



Education on Stroke Prevention for the Elderly in Gampong Bada, Ingin Jaya District, Aceh Besar

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ABSTRACT

Stroke is a condition characterized by rapidly developing clinical signs of focal and global neurological deficits, which may worsen and last for 24 hours or more, potentially leading to death. The purpose of this activity is to enhance the community's understanding of stroke prevention to avoid its complications. This activity was carried out in Bada Village, Aceh Besar. The participants who attended in person were 18 residents of Bada Village. The method of this community service activity was conducted in the form of counseling and discussion. The event took place on August 14, 2024, starting at 09:30 AM until it concluded. The activity began by registering the participants, followed by an explanation of the event's objectives and material related to stroke, its causes, and complications. From the event, it was found that the community's understanding of poor dietary habits (low in fiber), low physical activity, and excessive salt use in cooking was lacking. Hence, it is recommended for those at risk to improve their lifestyle, eating habits, and rest patterns, and for families to continuously provide strong motivation to family members who are already at risk.

Keywords: Stroke, Education, Lifestyle

1. Introduction

Chronic diseases are persistent health problems with a tendency to be severe, long-lasting, and often recurrent. According to the World Health Organization (WHO), chronic disease issues include cancer, tuberculosis, diabetes mellitus, stroke, and heart disease. These diseases are among the top 10 major global health problems (Iskandar & Rumahorbo, 2018).

According to WHO, stroke is a condition characterized by rapidly developing clinical signs of focal and global neurological deficits, which can worsen, persist for more than 24 hours, and may result in death. Stroke is also defined as one of the leading causes of death and neurological disability in Indonesia, with the majority of stroke incidents being non-hemorrhagic strokes (Saputra & Mardiono, 2022).

The risk factors for stroke can be categorized into two types (Boehme et al., 2017):

- a) Non-modifiable risk factors such as age, gender, certain races, and genetics.
- b) Modifiable risk factors such as hypertension, diabetes mellitus, obesity, dyslipidemia, and atrial fibrillation.

Factors that influence the incidence, risk factors, and prognosis of stroke attacks and quality of life include an average age of 70.3 years, female gender, time of attack at 13.4 hours, stroke classification as follows: ischemic stroke, intracerebral hemorrhage, and subarachnoid hemorrhage. The mortality rate is 24.6%, with patients either dying or becoming disabled. At 6 months, stroke patients' quality of life tends to decrease but improves after 12 months (Lavados et al., 2021).

Identifying stroke risk factors does not mean that stroke prevention cannot be done. Below are some tips to easily recognize the symptoms and signs of a stroke, with the slogan "SeGeRa Ke RS" (Hardika et al., 2020):

- a) Smile becomes asymmetric
- b) Movement in one side of the body suddenly weakens
- c) Speech becomes slurred, suddenly unable to speak, or unable to understand words
- d) Numbness or tingling in one side of the body
- e) Blurred vision occurs suddenly
- f) Severe headache that appears suddenly and is unlike any headache before

Stroke is the second leading cause of death and the third leading cause of disability worldwide. Stroke-related disability not only places an economic burden on families but also creates emotional and mental strain that affects the productivity of other family members. Stroke is more common in vulnerable, low-income populations, further exacerbating poverty due to the high costs of treatment and long recovery times (Imanda et al., 2019).

The most important aspect of primary stroke prevention is a healthy lifestyle and blood pressure control. A healthy lifestyle includes not smoking (or quitting for smokers), avoiding alcohol, staying physically active, and adopting a healthy diet with adequate fruits and vegetables, reduced trans fat intake, and limited sodium consumption (Maulidah, 2022).

Based on initial observations in Gampong Bada, Aceh Besar, it was found that the community lacks detailed knowledge about stroke risk factors, hypertension, and which types of foods should be avoided. Prevention is far better than treatment before the onset of the disease. Thus, education and support for early detection or screening among at-risk groups and the elderly are necessary. The community needs to be encouraged to engage in early prevention by learning about disease risk factors, prevention strategies, and foods that should be limited. Blood pressure screening among several late-adult residents revealed that 8 individuals had Grade 2 Hypertension (> 160 mmHg). The purpose of this activity is to enhance the community's understanding of stroke prevention to avoid its complications.

2. Methodology

This community service activity was conducted in Bada Village, Aceh Besar, with a total of 18 participants, primarily consisting of late-adult and elderly individuals. The activity employed a method that combined counseling and discussion to facilitate interactive learning. At the start of the event, the team conducted an initial assessment to evaluate the participants' level of understanding regarding stroke, its risk factors, and preventive measures. This pre-assessment was crucial in tailoring the information to the community's needs and ensuring that the material addressed their specific knowledge gaps concerning stroke prevention and management.

3. Results and Discussion

This community education and outreach activity took place on August 14, 2024, in Bada Village, Aceh Besar, beginning at 09:30 AM and lasting until the program was completed. The event started with the registration of participants, after which the facilitator provided a clear explanation of the objectives of the activity. The main focus of the event was to educate the participants about stroke, its complications, and preventive measures. The content delivered during the session covered various critical aspects, including dietary habits, physical activity, blood pressure management, and the impact of excessive salt consumption.

From the observations made during the event, it became evident that several lifestyle factors were contributing to an increased risk of stroke within the community. Among these factors were poor dietary habits, particularly low intake of fiber-rich foods, inadequate levels of physical activity, and irregular blood pressure monitoring. Moreover, many households commonly used excessive amounts of salt in their daily cooking, unaware of its detrimental effect on hypertension, a key risk factor for stroke.

During the group discussion session, several participants openly expressed their lack of knowledge about the specific triggers of hypertension. For example, they were surprised to learn about the strong connection between high salt consumption and elevated blood pressure levels. Some of the participants were unaware that this common cooking practice could lead to hypertension and, consequently, increase the risk of stroke. The accompanying family members also participated actively in the discussion, sharing their thoughts and concerns. They expressed their hope that future activities would place more emphasis on practical recommendations, particularly on preparing healthy meals suitable for individuals with hypertension.

The overall atmosphere of the event was positive, and the activity was well-received by the local community. The participants engaged actively throughout both the discussion and the question-and-answer session. Their responses indicated a strong interest in the subject matter and a genuine appreciation for the event, especially because it was held directly in their village, making the information more accessible to them. The event concluded with closing remarks from the moderator, who highlighted the importance of applying the knowledge gained. This was followed by a documentation session, capturing the participants' enthusiasm and engagement during the program.



Figure 1. Educational Activity with Patients

4. Conclusion

This community service activity was successfully conducted, with a high level of participation from local residents and their families. A total of 18 participants attended the session, and their engagement was evident throughout the presentation of the materials. The participants demonstrated attentiveness, and many raised pertinent questions and offered suggestions during the discussion. This reflected a genuine interest in learning more about stroke, its risk factors, and strategies for preventing complications.

Based on the assessment of the participants' understanding, it was clear that the community had gained valuable knowledge from the session. They were more aware of the triggers of stroke, particularly the influence of diet, physical activity, and blood pressure management. Additionally, the participants provided several constructive suggestions, such as expressing a desire for further education sessions that focus more specifically on healthy meal preparation for individuals at risk of hypertension and stroke.

Moving forward, it is recommended that the participants apply the knowledge they have acquired in their daily lives. This includes adopting healthier lifestyle habits, particularly with regard to meal preparation and incorporating regular physical activity into their routines. It is also essential to maintain consistent follow-up support from local healthcare providers, particularly the puskesmas (community health centers), to ensure that ongoing educational programs are available to the village residents. These follow-up activities should focus on practical advice, such as preparing nutritious meals tailored to individuals with hypertension.

In addition, it is crucial to strengthen collaboration between the village health cadres and the puskesmas to facilitate the dissemination of health information more effectively. These partnerships should particularly target the adult and elderly population, who are at higher risk of developing stroke-related complications. By fostering these collaborative efforts, the community will be better equipped to prevent stroke and manage hypertension, thereby improving overall public health outcomes in the village.

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