Model of family health empowerment preventing stroke in Puskesmas Ulee Kareng Banda Aceh

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Abstract. Stroke is a clinical sign that develops from the focal brain with symptoms that occur for a day or more and can cause death for no apparent reason other than vascular. Stroke has become the leading cause of death in almost all hospitals in Indonesia and in Aceh is the number one death factor. The purpose of this study is to empower families to get a stroke prevention model and have the effect of that model for lowering blood pressure, cholesterol and blood sugar. Participants in this study were hypertension sufferers with a total of 32 participants at the Ulee Kareng Health Center in Banda Aceh. The study was conducted from February 2017 to December 2018, using the Participatory Action Research (PAR) and T-Test methods. The results of research through PAR studies found stroke prevention models and differences in blood pressure, cholesterol and blood sugar decreased after the study. It can be concluded that the effect of the stroke prevention model was found to reduce the risk of stroke.

Recommendations: Strengthening and family motivation is very influential to reduce the risk of stroke.

1. Introduction

Stroke can be caused by one of the following etiological factors: Thrombosis (blood clots in the blood vessels of the brain or neck). Thrombus begins with the destruction of the walls of endothelial blood vessels. Atherosclerosis is the main trigger. Thrombus can occur anywhere along the carotid artery and its branches. Thrombosis is the most common cause of stroke, about 60% of stroke occurrences. Cerebral palsy (blood clots or other material carried to the brain from other body parts). The majority of emboli originates from the endocardial lining of the heart, where plaque exits the endocardium and enters the circulation. Cerebral palsy is the second leading cause of stroke, about 24% of stroke events. Brain hemorrhage (rupture of cerebral blood vessels with bleeding into brain tissue or brain spaces) [1,2].

Hypertension is a leading cause of intracerebral hemorrhage. Prognosis of patients with severe intracerebral hemorrhage, 50% of deaths occur within the first 48 hours. Mortality from intracerebral hemorrhage ranges from 40% to 80%. Other causes, for example cerebral artery spasms due to irritation, reduce perfusion to areas of the brain that are supplied by narrowed blood vessels;
The prevalence of stroke in Indonesia was 830 per 100,000 population, and 600 health workers had been diagnosed by health workers. The province with the highest prevalence of stroke was Nanggroe Aceh Darussalam (16.6%) and the lowest was Papua (3.8%) [4]. Based on the results of Riskesdas in 2013 showed an increase in the prevalence of strokes per 100,000 in Indonesia, namely 830 in 2007 increased to 1,210 in 2013. Judging from its characteristics, many strokes are visited by people over 25 years, have low education, and live in urban areas. Lifestyle changes, eating too much sugar, salt, and fat, and lack of activity are risk factors that can cause strokes. The results of interviews with 15 stroke patients in the area Ulee Kareng Health Center found that what they meant was that their strokes had high blood pressure and complicated black blood, this was because high blood pressure did not contain activity and without any difference, they will use health facilities if there are visible headaches, nausea, vomiting, and vomiting.

The lifestyle of the Acehnese people with culture or habits such as grand, the prophet's birthday which is commemorated for three consecutive months, festivity Blang (rice) annual festival with a very specific eating culture [5]. Eating patterns like the above are very susceptible to non-communicable diseases such as strokes caused by many styles and diets that are not well maintained [2]. Suggests that Participatory Action Research (PAR) can improve knowledge, protection for better health change [6]. Empowerment of family health by increasing the role and task of family health in caring for families with hypertension, where family health tasks consist of understanding family health problems, deciding appropriate actions, caring for family members who have health problems, supporting an environment that supports health and being able to utilize facilities health. Health problems that are solved by families can be solved if they have the ability to carry out five family health tasks [3]. The purpose of this study is to find a model for family health problems and to determine appropriate steps in considering hypertensive families to prevent stroke in the work area of the Ulee Kareng Community Health Center in Banda Aceh and to find out a model for testing blood pressure, cholesterol and glucose levels in hypertensive patients.

2. Research Methods
The research method uses qualitative and quantitative research methods. Participatory Research in Qualitative and Quantitative. The study began from February 2017 to December 2018 in the Ulee Kareng Community Health Centre, Banda Aceh. Family members who have family opinions who have family members who suffer from hypertension because the family has hypertension. Qualitative research with participatory action research design was conducted in February to December 2017 to get the model by interview observation and evaluation of interventions and reflections when the model trials were conducted in January to December 2018.
3. Results and Discussion

The results of this study were obtained by the Participatory Action Research and then the T-test Paired. Obtaining large models found significant results at the alpha level of 0.05. Based on the table above it can be seen that the most age is late adults are 13 participants (40.6%), the lowest is early adulthood i.e. 1 partition (3.1%) and elderly 1 participant (3.1%). The most common female sex was 29 participants (90.6%) more than men as many as 3 (9.4%) than participants. In addition, it is also known that the average married participant was 27 participants (84.4%) more than the widows of 5 participants (16.6%). The educational outcomes of participants are the number of secondary education, 19 participants (59.4%) the lowest are basic education, 4 participants (12.5%) and the results of this analysis also show the work of most housewives is 14 participants (43.8%) compared with 6 civil servants employed (18.8).

Qualitative research results with a participatory action research design through in-depth interviews, observation, evaluation and evaluation then completed a stroke model that family members know how to prevent strokes and stroke complications, families can make the right decisions for family members who are ill by not conforming to family, family know how to care for sick families, families able to cope with a safe and comfortable environment in accordance with the culture of the Acehnese people, families can use health facilities to check health before illness and check themselves regularly every 3 months this model is called a stroke.

This result is called a model and then this model is submitted again to patients with hypertension using an independent t-test, so that this study produces an average value before the study was 154.84 / 92.34 mmHg after the study of the average value of blood participants was 136.25 / 84.84 mmHg with 95% confidence interval (0.05%) p-value 0.00, it can be concluded what is meant by the intervention of participants to increase blood pressure.

This research was conducted at an early stage to determine the average value of blood pressure, cholesterol and blood sugar levels of participants with hypertension. Followed by in-depth interviews with participating family members to get a prevention model to introduce the problem of stroke and how to decide on appropriate actions to prevent stroke in hypertensive patients in the Ulee Kareng Health Centre in Banda Aceh. Blood pressure checks of all participants were carried out before and after the completion of this study to obtain information about participants' knowledge about hypertension and stroke complications. Teach participants how to improve it. How to make results. How to make results? the results of this study showed the average value before the study was 154.84 / 92.34 mmHg after the study the mean value of participants' blood pressure was 136.25 / 84.84 mmHg with 95% confidence interval (0.05%) p-value 0.00, it can be concluded as what intervention to participants to lower blood pressure.

The results of this study are consistent with other people's studies that blood pressure, blood sugar, cholesterol, in the experimental group were significantly lower than those in the control group p <0.01 and p <0.001. Studies that blood pressure, blood sugar, cholesterol, in the experimental group were significantly lower than those in the control group p <0.01 and p <0.001 [7]. The research explains that self-help empowerment and management programs are very important for diabetic patients, support systems such as family and friends are very important to learn optimal strategies for overcoming chronic diseases, physical barriers, and psychological problems related. Patient knowledge can motivate and empower patients with appropriate self-monitoring techniques, nutrition and exercise, pharmacological options, and psychosocial adjustments for depression and stress caused by chronic illness, as well as providing resources to increase knowledge. The results of this study support other studies where empowering family health by finding a disease prevention model together with health team members can reduce the risk of chronic illness or reduce morbidity and mortality rates [8].

The results of this study support the study (7,8) so that the intervention given to participants is very influential in reducing blood pressure so as to reduce the risk of heart disease and stroke. Appropriate health management for the community, especially families can prevent the emergence of various diseases due to changes in lifestyle, the more improved economic status, the more changes in behavior will also increase [9,10].
Bad behavior contributes greatly to the incidence of stroke, which is about 90%, usually caused by: hypertension, unhealthy eating patterns, lack of physical activity, excessive alcohol consumption, psychosocial stress, heart disease, smoking, high cholesterol and diabetes, so it is very knowledgeable and Health management is needed early in patients with hypertension to prevent [11]. Subsequent research also reiterates that it is very important to manage hypertension early to prevent stroke [12]. The results of this study support research [11,12] the importance of managing hypertension correctly to avoid sudden stroke killings.

Empowerment model obtained based on Acehnese culture and society Becoming standard in dealing with stroke in the family, which is now present in the family considers diseases that belong to individuals for the sake of family members who do not discuss and discuss improvements in individuals in the family with this research model, so that they can become family reference material for stroke prevention in Aceh, which is the province of Aceh which is the highest stroke incidence in Indonesia. this is in accordance with what was agreed by [13]. That the function of the family influences the health behavior of the patient, namely the function of the husband as the person in charge of the family so that behavior, communication, emotional involvement, problem-solving, the role function affects the family in caring for family members, with health education, these steps will help the patient adjust with their health conditions and form good health behavior habits as soon as possible.

This research has identified the ability of family care, it really depends on the role of family members in caring for sick family members. Must have good knowledge about the treatment of hypertension in preventing stroke, by teaching how to remind families to take medication regularly, support the importance of healthy values, consume healthy and nutritious food, be diligent in exercising and not smoking, avoiding stress are steps - steps - steps constructive in making decisions to treat family members with hypertension, as well as meukaol/vocal habits and habits can be minimized to prevent diseases with scientific ability not with a degree.

Health counseling, family support, good cooperation between researchers and families that have been carried out can provide good benefits to empower family health in preventing stroke. Families are expected to help/care for each other, provide affection to family members for health control or to the nearest health service, detect early stroke symptoms and other degenerative symptoms. The participation of families who care for or help sufferers largely determines the success of the recovery therapy program provided. This is important considering the interaction between sufferers and families do have relatively more time. Families have high emotional ties; intense and ongoing family interactions can always be done in the household to prevent strokes. Patients whose environment is not supportive tend to have a worse prognosis compared to sufferers whose families or people who care for them and pay attention to them are more supportive.

One of the functions of the family is to be able to support socially for family members to continue to socialize with the people closest to them so that individuals can interact with other communities, if the individual has difficulty interacting it is said to be an avoidant personality disorder (awkward dealing with others), everyone has experienced a phase where they have a sense of shame or awkwardness in dealing with others. However, some people experience personality disorders that cause them to deliberately avoid interactions with others, this is based on shame and too afraid of what people think, so they tend to avoid interacting with others [14]. The final results of this study emphasize the importance of the empowerment model of family members to prevent stroke. This is done because empowering family health is a process that encourages and develops skills for individuals and families as well as caring to improve the health status of individuals in the family [15].

4. Conclusions

The findings of a stroke prevention model in the form of stroke prevention management and how to take appropriate action if symptoms of dizziness, nausea, and vomiting occur and this model are very beneficial for people with hypertension. Even this model has been tested so that it can affect the decrease in blood pressure within normal limits.
5. References

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