Identification of the Elderly's Nutritional Status in Institutions

ISSN: 2528-066X (Print), 2599-2880 (Online)

Sumandar^{1*}, Yelfira sari²

¹ STIKes Al Insyirah Pekanbaru, Indonesia ² Universitas Islam Riau, Indonesia

*Corresponding author: sumandar.05mangiri@gmail.com

ARTICLE INFO	ABSTRACT
Article history: Received: 5 nd October 2022 Revised: 20 th November 2022 Accepted: 3 st December 2022	The nutritional problems of the elderly are directly related to their physical condition, so it affects their strength in carrying out daily routines. The aim of the research was to evaluate the nutritional status of the elderly. The research method is quantitative with descriptive. A
Keywords: Elderly Mini nutritional assessment	Mini Nutritional Assessment (MNA) questionnaire was used to collect data. The number of sample were 51 elderly with purposive sampling technique. The results showed that 15.7% were malnourished, 58.8% were at risk of malnutrition, 25.5% were normal. It is suggested to policymakers that nurses pay special attention by constantly monitoring nutritional status, developing nutrition programs, and involving external factors.

I. Introduction

Food and nutrition is a significant prevention effort for noncommunicable diseases in older adults. Because of demographic transmission, and most countries see an increase in the number of older adults. Demographic transmission is a population change process in which the birth rate has dropped dramatically while life expectancy has increased. The effectiveness of health development in Indonesia is reflected in lower birth rates, morbidity, and mortality, in addition to an improvement in life expectancy (Nasution, Amal, Ariga, Siregar, & Purba, 2020).

Healthy ageing is an important issue to be addressed in Indonesia. Complex interactions occur during the aging process, which involves both biological and environmental factors (Fauziyana, Prafiantini, & Hardiany, 2021). To capture reliable outcomes of healthy aging at the individual level, comprehensive measurement is required. Individual older people's nutritional requirements varies based on their living arrangement and lifestyle. Nutritional care, as well as social integration and beneficial care, are important in nursing homes to ensure a good quality of life and encourage independence in the finished years of life. Even though efficacy of tailored nutrition therapy in nursing home resident populations has been demonstrated, the effectiveness of individual nutritional interventions may vary considerably (R.E. Roller, A. Morgner, D. Eglseer, 2012).

According to previous findings, elderly participants from economically disadvantaged backgrounds were more likely to have a poor nutritional status and be at risk of malnutrition. The findings emphasize the importance of focusing on malnutrition screening in order to promote health and prevent the development of nutrition-related co-morbidities in the elderly. (Robb et al., 2017). According to Agarwal E, Miller M, Yaxley A, et a (2013), Saka B, Kaya O, Ozturk GB, et al (2010) have been described, Because of the effects of malnutrition on health and quality of life, it has been suggested that the elderly be screened on a regular basis in order to identify and treat nutrition-related difficulties as soon as possible (Robb et al., 2017). The MNA is a screening and assessment tool for health care professionals, with a reliable scale and clearly defined thresholds. It should be considered as part of the geriatric assessment and

DOI: https://doi.org/10.30994/jgrph.v7i2.406
Website: https://jgrph.org/Email:journal.grph@gmail.com

ISSN: 2528-066X (Print) Vol. 7, No 2, December 2022, pp.130-133 ISSN: 2599-2880 (Online)

is included in the minimum data set for nutritional interventions (GUIGOZ & Nestlé, 2006). The purpose of this research was to evaluate the nutritional status of the elderly residents in Pekanbaru City nursing homes.

II. Methods

This is a quantitative study with a descriptive approach. This study was carried out in July 2022. The study included 51 elderly people living in Pekanbaru City nursing homes. A purposive sample is used in the sampling technique. All sampling permits have been submitted to the Nursing Home's operations manager. All elderly researchers first explained the entire research process, from beginning to end, before beginning data collection procedures. This was stated in the researcher's informed consent document. Information is only collected from people who will have voluntarily agreed to participate in a survey.

The Mini Nutrition Assessment (MNA), developed by Bauer JM, Kaiser MJ, Anthony P et al (2008), is used to assess the nutritional status of the elderly. Effective technique for assessing the elderly population and identifying between subjects with normal nutritional status and those at risk of malnutrition (Isautier et al., 2019) (FERRARI BRAVO et al., 2018). Mini nutritional assessment questionnaire for nutritional status (MNA). According to Guigoz L (2006) on (8), the one of the most specific methods for determining malnutrition state through geriatric settings is the Mini Nutritional Assessment (MNA).

MNA has a high degree of accuracy for scores obtained, categorized scores, and most items (Bleda, Bolibar, Pares, & Salva, 2002). The nutritional status instrument identifies points based on 3 categories: malnutrition (0-7 points), malnutrition risk (8-11 points), and normal (12–14 points).

The data was analyzed using univariate and bivariate methods. To describe the characteristics of each variable, such as the characteristics of the respondents, a univariate analysis is used.

Result and Discussion III.

Table 1 Sociodemographic Information And Nutritional Status Of Nursing Home Residents

Variables	Frequency	%
Age	Min 55; max 81; Mean = 70.8	SD 5.980
Gender		
Male	26	51
Female	25	49
Educational		
Low	50	98.04
High	1	1.96
Nutrition status		
Malnutrition	8	15.7
At-risk malnutrition	30	58.8
Normal	13	25.5

Based on the table, the average age of the elderly is 70.8 years, the majority is male (51%), the majority has a low education level (98.04%), and the majority is at risk of malnutrition (58.8%).

Nutritional status is known to serve as a predictor of morbidity, mortality, and decreased mobility in the elderly. Malnutrition and obesity were associated with decrease functional ability in the elderly in a cross-sectional survey conducted by the WHO (WHO, 2001). Malnutrition is caused primarily for both socioeconomic factors and disease disorders.

While calories are consumed insufficiently in comparison to what is required, body weight falls below normal (Fatwa, Awaru, & Bahar, 2021). When combined with a protein Vol. 7, No 2, December 2022, pp.130-133

deficiency, this can result in irreversible cell damage, resulting in hair loss, decreased resistance to disease, and the possibility of infection (Ardi, 2012). Malnutrition in the elderly is frequently linked to functional impairment, disability, and health issues. As shown in a study conducted by Setiati et al., suffering from malnutrition elderly people have a higher risk of poor quality of life.

Aging causes several nutritional changes, such as a significantly reduced sense of smell and taste, difficulty chewing and swallowing, and actually reduced gastrointestinal function, each of which has an implication on nutritional status (Amarantos et al., 2001).

The elderly in this study were interviewed based on the MNA screening questions to determine the nutritional status of the elderly, so collection of data was subjective because the answers were obtained from the elderly (Wa Ode Sri Asmaniar, 2018). Some of the factors that influence a person's risk and vulnerability to malnutrition are included in the MNA screening questions. Decreased food intake in the previous three months, weight loss, mobilization, psychological stress or acute illness, neuropsychological problems, and BMI calculation results are some of these factors. Based on the literature review, there were more elderly people who were at risk of malnutrition compared towards the elderly who were malnourished and then had good nutrition.

IV. Conclusion

The nutritional status of the elderly in Pekanbaru nursing homes is at risk of malnutrition. Better management from policymakers, nurses, and other stakeholders is considered necessary so that the elderly can achieve food security based on their condition.

V. References

- Amarantos E, Martinez A, Dwyer J. (2001). Nutrition and quality of life in older adults. The Journals of Gerontology series A: Biological sciences and Medical sciences. 56 (suppl 2): 54-64.
- Ardi. (2012). Kebutuhan Gizi Lanjut Usia. Available at: http://www.psychologymania.com/2012/07/kebutuhan-gizi-lanjutusia.html.
- Bleda, M. J., Bolibar, I., Pares, R., & Salva, A. (2002). Reliability of the Mini Nutritional Assessment (MNA) in institutionalised elderly. J Nutr Health Aging, 6, 134–136.
- Bleda, M. J., Bolibar, I., Pares, R., & Salva, A. (2002). Reliability of the Mini Nutritional Assessment (MNA) in institutionalised elderly. J Nutr Health Aging, 6, 134–136.
- Fatwa, A., Awaru, T., & Bahar, B. (2021). Gambaran Status Gizi dan Kualitas Hidup Lansia di Wilayah Pedesaan Overview of Nutritional Status and Quality of Life Older People in Rural Area. Gorontalo Journal of Nutrition and Dietetic, 1(1), 22–29.
- Fauziyana, N., Prafiantini, E., & Hardiany, N. S. (2021). Association of nutritional screening score and healthy ageing domains among urban elderly in Jakarta, Indonesia. Nutrition and Healthy Aging, 6(3), 199–210. https://doi.org/10.3233/nha-210120.
- FERRARI BRAVO, M., Gallo, F., Marchello, C., Boicelli, R., Lupi, S., Atzei, M., ... Gabutti, G. (2018). Assessment of malnutrition in community-dwelling elderly people: Cooperation among general practitioners and public health. Iranian Journal of Public Health, 47(5), 633–640.
 - GUIGOZ, Y., & Nestlé. (2006). THE MINI NUTRITIONAL ASSESSMENT (MNA®) REVIEW OF THE LITERATURE WHAT DOES IT TELL US? The Journal of Nutrition, Health & Aging, 10(6), 466–487. https://doi.org/10.4037/ajcc1998.7.6.450.
- Isautier, ennifer M. J., Bosnić, M., Yeung, S. S. Y., Trappenburg, M. C., Meskers, C. G. M., Whittaker, A. C., & Maier, A. B. (2019). Validity of Nutritional Screening Tools for Community-Dwelling Older Adults: A Systematic Review and Meta-Analysis. JAMDA The Journal of Post Acute and Long Term Medicine, 20(10), 1351.E13-

- ISSN: 2528-066X (Print) Vol. 7, No 2, December 2022, pp.130-133 ISSN: 2599-2880 (Online)
- 1351.E25. https://doi.org/10.1016/j.jamda.2019.06.024.
- Nasution, S. Z., Amal, M. R. H., Ariga, R. A., Siregar, C. T., & Purba, W. D. (2020). Nutritional status of elderly in Urban and Rural North Sumatera, Indonesia. International Journal on Advanced Science, Engineering and Information Technology, 10(4), 1639–1645. https://doi.org/10.18517/ijaseit.10.4.6663.
- R.E. Roller, A. Morgner, D. Eglseer, G. H. W. (2012). NURSING DETERMINANTS HOME PROFESSIONALS OF MALNUTRITION QUALITATIVE OPINIONS. The Journal of Nursing Home Research.
- Robb, L., Walsh, C. M., Nel, M., Nel, A., Odendaal, H., & van Aardt, R. (2017). Malnutrition in the elderly residing in long-term care facilities: A cross sectional survey using the Mini Nutritional Assessment (MNA®) screening tool. South African Journal of Clinical Nutrition, 30(2), 34–40. https://doi.org/10.1080/16070658.2016.1248062.
- Setiati S. (2011). Predictor and Scoring System for Health-related Quality of Life in an Indonesia Community – Dwelling Ellderly Pupolation. Acta Med Indones J Intern Med. 43 (4): 237-242.
- WHO. (2001). Health and nutritional status of the elderly in the Former Yugoslav Republic of Macedonia: results of a national household survey, November 1999 (No. EUR/00/5015388). Copenhagen. WHO Regional Office for Europe.