, Tandes area, Surabaya City, East Java Province, Indonesia.

Research subject

This case study was conducted on hypertensive clients with ineffective health management nursing problems.

Instruments

This research used the format of nursing care which are owned by Nursing Science Program, Faculty of Nursing and Midwifery, University of Nahdlatul Ulama Surabaya.

Data collection

This research is descriptive research with a case study approach. The data collected is data from direct interviews with clients, client families, observations and physical examinations. After the data was collected, the researcher concluded the problem and determined the priority of the problem then made an action plan to be carried out on hypertensive clients to overcome ineffective health management.

Data Analysis

The data analysis used in this study is descriptive analysis based on data in the format of nursing care.

Ethical Consideration

The implementation of this case study activity has received approval and supervision from the Department of Nursing, Faculty of Nursing and Midwifery, Universitas Nahdlatul Ulama Surabaya.

RESULTS

The results of case studies on hypertensive clients with ineffective health management nursing problems show that after being given nursing care therapy by implementing 5 family tasks using a modified brisk walking exercise, the results of improved health management were obtained, which was indicated by the client and family understanding more about hypertension (understanding, risk factors, signs of symptoms and diet), the client's body looks fitter, the client's blood pressure which was initially 170/100 mmHg at the time of the assessment gradually dropped to 140/90 mmHg, the client began to pay attention to diet, the family was willing to help with treatment and took the client for control to a health facility nearest.

DISCUSSION

An overview of nursing care for hypertensive patients was obtained from an assessment of a 57-year-old female client suffering from hypertension since 2015. The client lives with her husband who is both elderly and her daughter is busy with college assignments so she cannot care for the client properly. The results of the physical examination showed BP: 170/100mmHg, S: 36.3°C, RR: 18 x/minute, N: 88 x/minute, TB: 150 cm, BB: 65 kg, the client felt symptoms of dizziness due to hypertension. Poorly maintained lifestyle, such as continuing to eat prohibited foods, taking irregular breaks and rarely exercising. Clients and families are unable to explain the health problems they are experiencing, the family's activities for dealing with health problems are inappropriate, and they have difficulty carrying out the prescribed treatment for hypertension. The priority nursing diagnosis that emerged was ineffective health management related to lack of exposure to information proven by failure to take action to reduce risk. Intervention is provided by implementing 5 family tasks, the superior intervention is implementing the Brisk Walking Exercise.

The application of the brisk walking exercise which the client underwent for 2 weeks with a training frequency of 3 times a week for 15-30 minutes followed by a warm-up, core and cool-down, was found to have an effect on reducing blood pressure. The client's blood pressure, which was originally 170/100 mmHg at the time of assessment, became 140/90 mmHg. Based on this data, it can be concluded that there has been a change in the blood pressure scale value before and after implementing the Brisk Walking Exercise intervention on clients. According to researchers, nursing actions need to be carried out regularly so that the expected results can be realized. Walking is a type of aerobic exercise that is often chosen and recommended for hypertensive patients who experience fatigue because it is the most effective, easy and safe, with the highest increase in quality of life and compliance compared to other sports such as swimming/swimming and cycling/cycling, and can increase capacity. physical, reducing body fat, reducing nausea, reducing fatigue, reducing anxiety and improving quality of life. Providing brisk walking exercise as an intervention to lower blood pressure can be used because it is easier, safer and more effective, so clients can apply it every day in their daily lives. Exercise such as walking can increase peak oxygen consumption by up to 3-4 mL/kg/minute, apart from that, exercise can also maximize heart morphology including increasing ventricular mass and volume as well as increasing diastolic filling and emptying which will then increase cardiac output. Exercise also increases blood volume, namely an initial increase in plasma volume followed by an increase in red blood cell mass thereby concentrating on increasing hemoglobin concentration. An increase in hemoglobin and cardiac output contributes to an increase in oxygen flow throughout the body (Darma et al., 2021).

LIMITATION

There is no limitation in this research.

CONCLUSION

Evidence based nursing implementation of brisk walking exercise which is carried out with a training frequency of 3 times a week, for 15-30 minutes with an average walking speed of 4-6 km/hour is shown to be effective in reducing ineffective health management.

AUTHOR CONTRIBUTION

Dhian Wulandari: Literature review, conceptualization, methodology, doing the nursing process, and manuscript drafting.

Rusdianingseh: Literature review, conceptualization, methodology, and supervise.

Nety Mawarda Hatmanti: Literature review, conceptualization, methodology, and supervise.

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CONFLICT OF INTEREST

There is no conflict of interest in this study.

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