

KNOWLEDGE AND PREVENTION OF DEMENTIA AMONG ELDERLY

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ABSTRACT

The elderly is an unavoidable final stage of human development. The elderly will experience various changes, including decreased intellectual function. Apart from age, factors that cause intellectual changes in the elderly include dementia, which results in deficits in cognitive abilities, focuses on memory decline, and affects the decline in speech or language use. This study aimed to describe the knowledge of the elderly about dementia and their knowledge of dementia prevention efforts at the Cempaka Putih Public Health Center, Central Jakarta. This research method employed quantitative research with a descriptive design and sampling in this study used a convenience sampling technique with a total sample of 108 elderly respondents who visit the Cempaka Putih Health Center, Central Jakarta. The data collection method used two questionnaires, namely the dementia knowledge questionnaire and the dementia prevention knowledge questionnaire. A univariate analysis was performed in this study. The results showed that most of the elderly had poor knowledge about dementia, with a total of 72 respondents (66.7%) and 108 respondents (100%) had good dementia prevention. It is hoped that the results of this study can provide recommendations for developing effective programs to increase elderly health knowledge, especially about dementia and its prevention.

Keywords: Dementia, Knowledge, Prevention Efforts

INTRODUCTION

Aging is a natural process that occurs in every human being (Firna & Pradana, 2021).

The elderly is also defined as people aged 60 years and up who have changes in their physical, intellectual, daily activities, social interactions, and quality of life (Widiastuti & Setyowati, 2019). According to Kemenkes (2021), the elderly population in Indonesia is currently around 27.1 million people or 10% of the total population. It is estimated that by 2025, the number of elderly will increase to 33.7 million people, or 11.8%. The increasing number of elderly with various health problems is a challenge for the community to prepare a healthy and independent elderly in order to minimize the burden on the community and the country.

Everyone is aware that dementia, also known as senile, is a common problem in the elderly.

Dementia is also defined as a disease that involves a deficit of cognitive abilities. It is centered on a decrease in memory and causing the decline of speech ability or language use (Martina, 2020). According to the Alzheimer's Association (2021), dementia is a progressive and slow cognitive decline that is indicated by a decrease in the ability to remember (intellectual function), including orientation, ability to count, care, and the ability to perform activities that damage several cognitive domains. In Indonesia, dementia is often known as senility. The elderly does not only

experience dementia but also changes in personality or behavior such as irritability or aggressiveness, and a lack of motivation or willingness to do activities (Anggrain & Ernawati, 2021). According to (Kemenkes, 2016) as many as 46 million people in the world have Alzheimer's disease, and about 22 million of them are in Asia and developed countries such as the United States. In ancient times, the United States had more than 4 million elderly people with Alzheimer's. These Alzheimer's patients are expected to nearly quadruple by 2050, with most of the elderly experiencing cognitive function decline in the United States reaching 19.2% in the elderly aged 65-74 years and 27.6% in the elderly aged 75-84 years, as well as 38% in the elderly aged over 85 years in the Asian region, such as China and Taiwan (Effendi, Mardijana, & Dewi, 2014).

World Health Organization (WHO) also predicts that the total number of cases of Alzheimer's in Indonesia will be as many as 1 million in 2011, but this situation will increase over time and increase the life expectancy of Indonesian people (Muliati, Jannah, & Sri, 2021). According to Sembiring & Setyarini (2019), in Indonesia alone, the number of elderly who experienced a deterioration in cognitive

function was around 9.9%-45.7% of those aged 60 years and over. In addition, the number of elderly people in the three regions of DKI Jakarta, West Java, and Central Java affected by dementia is as high as 4% (Suriastin, Turana, & Firman, 2016). Increasingly severe cognitive abilities can affect the social life of the elderly. The cognitive decline in the elderly that is often found usually includes the deterioration of memory caused by Alzheimer's disease, which is closely related to increasing age.

Alzheimer's disease is 60% caused by senility or dementia and is expected to continue to increase (Fahmi Adha & Nurhasanah, 2016). The previous study conducted by Pramana & Harahap (2020) elaborated several factors causing ones to be at risk of getting dementia, namely, old age, female, low education level, obesity, diabetes mellitus, hypertension, consumption of cigarettes and alcohol, and low intake of unsaturated fatty acids. In line with this, research conducted by Priastana, et al. (2020) found factors causing dementia in the elderly, which are hypertension, consuming smoking, head trauma, drinking alcohol, the elderly, diabetes, stroke, a family history of dementia, being overweight, stress, educational factors, epilepsy, and sleep pattern disorders. Knowledge of dementia prevention must be

a special concern for raising elderly's awareness of the danger, so they could take preventive action and handle elderly with dementia properly.

Kemenkes (2018) stated that various efforts that can be made to prevent dementia include lowering or maintaining cholesterol levels in the blood, lowering or maintaining blood pressure, controlling diabetes, exercising regularly, being involved in activities that stimulate the mind, improving the quality of life, eating a healthy diet with balanced nutrition, and doing health education about a healthy lifestyle, especially for those aged 40 years and above, with the aim of slowing down the occurrence of dementia. Public awareness and knowledge about dementia are still very low; dementia is still considered a common thing that occurs in the elderly. On the other hand, people's incomprehension of dementia tends to form a negative view. Society regards all elderly people to experience a decrease in memory, and considers it as a normal process. This assumption must assuredly be eliminated from society (Husmiati, 2016).

Study by Hananta, et al. (2011) showed that of the 95 elderly people living in three nursing homes in Tangerang, 54 were suffering from dementia, and 41 were not.

Similar research has been conducted by Untari (2014), who conducted a study on the level of dementia in 60 elderly respondents in Panti Werda Darmabakti Surakarta. The results showed that the elderly with severe dementia category totaling 28 respondents (46.7%). Sari, Ningsih, and Hartati (2018) conducted a study using a mental status examination (MMSE) questionnaire on four social homes Tresna Werda located in the Jakarta area with non-experimental methods and found that almost 30% of the elderly experienced dementia.

Dementia prevention requires adequate knowledge about dementia and efforts to prevent its occurrence. Knowledge of dementia is a factor that can facilitate or predict the occurrence of the behavior in a person (Lee, Woo, Kim, Lee, & Im, 2009). Another literature study also said that health education about dementia is very important for the elderly, which will have an impact on increasing the elderly's knowledge about dementia. Based on the results of the evaluation, it showed a change in the level of knowledge of the elderly about dementia with a percentage of 75% after receiving health education about dementia (Hasanah, Ailsa, & wuryaningsih, 2013; Priastana et al., 2020). Therefore, the purpose of this study was to explore the knowledge of the

elderly about dementia and their prevention efforts in Central Jakarta.

METHOD

This research method used quantitative research with a descriptive design, using convenience sampling method by choosing any elderly individuals who are accidentally encountered by researchers. The sample used in this study consisted of 108 respondents. This study was carried out at the Cempaka Putih Health Center in Central Jakarta. The data collection tool was a questionnaire (a list of questions). The inclusion criteria of this study were as follows: (i) elderly who willingly and voluntarily agree to be research respondents (ii) elderly who are able to communicate effectively in Indonesian. The exclusion criteria were the elderly with hearing loss. The questionnaire used is divided into three parts: questionnaires about demographic characteristics, knowledge of dementia and prevention of dementia.

The first questionnaire was the respondent's sociodemographic data which contained gender, education, age, marital status, and occupation. The second questionnaire on knowledge about dementia was developed by Harahap (2018) with a total of 8 items. The mean score of more than 24.2 is good

knowledge and the mean score of less than equal 24.1 is bad knowledge. The third questionnaire on dementia prevention developed by Harahap (2018) which included ten prevention questions about routine exercise, talking to family, personal hygiene, families frequently visit, frequently tell about the past to the child, and grandchildren, or the community, frequently eat vegetables, fish or fruit foods, routinely go to see a doctor. The eighth question asked about whether the respondents do the work of counting every day, for example: recalculating, the amount of grain, accustomed to keeping things to the original place; and frequently get together with friends. The interpretation was that bad prevention scores were 1-10, moderate prevention had a score of 11-20, and good prevention had a score of 21-30.

The questionnaires in this study were tested for its reliability and validity on 30 respondents with 18 question items and were declared reliable and valid. As a result of its reliability, the questionnaire was declared reliable with a Cronbach alpha value of 0.657. During the validity test, four question items, number 4,6,9,10 were declared invalid. The lead researcher discussed with co-researcher who focuses on the elderly how to modify the question with clearer and easier-to-understand language so that the two items in

the modification could still be used but the other two items, namely questions number 9 and 10, could not be used in this study. In the end, 8 question items are declared valid because r counts are greater than the r table (r table = 0.695). Furthermore, the second variable in this study is a preventive action of dementia that has been tested on 10 question items. From the ten questions, one question was invalid, namely item number 3 and the results of the trial of 10 question items were declared valid because the calculated r value was greater than r table (r table = 0.695).

The data were then analyzed univariately using SPSS version 26. In collecting data, researchers collaborated with nurses who were responsible for the elderly at the Cempaka Putih Public Health Center. The researcher explained the research objectives and distributed informed consent to respondents who were willing to voluntarily participate. The questionnaire takes about 10-15 minutes to complete. This study has passed the ethical review procedure and has been declared feasible to be carried out by the Health Research Ethics Commission of the Immanuel College of Health Sciences Bandung with No.117 / KEPK / STIKI / VII / 2022.

RESULT

Table 1 showed that 96 respondents (88.9%) were in old category, 67 respondents (62.0%) were female, 39 respondents (36.1%) were receiving high school education, 70 respondents (64.8%) were married, and 46 respondents (41.75%) had retired.

Table 1 Demographics Characteristics of Elderly (N=108)

Characteristics	n	%
Age		
Elderly (60-74)	96	88,9
Old (75-90)	12	11,1
Gender		
Woman	67	62,0
Men	41	38,0
Education		
No School	1	9
Elementary School	18	16,7
Junior High School	16	14,8
Senior High School	39	36,1
College	34	31,5
Marital status		
Not Married	2	1,9
Widow/Widower	36	33,3
Married	70	64,8
Job		
Farmer	1	9
Self-employed	7	6,5
Retired	46	42,6
unemployment	45	41,7
others	8	7,4

Table 2 Knowledge about Dementia among Elderly (N=108)

Knowledge	N	%
Good	36	33,3
Bad	72	66,7
Total	108	100

Table 2 showed that 72 respondents (66.7%) had poor knowledge, while 36 respondents (33.3%) were well-informed.

Table 3 Knowledge about Dementia Prevention among Elderly (N=108)

Prevention	N	%
Good Prevention	108	100
Total	108	100

Table 3 showed that 108 respondents (100%) had done good prevention efforts.

DISCUSSION

Individual knowledge is influenced by the information obtained. Due to the lack of information received, the community does not have adequate knowledge about dementia, so the term “dementia” is unfamiliar. People assume that dementia is better known as “senile dementia”, which is an easy-to-forget disease that usually occurs in the elderly (Missesa, 2017). People’s misconception about dementia can be influenced by the level of education, which usually affects the knowledge of the elderly, including the level of education and the lack of information about it. Information obtained by the elderly can come from print media, electronic media, or from health workers (Saraswati, Yuda, & Na’mah, 2019).

Other studies revealed that one factor influencing knowledge level is age; as people get older, they tend to be slower or refuse to deal with existing values or information, so prevention efforts will also be hampered. It is found that the elderly has

a low level of knowledge, as do respondents in elementary, junior high, and high school. However, respondents with a university education background mostly took good preventive actions, and respondents who had the potential for poor knowledge mostly took good preventive actions (Harahap, 2018). The results of this study indicate that of the 108 respondents, most of them have poor knowledge if they understand and know about the meaning of senility, the causes of senility, and the signs and symptoms of senility.

The same research was carried out by Saraswati et al. (2019) regarding respondents’ knowledge level of dementia prevention. The results showed that most of the respondents, totaling 12 respondents (44.45%), had lower-level knowledge, while 10 respondents had a sufficient knowledge level (37%) and 5 respondents (18.5%) had the lowest level of knowledge. Similarly, research conducted by Sopyanti (2019) showed that more dementia respondents, totaling 26 respondents (39.4%) were found at the age of 60-74. There were 29 female respondents (40.9%). Other researchers also mentioned that elderly women are more likely to develop dementia than men because women's life expectancy is higher (Suryatika, Pramono, & dkk, 2019). Other

studies also found that the highest number of respondents were female (74.5%) (Mulyadi, 2017).

Study carried out by Kurniasih (2022) involved 66 respondents with moderate knowledge of dementia, 35 respondents (53.0%) and 31 respondents (47.0%) with sufficient knowledge about dementia. The results of this study showed that dementia occurs in around 8% of the elderly over the age of 65 years and increases very rapidly to 25% at the age above 80 years and almost 40% at the age above 90 years (Taufik, Sari, & Alivian, 2018).

Elderly people who make efforts to prevent dementia usually develop healthy habits at a young age. In addition, accepting behavior among the elderly towards prevention planning is the basis for their willingness to participate in dementia prevention activities, both those held by Integrated Healthcare Centre (posyandu) and those carried out independently. A similar study conducted by previous researchers found that most of the respondents (53.5%) had moderate preventive measures, despite the fact that most of them did bad prevention (Harahap, 2018).

The study was conducted on the elderly at the Elderly Posyandu RW III Dukuh Kupang

Timur Surabaya in July 2012, with a sample of 37 people who were taken using a simple random technique. Data were collected by means of structured interviews and observation. The results showed that 48.65% of the elderly had sufficient knowledge about dementia, and as many as 55.56% of the elderly did not make efforts to prevent dementia (Hasanah & dkk, 2013). According to research conducted by Anggrain & Ernawati (2021), the overall population of dementia patients has increased, but public awareness and knowledge about dementia are still very lacking. Public awareness and insight about dementia are very low, dementia is still considered a common thing suffered by the elderly. On the other hand, public ignorance of dementia tends to lead to a slightly negative view. Society assumes that every elderly has a memory disorder and that decline is a natural process. This misconception must be removed from society (Husmiati, 2016).

Based on this discussion, good prevention efforts are influenced by daily actions or habits such as reading, singing or playing musical instruments; socializing; thinking positively; being grateful; and getting closer to God. Besides that, the elderly usually eats high-fiber foods, was on fats, sugar, and salt diets. The last is having an exercise for 30 minutes so that in their efforts to prevent

dementia, they are doing well, even though most of them have poor knowledge about dementia.

CONCLUSION

Based on the research concerning elderly's knowledge about dementia and knowledge of dementia prevention efforts in Central Jakarta, it can be concluded that there were as many as 72 respondents who had a poor level of knowledge about dementia, while 108 respondents were aware of the prevention efforts. This research may give information and useful suggestions for the improvement program regarding the knowledge of the elderly about dementia and efforts to prevent dementia.

CONFLICT OF INTEREST DECLARATION

The authors declared no potential conflicts of interest concerning the research, authorship, and/or publication of this article.

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LIMITATION

The primary drawback of this study is its descriptive design, which prevents a thorough examination of dementia in the elderly. This study also focuses on the elderly at the Cempaka Putih Health Center; therefore, the results cannot be generalized to other elderly people in Indonesia.

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