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Family Nursing Care in the Management of Ineffectiveness of Hypertension Management through Family Empowerment in the Pakusari Health Center Working Area, Jember

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A B S T R A C T

Ineffective family health management is an unsatisfactory pattern of handling health problems in the family to restore the health conditions of family members. Family empowerment is one of the efforts that can be done to increase cognitive, affective and psychomotor through health education, physical exercise and traditional medicine. This scientific work aims to analyze nursing care with ineffective health management problems with family empowerment in handling hypertension so that families are expected to be able to provide effective family nursing care in overcoming hypertension problems with family empowerment. This study was conducted by conducting observations and demonstrations for 3 weeks with 8 meetings in three families with hypertensive family members who were given family empowerment interventions through hypertension health education, anti-hypertension exercises and cucumber juice therapy. Based on the results of research on three families, it was found that there was an increase in family cognition about hypertension and hypertension diet, there was a decrease in systole and diastole blood pressure after anti-hypertensive gymnastics and administration of cucumber juice. Family empowerment shows that there is an influence on the handling of hypertension in the family. Family empowerment is important to do because it has a positive influence on cognitive changes, changes in systole and diastole pressure of hypertensive patients. Family empowerment can be done consistently and continuously because hypertension is a chronic disease and needs family involvement.

INTRODUCTION

Non-communicable diseases such as hypertension are one of the leading causes of death worldwide (*10 Facts on Noncommunicable Diseases*, 2018). Hypertension is a global problem that must receive serious attention because it increases the risk of complications such as coronary heart disease, heart failure, stroke, and kidney failure (*Global Status Report on Noncommunicable Diseases*, 2014). According to (Osamor, 2015), hypertension is a chronic disease that requires lifelong treatment. The goal of hypertension treatment is to control or control blood pressure in a stable condition and prevent complications due to hypertension (Firdausia et al., 2023).

Families who have patients with hypertension with effective family health management will be able to provide a more appropriate treatment management plan. However, if the family experiences the complexity of the service system, the complexity of the care or treatment program, decision-making conflicts, economic difficulties, many demands and family conflicts will cause ineffective family health management (SDKI Working Team DPP PPNI, 2018).

Therefore, families have an important role in the care for people with hypertension. Families who can actively participate in treatment compliance for people with hypertension can reduce the progressivity of hypertension and reduce the high risk of complications (Zulfitri et al., 2019).

Family participation in the treatment of people with hypertension is very necessary (Firdausia et al., 2023). According to the American Heart Association (2018), hypertension causes about 51% of deaths from stroke, and 45% from coronary heart disease. Margaret Chan as Director General of the World Health Organization revealed that one in three adults or about one billion people in the world were identified as suffering from high blood pressure, and it happened in developed and developing countries. According to the Basic Health Research in 2013 (*Riset Kesehatan Dasar*, 2013), the prevalence of hypertension in Indonesia was found to be 25.8% through measurements at the age of ≥ 18 years. The National Indicator Survey revealed that the number of people with hypertension had increased by 32.4% in 2016 (Kesehatan, 2018).

Family support is needed by people with hypertension, because it can have a positive influence on controlling the disease and become an influential factor in determining individual health beliefs and values, and can determine the treatment program they can receive (Nurdjanah & Sarwinanti, 2015). Family support through empowerment is an effort to improve the family's ability in cognitive aspects in managing hypertension in family members who suffer from hypertension (Hariawan & Tatisina, 2020). Families must have knowledge about hypertension management, because if the family's knowledge is better, their behavior will be better (Firdausia et al., 2023).

Based on efforts to prevent and manage health problems specific to hypertension, blood sugar, uric acid, and cholesterol in Subo Village, the village health service or POLINDES has a POSBINDU program with blood pressure, blood sugar, uric acid and cholesterol checks. The program is conducted on the 15th of every month at the home of one cadre in each dusun and attended by local residents. The program is carried out once a month in each hamlet so it takes 4 months to examine and treat health problems in the Subo village community. Data on visits to Subo Village POLINDES Pakusari Health Center in 2023, recorded hypertension patients in May and June were 34 people and 48 people respectively. It can be seen that there is an increase from the previous month so that more proactive efforts are needed for handling hypertension. In assisted families with nursing problems of ineffective family health management in handling hypertension in Karang Sadang Hamlet, Subo Village revealed ignorance and inability to care for hypertensive patients in their families. The role of nurses in nursing care for families with hypertension is appropriate and carries out their role function as a health educator, namely with hypertension health education interventions (Team SDKI Working Group DPP PPNI, 2018).

Nursing care for families with hypertension focused in this case study is to overcome the problem of ineffectiveness of family health management in handling hypertension with family empowerment, so that families are expected to be able to provide effective and independent family care in handling hypertension in their families.

METHOD

This study used a case study approach. The participants in this study were families assisted in family nursing care. This study was conducted through family nursing care coaching for 3 weeks from June 12, 2023 - July 02, 2023 with 8 meetings. The intervention provided was family empowerment with several family nursing interventions including health education with topics on hypertension and hypertension diet. The second intervention is physical exercise education by demonstrating anti-hypertension gymnastics exercises. The last intervention is a treatment program education where a live demonstration of making cucumber juice herbal therapy. The data analysis stage in this study uses the results of data obtained before and after the intervention of family empowerment with health education, physical exercise and traditional medicine: Cucumber juice will be managed using SPSS 26 statistical data application with paired sample t-test to determine the effect of family empowerment for hypertension management.

RESULT AND DISCUSSION

Health Education

Providing health education to 3 families built on two topics, namely hypertension recognition education and hypertension diet education. Education to recognize hypertension in three families was carried out in week 1 of nursing implementation with 2 meetings, the first meeting on Monday, June 12, 2023 with a duration of ± 30 minutes.

a. 

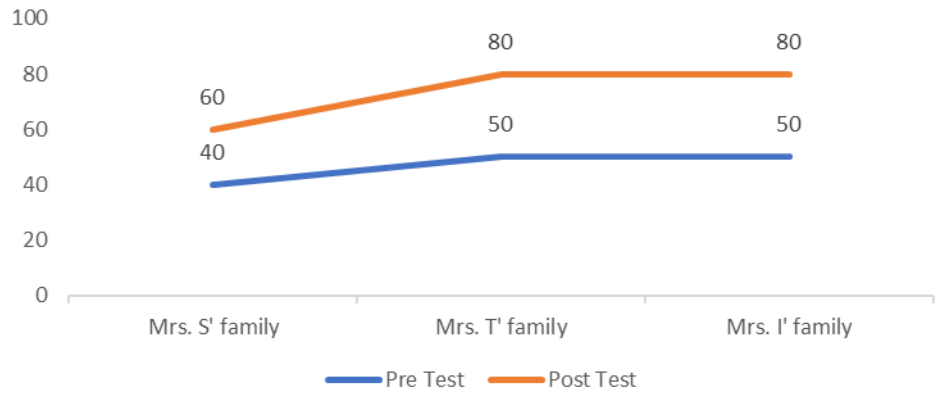
b. 

c. 

Fg. 3.1 (a) Health education about hypertension in Mrs. S's family; (b) Health education about hypertension in Mrs. T's family, (c) Health education about hypertension in Mrs. I's family.

Source: Primary Data (2023)

The results of the evaluation of nursing implementation regarding health education with the theme of hypertension carried out at the first meeting with a pre-test question and the second meeting with a post-test question for 30 minutes then an objective assessment is carried out by asking the family to answer 10 questions provided by the facilitator regarding the material presented, can be presented in table 3.1 as follows:



Fg. 3.2 Results of Questionnaires Before and After Health Education on Hypertension

Source: Primary Data (2023)

The results of the evaluation after conducting Health Education on Hypertension, subjective responses of 3 clients from each foster family said they understood the definition of hypertension, signs and symptoms, causes, treatment of hypertension, complications of hypertension and hypertension diet.

Table 3.1 Paired Sample t-test Comparison Test of Questionnaire Filling Before and After Health Education About Hypertension

Variable	*Mean*	*Sig.*	*Sig. (2-tailed)*
Before and After Health Education	26.667	0.000	0.015

Source: Primary Data (2023)

Table 3.1 on the results of comparing the value of questions before and after health education about hypertension shows a correlation coefficient of 0.000 and sig. (2.tailled) 0.015 with the results there is a relationship between pre and post test values and there is an effect of empowerment interventions with health education about hypertension in 3 assisted families.

Health education conducted to families as a form of empowerment of families with hypertension has a very positive impact on the management of hypertension in family members (Hariawan & Tatisina,

2020). Health education is an implementation that aims to change the behavior of individuals, groups and communities that are initially unhealthy to behavior that is in accordance with expectations and can improve their health independently (Efliani, 2022).

Physical exercise education: Anti-Hypertension Gymnastics

Physical exercise education of anti-hypertension exercises and demonstration of anti-hypertension exercises in three assisted families were carried out in the second week with 4 meetings. Meetings 1 - 4 consecutively from June 19 - 22, 2023 with a duration of approximately 30 minutes.

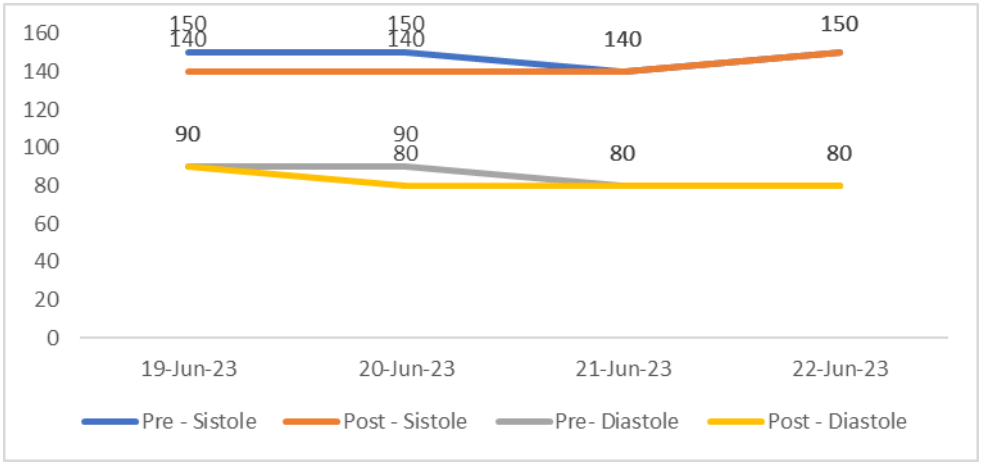
a.  b.  c. 

Fg. 3.3 (a) Demonstration of anti-hypertension exercises Mrs. S; (b) Demonstration of anti-hypertension exercises Mrs. T, (c) Demonstration of anti-hypertension exercises Mrs. I.

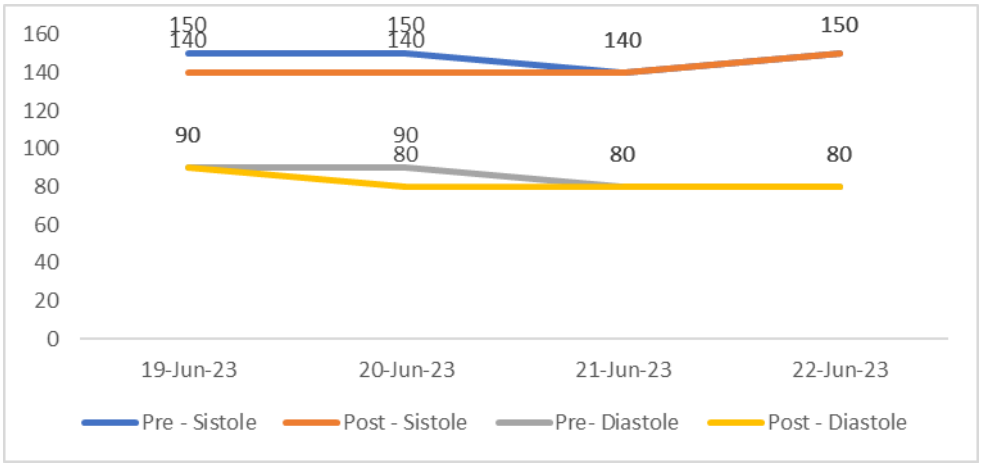
Source: Primary Data (2023)

The results of the evaluation of nursing implementation regarding physical exercise, namely with anti-hypertensive exercises carried out at meetings 3 to 6 which were carried out for 30 minutes then objectively assessed by checking blood pressure before and after doing anti-hypertensive exercises (Silvia, 2021). The three assisted families with subjective assessment results said anti-hypertensive gymnastics was easy to do and did not require much time so that I could do it every morning later, for objective assessment as follows:

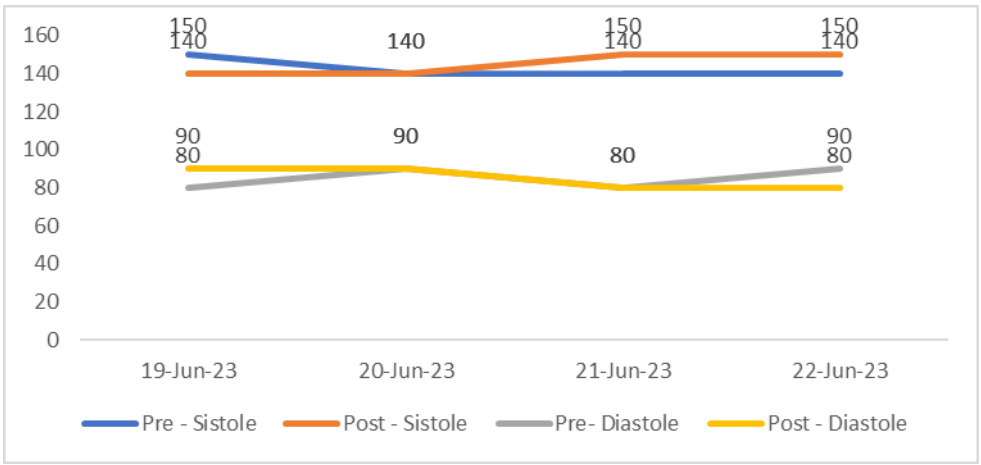
a.



b.



c.



Fg. 3.4 (a) Results of blood pressure before and after anti hypertension gymnastics in Mrs. S; (b) Results of blood pressure before and after anti hypertension gymnastics in Mrs. T, (c) Results of blood pressure before and after anti hypertension gymnastics in Mrs. I.

Source: Primary Data (2023)

Table 3.2 Paired Sample t-test Comparison Test of Systole and Diastole Blood Pressure Before and After Anti-Hypertension Gymnastics in the three families

Variable	*Mean*	*Sig. (2-tailed)*
Systole Blood Pressure Before and After Anti-Hypertension Gymnastics Mrs. S	2.500	0.041
Distole Blood Pressure Before and After Anti-hypertensive Gymnastics Mrs. S	2.500	0.041
Systole Blood Pressure Before and After Anti-Hypertension Gymnastics Mrs. T	5.000	0.022
Distole Blood Pressure Before and After Anti-hypertensive Gymnastics Mrs. T	2.500	0.044
Systole Blood Pressure Before and After Anti-Hypertension Gymnastics Mrs. I	2.500	0.024
Distole Blood Pressure Before and After Anti-hypertensive Gymnastics Mrs. I	5.000	0.048

Table 3.2 on the comparison test of systole and diastole blood pressure before and after anti-hypertensive gymnastics in the three families shows that there is an effect before and after empowerment with anti-hypertensive gymnastics on blood pressure in the three families.

Physical activities such as hypertension exercises that have been carried out are physical activities and sports that are structured by always prioritizing the ability of the heart large muscle movements and joint flexibility and incorporating as much oxygen as possible. In addition to increasing feelings of health and the ability to cope with stress another advantage of regular hypertension exercise is lower blood pressure reduced obesity reduced frequency at rest and lower insulin resistance (Sylvia, 2021).

Educational treatment program: cucumber juice therapy

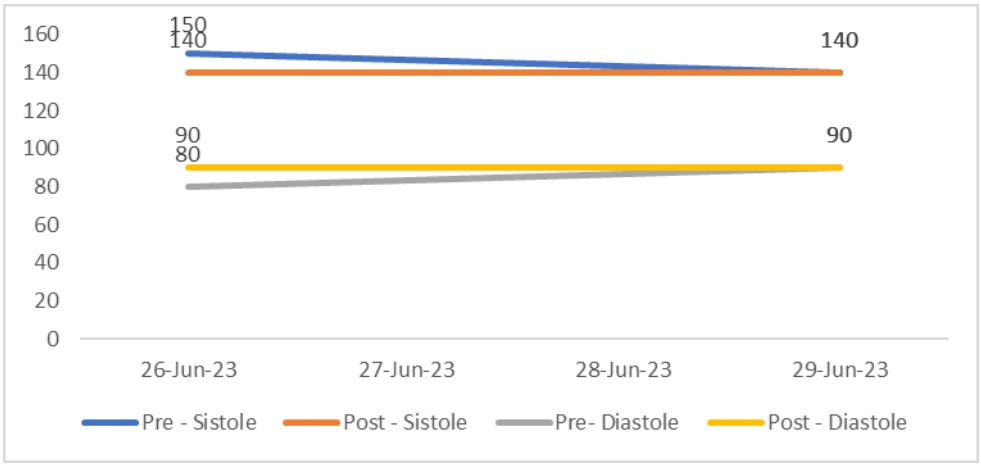
Cucumber juice making treatment program education and demonstration to three assisted families was carried out in the third week with two meetings. The first meeting was on June 26, 2023, the second meeting was on June 29, 2023 with a duration of approximately 30 minutes.

a.  b.  c. 

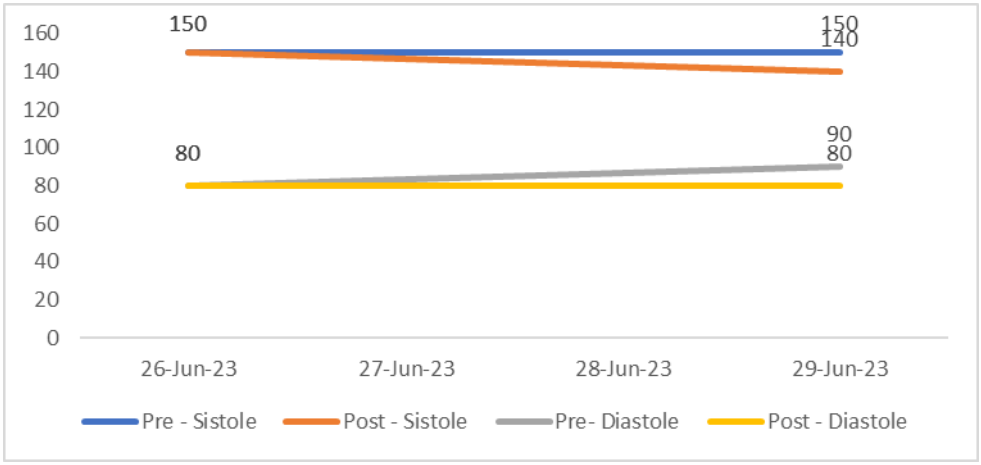
Fg. 3.5 (a) Demonstration of making cucumber juice therapy Mrs. S; (b) Demonstration of making cucumber juice therapy Mrs. T, (c) Demonstration of making cucumber juice therapy Mrs. I

Source: Primary Data (2023)

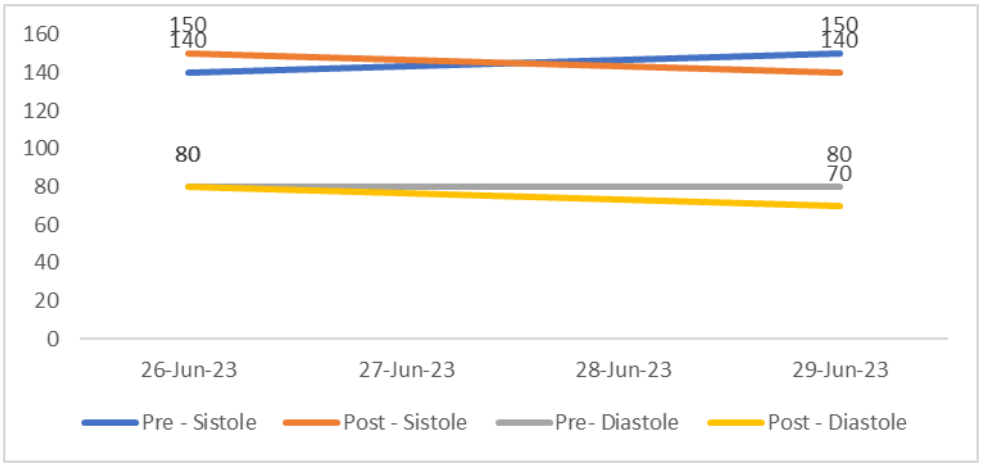
The results of the evaluation of nursing implementation regarding the treatment program, namely traditional medicine using cucumber juice therapy, were carried out at meetings 7 and 8 which were carried out for 30 minutes then an objective assessment was carried out by checking blood pressure before and 15 minutes after drinking cucumber juice. 3 foster families drank at least ± 200 ml or 1 glass of cucumber juice. The first assisted family Mrs. S with the subjective assessment results said the cucumber juice drink tasted fresh and easy to make, for an objective assessment as follows:

a. 

b.



c.



Fg. 3.6 (a) Blood pressure results before and after Cucumber Cider Therapy on Mrs. S; (b) Blood pressure results before and after Cucumber Cider Therapy on Mrs. T, (c) Blood pressure results before and after Cucumber Cider Therapy on Mrs. I.

Source: Primary Data (2023)

Table 3.3 Comparison Test of Paired Sample t-test of Systole and Diastole Blood Pressure before and after Cucumber Cider Therapy in the three families

Variabel	*Mean*	*Sig. (2-tailed)*
Systole Blood Pressure before and after Cucumber Cider Therapy Mrs. S	5.000	0.040
Distole Blood Pressure before and after Cucumber Cider Therapy Mrs. S	5.000	0.040
Systole Blood Pressure before and after Cucumber Cider Therapy Mrs. T	5.000	0.040
Distole Blood Pressure before and after Cucumber Cider Therapy Mrs. T	5.000	0.040

Systole Blood Pressure before and after Cucumber Cider Therapy Mrs. I	5.000	0.048
Distole Blood Pressure before and after Cucumber Cider Therapy Mrs. I	2.500	0.024

Table 3.3 on the comparison test of systole and diastole blood pressure before and after Cucumber Cider Therapy in the three families shows that there is an effect before and after empowerment with cucumber cider therapy on blood pressure in the three families.

Family empowerment with a treatment program through making cucumber juice drinks is a good alternative therapy for people with hypertension. This therapy is carried out by consuming vegetables that can affect blood pressure, such as cucumbers (Sari, 2020). Besides containing substances that are beneficial to health, cucumbers are also much cheaper and economical when compared to the cost of pharmacological treatment and are easily obtained in the midst of society. This is what underlies the author to provide the implementation of herbal therapy with cucumber to help control blood pressure in the family.

CONCLUSION

The overall evaluation of the three assisted families with hypertension problems is based on the achievement of five family health tasks including; the family has been able to recognize the problems faced by the family in the form of health status, namely hypertension and the family is able to convey the difficulties faced in caring for family members with hypertension, the family is able to decide on treatment actions, namely health management by empowering the family through hypertension management; education, hypertension gymnastics, routine medication and cucumber juice tradiosnal therapy and other appropriate actions for people with hypertension, families are able to take appropriate care actions for people with hypertension with a healthy lifestyle with physical exercise, families are able to modify the nutrition given to people with hypertension with a hypertension diet and are able to utilize environmental resources to optimize the implementation of family empowerment actions with people with hypertension.

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