



## KNOWLEDGE OF GENERAL DOCTORS OF PRIMARY HEALTH SERVICE FACILITIES IN SEMARANG CITY ABOUT DEMENTIA IN SEMARANG

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### ABSTRACT

**Background.** Dementia is a syndrome due to brain disease, usually chronic or progressive and there is a disturbance of sublime function. Lack of knowledge and awareness of health workers about the occurrence of dementia can worsen dementia due to delays in diagnosis and treatment. **Methods.** This study is a descriptive study with a cross sectional design involving 66 respondents who have agreed to the informed consent and they are general practitioners who work in the Primary Health Care Facilities. Sampling using consecutive sampling technique. Data collection was carried out in November 2021. Data analysis used SPSS 22.0 ver. **Results.** The average knowledge of respondents before the training was described from the pretest score of 5.2. **Conclusion.** Lack of knowledge about dementia in general practitioners who work in primary health care facilities in the Semarang.

**Keywords :** *Dementia, General Practitioner, Knowledge*

### BACKGROUND

Dementia is a syndrome due to brain disease, usually chronic or progressive and there is a disturbance of sublime function. Brain disease is a disorder of several higher cortical functions, including memory, thinking, orientation, comprehension, computation, learning capacity, language, and judgment. Impaired cognitive function is usually accompanied and sometimes preceded by a decrease in emotional control, social behavior, or motivation. This syndrome occurs in a large number of primary or secondary brain disorders.<sup>1,2</sup>

Alzheimer's disease is the most common type of dementia accounting for about 60% to 80% of cases. In reality, however, dementia is under-detected in primary health care. A systematic review showed that 2-12% of primary care patients over the age of 65 have dementia of unknown origin. Currently, in Hong Kong the diagnosis of dementia in primary care largely relies on clinical suspicion based on the patient's symptoms or caregiver concerns that tend to be missed or delayed.<sup>3</sup>

Late diagnosed dementia in primary health care can be caused by factors of knowledge and attitude of clinicians. A study from the UK reports that primary care physicians were lack of confidence in making a dementia diagnosis and require additional training for skrinning dementia. Some primary care physicians believe that early diagnosis of dementia is unimportant and can actually be harmful to patients, as it is equivalent to stigmatization without drugs.<sup>1,2</sup>

Lack of knowledge and awareness of health workers about the occurrence of dementia can

worsen dementia due to delays in diagnosis and treatment. In countries that are less concerned about dementia, the morbidity and mortality rates of the population will increase. In the UK, dementia financing ranks first, higher than cancer and other cardiovascular diseases.<sup>6</sup>

Several ways that can be handle patient with dementia, the most important of are providing motivation to people with dementia, the care-giver, and families of people with dementia, as well as early detection by health workers.<sup>7</sup> Because in the city of Semarang there are people who have the potential to experience Alzheimer's dementia, it is necessary to conduct a survey on the knowledge of general practitioners about Alzheimer's dementia.

### METHODS

This research is a cross sectional study with total purposive sampling. This study was conducted to determine the general practitioner's knowledge of dementia in the city of Semarang. This research was in November 2021, the research subjects were general practitioners who were taking part in the Alzheimer's Early Detection training for General Practitioners at Health Centers and Level I Health Facilities in the city of Semarang.

The trainees will be given informed consent to be included in this study. Participants will be asked several questions about dementia before and after being given the material exposure. The collected data was checked for completeness and correctness, then cleaned, coding, editing, tabulating and entered into the computer using the IBM SPSS Statistics for



Windows version 22 program. Data analysis included descriptive statistics.

**RESULTS**

This research was conducted in November 2021 among 66 general practitioners participating in the Alzheimer's Early Detection training for General Practitioners at Puskesmas and Level I Health Facilities in Semarang City.

**Table 1.** Characteristics of respondents

N	Characteristics	Criteria	Freq (n)	%
1	Gender	Female	50	82
		Male	11	18
2	Education	Bachelor Degree	57	93,4
		Graduate Degrees	4	6,6
3	Community Activities	Posyandu Lansia	2	3,3
		PKK	5	8,2
		Not Participate	54	88,5
4	Information facilities	Often	16	26,2
		Always	22	36,1
		Sometimes	22	36,1
		Difficult	1	1,6
5	Opportunity to gain knowledge about Dementia	Often	23	37,7
		Always	9	14,8
		Sometimes	29	47,5
6	Resources	Seminar/ training	7	11,5
		Electronic media	20	32,8
		Print media and seminar/ training	2	3,3
		Electronic media and seminar/ training	29	47,5
		Electronic media, Print media, or seminar/ training	3	4,9
7	The best source of information	Book/journal	14	23,0
		seminar/ training	30	49,2
		Electronic media	5	8,2
		Book/	4	6,6

		Journal and seminar/ training	2	3,3
		Electronic media and seminar/ training	6	9,8
		No answer		
8	Age	Mean (SD)	38,06 (10,06)	
9	Knowledge before training (pretest score)	Mean (SD)	5,2 (1,08)	

Respondents in this study were dominated by women, as many as 50 people (82%), while 11 men (18%), with a mean age of 38.06, and 57 people (93.4%) with a bachelor's degree and 4 people (93.4%) finally postgraduate education. The research subjects at most 88.5% did not participate in community activities. The survey also shows that the provision of information about dementia varies. The most common sources of information regarding dementia were obtained through electronic media and symposium/trainings. Meanwhile, according to respondents, the best source of information is symposium/training. The average knowledge of respondents before the training is described from the pretest value of 5.2.

**DISCUSSION**

In this study, the characteristics of doctor in primary health care were dominated by women with an average age of 38.06 and the last degree was of S1 with the profession of a doctor. The subject is a professional doctor who is competent in his field. In this study found that many subjects did not participate in community activities related to dementia. There are many program on primary health care, that caused the subject did not participate in community activities.<sup>3</sup>

The information facilities is easy to obtain because there are many media that can be a source of knowledge. The development of information technology is so rapid that it allows the public to easily access information on these matters. However, according to the subject, the best sources of information are symposium/trainings and books. Because social media is hard for take the responsibility.<sup>4</sup>



The opportunity to gain knowledge about Dementia was sometimes. This is due to the lack of information about dementia, because of the stigma in the community which has been saying that forgetting is normal in the elderly.<sup>3</sup>

The average value of knowledge of health workers before education about dementia is 5.2. This shows that there is a lack of knowledge about dementia in research subjects such as the research by Leung CW (2018), which shows a lack of knowledge of general practitioners in primary care health facilities in Hong Kong. Refreshment and addition of knowledge is needed for research subjects regarding dementia.<sup>1</sup>

Alzheimer's dementia is a disorder of physical decline in the brain that affects emotions, memory and decision making and is commonly referred to as senile dementia. Dementia is often considered to be experienced by the elderly so that Alzheimer's is often not detected, even though the symptoms can be experienced from a young age (early on-set dementia) and early detection helps sufferers and their families to better deal with the psycho-social effects of this disease.<sup>5</sup>

Alzheimer's disease is most common in older people > 65 years, but can also affect people over the age of 40. The following is an increase in the percentage of Alzheimer's disease with age, including: 0.5% per year at the age of 69 years, 1% per year at the age of 70-74 years, 2% per year at the age of 75-79 years, 3% per year years at the age of 80-84 years, and 8% per year at the age of > 85 years.<sup>6</sup>

Dementia is a major and serious problem faced by developed countries, and has also become a health problem that has begun to emerge in developing countries such as Indonesia. This is due to the increasing prevalence of degenerative diseases and the increasing life expectancy almost all over the world. Most 10% of all people over the age of 70 have significant memory loss and more than half are due to Alzheimer's disease. Estimated total expenditure for treating Alzheimer's patients is >\$50,000.<sup>7</sup> Alzheimer's disease can occur in any adult decade, but it is the leading cause of dementia in the elderly. Alzheimer's disease is more common with slow memory loss followed by dementia, which progresses slowly over several years.<sup>6</sup>

The most important thing that is a risk factor for Alzheimer's disease is old age and a positive family history of the disease. The frequency of

Alzheimer's disease will increase as you get older. It reaches about 20-40% of the population over 85 years of age. Women are gender risk factors that are more at risk, especially elderly women. Over 35 million people worldwide, 5.5 million in the United States, have Alzheimer's disease, memory loss and other cognitive impairments that can lead to death about 3 – 9 years after diagnosis. Alzheimer's disease is the most common type of dementia, accounting for 50-56% of autopsy and clinical cases. The incidence of the disease doubles every 5 years after age 65, with 1275 new diagnoses per year per 100,000 people older than 65 years. Most people with Alzheimer's disease are women and skin white.<sup>7</sup>

In this study, the average results of the pretest were 5.2 and the posttest was 6.4. After the statistical test, it was found that there was a significant difference from the value before being given education about dementia. This may indicate that primary care physicians lack understanding of dementia.

The importance of early diagnosis to promote the adoption of quality care not only for the individual affected, but also for their caregivers and families. When early warning signs are identified, interventions and engagement in services can be initiated proactively and delivered more effectively.<sup>8</sup> Evidence shows that early recognition reduces the psychological distress of patients and their families. Early detection of Alzheimer's disease and planning has proven useful in slowing cognitive and behavioral decline during mild to moderate stages.<sup>1,2</sup>

There are the benefits of early diagnosis of dementia are:

#### 1. Initial planning and assistance

Early diagnosis allows a person with dementia and their family to receive assistance in understanding and adjusting to a diagnosis and to prepare for the future in an appropriate way. This may include making legal and financial arrangements, changing living arrangements, and finding out about help and services that will improve the quality of life for people with dementia and their families and friends. Early diagnosis can allow individuals to have an active role in decision making and planning for the future while families can educate themselves about the disease and learn effective ways to interact with people with dementia..<sup>2,5</sup>



## 2. Checking for problems

Changes in memory and thinking skills can be very worrying. Symptoms of dementia can be caused by several different diseases and conditions, some of which are treatable and reversible, including infections, depression, medication side effects, or nutritional deficiencies. The sooner the cause of dementia symptoms is identified, the sooner treatment can be started. Asking a doctor to check for any symptoms and identify the cause of the symptoms can relieve people and their families.<sup>5</sup>

## 3. Treatment

There is evidence that currently available drugs for Alzheimer's disease may be more beneficial if given early in the disease process. These drugs can help maintain daily function and quality of life and stabilize cognitive decline in some people; However, they do not help everyone and they are not a cure. Early diagnosis allows quick access to treatment and medical attention.<sup>5</sup>

## 4. Health Management

Receiving a diagnosis can also help in the management of other symptoms that may accompany the early stages of dementia, such as depression or irritability. Also reviewing the management of other medical conditions is very important, as memory problems can interfere with a person's memory for taking important medications such as diabetes, heart disease or high blood pressure.<sup>5</sup>

## CONCLUSION

There is a lack of knowledge about dementia in general practitioners who work in primary health care facilities in Semarang.

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