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Complementary of Nursing Care for an Elderly Family: Management of Hypertension and Smoking Behaviour

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ABSTRACT

Background: An elderly was closed to some medical problem, especially hypertension. Problems that occur in elderly patients with hypertension not only involve the patient itself but also involve the family as the closest person to the patient. One important aspect of family nursing is the family itself. To achieve good treatment outcomes, implementation of evidence-based nursing is needed. The purpose of this study is to present the implementation of evidence-based nursing to an elderly in a family by using coconut water to reduce high blood pressure and progressive muscle relaxation therapy to reduce pain intensity in hypertensive patients, as well as acupressure therapy in stopping smoking that is applied 1 week each other. **Method:** In the implementation, complementary therapy is applied to hypertensive patients by given young coconut water and progressive muscle relaxation therapy, and acupressure therapy in an effort to stop smoking. **Results:** showed significant results in the reduction of high blood pressure before being given an intervention was TD: 200/100 mmHg and after being given the intervention obtained TD: 140/80 mmHg and decreased pain intensity in hypertensive patients using relaxation therapy, as well as a decrease in the number of cigarettes smoked with acupressure therapy for 1 week. **Conclusion:** The application of complementary therapy carried out showed improvement in elderly patients suffering from hypertension and smoking behaviour, therefore, the application of evidence based nursing in providing nursing care is recommended. **Suggestion:** Complementary Nursing Case Study this is expended to be a reference material to improve health services and provide an overview in carrying out complementary nursing care to families, especially an elderly with comprehensive cases of hypertension (bio, psycho, social and spiritual).

1. Introduction

One of important aspect in family nursing is the family itself. Family is the smallest unit in society which is the client or recipient of nursing care. The family has an important role in determining how

to care needed for family members who are sick. There are several type of family, including elderly family. In elderly family, the aged had functional roles to play both within the family and in the community. Care of the elderly was, therefore, obligatory for the family and the community^[1]. Several important reasons are convincing why

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the family unit should be the central focus of family nursing, namely in a family unit, dysfunction (disease, injury, separation) that occurs in one family member affects other family members who are the unit as a whole. In this part, nurse are having an important role as a caregiver to promote the whole healthy system in the family, especially in elderly family. Nurses need for the team and other health-care professionals regarding health communication as an innovative technology, taking a health promotion and prevention programs for elderly^[2]. One of the type of health prevention for elderly was using complementary care. Complementary therapy is a group of various medical systems, care practices and products that are generally not part of conventional medicine^[3]. The wider community is now starting to switch from modern or medical medicine to complementary medicine, although modern medicine is also very popular among the public. In Indonesia, almost 40% of the total population and 70% of the rural population in Indonesia use alternative and complementary medicine^[4].

The health or illness status of family members influences one another. An illness in the family affects the whole family and in turn affects the course of an illness and the health status of the family. Therefore, the effects of family health or illness status influence or depend on one another. The family tends to be a reactor to health problems and an actor in determining the health problems of family members^[5]. Some health problem can be detected in a family with family nursing care doing by a nurse. In elderly family, the most case finding as a health problem was high blood pressure or hypertension. In the elderly, the most powerful predictor of risk is increased pulse pressure due to decreased diastolic and increased systolic blood pressure^[6]. Hypertension is a condition in which blood pressure has increased which gives continuous symptoms to a target organ of the body. Blood pressure that exceeds 140/90 mmHg at rest is thought to have a high blood pressure. Always high blood pressure is a risk factor for stroke, heart attack, heart failure, and is the main cause of chronic heart failure^[7] and it is obvious that it will dramatically increase the prevalence of this disease. In 70+-year-old patients, the prevalence of arterial (in particular systolic hypertension >140 mmHg.

Nearly 1 billion people worldwide have high blood pressure. Hypertension is one of the leading causes of premature death worldwide. In 2020 about 1.56 billion adults will live with hypertension. Hypertension kills nearly 8 million people every year in the world and nearly 1.5 million people annually in the East-South Asia region. About a third of adults in East-South Asia suffer from hypertension^[8]. Based on data from the Ministry of

Health's Research and Development^[9] hypertension in Indonesia is a health problem with a high prevalence of 25.8%. The prevalence of hypertension in West Sumatra Province shows that it has reached 22.6%. Data from the West Sumatra Provincial Health Office in 2014, hypertension is the 5 largest disease suffered by the community with a total of 84,345 sufferers. The Padang City Health Office in 2015 showed that hypertension was the second most common disease with a total of 31,760 sufferers. The incidence of hypertension is seen from 22 health centers in the city of Padang. Based on existing data, the highest incidence of hypertension was at Andalas Health Center Padang city, with 1158 people in 2015.

There is an example elderly family in community supporting by Andalas Health Center Padang city who have an hypertension health problem. This family became a participant to be applied such a complementary nursing care. It was Mr. S's family which was an elderly family consist of Mr. S and Mrs. I who live in the same house as both. Based on the results of interviews with Mr.S's family (60 years) which the author did in April 2020, Mrs. I (58 years) had hypertension ± since 2 years ago which was marked by dizziness, the patient complained of headaches that spread to the shoulders, eyes. Dizzy, and had trouble sleeping. If these signs appear, Mrs. I always rested and took medicine from the shop or health center to reduce the pain in her head. At the time of the assessment, it appeared that Mr. S's family had less healthy behavior, such as smoking, not exercising enough and not maintaining hygiene.

The first role of the community nurse is as a service provider to provide nursing care through assessing existing nursing problems, planning nursing actions and evaluating the services that have been provided to individuals, families, and communities^[5]. The second role of the nurse is as an educator and consultant, providing health education to individuals, families, groups and communities both at home, at health centers, and in the community in an organized manner in order to instill healthy behavior, so that behavior changes as expected in achieving a healthy degree of health occur optimally. The third role of the nurse is as a role model, the public health nurse must be able to provide a good example in the health sector to individuals, families, groups and the community about how to live healthy procedures that can be imitated and exemplified by the community. Nursing care can be done in the form of complementary therapy. There are many complementary therapies that can be done on families with family members who suffer from hypertension^[10]. Based on the above phenomenon, the authors are interested in managing cases with "Family Nursing Care for elderly family

with Hypertension”.

2. Methods

2.1 Research Design

This case study follows the stages based on Polit and Beck (2010)^[11] regarding the implementation of Evidence Based Nursing Practice (EBNP). The stage consists of five stages, namely: (1) raising questions (PICO), (2) looking for related evidence, (3) assessing the evidence obtained, and (5) evaluating the implementation of EBN. For the first stage, the questions raised are based on PICO (Problem, intervention, comparison and outcome), namely “*what can be done to reduce hypertension and pain scales in hypertensive patients, as well as therapy in an effort to stop smoking?*”

2.2 Settings

The application of EBN is carried out on Mr. S (60 yo) and his wife, Mrs. I (58 yo) with hypertension health problem. Even, Mr. S's also have smoking behavior. This family taken in in the community in “Nagari Talu”, Padang, Indonesia.

2.3 Ethical Consideration

Before any intervention, the procedure is explained to the patient's family. Willingness of the family is given through informed consent. Before the EBN is implemented, a comprehensive assessment is carried out on the family.

2.4 Prosedural Application

After the questions were formulated by assesment, the second stage was carried out by searching for EBN using an electronic data base, namely google scholar. The results of the assessment of the articles found in the third stage recommend the application of giving young coconut water to reduce hypertension and progressive muscle relaxation therapy to reduce headaches in hypertensive patients, as well as acupressure therapy in an effort to stop smoking. The hypertension intervention was carried out for 1 week to provide young coconut water^[12]. Therapy of giving young coconut water as much as 250cc / 3 times a day, namely morning, afternoon and evening for 7 days and tension was carried out on each respondent. Blood pressure was identified by using Sphygnomanometer. Progressive muscle relaxation therapy is carried out for ± 10 minutes with 1 movement a week carried out 3 times to reduce headache pain and reduce high blood pressure^[13]. Pain scale was identified by using Numeric Pain Rating Scale. Acupressure therapy is an effort to quit smoking for

families who smoke. The last stage is an evaluation of the implementation of the EBN. Assessment of blood pressure and pain scale was carried out every day after giving young coconut water and progressive muscle relaxation therapy to reduce pain for 3 times a week and decrease the number of cigarettes consumed after being given acupressure therapy for 1 week.

3. Result and Discussion

3.1 Assesment of the Family

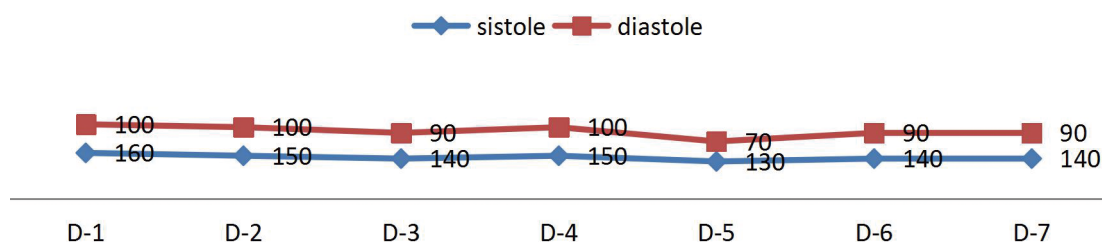
The results of the study showed that Mr. S's family had a wife who suffered from hypertension. Currently Mrs. I suffered from hypertension only because of frequent headaches. Mrs. I said that she did not really understand the disease. Mrs. I said he still didn't know the treatment for the disease he was suffering from. Mrs. I said that her body often felt weak, often had headaches that radiated to her back, had dizzy eyes and felt dizzy. Mrs. I said that she picked up the medicine at the stall for headaches and the nearest Health Care Center if she was sick. Mr. S said the family's diet was not regular, they still like to eat fatty foods, and there are no restrictions in food. I myself like to eat foods that are sour, salty and spicy and fatty. Apart from that, Mr. S's family rarely did sports because he was busy working and also smoking. Mr. S said he wanted to change his family's health behavior. Mrs. I said that she wanted to recover and control her disease, and wanted to change her healthy lifestyle. This is in line with research which says that there are still 40% of people who suffer from controlled hypertension who have poor knowledge in treating hypertension^[14].

The disease that happened to Mrs. I was caused by several factors, such as: genetics, age, gender, diet, and unhealthy activities. The smoking behavior of Mr. S occurred due to work factors and lack of knowledge of clean and healthy living habits. The assessment data that has been obtained are then analyzed so that it is found that there are nursing problems that are readiness to improve family coping, ineffectiveness of health care, and health behavior that tends to be at risk. In accordance with the diagnosis in Mr. S's family, the intervention carried out to treat hypertension was taking regular medication accompanied by giving young coconut water and progressive muscle relaxation therapy, as well as acupressure therapy in an effort to stop smoking in Mr. S and his child.

3.2 Reducing High Blood Pressure and the Pain

Mrs. I who suffered from high blood pressure was given a complementary therapy by using coconut water. The result showed the decreasing of her blood pressure below:

The decreasing of blood pressure in 7 days complementary care



The treatment given to the problem of ineffectiveness of health care for Mrs. I in the form of complementary therapy was given by the provision of young coconut water for a week because young coconut water was very easy to get near his house. Young coconut water is a natural drink that is high in calcium, in addition to other elements such as potassium, magnesium and sodium. The potassium level in coconut water is 15 mg / 100 ml on average. With the provision of 250 cc x 3 times a day, the average consumption of additional calcium in one day is 37.5. In the act of giving coconut water / day every morning and accompanied by progressive muscle relaxation therapy for 3 times a week which has been done in order to reduce high blood pressure in Mrs. I where the blood pressure value of Mrs. I before the procedure was 160/100 mmHg and the blood pressure value was Ny. I and the final result of this implementation, precisely on the 7th day, the results obtained BP: 140/90 mmHg.

Based on the results of this study, the researcher argues that there is a great need for education and demonstration regarding the complementary therapy of young coconut water and progressive muscle relaxation therapy in the treatment of patients with hypertension. Later, the families with hypertension health problems can take the care independently at home. This is in accordance with the research conducted by Tarwoto, 2018 with the title "The Effect of Coconut Water Consumption on Blood Pressure in Hypertension Patients", where blood pressure was obtained before giving young coconut water a total of 30 respondents (100.0%) after giving young coconut water experienced drop in blood pressure becomes normal^[12]

In addition, a study conducted by Rahmasari, 2015 with the title "Progressive Muscle Relaxation Can Reduce Headaches" shows the same results, namely that progressive muscle relaxation techniques are proven to provide a calming effect so as to reduce headaches, especially tension headaches. For nursing diagnoses of the ineffectiveness of health care, health education is given in the form of hypertension counseling using laptop media and leaflets. The information consist of edible and non-edible foods and the dosage of salt for people with hypertension,

complications and treatment of hypertension. Some independent actions that nurses can carry out to help clients are by using Pain Management to relieve or reduce pain and increase comfort. Using therapeutic communication to find out the patient's pain experience is to use progressive muscle techniques^[15].

3.3 Smoking Behaviour

For other complementary measures, namely with nursing problems, health behavior tends to be at risk where Mr. S's family said that he was smoked, lacked exercise and lacked hygiene and healthy behavior. Mr. S said that he wanted to try to reduce the number of cigarettes smoked every day. Complementary measures taken by Mr. S's family in this matter were acupressure therapy in an effort to quit smoking for 1 week. Acupressure therapy is a treatment method by providing emphasis stimulation (massage) by paying attention to the "yang" reaction, which is a reaction to strengthen energy while weakening energy is called a "yin" reaction. Acupressure therapy in this study was carried out at the LI 4 point on the back of the hand, at the LU 7 point which is located 2 fingers above the wrist, in line with the thumb of the hand, the LR 3 point on the instep where the thumb and 2nd finger meet and pressing the ear. Emphasis on the point of the body using the fingertips as much as 30 times which serves to react to strengthen "yang". Acupressure stimulates the regulatory system and activates the endocrine mechanism and the neurological system which is part of the physiological mechanism to maintain balance^[16].

In the acupressure therapy action that has been carried out, it was found that the number of cigarettes smoked by Mr. S and his child before acupressure therapy was carried out was 3 packs (25 sticks). The number of cigarettes smoked after acupressure therapy for 1 week decreased to 2 packs (18 cigarettes). Based on the results of this study, the researcher argues that there is a need for education and demonstration about complementary acupressure therapy in health care, especially for family members who smoke. Later, Mr. S can later apply acupressure therapy in an effort to quit smoking. This is in accordance with

the research conducted by Nia Nurzia with the title “The effectiveness of acupressure therapy on smoking cessation efforts”, where there was a difference in the difference in the number of cigarettes consumed before and after acupressure therapy intervention was given^[17].

4. Conclusion

Applying Evidence Based regarding the provision of young coconut water and progressive muscle relaxation therapy for hypertension treatment management for Mrs. I was proven to be effective in reducing Mrs. I’s blood pressure. Acupressure therapy in an effort to quit smoking for Mr. S was also successful. Using the Complementary Nursing Case Study, it is hoped that can become a reference material to improve health services and provide an overview of carrying out complementary nursing care for families, especially with comprehensive hypertension cases (bio, psycho, social, spiritual). In addition, this paper can provide information to the public about independent care that can be done by families, especially complementary therapies for families with hypertension at home.

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