Upgrading Posyandu Elderly Services in Early Detection of Degenerative Diseases in Posyandu Elderly in Pasir Lor Village, Karanglewas District, Banyumas

Sumarni[a)], Dyah Puji Astuti, Fitria Prabandari

University of Muhammadiyah Gombong

[a)]Corresponding author: sumarni2880@gmail.com

ABSTRACT

Degenerative disease is a disorder in which there is a gradual decline in function or damage to the structure of the body. The services provided at the elderly Posyandu are still limited to checking blood pressure, weighing, providing additional food and health education, but early detection of degenerative diseases has not been carried out, such as heart by checking cholesterol, DM by checking blood sugar levels, and detecting joint disease by checking uric acid levels. The activity method consists of preparation, implementation and evaluation. Preparatory activities are carried out for coordination with partners and preparation of all activity needs. Implementation activities consist of two activities, namely counseling and training on early detection of degenerative diseases. Evaluation is carried out to determine the effectiveness of the implementation of community service activities that have been carried out. The results showed that most of the knowledge of health cadres before counseling had poor knowledge, namely 69.8%, while 23.3% had quite good knowledge and 2.3% already had good knowledge about degenerative diseases. Meanwhile, after counseling, most of the cadres had good knowledge, namely 80.5%. while 19.5% knowledge is quite good. the ability of cadres in early detection through blood tests most of the cadres already have good skills at 88% while 12% are in the sufficient category. The conclusion of this activity is that some cadres have good knowledge and skills after upgrading cadres in early detection of degenerative diseases in the elderly, so this activity is very important to improve the quality of services for the elderly posyandu

Sumarni[a)], Dyah Puji Astuti, Fitria Prabandari

INTRODUCTION

Elderly is a scientific, continuous and continuous process that in advanced conditions causes anatomical, physiological, and biochemical changes in tissues or organs which ultimately affect the condition, function, and abilities of the body as a whole. (Kemenkes RI, 2021) In the elderly, there is a decrease in physical capacity which is characterized by a decrease in muscle mass and strength, maximum heart rate, exercise tolerance, and an increase in body fat. With increasing age, body weight will increase due to the accumulation of fat in the muscles while the muscle cells themselves decrease in number and volume, so there is a tendency to reduce physical activity due to obesity. (Setiorini, 2021) In Indonesia, the elderly are aged 60 years and over. An elderly person is someone who has reached the age of 60 years or more. In the elderly, cells decline due to the aging process, which can result in organ weakness, physical decline, and the emergence of various diseases, especially degenerative diseases. (Kemenkes RI, 2021)

Degenerative diseases are disorders in which there is a gradual decline in function or damage to body structure. Degenerative diseases include hypertension, coronary heart disease, cancer, diabetes mellitus, osteoporosis, joint disease, asthma, cataracts, and so on. In 2020, almost half of Indonesia's elderly experienced health complaints, both physical and psychological (48.14 percent). Meanwhile, the percentage of elderly people who experience illness is almost a quarter of elderly people in Indonesia (24.35 percent). In general, the diseases experienced by the elderly are non-communicable diseases that are degenerative in nature or caused by age factors, for example heart disease, diabetes mellitus, stroke, rheumatism and injury. (Kemenkes RI, 2021) Based on the National Riskesdas report in 2018, degenerative diseases such as hypertension, diabetes and heart disease were found. Among these diseases, joint disease was ranked first (53.13%) and followed by DM (16.04%), heart disease 13.2%. (Kementrian Kesehatan, 2018)

Degenerative diseases can be detected early through blood tests for cholesterol, uric acid and blood sugar at elderly posyandu. The results of research by Utami and Palupi, (2017) regarding the effectiveness of elderly posyandu on the ability to detect early degenerative diseases at Posyandu GBI Colomadu showed that elderly posyandu was effective in increasing the ability of elderly people to detect degenerative diseases early. (Utami & Palupi, 2017) Research by Nisak et al (2019) shows that the majority of elderly people involved in community service are women (72%). The average age of middle-aged elderly (59.74 ± 6.5), elderly with normotension is 57.4%, elderly with normal glucose levels is 96.3%, uric acid levels are above normal as much as 90.7%, and cholesterol levels above normal as much as 61.1%.

Posyandu for the elderly is a service center for elderly residents. Posyandu activities for the elderly are carried out based on community needs and initiatives. The social programs and services provided to the elderly vary in each location according to the conditions and needs of the community. Posyandu for the elderly has an important role in maintaining the health and quality of life of the elderly in society. Apart from providing health services, this smallest service unit will also facilitate various non-medical activities so that the elderly have a place to work and be active. (Tuwu & La Tarifu, 2023)

Posyandu for the elderly is an integrated service post for the elderly in a certain area that has been agreed upon, and is mobilized by the community so that the elderly receive adequate health services and is a government policy for the development of health services for the elderly which is administered through community health center program involving the participation of the elderly, families, community leaders and social organizations.(Kemenkes RI, 2021) Posyandu activities for the elderly include efforts to improve and increase public health, such as: 1. Promotive, namely efforts to improve health, for example counseling on healthy living behavior, nutrition for the elderly in an effort to increase physical fitness. 2. Preventive, namely efforts to prevent disease, detecting disease early by using KMS for the elderly. 3. Curative, namely efforts to treat diseases that the elderly are suffering from. 4. Rehabilitative, namely efforts to restore self-

Sumarni[a)], Dyah Puji Astuti, Fitria Prabandari

confidence in the elderly. 5. Measure blood pressure using a sphygmomanometer and stethoscope and count the pulse for one minute. 6. Checking blood sugar levels in urine as an early detection of diabetes. 7. Counseling can be carried out within or outside the group in the context of home visits or health and nutritional counseling according to the health problems faced by individuals and/or groups of elderly people. Not all posyandu activities can be carried out by all elderly posyandu in the community, this is due to the lack of facilities and infrastructure as well as human resource capabilities at these posyandu. (Kemenkes RI, 2021)

Karanglewas District is one of the sub-districts in Banyumas Regency which is 3.3 km from Purwokerto City, the capital of Banyumas Regency. The capital of Karanglewas District is in Karangkemiri Village. Administratively, Karanglewas District consists of 13 villages with an area of 34.93 km2. Pasir Lor Village is one of the villages in Karanglewas sub-district with an area of 0.72 km2, consisting of 7 RWs and 26 RTs. The population of Pasir Lor Village is 4,061 people. The number of elderly people in Karanglewas District is 13,222 people or 18.7% of the total population in Karanglewas District, namely 70,507 people. (BPS, 2020)

The number of posyandu for the elderly in Karanglewas District, Banyumas is 80 posyandu. Meanwhile, the number of posyandu in Pasir Lor Village is 7 posyandu for toddlers as well as posyandu for the elderly. The services provided at posyandu for the elderly are still limited to checking blood pressure, weighing weight, providing additional food and health education, but early detection of degenerative diseases such as heart disease by checking cholesterol, DM by checking blood sugar levels, and detecting joint disease by checking uric acid levels. This is due to the lack of tools and capabilities of cadres in early detection of this degenerative disease. Therefore, this community service aims to improve posyandu services for the elderly by carrying out early detection of degenerative diseases through checking cholesterol, uric acid and blood sugar.

MATERIALS AND METHODS

The program to increase the quality of posyandu services for the elderly in Pasir Lor village, Banyumas, Central Java. The methods used in this program are lectures, discussions and simulations for early detection of degenerative diseases. The service will be carried out on 21-22 June 2023. There are 7 posyandu in Pasir Lor village, Karanglewas subdistrict, Banyumas, spread across 5 RWs. There are 7 posyandu in Pasir Lor village, Karanglewas subdistrict, Banyumas. The member of posyandu cadres is 45 cadres. This activity was attended by 33 health cadres who served at the elderly posyandu.

The sampling technique was carried out using purposive sampling which met the inclusion criteria. Data collection techniques were carried out using questionnaires to determine the level of knowledge of respondents and observation sheets to assess cadres' ability to detect degenerative diseases, especially cholesterol, blood sugar and uric acid levels. Data analysis was carried out using descriptive analysis to describe the level of knowledge and skills of health cadres. Data presentation is carried out by presenting data through a frequency distribution table to describe the distribution of knowledge and skills of health cadres.

Tools and materials used in this community service activity include projectors, laptops for presenting material, GCU sets for simulations, questionnaire sheets and observation sheets to assess knowledge and skills, booklets and stationery as guiding materials for respondents. The following is the program schedule that will be implemented:

TABLE 1. Implementation of community service activities

Sumarni[a)], Dyah Puji Astuti, Fitria Prabandari

TIME	ACTIVITY	MATERIAL	METHOD	NUMBER OF	PERSON RESPONSIBLE
10 June 2023	preparation	Coordination with partners, namely village midwives and cadre leaders for appropriate and timely implementation.	Discussion	3	Sumarni Dyah Puji Astuti Fitria Prabandari
11 June 2023	preparation	Making proposals, questionnaires, and booklets for cadres	Discussion	10	Sumarni Dyah Puji Astuti Fitria Prabandari
21 June 2023	implementation	Delivery of GCU equipment sets to the village head and coordinator of each posyandu and explanation of the health cadre equipment	Lecture Discussion	2	Sumarni Dyah Puji Astuti Fitria Prabandari
21 June 2023	implementation	Counseling on detection of degenerative diseases in the elderly to health cadres	Pretest Simulation Discussion	2	Sumarni Dyah Puji Astuti Fitria Prabandari
22 June 2023	implementation	Training on blood tests using the GCU tool to check uric acid, cholesterol and blood glucose a. Demonstration of blood examination with GCU b. Accompany cadres in carrying out blood test simulations with GCU	Simulation	4	Sumarni Dyah Puji Astuti Fitria Prabandari
22 June 2023	Evaluation	Evaluation Evaluating cadres' knowledge about early detection of degenerative diseases	Posttest	2	Sumarni Dyah Puji Astuti Fitria Prabandari
3 Juli 2023	Pelaporan	Data analysis Carry out data processing from coding to data analysis	Discussion	5	Sumarni Dyah Puji Astuti Fitria Prabandari

TIME	ACTIVITY	MATERIAL	METHOD	NUMBER OF HOURS	PERSON RESPONSIBLE
3 September 2023	Reporting	Preparation of results reports and scientific articles Make a final report and upload it on the Simpenmas website Create articles for journals	Discussion	20	Sumarni Dyah Puji Astuti Fitria Prabandari

RESULTS

Evaluation of service activities is carried out before, during the implementation process and after the implementation of the activity. Evaluation of activities is carried out to ensure the sustainability of the program that has been implemented. Evaluation of the level of knowledge of health cadres about degenerative diseases and early detection of degenerative diseases and ability to carry out early detection of degenerative diseases, prenatal yoga exercises in pregnancy are carried out through pre-test and post-test activities. This was done as an effort for the activity team to ensure an increase in knowledge after the program was carried out. This level of cadre knowledge is important because the cadre is one of the companions for the elderly in carrying out early detection of degenerative diseases in addition to the village midwife. So you must know and have adequate skills regarding early detection of degenerative diseases.
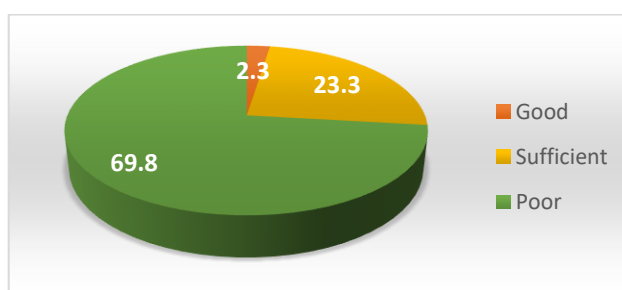

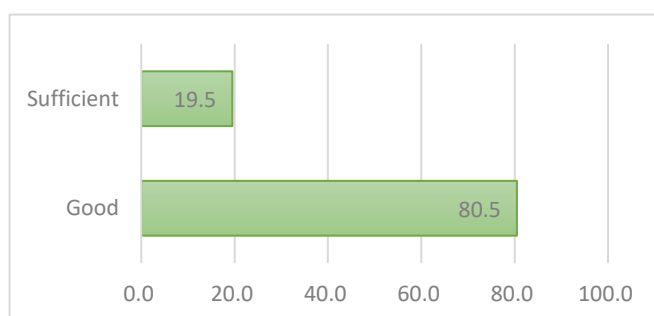**FIGURE 1.** Pre-Test Results of Health Cadre Knowledge about degenerative diseases

FIGURE 2. PostTest Results of Health Cadre Knowledge about degenerative diseases

Sumarni[a)], Dyah Puji Astuti, Fitria Prabandari

Based on the results of the analysis in the pre-test knowledge of health cadres about degenerative diseases was mostly in the poor category, namely 69.8%, while 23.3% had sufficient knowledge and 2.3% already had good knowledge about degenerative diseases. After carrying out training activities on early detection of degenerative diseases for health cadres in Pasir Lor Village, the cadres felt more confident and able to carry out early detection of degenerative diseases with routine blood tests at the posyandu for the elderly. This is of course supported by the role of village midwives and village officials who fully support the implementation of training activities for early detection of degenerative diseases.

DISCUSSION

Based on the results of the analysis in the post test knowledge of health cadres about degenerative diseases was mostly in the good category, namely 80.5%. while 19.5% is in the sufficient category. This shows that outreach activities are effective and able to increase health cadres' knowledge about degenerative diseases. This is possible because information on degenerative diseases is needed by Health Cadres and is very appropriate to the current conditions felt by health cadres.

Social media sources are one source of information that is easily accessible to the public, especially health cadres. Knowledge is a very important domain for the formation of one's actions. Knowledge is the result of human sensing, or the result of a person's knowledge of objects through the senses they have (eyes, nose, ears, and some of them). The time from sensing to producing knowledge is greatly influenced by the intensity of perception of the object. Most of a person's knowledge is obtained through the sense of hearing (ears) and the sense of sight (eyes).

The increase in health cadres' knowledge about prenatal yoga after the counseling was carried out was due to the focused attention of health cadres and a supportive atmosphere for absorbing the information received. This is in accordance with what was stated by Notoatmodjop S (2022) that the factors that influence the sensing process include concentration and the way humans view the objects being observed. Indra. Knowledge is most easily absorbed and understood by a person through the sense of hearing (ears) and the sense of sight (eyes) (Notoatmodjo, 2022)

A person's experience greatly influences knowledge, the more experience a person has about something, the more a person's knowledge about that thing will increase. Measuring knowledge can be done by interviews or questionnaires that state the content of the material that you want to measure from research subjects or respondents. As people get older, they will have more experience so that the sources of information they obtain will also increase and their knowledge will develop. (Notoatmodjo, 2022) A person's education also influences knowledge. A calm, conducive and enjoyable atmosphere in the udimNactivity location will make it easier for a person to concentrate and be able to absorb more of the information presented. According to Budiman & Riyanto, the environment can influence the process of knowledge entering an individual. This is due to reciprocal interactions which individuals respond to as knowledge. A good environment will increase the absorption capacity of the knowledge received. (Budiman & Riyanto, 2013)

Knowledge is a human reaction to environmental stimuli through contact and usually occurs after someone senses a certain object. Knowledge is a collection of information that can be understood and obtained and can be used as a tool for self-adjustment. (Zahro, 2019) Good knowledge is the basis for a person to behave well. Good knowledge of appropriateness influences your mindset so that you are able to act and behave in accordance with the knowledge you have. Knowledge is an important variable that influences a person's behavior and belief in something. Knowledge shapes a person's way of thinking and

increases understanding of information so that the higher a person's knowledge about the meaning of health, the greater a person's desire to use health facilities. (Potter & Perry, 2012)

Based on the results of the implementation, health cadres also had good knowledge about degenerative diseases. Armed with the knowledge and experience of training in early detection of degenerative diseases and the support of available facilities and infrastructure, it is hoped that early detection of degenerative diseases can be carried out independently and continuously through regular blood sugar, cholesterol and uric acid checks in Pasir Lor Village. Technical training for cadres is very necessary considering that it is impossible for cadres to be given all the knowledge and skills they need at the same time. Cadres' knowledge and skills need to be continuously developed by technical officers from various sectors according to their fields. Apart from knowledge and skills related to activity programs to improve services at posyandu, increase the knowledge and skills of posyandu cadres through courses, training and regular refreshments. Training for Posyandu cadres has provided significant benefits for Posyandu cadres in providing increased abilities in cognitive aspects, affective aspects and psychomotor aspects. (Zahrah Maulidia Septimar et al., 2023)

Elderly diseases that often appear in Indonesia are rheumatic, osteoporosis, osteoarthritis, hypertension, cholesterol, angina, cardiac attack, stroke, high triglycerides, anemia, gastritis, peptic ulcer, constipation, urinary tract infection (UTI), acute kidney failure, failure chronic kidney disease, prostate hyperplasia, diabetes mellitus, obesity, pulmonary TB, carcinoma/cancer. The most common diseases in the elderly are Diabetes Mellitus 17.0%, Hypertension 69.5%, Heart disease 4.7%, and Joint disease 18.9%. (Kementrian Kesehatan, 2018)

FIGURE 3. Implementation of outreach activities about degenerative diseases among elderly health cadres.

FIGURE 4. Simulation of blood glucose, uric acid and cholesterol examination by health cadres in the context of early detection of degenerative diseases by health cadres

Sumarni[a], Dyah Puji Astuti, Fitria Prabandari

CONCLUSIONS AND SUGGESTIONS

The level of knowledge of health cadres is mostly in the good category. This is directly proportional to the ability of health cadres to carry out early detection of degenerative diseases with routine blood tests at posyandu for the elderly. After carrying out training activities on early detection of degenerative diseases for health cadres in Pasir Lor Village, the cadres felt more confident and able to carry out early detection of degenerative diseases in the elderly. Technical training for cadres is very necessary considering that it is impossible for cadres to be given all the knowledge and skills they need at the same time.

ACKNOWLEDGMENT

REFERENCES

BPS. (2020). *Kabupaten Banyumas Dalam Angka 2020*.

Budiman, & Riyanto. (2013). *Kapita Selekta Kuesioner Pengetahuan dan Sikap dalam Penelitian Kesehatan.* . Salemba Medika.

Kemenkes RI. (2021). *Profil kesehatan indonesia tahun 2020*. https://pusdatin.kemkes.go.id/resources/download/pusdatin/profil-kesehatan-indonesia/Profil-Kesehatan-Indonesia-Tahun-2020.pdf

Kementrian Kesehatan, R. (2018). *Laporan Nasional Riset Kesehatan Dasar 2018 (Report of Indonesian Basic Health Survey 2018)*. http://repository.bkpk.kemkes.go.id/3514/1/Laporan%20Riskesdas%202018%20Nasional.pdf

Notoatmodjo, S. (2022). *Promosi Kesehatan Teori Dan Aplikasinya* . Rineka Cipta.

Potter, & Perry. (2012). *Fundamental Keperawatan.* (7th ed.). Salemba Medika.

Setiorini, A. (2021). Kekuatan Otot pada Lansia. *Jurnal Kedokteran Universitas Lampung*, *5*(1), 69–74. https://juke.kedokteran.unila.ac.id/index.php/JK/article/view/2936

Tuwu, D., & La Tarifu. (2023). Implementasi program posyandu lansia untuk menjaga kesehatan lanjut usia. *Journal Publicuho*, *6*(1), 20–29. https://doi.org/10.35817/publicuho.v6i1.72

Utami, U., & Palupi, F. H. (2017). Efektivitas Posyandu Lansia Terhadap Kemampuan Deteksi Dini Penyakit Degenerative di Posyandu Lansia GBI Colomadu. *Jurnal Ilmiah Maternal*, *2*(1). https://ejurnal.stikesmhk.ac.id/index.php/jurnal_ilmiah_maternal/article/view/579

Zahrah Maulidia Septimar, Imas Sartika, Ahmad Kurtusi, & Azzahra Ma'ruf Fiana. (2023). Basic Life Support Training for Posyandu Cadres in The Bumi Indah Residential Area of The Sakura Cluster, Tangerang District. *ABDIMAS: Jurnal Pengabdian Masyarakat UMTAS*, *6*(4), 4377–4386. https://doi.org/10.35568/abdimas.v6i4.3946

Zahro. (2019). Analisis Theory Of Planned Behaviour Dan Pengetahuan Terhadap Niat Berinfaq Jamaah Majelis Taklim Kecamatan Sukomanunggal Surabaya. *Jurnal Ekonomi Syariah Teori Dan Terapan* , *6*(6), 1209–1227.