Overview Of Elderly Knowledge Regarding Osteoporosis Prevention dan Treatment In Maradekaya Village,Gowa District

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ARTICLE INFO	ABSTRACT
Keywords: *Knowledge, Osteoporosis, elderly, prevention, treatment.*	Osteoporosis is a problem for the service system because the incidence of osteoporosis increases with age, and people adopt unhealthy lifestyles and reduce physical activity . This study aims to determine the knowledge of elderly people about preventing and treating osteoporosis in Maradekaya Village, Bajeng District, Gowa Regency. The type of research carried out was descriptive research. The sampling method used was accidental sampling. The research instrument used a questionnaire in the form of a check list. The results showed that 11.42% of respondents had good knowledge, and 22.85% of respondents had sufficient knowledge and the remaining 65.73% of respondents had poor knowledge. So it can be concluded that on average the elderly people in Maradekaya Village have insufficient knowledge about the prevention and treatment of osteoporosis
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1. INTRODUCTION

The World Health Organization (WHO) estimates that by the middle of the next century, the number of hip fractures due to osteoporosis will triple from 1.7 million in 1990 to 6.3 million cases in 2050. Data from the International Osteoporosis Foundation (IOF) states that worldwide, one in three women and one in eight aged over 50 years are at risk of experiencing a bone fracture due to osteoporosis in their lifetime. (Mitchell P. IOF, 2019) The Ministry of Health noted an increase in the number of elderly people (elderly), namely from 18 million people (7.6%) in 2010 to 25.9 million people (9.7%) in 2019. And in 2020 it is estimated that the number of elderly around 80,000,000. Delivered by the Director of Mental Health Service Development, Ministry of Health of the Republic of Indonesia. The number is predicted to continue to increase to 48.2 million people (15.8%) in 2035. (Kementrian Kesehatan RI, 2015)

As we age, bone function decreases. Bone is one of the hardest tissues in the human body and is the main element of the body's skeleton which supports other body structures and protects vital organs. (Lee & Song, 2018) Bone density is the mass of bones in the body which shows the compactness of the bones. Bones that we take care of from an early age can cause loss. The beginning of bone abnormalities can be osteoponia which is an early sign of osteoporosis. (Ramadani, 2010) Based on observations and interviews conducted by researchers at the elderly posyandu, it was found that out of 10 elderly people, 6 elderly people complained of back pain and appeared to bend when standing and walking with the help of a cane or assisted by their family. Several elderly people said they had experienced falls at home and did not know how to avoid falls and maintain balance when standing. Therefore, researchers are interested in conducting research related to describing the knowledge of elderly people about prevention and treatment in Maradekaya Village, Bajeng District, Gowa Regency.

2. METHOD

Location, Population, and Research Sample

The type of research carried out was descriptive research which aimed to measure or assess the knowledge of elderly people about osteoporosis in Maradekaya Village, Bajeng District, Gowa Regency.

This research was conducted from July to August 2021. The population in this study were all elderly people in Maradekaya Village, Bajeng District, Gowa Regency. The sampling technique used in this research, namely accidental, is a sampling technique based on chance/incidental encounters with research that can be used as a sample, if it is deemed that the person who is met by chance is suitable as a data source (Notoatmodjo. S, 2015). The number of samples in this research is 35 elderly people. The sample criteria are as follows:

Inclusion Criteria:
1 elderly aged 60-90 years
2 elderly people who experience back pain and hunchback
3 elderly

who can communicate and are willing to be respondents Exclusion Criteria:
1. elderly over 90 years
2. elderly people who are not willing to be respondents

Data collection

Data with secondary data, namely data obtained from the research site, namely data from the village office and health center regarding the number of elderly and the health status of the elderly in 2020-2021, primary data in the form of a questionnaire. Data processing and analysis will go through three stages (Arikunto, 2002), namely:

1 Preparation
   At this stage the data is selected and sorted so that only the necessary data remains. By checking the completeness of the identity of the research respondents, checking the contents of the instrument, and checking the type of data entry.
2 Tabulation
   The activities carried out are assessing the questions, coding, and adding up the scores on the instrument.

3.   RESULTS AND DISCUSION

a. Respondent characteristics.

Table 1 shows the distribution of respondents based on age, 8 elderly (22.85%) aged 55-69 years, 4 elderly (11.42%) aged 66-74 years, 23 elderly (65.73%) aged 75- 90 years old. and Table 2 shows the distribution of respondents based on gender, 5 elderly (14.28%) are female, 30 elderly (85.72%) are male. and Table 3 shows the distribution of respondents based on education. There are 15 seniors with elementary school education (42.85%), there are 9 seniors with junior high school education (25.71%), there are 11 seniors with high school education (31.44%)

b. Overview Of Elderly Knowledge Regarding Osteoporosis Prevention dan Treatment In Maradekaya Village,Gowa District.

The results of the research depicting the knowledge of elderly people regarding the prevention and treatment of osteoporosis in Table 4 showed that there were 4 elderly people who had good knowledge (11.42%), 8 elderly people who had sufficient knowledge (22.85%), 23 elderly people who had poor knowledge. elderly (65.73%).

Discussion

Description of the elderly's knowledge in the good category

Based on research results from 35 respondents, 4 elderly people who have good knowledge (11.42%), this is due to the large amount of information that can be obtained through elderly posyandu, electronic media and information in the surrounding environment. This is supported by A.Wawan & Dewi M, (2011) that the more information a person obtains through print and electronic media, the more knowledge they gain, based on high school education as many as 11 seniors (31.44%), someone who has a higher education will find it easier to receive and process information so that they have good knowledge and understanding of something, including knowledge about osteoporosis. These results are in line with research conducted by Kusumawati (2014) on the elderly at the Dharm Bakti Nursing Home in Surakarta, where out of 24 respondents, 1 respondent (4.2%) had good knowledge. By knowing more

about osteoporosis, you can prevent further complications, where serious complications that are often encountered are bone fractures. Bone fractures often appear in the spine or hips, and wrists. Bone fractures cause a decrease in quality of life such as disability, social isolation and even death. (Humaryanto, 2017).

Prevention is important to avoid osteoporosis. Actions to prevent osteoporosis can be taken by (1) reducing risk factors, including smoking, alcohol consumption, caffeine consumption, using drugs that can affect bone health, reducing the achievement of maximum bone mass or increasing bone loss. (2) Managing the food or nutrition consumed is very important to maintain bone health and prevent osteoporosis. The main nutrients that are good for maintaining bone density are the growth of calcium and vitamin D. (3) physical activity (exercise) (4) Hormone replacement therapy (HRT) can be used in women during menopause to slow down the decline in bone content. (Humaryanto, 2017) According to the researchers' assumption, someone who has a higher education will be easier to manage and receive good information about something, including the elderly's knowledge about preventing and treating osteoporosis

Description of the elderly's knowledge in the sufficient category

Based on research results from 35 respondents, 4 elderly people who have good knowledge (11.42%), this is due to the large amount of information that can be obtained through elderly posyandu, electronic media and information in the surrounding environment. This is supported by A.Wawan & Dewi M, (2011) that the more information a person obtains through print and electronic media, the more knowledge they gain, based on high school education as many as 11 seniors (31.44%), someone who has a higher education will find it easier to receive and process information so that they have good knowledge and understanding of something, including knowledge about osteoporosis. These results are in line with research conducted by Kusumawati (2014) on the elderly at the Dharm Bakti Nursing Home in Surakarta, where out of 24 respondents, 1 respondent (4.2%) had good knowledge. According to the researchers' assumptions, someone who has a high level of education will be easier to manage and receive good information regarding something, including the knowledge of elderly people regarding the prevention and treatment of osteoporosis. Based on the knowledge of elderly people who have sufficient knowledge, there are 8 elderly people (22.85%), Based on the research results, it can be seen in table 4.1 that the distribution of respondents based on age shows that most elderly people are aged between 55-65 years, namely 8 elderly people (22.85%).

This is because elderly people have sufficient knowledge because their thinking ability is still good compared to those aged 75-90 years. Age can indirectly influence a person's knowledge, the older one gets, the higher a person's level of maturity and maturity, as well as the ability to think. This is also supported by A. Wawan & Dewi M, (2011) who explain that age is one of the factors that influences a person's level of knowledge because age can be a measure of a person's physical and mental readiness in thinking and making decisions without information. This is also in line with research conducted by Sani et al., (2020) namely that there is a significant relationship between the level of knowledge and secondary osteoporosis prevention behavior among Malahayati University students in 2019.according to assumptions Education will experience changes if electronic advances provide various kinds of mass media that can influence general knowledge.

Description of elderly knowledge in the low category

Based on the level of knowledge of the elderly, there were 23 elderly people (65.73%) who had less knowledge. This was because the source of information about osteoporosis was that the information obtained was still lacking, thus affecting the respondent's level of knowledge. This is also supported by A.Wawan & Dewi M, (2011), the environment is all the conditions that exist around humans and their influence can influence the development and behavior of people or groups, based on education it can be seen that most elderly people have an education level of up to elementary school, as many as 15 elderly people (42.85 %), In the opinion of researchers, someone who has low education really does not understand and accept information so they have less understanding and knowledge of something, including knowledge about osteoporosis.

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These results are in line with research conducted by Kusumawati (2014) on the elderly at the Dharma Bakti Wredha Home in Surakarta. From 24 respondents, 5 respondents (20.8%) had less knowledge. Apart from that, research conducted by (Rajaratenam et al., 2014) found that the level of osteoporosis knowledge and attitudes about osteoporosis in Jati Village was good and elderly women were still found with poor levels of knowledge and attitudes. According to the assumption, the elderly need to know about the importance of health protection regarding osteoporosis knowledge so that the safety and health of the elderly can be protected. Apart from that, knowledge related to osteoporosis can help improve the quality of life of the elderly. Because Osteoporosis is a hidden disease, sometimes it is asymptomatic and undetectable, until symptoms of pain arise due to microfractures or due to limb fractures. Due to the high morbidity associated with bone fractures, prevention efforts are a priority. Prevention of osteoporosis can be divided into 3 categories, namely primary (giving calcium and activity training), secondary (additional calcium consumption and hormone therapy and tertiary (after a fracture occurs).(Ramadani, 2010). Based on the results of research on "Illustration of Elderly Knowledge about the Prevention and Treatment of Osteoporosis in Maradekaya Village, it can be concluded that, on average, elderly people have a low level of knowledge.

Table 1. Frequency distribution of respondents based on age

Age	Frekuency	Percentage
55-69	8	22,85 %
66-74	4	11,42 %
75-90	23	65,73 %
Total	35	100%

Table 2. Frequency Distribution of Respondents by Gender

Gender	Frekuency	Persentage
Woman man	530	14,28 %
		85,72
Total	35	100 %

Table 3. Frequency Distribution of Respondents based on education

Education	Frekuency	Persentage
SD	15	42,85 %
SMP	9	25,71 %
SMA	11	31,44 %
Total	35	100%

Table 4. Frequency Distribution of Respondents based on elderly knowledge

Knowledge	Frekuency	Persentage
Good	4	11,42 %
Enough	8	22,85 %
Not Enough	23	65,73 %
Total	35	100 %

4. CONCLUSION

Based on the results of research on "Illustration of Elderly Knowledge about the Prevention and Treatment of Osteoporosis in Maradekaya Village, it can be concluded that, on average, elderly people have a low level of knowledge.

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