

Health Education and Dementia Screening in The Elderly of Tresna Werdha Bhakti Yuswa Nursing Home South Lampung

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Abstract

Dementia is the 4th cause of death after heart disease, cancer and stroke. To prevent dementia, 6 pillars of dementia prevention are needed. This service aims to screen for dementia and health education about preventing dementia. The benefit of this activity is to improve the quality of life for the elderly. Participatory Impact Monitoring (PIM) activity methods include involvement, active participation, and community empowerment. The instrument uses the Mini-Mental Status Examination (MMSE) questionnaire, sphygmomanometer, scales, and microtome. Indicators of achievement are dementia screening, health services, and increasing knowledge for the elderly. The partners' targets are 34 elderly people at the Tresna Nursing Home Bakti Yuswa Natar. South Lampung. The results of the activity showed that blood pressure was hypertension stage 1 (35.29%), hypertension stage 2 (8.82%), and hypertensive crisis (2.94%). Examination of nutritional status: overweight (26.47%), obesity I (8.82%), obesity II (11.76%). Dementia screening showed probable dementia (44.12%), and definitive dementia (23.53%). The results of health education showed that there was a difference in the mean knowledge about dementia before and after being given health education ($p=0.02$). and the solutions offered are health screening, health education, and the SMART Elderly program. The results disseminated are the SMART Elderly Program and health education. It requires collaboration and joint commitment from all parties to prevent dementia. The continuation of this activity is in the form of the SMART (Healthy, Independent, and Active) Elderly program in collaboration with the Natar Community Health Center, South Lampung.

Keywords: dementia, elderly, health education, health screening, empowerment

Abstrak

Demensia merupakan penyebab kematian ke-4 setelah penyakit jantung, kanker dan stroke. Untuk pencegahan penyakit demensia, diperlukan 6 pilar pencegahan demensia. Pengabdian ini bertujuan untuk skrining demensia dan edukasi kesehatan tentang pencegahan demensia. Manfaat kegiatan ini adalah untuk meningkatkan kualitas hidup pada lansia. Metode kegiatan Participatory Impact Monitoring (PIM) meliputi pelibatan, partisipasi aktif dan pemberdayaan masyarakat. Instrumen menggunakan kuesioner Mini Mental Status Examination (MMSE), tensimeter, timbangan dan microtome. Indikator ketercapaian adalah skrining demensia, pelayanan kesehatan dan peningkatan pengetahuan pada lansia. Sasaran mitra adalah 34 orang lansia di Panti Tresna Werdha Bakti Yuswa Natar. Lampung Selatan. Hasil kegiatan didapatkan tekanan darah hipertensi stage 1 (35,29%), hipertensi stage 2 (8,82%), krisis hipertensi (2,94%). Pemeriksaan Status gizi overweight (26,47%), obesity I (8,82%), obesity II (11,76%). Skrining

demensia didapatkan probable demensia (44,12%), definitive demensia (23,53%). Hasil edukasi kesehatan didapatkan terdapat perbedaan rerata pengetahuan tentang demensia sebelum dan sesudah diberikan edukasi kesehatan ($p=0,02$). dan Solusi yang ditawarkan adalah skrining kesehatan, edukasi kesehatan dan program SMART Lansia. Hasil yang didiseminasikan adalah Program SMART Lansia dan edukasi kesehatan. Perlu kolaborasi dan komitmen bersama dari semua pihak untuk mencegah penyakit demensia. Keberlanjutan kegiatan ini berupa program Lansia SMART (Sehat Mandiri dan Aktif) yang bekerjasama dengan Puskesmas Natar, Lampung Selatan.

Kata kunci: demensia, lansia, edukasi kesehatan, skrining kesehatan, pemberdayaan

INTRODUCTION

It is estimated that the number of elderly people in 2050 will reach 2 billion people and 80% will be in low and medium-income countries (World Health Organization, 2018). In Indonesia alone, the number of elderly people is estimated at 31,320,066 million people (Lasriado et al., 2021). Various studies showed that age is a risk factor for diseases such as diabetes mellitus, hypertension, heart disease, stroke, and dementia. Dementia is the 4th cause of death after heart disease, cancer, and stroke (Agis et al., 2021). According to WHO, (2023), currently, it is estimated that 55 million people in the world experience dementia for various reasons such as disease, trauma, drugs, and depression. It is estimated that 60% of dementia occurs in low and middle-income countries. Meanwhile in Indonesia, 15% of the elderly population experiences dementia (senility) (Kementerian Kesehatan Republik Indonesia, 2021). Dementia cannot be cured, but before dementia occurs there are many things we can do. Increasing activity, especially exercise, will help the brain's metabolism in digesting glucose. People who have moderate activity have better brain metabolism than people who tend to be less active (Agis et al., 2021). Apart from exercise for the elderly, puzzle games can slow the onset of a decline in cognitive function in the elderly. Other efforts that can be made to delay dementia are nutrition for the elderly, paying attention, and listening to the conversations of the elderly (Muliatie et al., 2021). The results of a preliminary study show that the number of elderly people living at the Tresna Nursing Home Bakti Yuswa Natar Natar is 80 people. From the results of interviews with the head of the Tresna Nursing Home Bakti Yuswa, most of the elderly had difficulty remembering the name of the home, people's names, remembering dates or days, and some were even unable to remember their own husband's name. This shows symptoms of dementia. The program carried out by the Tresna Nursing Home Bakti Yuswa is only limited to care for elderly people who are sick, there is no program to prevent dementia. The results of interviews with the elderly themselves stated that dementia or senile dementia is a common thing in old age or old age.

GENERAL DESCRIPTION OF THE COMMUNITY, PROBLEMS AND TARGET SOLUTIONS

General description

In order to improve the welfare of the elderly in Lampung Province, the Tresna Werdha Bhakti Yuswa Lampung Social Home was established before 1979 and is managed by the Tk Social Service. I Lampung which is a satlak located on Mount Sulah Kedaton, Tanjung Karang. In 1979-1980, through the Indonesian Department of Social Affairs Project implemented by the Regional Office of the Department of Lampung Province, the Tresna Werdha Bhakti Yuswa Lampung Social Home was built, located on Jalan Sitara No. 1490 Muara Putih Village, Natar District,

South Lampung Regency, Lampung Province. The Tresna Werdha Bhakti Yuswa Social Home officially started service activities (support) in 1980 with a service capacity of 30 elderly people. Considering that the development of social problems, especially for the elderly, is increasing, the Tresna Werdha Bhakti Yuswa Social Home is required to increase the reach and quality of its services. In 1981 an additional boarding house was built with the capacity to accommodate 50 elderly people and at that time the Tresna Werdha Bhakti Yuswa Social Home had the status of a Central UPT. Furthermore, from 1990 onwards the capacity was increased to 100 elderly people until now.

Tabel 1. Target description

No	Name of target	Characteristics of target	Amount	General problems or targets
1	Elderly	Men and Woman Elderly	34	Dementia, disability daily life, hypertension, diabetes mellitus

Problem

Tresna Werdha Bhakti Yuswa Nursing Home faced 3 problems to be solved.

1. Elderly people who experience symptoms of dementia
2. The elderly's perception of dementia is a common or an 'older disease'
3. There is no dementia prevention program yet

Target Solution

1. Dementia screening using the Mini-Mental Status Examination (MMSE)
2. Health education about dementia in the elderly
3. SMART Elderly program for dementia prevention

Tabel 2 Problem and solution

No	Problem	Solution	Indicators of goal
1	Elderly people who experience symptoms of dementia	Dementia screening using the Mini-Mental Status Examination (MMSE)	All Elderly have checked MMSE
2	The elderly's perception of dementia is a common or an 'older disease'	Health education about dementia in the elderly	Increase knowledge prevention about dementia
3	There is no dementia prevention program yet	SMART elderly program for dementia prevention	Improve Quality of life in elderly

METHOD

In implementing this program, the method used is the Participatory Impact Monitoring (PIM) approach. The application of the PIM method is the involvement and active participation of the community starting from the planning, implementation, utilization and evaluation stages to accept change (Vaughn & Jacquez, 2020). The stages of implementing activities are as follows:

1. Coordination

This activity was carried out to prepare service activities and sharing programs that could be implemented at the Bakti Yuswa Natar Tresna Nursing Home. The activity was held in the form of a Focus Group Discussion (FGD) by inviting the Head of the UPTD for Elderly Social Services at the Tresna Werdha Bakti Yuswa Natar Home, home staff, representatives of the elderly and the Natar Community Health Center.

2. Health Screening

This activity took the form of health checks, namely blood pressure, nutritional status, and dementia with a Mini-Mental Status Examination (MMSE) questionnaire which was carried out on 34 elderly people.

3. Health education about dementia and its prevention

This activity was attended by 34 elderly people with presentations using leaflets delivered through interactive counseling including:

- a. Knowledge of the symptoms and causes of Dementia
- b. Healthy diet in the elderly
- c. Mental stimulation and stress management
- d. Physical activity for the elderly

The activity continued with interactive questions and answers. So that knowledge can be internalized, continue with exercise demonstrations for the elderly. It is hoped that the involvement of nursing home staff in this activity will be a motivator to improve the quality of life for the elderly.

4. SMART Elderly Program

This activity is in collaboration with the Natar Community Health Center which is carried out once a month. The schematic of community service activity is shown at Figure 1.

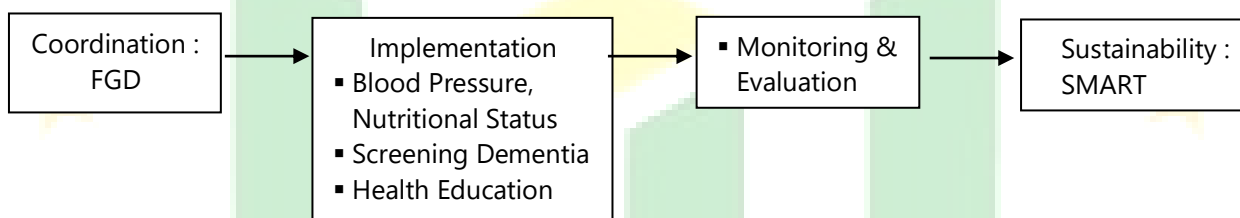


Figure 1. Method of Community Service

RESULTS AND DISCUSSION

This service activity begins with coordinating the implementation of activities on 10th, August 2023 at the Tresna Werdha Bhakti Yuswa Nursing Home. From the results of the coordination, it was agreed that the service activities would be carried out on 7th, September 2023. Community service activities include blood pressure examination, nutritional status by anthropometry examination, dementia health screening with tools Mini-Mental Status Examination (MMSE), followed by health education about dementia and its prevention. The service activities were attended by 34 elderly people, the characteristics of service participants can be seen in Table 1.

Table 1. Characteristic of Partner Target (n=34)

No	Variable	n	%
1	Age		
	pre elderly (45-59 yr)	1	3.03
	Elderly (60-69 yr)	33	94,74
2	Sex		
	Male	21	61.76
	Female	13	38.24
3	Education		
	Low	28	82.35
	Middle	6	17.65
	High	0	0.00

4	History of disease		
	Hipertension	5	14.71
	Gastritis	3	8.82
	Gout Arthritis	5	14.71
	Diabetes Mellitus	1	2.94
	Bronchitis Kronis	1	2.94

The results of health services The results of the health examination showed that 13 people (35.3%) had hypertension and 8 people (23.5%) had cognitive impairment. The results of health services are shown at Table 2.

Table 2. Health Service at Panti Tresna Werdha Bhakti Yuswa South Lampung

No	Health Service	n	%
1	Blood Pressure		
	Normal	9	26,47
	Pre-hipertensi	9	26,47
	Hipertensi stage 1	12	35,29
	Hipertensi stage 2	3	8,82
	Krisis Hipertensi	1	2,94
	Total	34	100
2	Nutritional Status		
	Underweight	3	8,82
	Normal	15	44,12
	Overweight	9	26,47
	Obesity I	3	8,82
	Obesity II	4	11,76
	Total	34	100,00
3	Dementia Status		
	Normal	11	32,35
	Probable Dementia	15	44,12
	Definitive Dementia	8	23,53
	Total	34	100

The results of the blood pressure examination are in line with the 2018 Basic Health Research (Riskesmas) results which show that the incidence of hypertension based on doctor's diagnosis in the 45-54 year-old group was 45.3%, 55-64-year-old was 55.2%, 65- 74 years old is 63.2%, and 75+ years old is 69.5% (Riskesmas, 2018). This is because as age increases, changes occur in the structure and function of the body's organs, which affects the deterioration of physical health and makes people more susceptible to disease (Putra, 2019). The results of this MMSE examination show that they are by research from Zaiyan et al., (2022) regarding the description of dementia in the elderly in Banda Aceh City, which showed that 43 people (76.8%) did not indicate dementia. Before health education, our team got a pretest to know the prior knowledge of the participants about dementia. The activity continued with health education in the form of delivering material, interactive discussions, and demonstrations of elderly exercise. Participants listened carefully to all the material presented and took an active role during the question-and-answer discussion. The education provided includes symptoms and causes of dementia, a healthy diet for the elderly, mental stimulation and stress management, as well as physical activity for the elderly. After health education, we delivered a posttest with the same

questionnaire. The data was analyzed with a paired t-test. The result of knowledge before and after health education is shown in Table 3.

Table 3: Knowledge Level Before and After Health Education

Knowledge	Mean ± SD	p
Before Education	1.59 ± 0,5	
After Health Education	2 ± 0,3	0,02

The result of the literature review of health education about dementia correlates to the level of knowledge of the elderly (Firna & Pradana, 2021). Providing health education about dementia increases knowledge by 75% among elderly people in Central Banjar, Jembrana Regency (Priastana et al., 2020). A continuation of this service is the SMART elderly program which is carried out in collaboration with the Natar Community Health Center once a month as a form of assistance in monitoring the health of the elderly.

CONCLUSIONS AND SUGGESTIONS

Community service activities in the form of health checks found that 35.3% of elderly people at the Tresna Werdha Bhakti Yuswa Home in South Lampung had hypertension and 23.5% had indications of dementia. It is hoped that the health education carried out will increase the knowledge of the elderly and their companions. This service activity needs to be carried out on an ongoing basis in order to create healthy, dementia-free elderly people.

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