Elderly Nutrition Status In Caringin Health Center Posbindu

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Abstract

Elderly is one of the most vulnerable groups to nutritional problems. Elderly people should maintain nutritional status at optimum conditions, so they can help their physical condition in the process in adjusting to the changes they experience. The purpose of this study was to determine the description of the nutritional status of the elderly at Posbindu Caringin Health Center. The research method was descriptive using a cross-sectional approach. The number of respondents was 125 people that chosen using purposive sampling technique. Data collection using a Mini Nutrition Assessment questionnaire and analyzed using percentage and frequency distribution. The study found that the elderly had normal nutritional status (68.0%), the risk of malnutrition (27.2%), and malnutrition (4.8%). The conclusions in this study are the nutritional status of the elderly in Posbindu Pusingin Caringin, most of the elderly have normal nutrition. Community nurses are expected to be able to use this information in determining appropriate interventions and prevention related to the nutrition problems of the elderly.

Keywords: Elderly people, mini nutrition assesment, nutrition status.

Introduction

The elderly population is expected to continue to increase globally throughout the world. In 2012, the percentage of the elderly in Indonesia reached 7% and will continue to increase to 11.34% in 2020. Based on the World Health Organization (WHO), in 2050 Indonesia is predicted to be included in the top 10 countries with the number of elderly reaching 10 million (WHO, 2013).

The increasing number of elderly people can cause a variety of complex problems for the elderly, family, and the community, including biological, mental, physical or socio-economic aspects. One of the problems for the elderly can affect the food intake of the elderly, which will affect the nutritional status of the elderly (Ministry of Health, 2016). The elderly are among the groups most vulnerable to nutritional problems. Nutritional problems that occur in the elderly can be in the form of malnutrition (malnutrition) and overnutrition (obesity). The prevalence of malnutrition tends to increase in the elderly group at 10-50% (Tamher & Noorkasiani, 2009). In Indonesia, the incidence of malnutrition in the elderly was around 31% and only 1.8% for overnutrition problems (Ministry of Health, 2005). Research in Semarang stated that around 17.2% of the elderly were in poor nutritional status, normal nutritional status was 46.6%, and overnutrition was 36.2% (Sari, 2013). Research at Sijunjung conducted by Munawirah, Masrul, and Martini (2014) stated that respondents 22.8% had good nutrition, 77.2% had malnutrition (risk of malnutrition and malnutrition). Nutrition problems in the elderly will increase the risk of disease, increase the severity and complications of the disease, cognitive impairment, and poor quality of life (Lee & Tsai, 2012).

Data from the West Java Health Office (2016) showed that the highest number of elderly in the province of West Java was Bandung City, and the Public Health Center in Bandung which has the most elderly is Puskesmas Caringin, which is 12,029. From the information obtained, the assessment of the nutritional status of the elderly in Posbindu was only by measuring the Body Mass Index. The results of the preliminary study at the Puskesmas Caringin which had normal nutritional status were 49%, overnutrition 36%, malnutrition 15%. So the nutritional status of the elderly at the Caringin Health Center was found that it had not reached half and there were still elderly people who experienced over nutrition and undernutrition.

A preliminary study conducted on 10 elderly in Caringin Health Center, based on the results of interviews obtained 5 people said that the food was provided by their children, 2 people said that the food was cooked by their partners, and 3 people said that the food was cooked. Elderly people whose food is provided by their children say that they often experience a lack of appetite because this food is not according to their taste. In this case, the nurse acts as the geriatric care source. The role and function of nurses are to provide direct nursing care (caregiver provider), including nutrition issues of elderly patients.

The purpose of the study was to determine the description of the nutritional status of the elderly at Posbindu Caringin Health Center. This research is expected to help nurses in preventing nutritional problems and making nursing care regarding nutrition issues in the elderly in the community.

Research Method

The design of this research was a descriptive quantitative study using a cross-sectional approach. The population in this study was elderly over 60 years old who participated in the Posbindu activity at the Caringin Bandung Health Center which was based on 182 data. Caringin Health Center is the Puskesmas with the most elderly in the city of Bandung. The sampling technique used in the study was purposive sampling with inclusion criteria, namely the elderly were able to communicate in two directions and did not have cognitive damage. The number of samples obtained in accordance with the inclusion criteria in this study was 125 respondents.

The researcher has tested the validity of the MNA questionnaire on 20 elderly people and obtained the results (0.456–0.705) which are worth more than r table (0.44),

while the results of the reliability test of the MNA questionnaire are 0.74. This shows that the Cronbach alpha coefficient p in this questionnaire is greater than the minimum Cronbach alpha coefficient of 0.7 then the questionnaire is reliable.

The data collection instrument used in this study was a form of the questionnaire from The Mini Nutritional Assessment consisting of 2 parts, namely screening, and assessment. As many as 6 questions at the beginning are screening or what is called the short form MNA. After getting the screening results, the total value is added up, the total value of the short form MNA is 14 if the score is more than 12 normal, ≤11 may be malnutrition. If the elderly are identified as enabling malnutrition (score ≤11) then the assessment of the elderly is continued by asking 12 questions for the elderly. Then add up the value of the assessment results and the results of the screening.

The research has applied the ethical principles including autonomy, respect, beneficence, and justice. Researchers have obtained permission from the Research Ethics Commission number 176 / UN6.KEP / EC / 2018. Data collection was collected from respondents who came to Posbindu, the respondents carried out activities at Posbindu posts first such as checking body weight, height, and checking blood pressure. After that, the researcher introduces the identity of the researcher to the respondent and conducts informed consent. The MNA questionnaire was assessed by conducting interviews with respondents. If the researcher cannot participate in the posbindu activity, the researcher takes the data door to door to the elderly house that follows the Posbindu. The data were analyzed by the researcher using percentage analysis and frequency distribution.

Research Results

Based on table 2, it can be seen that respondents aged 75–90 years had a distribution with malnutrition nutritional status 27 (8.0%), female sex with malnutrition nutritional status as many as 5 people (7.3%), elderly who had previously attended as many as 4 people (3.9%) with nutritional status malnutrition, living with a family of 5 people

Tabel 1. Distribution of Nutrition Status (n = 125)

Variable	Frequency (f)	Persentation (%)
Nutritional Status		
Normal	85	68
Malnutritional Risk	34	27.2
Malnutritional	6	4.8

Table 2 Sample Nutrition Status Based on Characteristics and Nutritional Status (n = 125)

Variable	Nutritional Status						Total
	Normal		Malnutritional risk		Malnutritional		
	f	%	f	%	f	%	
Age							
Elderly (60–74)	79	72.4	27	24.8	3	2.8	109
Old (75–90)	6	10.9	7	4.4	3	8	16
Gender							
Male	44	78.6	11	19.6	1	1.8	56
Female	41	59.4	23	33.3	5	7.3	69
Educational Background							

No	11	50	9	40.9	2	0.9	22
Yes	74	71.8	25	24.2	4	3.9	103
Maritas Status							
Married	61	72.6	20	23.8	3	3.6	84
Widow	24	58.5	14	34.1	3	7.4	41
Live with							
Live alone or with a partner	39	78	10	20	1	2	50
Live with Family	46	61.3	24	32	5	6.2	75
Job Status							
Does not Work	54	66.7	22	27.2	5	6.1	81
Work	31	70.5	12	27.3	1	2.2	44
Disease History							
No	33	70.2	13	27.7	1	2.1	47
Yes	52	66.7	21	26.9	5	6.4	78
Number of Teeth							
Still Complete	7	87.5	1	12.5	0	0	8
It is Incomplete	71	65.7	32	29.6	5	4.7	108
Use Dentures	7	77.8	1	11.1	1	11.1	9
Thrush							
No	76	69.7	29	26.6	4	3.7	109
Yes	9	56.3	5	31.3	2	12.4	16

(6.7%), a history of 5 people (6.4%), using false teeth as many as 1 person (11.1%), having thrush as many as 2 people (12.4%) .

Discussion

In research conducted at the health center Posbindu Caringin, almost half of samples at risk of malnutrition, and the rest of the samples are in the normal category. The results in line with the research conducted by Doumit (2014) which found that 27.6% of the elderly had nutritional status with malnutrition risk categories, and 3.2% of elderly was malnutrition. The results of this study are in line with the research of Krzyminska et al (2015) with the results of the prevalence of 38.9% of the elderly at risk of malnutrition, and 7.5% of the elderly who are malnutrition. This is in line with the results of Wijaya's research (2011) in Yogyakarta with 62 respondents getting the percentage of malnutrition 37.1%.

The problem of malnutrition in the elderly may be caused by several factors. Age is a factor that contributes to the nutritional status of the elderly. Increasing age will cause some changes especially physiological especially digestive function. In this study based on age variables, the highest percentage of malnutrition occurred in the 75–90 year age group. This is because of the older a personage, the more risk of health problems. This result is different from the study conducted by Oktariyani (2012) which found elderly who were at risk of malnutrition with the highest percentage in the age group 75–90 years with a percentage of 56.8%. The results of this study are also in accordance with the research conducted by Kaburagi et al (2011) which found that the percentage of older people at risk of malnutrition was greater in the age group> 75 years compared to the 65–74 year age group, which was 85.2%. This is also in accordance with Fatmah (2010), where Fatmah explained that with increasing age, the need for carbohydrate and fat nutrients decreases, while the need for protein, vitamins, and minerals increases so that older people who are older can have a greater risk of nutritional problems. In

addition, there are physiological changes that make the elderly at risk of malnutrition such as dental conditions, decreased saliva, and also decreased intestinal peristaltic which causes the elderly at risk for malnutrition.

Table 2 illustrates that the incidence of nutritional malls is more prevalent in women. This is similar to research (Jésus et al., 2017) which shows that the incidence of malnutrition is more common among women than men with a ratio of 57.4%: 42.6%. The results of this study are in line with Subekti's research (2013) that the highest incidence of malnutrition occurred in women 20.8%. The results of this study are in line with the research conducted by El-Sherbiny et al (2016) which states that the prevalence of malnutrition is higher in women 60.1% compared to men 46.0%. This result is in line with Hallaj's research (2015) that female elderly is more proportional to malnutrition compared to male elderly at 21.4%. This is due to differences in body composition changes between women and men due to the aging process (Tsousi et al, 2014). Changes in body composition that is in the elderly male muscle mass decreases, while in women the fat mass increases which causes a decrease in Basal Metabolism Rate (BMR). Elderly women need more calories, protein and fat than older men (Fatmah, 2010).

The existence of a disease process in the elderly will affect the absorption of nutrients contained in the food that can affect the nutritional status of the elderly. In addition, the history of the disease also affects the food intake of the elderly, this is due to tighter food arrangements. Some elderly people are too strict in their food choices, for example, because they are told to limit cholesterol, they don't dare eat eggs at all. Most elderly people with diabetes mellitus say they always limit their eating portions.

Conclusion

Based on the results, it was found that nearly half of the elderly were at risk of malnutrition, and a small percentage had nutritional status in the category of malnutrition. It is expected that nurses who contribute to Posbindu activities can be used as reference material for planning nursing interventions for the elderly who are at risk of malnutrition and even those who are malnutrition. Nurses who are active in Posbindu activities are expected to be able to monitor the condition of the elderly regarding elderly characteristics, which affect the nutritional status of the elderly, especially living with the family. The results of this study are also expected to be used as a basis for learning for nursing institutions in providing nursing care to the nutrition of the elderly.

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