

Empowerment of Elderly Aggregate with Hypertension based on Protection Motivation Theory to Improve Hypertension Management Behavior in Rural Area

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Abstract

The aggregate based on age is vulnerable to suffering from non-communicable diseases: hypertension, namely the elderly aggregate. Empowerment is one of the appropriate intervention strategies in improving public health conditions. The empowerment of elderly people with hypertension which is carried out consists of the following activities, namely: pre test measurements, education related to perceptions of vulnerability, severity and appreciation of elderly people with hypertension, education regarding coping of elderly people with hypertension (including response efficacy and self-efficacy) and intentions of elderly people with hypertension, training on hypertension management behavior, and post test measurements. Community service activities run smoothly. The elderly and their families who attended were enthusiastic in listening to the educational material presented. The elderly and their families also participated in a re-demonstration of the hypertension management behavior that was taught. Aggregate empowerment of elderly people with hypertension needs to be carried out on an ongoing basis by paying attention to other aspects that contribute to improving hypertension control behavior.

Keywords: elderly, hypertension management behavior, rural, protection motivation theory

Introduction

Functional decline occurs with increasing age. One of the functions that has decreased is physiological function. This decrease in function gives rise to infectious and non-communicable diseases (Sari et al., 2020). Indonesia currently faces communicable and non-communicable diseases, which bear the double burden of these two diseases. Changes in disease patterns are influenced by environmental changes, demographic transitions, technology, economics, socio-culture and of course the behavior of society. This non-communicable disease has also become a strategic issue in the 2030 SDGs agenda and has become a priority in every country, including Indonesia (Kemenkes, 2019).

The aggregate based on age is vulnerable to suffering from non-communicable diseases: hypertension, namely the elderly aggregate (Pangribowo, 2022). Unfortunately, the vulnerability of the elderly population is not in line with the hypertension management behavior they experience. Elderly people with hypertension only take medication if they feel pain or there is discomfort in their body, so it is important to improve the behavior of managing hypertension in the elderly (Nurhidayati et al., 2018). Health literacy is also one part that contributes to the management of hypertension (Fauziyah, 2022). This ability is different between elderly people who live in rural and urban areas. The health literacy skills of elderly

people who live in rural areas tend to be low, which poses a threat to improving the management of their hypertension. The elderly's low education is also related to poor health literacy (Kavit et al., 2022).

The results of the Riskesdas 2018 showed that there was an increase in the prevalence of high blood pressure in the elderly aggregate. The significant increase in cases of non-communicable diseases certainly adds to the burden on society and the government (Kemenkes, 2019). East Java Province is in second place, namely 10.4%, regarding the incidence of hypertension in the elderly. As much as 52.5% of the prevalence of hypertension also occurs in elderly people aged around 55-85 years (Lindayani et al., 2018). Hypertension is also a type of non-communicable disease that has the highest prevalence in Jember Regency (Putri et al., 2019). Jenggawah Community Health Center is one of the community health centers in the rural area of Jember Regency with a fairly high prevalence of hypertension in the elderly (Silvanasari et al., 2022a). The elderly population with hypertension in the Jenggawah Community Health Center working area has previously received health education so that they understand the hypertension they suffer from and the important behavioral modifications that need to be made to control their hypertension (Silvanasari et al., 2022b, Silvanasari et al., 2023c). It's just that the health education provided does not emphasize the factors that influence hypertension control behavior.

Factors that influence hypertension management behavior based on Protection Motivation Theory are perception of vulnerability, perception of severity, perception of reward, response efficacy, self-efficacy, and intention. The dominant factor is perception of vulnerability (Silvanasari et al., 2023a). It is important to optimize hypertension management behavior so that hypertension can be well controlled and minimize the risk of complications such as stroke, heart attack, heart failure and chronic kidney failure (Silvanasari et al., 2023b). This effort is also important so that the elderly avoid the negative impacts of hypertension which can later reduce the quality of life of the elderly (Lindayani et al., 2018).

Prevention and appropriate management of hypertension in the elderly is very important. There are two treatments that can be given, namely pharmacological and non-pharmacological (Lindayani et al., 2018). In maximizing these two types of treatment, of course it is necessary to start with a good understanding of hypertension in the elderly population. Empowerment is one of the appropriate intervention strategies in improving public health conditions. The team

emphasized empowerment activities on increasing threat assessment, coping assessment, and intentions in elderly people with hypertension.

Identification of Problems

The target audience for partners in this community service activity is economically unproductive people, in this case the elderly with hypertension. Elderly people with hypertension certainly need adequate understanding and improvement of skills related to hypertension management behavior in an effort to improve their quality of life. The empowerment activities for elderly people with hypertension provided are based on Protection Motivation Theory where perceptions of vulnerability, perceptions of severity, perceptions of reward, response efficacy, self-efficacy, and intentions influence hypertension management behavior in the elderly. Perception of vulnerability is a dominant factor so strengthening this section is important.

Implementation Methodology

Community service activities are carried out on the elderly with hypertension. This activity was carried out in July 2024 in a rural area in Jember Regency. The aggregate number of elderly people and their families who attended was 30 people. The empowerment of elderly people with hypertension which is carried out consists of the following activities, namely: pre test measurements, education related to perceptions of vulnerability, severity and appreciation of elderly people with hypertension, education regarding coping of elderly people with hypertension (including response efficacy and self-efficacy) and intentions of elderly people with hypertension, training on hypertension management behavior, and post test measurements. Pretest measurements were carried out at the beginning of the meeting using the Hypertension Self-Management Behavior Questionnaire (HSBMQ) to assess hypertension management behavior before carrying out activities to empower elderly people with hypertension. Posttest measurements were carried out in the following month using the HSBMQ questionnaire so that data would be obtained on changes in behavior before and after empowerment activities for elderly people with hypertension.

Results and Discussion

Community service activities run smoothly. The elderly and their families who attended were enthusiastic in listening to the educational material presented. The elderly and their families

also participated in a re-demonstration of the hypertension management behavior that was taught. The following is a comparison of the pre-test and post-test results of hypertension self-management behavior, namely:

Table 1. Hypertension Self Management Behavior before and after being given empowerment for elderly aggregate with hypertension

Hypertension Self Management Behavior	Pre		Post	
	n	%	n	%
Good	8	27	28	93
Less good	22	73	2	7
Total	30	100	30	100

Based on table 1, it can be seen that there has been an increase in knowledge regarding hypertension control behavior from 27% to 93%. The empowerment carried out emphasizes that the elderly, based on increasing age, are indeed included in the age group that is vulnerable to hypertension. The elderly aggregate was given information that in their age group it is important to synergize with health workers in monitoring their health condition. By providing this education, the elderly population has the awareness to pay attention to their lifestyle. An individual's perception does have a relationship with how the individual behaves healthily according to his or her health condition.



Figure 1. Education regarding Hypertension Management Behavior

Conclusion

Empowering the elderly population with hypertension is an important activity to carry out. This is because the prevalence of hypertension in the elderly aggregate is still high, especially in rural areas in Indonesia. Empowerment activities carried out can include providing health

education related to factors related to hypertension control behavior as well as training on hypertension control behavior. Measuring the success of empowerment activities can be done using HSBMQ measurements to see whether there is a change in hypertension control behavior after the activity is carried out. Aggregate empowerment of elderly people with hypertension needs to be carried out on an ongoing basis by paying attention to other aspects that contribute to improving hypertension control behavior.

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