Education Of Safe Treatment Of Degenerative Diseases In The Elderly At The Miftahul Jannah Elderly Boarding

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Abstract

Degenerative diseases are often experienced by the elderly, such as gout, high blood pressure, arthritis, high cholesterol and diabetes. Therefore, elderly people need to know more about diseases and treatments that can be used to prevent or reduce their symptoms. Community service activities were carried out targeting elderly mothers at the Miftahul Jannah Islamic Boarding Pimpinan Daerah ‘Aisyiyah (PDA) Pekalongan Regency. A total of 63 participants took part in this activity. The implementation method used the lecture and discussion method. Knowledge assessment was taken through a closed questionnaire and participants’ responses during the discussion session. The conclusion that can be drawn from this activity is that elderly people need knowledge about medicines for degenerative diseases, which are common diseases suffered by elderly people. Participants enthusiastically paid attention and asked questions during the activity.

Keywords

aisyiyah, elderly, degenerative disease
INTRODUCTION

Degenerative diseases are diseases that are not contagious (Berawi et al., 2019). Degenerative diseases are chronic and are caused by the deterioration of body organs due to the aging process. Populations aged 45-54 years are more at risk of death due to degenerative diseases than those aged more than 33 years (Handajani et al., 2010). Degenerative diseases can affect the health status and quality of life of the elderly. The results of a research study using a cross sectional study method on 100 elderly people in Medan City, it was found that 69% had hypertension, 55% have hypercholesterolemia, 20% have diabetes mellitus, 20% have hyperuricemia, and 13% have proteinuria. As many as 16% of elderly suffer from at least 3 types of disease, 31% suffer from 2 types of disease, and 33% only suffer from 1 type of disease. Generally, elderly people experience hypercholesterolemia and hypertension (Harahap and Andayani, 2018).

In general, people, especially the elderly, will check themselves after symptoms appear. Early detection carried out in the Mutiara Home Care area showed that 60% had systolic blood pressure of less than 130 mmHg, 58% had diastolic blood pressure of less than 90 mmHg, 32% had obesity, 66% had normal uric acid levels, 86% had current blood sugar levels of less than 140 mg/dL, and 60% had total cholesterol of more than 200 mg/dL (Amila et al., 2021). Degenerative diseases that are not treated properly can reduce the quality of life of the elderly (Hernawan and Rosyid, 2017). Hypertension cases are often found, especially in the elderly. There are still many elderly people who do not understand hypertension, prevention efforts and early treatment of hypertension (Maulana, 2022).

Gout or hyperuricemia is a condition that describes increased uric acid levels in the body (Firdayanti and Setiawan, 2019). High fluid consumption can reduce uric acid levels in the body (Diantari and Kusumastuti, 2013). Gout is often found at the age of 40-70 years. In the elderly, there is a decrease in the production of the urikinase enzyme which oxidizes uric acid into allatonin (Siswanto, 2019). Hyperuricemia can be controlled with a low-purine diet and taking medication to lower uric acid levels (Ismanto et al., 2016).

High blood pressure or hypertension occurs when blood pressure is abnormal in the blood vessels (Adam, 2019). Hypertension requires therapy in its treatment. Hypertension management is needed based on compliance with therapy so that it does not progress to complications such as stroke (Prasetyo et al., 2023). Arthritis is a disease that appears in old age (Yuliyanti and Zakiyah, 2016). The family plays a very important role in resolving joint pain in the elderly (Waskita et al., 2020). Analgesics are widely used by elderly people to reduce complaints of joint pain (Sanjaya et al., 2018). In the elderly, body fat accumulates due to a low basal metabolic rate. This has the potential to become cholesterol (Rahmawati et al., 2022). Analgesics are one of the drugs most widely used as self-medication by elderly patients (Sanjaya et al., 2018). Diabetes or often referred to as diabetes mellitus. Diabetes is a condition where the body cannot produce the insulin hormone as needed (Kaban et al., 2020). In the elderly, appropriate treatment recommendations are needed, due to the risk of hypoglycemia (Prasetyo, 2019) The aim of this activity is to provide information and knowledge for participants so they can understand the types of degenerative diseases that are often encountered by the elderly and use and choose degenerative disease medicines that are safe for the elderly.

METHOD
The implementation method used was five sessions, namely the first session by filling in a pre-test questionnaire, the second session was delivering material using the lecture method, the third session was a discussion using the question and answer method, the fourth session was filling in a post-test questionnaire for evaluation, and the fifth session was handing over the water storage equipment. Can be used for seniors at the Mifathul Jannah Elderly Islamic Boarding School. The questionnaire is aimed at participants and administrators. The questionnaire aimed at participants aims to evaluate the information received by participants and the continuity of the delivery process received by participants. Questionnaire aimed at the management to evaluate the presenters whether the activities carried out can provide benefits to the institution. The material presented includes safe treatment for degenerative diseases that are often experienced by the elderly, such as gout, high blood pressure, arthritis, high cholesterol and diabetes. The activity was held on Saturday, October 29 2022 at the PDA Aisyiyah Da'wah Building, Pekalongan Regency. Participants were members of the Mifathul Jannah PDA Pekalongan Regency Elderly Islamic Boarding, totaling 63 elderly participants.

RESULTS AND DISCUSSION

Service activities have been carried out for elderly people who are members of the Mifathul Jannah PDA Elderly Islamic Boarding, Pekalongan Regency. This activity aims to provide information and knowledge to elderly people so they can understand the types of degenerative diseases that are often encountered by elderly people and use and choose safe medicines for degenerative diseases. This effort is made so that elderly people feel cared for, their quality of life increases, and they are safe in consuming daily medication. The implementation of activities is presented in Figure 1-7.

1. Gout Disease and Treatment in the Elderly

In 2022, based on data from the Pekalongan District Health Service, gout arthritis will be highest in the Kedungwuni area. Gout arthritis patients undergoing examination at the Kedungwuni I Community Health Center use conventional antigout-phytotherapy to treat gout arthritis (Prastika et al., 2023). Age over 60 years or the elderly is an age prone to gout. High uric acid levels have the potential to cause complications in the kidneys (Efendi and Natalya, 2023). Pain is one of the signs and symptoms of gout (Amalia et al., 2021). In old age, there is a decline in the function of various organs in the body. It is important to regulate your diet, reduce foods high in purine, consume lots of carbohydrates, and consume fruit that contains lots of water (Nasir, 2019).

Non-pharmacological therapy can be done with ergonomic exercises and nutritional management. Management needs to be attempted to limit acute attacks, prevent recurrence, and prevent complications and physical disability (Mulianda et al., 2019). Treatment for acute gouty arthritis can be treated with non-steroidal anti-inflammatory drugs (NSAIDs) such as naproxen, sulindac, and indomethacin, glucocorticoids, and colchicine. For patients who have gastrointestinal disorders, COX-2 selective NSAIDs such as etoricoxib and celecoxib can be used. Aspirin is not recommended because it can cause an increase in uric acid and retention in the kidneys (Schinas et al., 2016).

2. Disease and Treatment in the Elderly

Vascular age causes arterial hypertension which can increase mortality and morbidity in the elderly. Reducing blood pressure can reduce the risk of cardiovascular disorders. Lifestyle management is very important to support the pharmacotherapy treatment of hypertension. Effective antihypertensive drugs for the elderly are diuretics, angiotensin converting enzyme (ACE) inhibitors, calcium channel blockers, and beta blockers (Bilen and Wenger, 2020).
Gymnastics activities carried out by elderly people can maintain healthy blood pressure (Pangaribuan and Berawi, 2016). Tomato juice as a non-pharmacological therapy can reduce blood pressure (Febriaty et al., 2023). Apart from using tomato juice, foot soak therapy using boiled red ginger for 3 days can have an effect by increasing blood circulation and relaxing the body's muscles (Azzakiyah and Kurniawan, 2023). Knowledge about the use of Tanaman Obat Keluarga (TOGA) can prevent hypertension which will affect perceptions (Erika et al., 2022).

3. Diseases and Treatment of Arthritis in the Elderly

Arthritis has symptoms of pain in the joints (Zein and El Newi, 2019). Inflammation of the joints or osteoarthritis (OA) is often found and is a cause of disability, especially in the elderly. Paracetamol is the first choice drug to treat chronic pain such as arthritis in the elderly with short-term therapy. However, to avoid gastrointestinal effects in the elderly, COX 2 inhibitor drugs such as celecoxib are preferred (Anggriani et al., 2016). Compress using ginger extract can reduce joint pain because it inhibits the release of the enzymes 5-lipoxygenase and cyclooxygenase and increases the activity of the endocrine glands (Anggraini and Yanti, 2018). Apart from that, reducing the scale of joint pain in the elderly can be done with warm compress therapy and back massage (Anggraini and Yanti, 2018).

4. Diseases and Treatment of High Cholesterol in the Elderly

High cholesterol or hypercholesterol can cause symptoms such as aches and headaches (Sari, 2014). High cholesterol is a disease that is not contagious in the elderly (Rahayu et al., 2021). Hypercholesterol can cause blockage of blood vessels (atherosclerosis) which can reduce cognitive abilities in the elderly (Alfarissi, 2021). Initial therapy for dyslipidemia suggests lifestyle modification. If this is not successful, a combination of lifestyle modification and medication is recommended. Statins are a safe first line for the elderly. Several studies state that statins are safe and effective for the elderly (Shao et al., 2011). Bay leaf boiled water consumed for 5 days can reduce cholesterol levels in elderly people by as much as 65 mg/dL (Pratiwi et al., 2023).

5. Diseases and Treatment of Diabetes in the Elderly

Diabetes or diabetes mellitus is characterized by hyperglycemia which is associated with insulin deficiency. Non-adherent treatment can cause therapy failure (Syifannisa et al., 2022). Diabetes can be caused by consuming too much sugar (Ningrum et al., 2020). Elderly people are at risk of polypharmacy which can cause Inappropriate Prescription (IP) or Potentially Prescription Omission (PPO) (Listiani et al., 2021).

Diabetes requires long and regular medical therapy. The use of combined or single oral antidiabetic drugs can help control blood sugar levels (Muthoharoh et al., 2020). Long diabetes treatment also has a large cost impact (Ningrum et al., 2019). External behavioral and motivational factors can be a factor in patient boredom when undergoing long-term treatment. So education and motivation are needed so that patients comply and have treatment behavior to achieve therapy targets (Saputri et al., 2019). Diabetes can potentially cause hypertension, hyperlipidemia and stroke (Pambudi et al., 2019).

6. Evaluation of Participant Knowledge
Table 1. Participants' knowledge through closed questionnaires

<table>
<thead>
<tr>
<th>No</th>
<th>Closed Questionnaire Questions (True/False Answers)</th>
<th>Correct Amount (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>High uric acid levels are characterized by pain and swelling in the fingers</td>
<td>73</td>
</tr>
<tr>
<td>2</td>
<td>Amlodipine and captopril are examples of drugs to reduce high blood pressure</td>
<td>97</td>
</tr>
<tr>
<td>3</td>
<td>Arthritis can be reduced by compressing it with cold water.</td>
<td>51</td>
</tr>
<tr>
<td>4</td>
<td>High cholesterol levels can cause stroke.</td>
<td>91</td>
</tr>
<tr>
<td>5</td>
<td>Diabetes is known as diabetes. Diabetes medication must be taken regularly every day.</td>
<td>94</td>
</tr>
</tbody>
</table>

Providing education can increase participants' knowledge (Muthoharoh et al., 2021). Participants who are given the opportunity to ask questions can have an impact on increasing knowledge (Muthoharoh et al., 2023). Based on the evaluation given at the start of the activity which is presented in Table 1, it shows that not all participants understand about gout, high blood pressure, arthritis, high cholesterol and diabetes. The hope is that providing education and discussion sessions can provide better experience and knowledge.

![Figure 1. Delivery of material using the lecture method](image1)

![Figure 2. Discussion](image2)
Figure 3. Assistance in filling out the pretest questionnaire

Figure 4. Participants fill out the posttest questionnaire

Figure 5. Delivery of water storage equipment
RESULT

Community service activities carried out with the Pimpinan Daerah ‘Aisyiyah (PDA) of Pekalongan Regency through the Miftahul Jannah Elderly Islamic Boarding Community were carried out well as shown by participants being interested, cooperative in participating in activities, and asking questions during discussion sessions and when delivering material. As for the next activity, it is necessary to practice in recognizing and selecting appropriate medications for the elderly. Participants enthusiastically paid attention and asked questions during the activity.

RECOGNITION

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