The Description of Quality of Life of Elderly During the Pandemic COVID-19 at Nursing Home of Bondowoso

Yahtarita Ulfia Adisiwi^{1*}, Latifa Aini Susumaningrum², Tantut Susanto³, Hanny Rasni⁴, Fahrudin Kurdi⁵, Roro Dewi Qudsiyah⁶, Khoirun Nasikhin⁷

¹Program of Nursing, Faculty of Nursing, University of Jember, Indonesia; ulfiahtarita@gmail.com (Corresponding Author)

^{2,3,4,5}Faculty of Nursing, University of Jember, Indonesia

^{6,7}Nursing Home of Bondowoso, Bondowoso, Indonesia

Article Info:

Submitted:

30-09-2021

Revised:

18-12-2021

Accepted:

27-12-2021

DOI:

<https://doi.org/10.53713/nhs.v1i3.76>

This work is licensed under CC BY-SA License.

ABSTRACT

During the COVID-19 pandemic, the elderly were required to reduce direct interactions with people around them. So that, it affected the psychological condition and social relations of the elderly which caused a decrease in their quality of life (QOL). This study aimed to analyze the QOL among elders during the pandemic COVID-19 at the Nursing Home of Bondowoso. The method used in this study was quantitative research with a descriptive design conducted at the Nursing Home of Bondowoso from April until May 2021. 48 elders participated in this study selected by consecutive sampling technique. Data were collected through self-report interviews using a self-administered questionnaire used to identify characteristics of the elderly and WHOQOL-BREF to identify their QoL. The one-sample Kolmogorov-Smirnov's test was used to reach the aim of this study. The result showed that the QOL among elders during the COVID-19 pandemic is significant with $Md(25-75)=50(44-52)$; $Z=0,152$; $p\text{-value } 0,007$. It can be concluded that the QOL of elders during COVID-19 a significant QOL. Therefore, to improve the QOL, the elderly must maintain good communication with others, and conduct regular physical activity.

Keywords: elderly; quality of life; pandemic COVID-19

INTRODUCTION

Indonesia is in a period of aging population, which is marked by an increase in the number of elderly people which will reach 10% in 2020. From data from the Central Statistics Agency, the number of elderly people in 2019 is 9.6% or around 25 million people. The number of male elderly and female elderly has a difference of 1%, namely 9.10% male elderly and 10.10% female elderly. Of the total number of elderly people in Indonesia, the largest number is aged 60-69 years, which is 63.82%, followed by the elderly aged 70-79 years at 27.68% and elderly >80 years at 8.50 (Ministry of Health, 2020; BPS 2019). With age, a person will also experience several changes in body functions such as a decrease in the respiratory system, a decrease in the integumentary system, a decrease in genitourinary function, a decrease in musculoskeletal function, and neurological changes (Meredith, 2008).

The idea that older adults and people with serious comorbidities are particularly vulnerable to worse outcomes from COVID-19 can cause considerable fear in the elderly. Other psychological effects may include anxiety, irritability and feelings of excessive stress or anger. Older adults with cognitive decline may become much more anxious, restless, and socially withdrawn, so that their special needs demand special attention (Dubey et al., 2020). From research in several countries, data shows that the impact of COVID-19 is very broad. One of the impacts of COVID-19 is on psychology. The COVID-19 pandemic has caused a lot of fear, anxiety and even resulted in excessive stress in many people, including the elderly group. The impact of the COVID-19 pandemic in addition to disrupting the mental health of the elderly also has an impact on socio-economic conditions that have an impact on the welfare of the elderly in their old age (Rajkumar, 2020). Many elderly people experience a decrease in their quality of life during this pandemic, because many of them have lost their source of livelihood so that their welfare also declines. Apart from losing their jobs, they are also required to reduce direct interactions with people around them so that the elderly often feel bored and many things cannot be done during the pandemic (Samlani, Lemfadli, Errami, Oubaha, & Krati, 2020).

Based on several studies, it shows that the elderly with comorbid diseases tend to have a low/poor quality of life. Based on research conducted by (Sari & Atiqoh, 2020), it was found that the elderly had a poor quality of life by 55%. This

is due to factors of physical health and psychological health. Physical health factors are starting to decline, causing the elderly to be susceptible to various diseases, such as hypertension, heart disease, stroke, and rheumatism ((Mila Triana Sari, 2017)); KEMENKES, 2020). Based on the research conducted by (Dewi, 2013) at the Gianyar Health Center, it was found that the elderly with hypertension had a poor quality of life compared to the elderly who were not hypertensive where the number of elderly who experienced poor quality of life was 67.7% while those with normotension were by 57.1% the quality of life is poor. This is because hypertension can affect vitality, social conditions, mental health, and psychology (Dewi, 2013) Elderly people who have a bad self-image and negative feelings will also make the elderly become depressed. Elderly who are depressed have low quality of life scores (Aniyati & Kamalah, 2018). WHO in 2019 stated that in many countries, the elderly face the most threats and challenges from COVID-19 because they are at higher risk of developing severe disease, with a mortality rate of 3.6% among those aged 60-69 years, which rose to 18%. over 80 years (Padilla, Ph, L, Rodriguez-jimenez, & Ph, 2020). Day by day, the number of deaths due to corona virus infection is increasing. Currently, the corona virus will cause more serious infections in the elderly and can even cause death in the elderly. Cases of death due to the corona virus currently mostly occur in the elderly aged 60-80 years (Riadi, 2020).

Based on previous research conducted at Nursing Home Jember, it was stated that the elderly had moderate quality of life, namely 70.7%, good quality of life 20.7% and poor quality of life 8.5%, while at Nursing Home Jakarta the results obtained quality of life good elderly by 53.50%. These differences can be influenced by the physical condition of the elderly, the environment and social activities of the elderly (Saputri, Susanto, & Susumaningrum, 2020). Several things can be factors that affect the quality of life in the elderly, including physical health factors, psychological health, social and economic well-being as well as family and environmental support (Hayulita, Bahasa, & sari, 2018). Disruption of the quality of life for the elderly who declined during the pandemic due to a reduction in outdoor activities. Therefore, it is necessary to conduct a study on the description of the quality of life in the elderly during the COVID-19 pandemic, researchers are interested in conducting research on the description of the quality of life in the elderly at Nursing Home Bondowoso.

METHOD

The research design used in this study is a descriptive research design. The variables studied were quality of life. The population in this study were 100 elderly people living at Nursing Home of Bondowoso. The sample in this study was the elderly who entered the inclusion and exclusion criteria of 48 respondents. The sampling technique in this research is total sampling. The researcher determines the population, sample, and respondents to be used for research in accordance with the inclusion criteria and exclusion criteria that have been determined by the researcher. Inclusion criteria include the elderly with age > 60 years, currently living at Nursing Home Bondowoso, cooperative elderly, having GCS scores of 14-15, having cognitive abilities with normal criteria (26-30) and mild cognitive decline (20-25) using the MMSE questionnaire and the and the exclusion criteria used were the elderly who had psychological and cognitive disorders with an MMSE score <21, the elderly who had hearing problems, the elderly who were unable to communicate well, the elderly who were sick or had signs and symptoms of COVID-19 (temperature > 38°C, experiencing symptoms of respiratory disease such as cough, runny nose, sore throat, has a history of living/traveling in a country/local transmission area in the last 14 days, having a history of close contact with a confirmed COVID-19 patient)..Researchers take data in a Nursing Home in May 2021. Stages data collection is to explain the intent and purpose of the study and proposed consent form (informed consent) signed by the elderly when the elderly are willing to become respondents, conduct screening symptom COVID-19, fill sheet characteristics of the elderly, test the Mini-Mental State Examination (MMSE) and WHOQOL-Bref questionnaire. The research team and the elderly wash their hands using soap and running water/hand sanitizer and keep their distance when interacting. The research team used PPE such as surgical masks, face shields, and aprons.

Data analysis carried out in this study is univariate analysis. Quality of lifedata was tested using the one-sample Kolmogorov-Smirnov test to determine the significance in the quality of life of the elderly and the results of each indicator consisting of physical health, psychology, social relations and the environment. Significant in quality of life with p-value <0.05. Numerical data such as age show that the data are normally distributed, so they are presented in terms of mean and standar deviation. Categorical data such as gender, depression and their environment are presented in numbers and percentages. This research was conducted an ethical test at the Faculty of Nursing, University of Jember and was declared to have passed ethics through the KEPK of the Faculty of Nursing, the University of Jember with No. 62/UN25.1.14/KEPK/2021.

RESULT

Characteristics of the elderly during the COVID-19 pandemic at Nursing Home Bondowoso

Based the result of statistical calculation in Table 1 using one-sample Kolmogorov-Smirnov, shows the demographic characteristics of the respondents that the results of the study with a total of 48 respondents. the mean age value is 71 years with a standard deviation of 6.583. Most of the respondents were male (64.4%). Judging from the depression status, most of the elderly experienced moderate depression (43.8%) and their characteristics included a healthy home environment (100%).

Table 1. Characteristics of the elderly during the COVID-19 pandemic based on age, gender, level of depression and the elderly environment at Nursing Home of Bondowoso, May 2021 (n=48)

Characteristics of the elderly	n (%)
Age (years)	
M $\pm$ SD	71 $\pm$ 6.583
Gender	
Male	31 (64.6)
Female	17 (35.4)
Depression	
Normal	0 (0)
Mild depression	11 (22.9)
Moderate depression	21 (43.8)
Severe depression	16 (33.3)
Environment	
Healthy home environment	48 (100)
Unhealthy home environment	0 (0)

Quality of Life for the Elderly during the COVID-19 Pandemic at UPT PSTW Bondowoso

Based the result of statistical calculation in Table 2 using one-sample Kolmogorov-Smirnov, it is known that the quality of life of the elderly in this study has a value of $Z = 0.152$ and a p-value of 0.007 which can be concluded that the quality of life of the elderly at Nursing Home Bondowoso in this study has a significant quality of life during the COVID-19 pandemic. The score data for each indicator was significant and varied (p-value <0.05). The physical health indicator of the elderly has a significant value during the COVID-19 pandemic ($Z=0.179$; p-value 0.001). The psychological indicators of the elderly have a significant value during the COVID-19 pandemic ($Z=0.284$; p-value 0.000). The elderly social relationship indicator has a significant value during the COVID-19 pandemic ($Z=0.340$; p-value 0.000). The environmental indicator for the elderly has a significant value during the COVID-19 pandemic ($Z=0.289$; p-value 0.000).

Table 2. Indicators of the quality of life of the elderly during the COVID-19 pandemic at Nursing Home Bondowoso, Bondowoso Regency in May 2021 (n= 48)

Variable	Md (P_{25-75})	Z	p-value
Physical health	50 (38-50)	0.179	0.001
Psychological	44 (44-50)	0.284	0.000
Social relations	44 (44-44)	0.340	0.000
Environment	63 (56-63)	0.289	0.000
Total	50(44-52)	0.152	0.007

The Category Of Quality Of Life For The Elderly At Nursing Home Bondowoso During The Pandemic Covid-19

Based the result of statistical calculation in figure 1 using one-sample Kolmogorov-Smirnov, shows that the quality of life of the elderly at Nursing Home Bondowoso during the COVID-19 pandemic is generally combined from the domains of physical, psychological, social and environmental health, showing that the elderly have a moderate quality of life (97.9%) and 1 elderly (2, 1%) have a high quality of life.

Figure 1. Quality of life of the elderly during the COVID-19 pandemic at Nursing Home Bondowoso, May 2021

DISCUSSION

Charateristics of the Elderly

The results of this study indicate that the average of 48 respondents was 71 years old. According to Hayulita et al (2018), it was revealed that along with increasing age, a person's quality of life will also change. Most elderly people experience a decrease in quality of life. The decline in the quality of life experienced by the elderly is related to several factors including changes in physical health, psychological changes, social relationships and the environment around the elderly (Hayulita et al., 2018). The results of this study indicate that the gender of the elderly who participated in this study were mostly male as many as 31 respondents (64.6%) and female as many as 17 respondents (35.4%). According to (Ardiani, Lismayanti, & Rosnawaty, 2019) gender can affect the quality of life. This is influenced by hormones in the human body. The results showed that most of the elderly in the Nursing Home Bondowoso were in the moderate depression category as many as 21 (43.8%). In line with research conducted by Levkovich, Shinan-Altman, Essar Schwartz, & Alperin, (2021), stated that during the COVID-19 pandemic, 37.5% of the elderly experienced depression. Based on the results of the study, it was found that the elderly environment at Nursing Home Bondowoso during the COVID-19 pandemic was 100% included in the healthy home category. The environment in which a person lives can have an impact on the quality of his life. The residence must be able to make those who live in it feel safe, comfortable, and peaceful so that it will make the residents feel at home to live in it. Likewise, the elderly will improve their quality of life if they feel comfortable living in the environment (Rohmah, Purwaningsih, & Bariyah, 2012).

Quality of Life for The Elderly During Pandemic COVID-19

Physical Health

In this study, researchers assessed the first domain quality of life indicators based on physical health aspects and found that as many as 40 respondents (83.3%) had moderate quality of life and based on statistical tests it was found that the physical health of the elderly was significant during the COVID-19 period (p-value 0.001). According to research by Lehtisalo et al (2021) it was shown that during the COVID-19 pandemic, there were changes related to the lifestyle of the elderly, this was because the physical activity of the elderly decreased during the COVID-19 pandemic by 34%, and this would affect aspects of the quality of life of the elderly (Lehtisalo et al., 2021). The existence of this lockdown and social distancing policy has an impact on the psychological condition of the elderly, such as causing stress to depression, so that the quality of life of the elderly decreases drastically (Siette et al., 2021).

Psychological

The second domain of quality of life indicators is the psychological aspect. In this study, based on statistical tests, it was found that the psychological indicators of the elderly were significant during the COVID-19 pandemic (p-value 0.000). Based on the frequency distribution, 37 respondents (77.1%) had a moderate quality of life during the COVID-19 period. According to (Hayulita et al., 2018), the psychological aspect of the elderly is one of the domains that greatly affects their quality of life. The elderly often experience psychological changes caused by the changes that occur in them (Hayulita et al., 2018). According to Qiu et al., (2020) one of the causes of psychological problems in the elderly during COVID-19 is the amount of misinformation, especially regarding the high mortality rate due to COVID-19 in the elderly population.

Furthermore, a study conducted by Das & Bhattacharyya, (2021) also stated that during the COVID-19 pandemic, the elderly experienced psychological disorders due to the implementation of social distancing and lockdown policies.

Social Relations

The third indicator is about the social relations of the elderly. The results of this study, based on statistical tests, showed that the social relationships of the elderly during the COVID-19 pandemic were significant (p-value 0.000). In the indicators of elderly social relations, 35 respondents (72.9%) had a moderate quality of life. Based on the results of interviews conducted by many elderly people who told about their relationship with their family and peers, most of which were not good, especially because the PSTW limited visits between families and the elderly. According to research Macdonald & Hülür (2021) stated that the COVID-19 pandemic had a negative impact on the social relationships of the elderly. This is due to the lockdown policy to protect the elderly from COVID-19. In addition to the factor of social distancing policies, the elderly also have limitations in carrying out social interactions due to the aging process that occurs in the elderly so that often the elderly also experience decreased body functions. Interactions between the elderly greatly affect the social relationships of the elderly and the health status of the elderly (Pambudi, Dewi, & Sulistyorini, 2017)

Environment

The fourth indicator is about the environmental domain. The environmental indicator for the elderly is significant during the COVID-19 pandemic (p-value 0.000). Based on the environmental domain, the majority of the elderly have moderate quality of life as many as 44 respondents (91.7%). The environmental domain includes several things such as security, money sufficiency, environmental health, recreation or pleasure opportunities, health and transportation services and the availability of information. In addition, the sense of security that the elderly get due to relationships with people around them by interacting and having fun, exchanging information with other people in the surrounding environment (Kiik, Sahar, & Permatasari, 2018).

CONCLUSION

Based on the results of the study it was found that the elderly with an average age of 71 years, the gender of the elderly are mostly male (64.6%), and the level of depression most of the elderly experience moderate depression (43.8%) and the home environment is in the healthy home category (100%). It was found that the quality of life of the elderly has a Z value = 0.152 and a p-value of 0.007 which can be concluded that the quality of life of the elderly at Nursing Home Bondowoso is significant during the COVID-19 pandemic. In this study, of the 48 elderly respondents studied, 47 elderly (97.9%) had moderate quality of life and 1 elderly (2.1%) had high quality of life.

ACKNOWLEDGEMENT

The preparation of this research can not be separated from the help of various parties. Thank you to all those who have helped in completing this research, one of them is all the respondents who have been willing to participate in this research and to all those who have helped and supported the researcher during the research process.

REFERENCES

- Aniyati, S., & Kamalah, A. D. (2018). Gambaran Kualitas Hidup Lansia Di Wilayah Kerja Puskesmas Bojong I Kabupaten Pekalongan. *Jurnal Ilmiah Kesehatan Keperawatan*, 14(1). <https://doi.org/10.26753/jikk.v14i1.270>
- Ardiani, H., Lismayanti, L., & Rosnawaty, R. (2019). Faktor-Faktor yang Berhubungan Dengan Kualitas Hidup Lansia di Kelurahan Mugarsari Kecamatan Tamansari Kota Tasikmalaya Tahun 2014. *Healthcare Nursing Journal*, 1(1), 42–50.
- Das, M., & Bhattacharyya, A. (2021). Social distancing through COVID-19: A narrative analysis of Indian Peri-Urban Elderly. *Social Sciences & Humanities Open*, 4(1), 100139. <https://doi.org/10.1016/j.ssaho.2021.100139>
- Dewi, P. R. (2013). Gambaran Kualitas Hidup Pada Lansia Dengan Normotensi Dan Hipertensi Di Wilayah Kerja Puskesmas Gianyar I Periode Bulan November Tahun 2013. *Research Gate*, (June).
- Dubey, S., Biswas, P., Ghosh, R., Chatterjee, S., Jana, M., Chatterjee, S., ... Lavie, C. J. (2020). Diabetes & Metabolic Syndrome : Clinical Research & Reviews Psychosocial impact of COVID-19. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, 14(5), 779–788. <https://doi.org/10.1016/j.dsx.2020.05.035>
- Hayulita, S., Bahasa, A., & sari, A. N. (2018). FAKTOR DOMINAN YANG BERHUBUNGAN DENGAN KUALITAS HIDUP LANSIA. (2), 42–46.
- Kiik, S. M., Sahar, J., & Permatasari, H. (2018). Peningkatan Kualitas Hidup Lanjut Usia (Lansia) Di Kota Depok Dengan Latihan Keseimbangan. *Jurnal Keperawatan Indonesia*, 21(2), 109–116. <https://doi.org/10.7454/jki.v21i2.584>

- Kemenkes RI. (2020) . Hindari Lansia Dari COVID-19. <http://www.padk.kemkes.go.id/article/read/2020/04/23/21/hindari-lansia-dari-covid-19.html>
- Lehtisalo, J., Palmer, K., Mangialasche, F., Solomon, A., Kivipelto, M., & Ngandu, T. (2021). Changes in Lifestyle, Behaviors, and Risk Factors for Cognitive Impairment in Older Persons During the First Wave of the Coronavirus Disease 2019 Pandemic in Finland: Results From the FINGER Study. *Frontiers in Psychiatry*, 12(February), 1–13. <https://doi.org/10.3389/fpsy.2021.624125>
- Levkovich, I., Shinan-Altman, S., Essar Schvartz, N., & Alperin, M. (2021). Depression and Health-Related Quality of Life Among Elderly Patients during the COVID-19 Pandemic in Israel: A Cross-sectional Study. *Journal of Primary Care and Community Health*, 12. <https://doi.org/10.1177/2150132721995448>
- Macdonald, B., & Hülür, G. (2021). Well-Being and Loneliness in Swiss Older Adults During the COVID-19 Pandemic: The Role of Social Relationships. *The Gerontologist*, 61(2), 240–250. <https://doi.org/10.1093/geront/gnaa194>
- Meredith, W. (2008). Essentials of Gerontological Nursing. In *Geriatric Nursing* (Vol. 18). [https://doi.org/10.1016/s0197-4572\(97\)90051-3](https://doi.org/10.1016/s0197-4572(97)90051-3)
- Mila Triana Sari, S. (2017). GAMBARAN KUALITAS HIDUP LANSIA DI PANTI SOSIAL TRESNA WERDHA BUDI LUHUR DAN LANSIA DI KELURAHAN PAAL V - KOTA JAMBI. 17(2), 178–183.
- Padilla, S., Ph, D., L, P. D., Rodriguez-jimenez, R., & Ph, D. (2020). Mental Health in Elderly Spanish People in Times of COVID-19. 10(October), 1040–1045. <https://doi.org/10.1016/j.jagp.2020.06.027>
- Pambudi, W. E., Dewi, E. I., & Sulistyorini, L. (2017). Pengaruh terapi aktivitas kelompok sosialisasi (taks) terhadap kemampuan interaksi sosial pada lansia dengan kesepian di pelayanan sosial lanjut usia (pslu) jember (the effects of socialization group activity therapy (sgat) toward ability of social intera. *E-Jurnal Pustaka Kesehatan*, 5(2), 253–259. Retrieved from <https://jurnal.unej.ac.id/index.php/JPK/article/view/5774>
- Qiu, J., Shen, B., Zhao, M., Wang, Z., Xie, B., & Xu, Y. (2020). A nationwide survey of psychological distress among Chinese people in the COVID-19 epidemic: Implications and policy recommendations. *General Psychiatry*, 33(2), 1–4. <https://doi.org/10.1136/gpsych-2020-100213>
- Rajkumar, R. P. (2020). COVID-19 and mental health : A review of the existing literature. *Asian Journal of Psychiatry*, 52(March), 102066. <https://doi.org/10.1016/j.ajp.2020.102066>
- Riadi, A. (2020). Pedoman dan Pencegahan Coronavirus (COVID- 19). *Math Didactic: Jurnal Pendidikan Matematika*, 4, 1–214. <https://doi.org/10.33654/math.v4i0.299>
- Rohmah, A. I. N., Purwaningsih, & Bariyah, K. (2012). *Quality of Life Elderly*. 120–132.
- Samlani, Z., Lemfadli, Y., Errami, A., Oubaha, S., & Krati, K. (2020). The Impact of the COVID-19 Pandemi on Quality of Life and Well-Being in Morocco. (June), 1–13. <https://doi.org/10.20944/preprints202006.0287.v1>
- Saputri, N. D., Susanto, T., & Susumaningrum, L. A. (2020). Association between cognitive function and quality of life in aged people in an elderly home. *Revista Cubana de Enfermeria*, 36(2), 1–13.
- Sari, D. P., & Atiqoh, N. S. (2020). HUBUNGAN ANTARA PENGETAHUAN MASYARAKAT DENGAN KEPATUHAN PENGGUNAAN MASKER SEBAGAI UPAYA PENCEGAHAN PENYAKIT COVID-19 DI NGRONGGAH. 10(1).
- Siette, J., Dodds, L., Seaman, K., Wuthrich, V., Johnco, C., Earl, J., ... Westbrook, J. I. (2021). The impact of COVID-19 on the quality of life of older adults receiving community-based aged care. *Australasian Journal on Ageing*, 40(1), 84–89. <https://doi.org/10.1111/ajag.12924>