

Optimization Of Improving Self-Care And Independence In The Elderly With Hypertension Friendly Support

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Abstract.

The community service partner is the elderly and families in Tambak Baru Ilir Village. There are still many elderly people who suffer from hypertension. If hypertension does not show symptoms, the elderly rarely seek treatment. The elderly rarely engage in physical activity. Individuals with hypertension often experience complex problems such as difficulties in fulfilling self-care and a decline in quality of life, leading to the elderly becoming dependent on others around them. Elderly and families need to be socialized about hypertension-friendly support to address issues caused by hypertension through hypertension education, education about the DASH diet, stress management, and a 60-minute exercise session for 25 elderly individuals. The result of the hypertension-friendly support education is that the elderly and their families feel enthusiastic about this activity. In self-care, all are in the sufficient category and all are in the independent category. Hypertension-friendly support can have a positive impact on elderly individuals who face issues due to hypertension, helping them to maintain their lives and continually respond to their surrounding environment. Keywords: hypertension, DASH diet, stress management, defansive exercise, elderly.

Keywords: Hypertension friendly support; elderly; independence and self-care.

I. INTRODUCTION

Hypertension, often referred to as the silent killer, typically occurs without symptoms or complaints [1]. The global prevalence of hypertension is reported by the WHO to be 22% of the total world population [2]. The highest prevalence is in Africa at 27%, and Southeast Asia ranks third highest with a prevalence of 22% of the total population. According to data, hypertension occurs in the age group of 18 years (34.1%), 31-44 years (31.6%), 45-54 years (45.3%), and 55-64 years (55.2%). The prevalence of hypertension among the elderly in Indonesia is 63.2% in the age group of 65-74 years, and 69.5% for those over 75 years old. South Kalimantan has a prevalence of 44.1%, while Papua has the lowest at 22.2% [3]. The situational analysis that has been conducted is an effort to gather information, potential, and obstacles that exist as a reference for formulating community service program activities in the form of community development activities. From the team's situational analysis, the initial step taken before the implementation of these activities is that the volunteers first conduct observations to inventory the conditions of the community service location in the Tambak Baru Ilir village, Martapura District, Banjar Regency. During the observation phase, direct field observations are made, engaging in dialogue with relevant parties in the community and observing conditions related to both physical and non-physical aspects. On March 15, 2024, the service also conducted research on the theme of hypertension and found that the majority of elderly people visiting the elderly health post experienced hypertension.

The results obtained through observational activities showed that based on the report data of the number of visits to the polyclinic at the Martapura Health Center in Banjar Regency in October 2023, data was obtained in September 2023 showing that there were 26 elderly people experiencing hypertension and receiving treatment at the health center, along with 19 suffering from diabetes mellitus out of 107 visits. There was an increase in October 2023 where 35 elderly people experiencing hypertension and receiving treatment at the health center were recorded, along with 14 suffering from diabetes mellitus out of 138 visits. In the village of Tambak Baru Ilir, in July 2024, the number of elderly people suffering from hypertension who visited the elderly health post was 40. The results from the gerontology division's service previously indicated that the majority, 65.7%, of the community experienced hypertension. Biologically, the elderly are

individuals who undergo a continuous aging process, characterized by a decline in physical endurance, making them increasingly vulnerable to diseases that can lead to death [4]. Efforts that hypertensive patients can take to lower blood pressure can be divided into two types: pharmacological and non-pharmacological. Pharmacological therapy can be conducted using antihypertensive medications, while non-pharmacological therapy can be approached through various efforts such as addressing obesity by reducing excess weight, providing potassium through food by consuming fruits and vegetables, reducing salt and saturated fat intake, quitting smoking, reducing alcohol consumption, creating a relaxed state, and engaging in regular physical exercise (sports), education, the DASH diet, stress management, and physical activity [5].

As is known, hypertension is one of the chronic diseases. One of the ideas for managing chronic diseases is the 'Chronic Care Model.' The chronic care model is a nursing model that focuses on creating productive interactions between patients with chronic diseases and a proactive interdisciplinary team. There are 6 basic elements in the implementation of the chronic care model, which are community, health system, self-management support, decision support, delivery system design, and clinical information system [6]. Hypertension friendly support is a method that consists of several interventions from the chronic care model applied to address issues caused by hypertension. Several studies have shown that chronic nursing models can help improve the quality of life of patients with chronic diseases such as diabetes mellitus and hypertension. A study in Malaysia by Aryani, Lee, Kok, Efendie, & Paraidathathu (2016) [7] showed significant changes in the quality of life of patients who were intervened with the chronic nursing model. In the study by Turner et al. (2018) [8], the implementation of the chronic nursing model was able to significantly control the increase in systolic blood pressure in hypertensive patients in addition to using antihypertensive medication. In Solihin's (2014) research [9], it was found that there is an influence of elderly exercise on lowering blood pressure in hypertension. Systolic blood pressure experienced a decrease while diastolic blood pressure did not show significant changes. Kritiani's (2018) research [10] found that there was an effect before and after the elderly exercise on the blood pressure of hypertension patients after doing elderly exercises three times a week for 40 minutes.

Physical activities such as elderly gymnastics can encourage the heart to work optimally, where exercise can increase energy demands by cells, tissues, and organs, thus enhancing venous return and causing stroke volume to increase, which will directly increase cardiac output. After consistently performing the exercises, blood vessels will become more elastic, and the decrease in blood pressure will last longer [11]. Self-management support is one of the elements in the Chronic Nursing Model. The researcher translated this into an intervention in the form of hypertension friendly support, which refers to an individual's ability to manage symptoms, care, physical health, and psychological impacts, as well as to adapt to lifestyle changes related to chronic conditions, resulting in the ability to monitor conditions and influence cognitive, behavioral, and emotional responses necessary to maintain satisfaction in quality of life [12]. Hypertension friendly support is care and support provided by emphasizing the importance of the patient's central role in managing their own health. The goal of hypertension friendly support is to assist the elderly in being able and willing to manage their health and care independently by accompanying clients and being a source of information for them. In the implementation of Hypertension friendly support, there are several main components, namely education about hypertension and its prevention, DASH diet education, stress management, and deficiency exercises. The purpose of this community service program is for the elderly and their families to understand hypertension and to be able to manage it non-pharmacologically through Hypertension friendly support.

II. METHODS

The location of this Community Service activity is located in Tambak Baru Ilir Village, Banjar Regency, South Kalimantan. The media used is a booklet. Then carry out hypertension friendly support for elderly. There are three stages of activity, namely: Preparation The first step in this community service activity is to make observations about health problems that are often suffered by the community. Furthermore, the Community Service screened health problems in the community and it was found that the elderly in Tambak Baru Ilir Village mostly suffered hypertension. The next step, devotees will teach

hypertension friendly support to optimize the self-care and independence in the elderly for 60 minutes, done according to the ability of the elderly while relaxing the muscles of the elderly body so that it is relaxed / comfortable. After completion, the elderly rest first for 10 minutes before doing the next activity



Fig 1. hypertension friendly support activities



Fig 2. Measurement of self care behaviour and independence in the elderly

Monitoring and evaluation

Monitoring and evaluation (monev) is carried out directly to the target. Monitoring and evaluation is carried out by conducting discussions and questions and answers after implementation hypertension friendly support in Tambak baru ilir Village. This evaluation aims to determine the Elderly Feelings After Performing hypertension friendly support. The results of the evaluation are both through questions and answers and the implementation of defancy exercise, All elderly are enthusiastic when participating in hypertension friendly support and can follow hypertension friendly support provided and some elderly experienced a calm feeling. Overall, hypertension friendly support can be carried out by all elderly in Tambak Baru Ilir Village.

III. RESULT AND DISCUSSION

Results of the elderly age and grade of hypertension conducted in Tambak baru ilir Village which was attended by 25 participants. Participants were enthusiastic about the activities carried out. Data collection was carried out in Tambak baru ilir Village on February 22, 2025.

Table 1. The elderly characteristic

CHARACTERISTIC	N	%
GENDER		
Male	7	28%
female	18	72%
TOTAL	25	100%
AGE		
55-65 years old	19	76%
66-74 years old	6	24%
TOTAL	25	100%
EDUCATION		
Elementary school	21	84%
Junior high school	3	12%
Senior high school	1	4%
TOTAL	25	100%
WORK		

Farmer	1	4%
entrepreneur	11	44%
Not working / housewife	13	52%
TOTAL	25	100%

From table 1, it can be seen that the majority of the participants' gender is female, with 18 people (72%), the majority age of the participants is 55-65 years old with 19 people (76%), the majority education level of the participants is elementary school with 21 people (84%), and the majority occupation of the participants is unemployed/housewives with 13 people (52%).

Table 2. self-care

Self care	f%
cukup	25100
Total	25100

From table 2, it is obtained that all participants have adequate self-care behaviors, which amounts to 25 people (100%).

Table 3. elderly independence

Self care	f%
independent	25100
Total	25100

From table 3, it is shown that all participants are independent, totaling 25 people (100%).

The next stage is the implementation of community service, where elderly individuals are provided with Hypertension-friendly support together with the volunteers. This aligns with our research on nursing interventions based on Levine's conceptual model for blood pressure recovery in the elderly. It was found that activity-based interventions are effective in managing hypertension in the elderly ($p=0.016$) [13]. At this time, non-pharmacological therapy is prioritized in management before administering pharmacological therapy to reduce the side effects of medication use. This is in line with Devi's journal where Ashima therapy (listening to Asmaul Husna, handgrip relaxation, and aromatherapy) is used to lower blood pressure in the elderly [14]. Hypertension friendly support is a non-pharmacological management support method for hypertension conducted in groups that can enhance self-care using various methods such as teaching (education that can increase knowledge about hypertension), asmaul husna therapy (listening to asmaul husna, handgrip relaxation exercises, and inhaling aromatherapy), DASH diet education, and physical exercises with defansi gymnastics, which can provide and support patients' skills in self-care efforts [15]. Several studies have proven that patients' ability to take care of themselves significantly affects the blood pressure of hypertensive patients.

In the study by Lestari & Isnaini (2018) [16], it was found that self-management can help lower blood pressure in addition to taking antihypertensive medication. Confidence in the effectiveness of therapy, self-efficacy, social support, and communication between healthcare providers and patients also influence the self-management of hypertensive patients [17]. The method used in this study to deliver material utilized booklets and demonstrations for 60 minutes of activities. This aligns with the research conducted by Mardhiah et al. (2015) [18], which was a group intervention held in the Indrajaya community health center hall using booklet media and PowerPoint, given over 60 minutes on health education material about self-care for hypertensive patients. A duration of 60 minutes is more effective for health education. The fulfillment of Activities of Daily Living (ADL) in the elderly requires an important role from family/caregivers. Caregivers play a crucial role in determining priorities and achieving optimal health goals for the elderly [8]. Caregivers are involved in fulfilling each ADL of the elderly as well as optimizing the basic human needs of elderly individuals with hypertension [13]. The optimization of this role requires attention from nurses in planning nursing care for hypertensive elderly patients to enhance the caregiver's role in the provision of care. The nurse's role in cases of hypertensive elderly patients with a decline in independence is focused on providing support for the elderly to maintain their existing health conditions, while still allowing opportunities for them to perform daily activities as optimally as possible and offering assistance when needed.

IV. CONCLUSION

Community service activities in the form of Hypertension friendly support for self-care and independence of the elderly were conducted in Tambak Baru Ilir village as an effort to tackle hypertension in the elderly. The method involved measuring blood pressure, followed by an intervention in the form of Hypertension friendly support for approximately 60 minutes. Evidence-based Hypertension friendly support is effective for self-care and independence in the elderly.

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