



COPING MECHANISMS AND QUALITY OF LIFE AMONG THE ELDERLY IN GANDUS SUB-DISTRICT, PALEMBANG CITY

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ABSTRACT

The decline in the physical and mental condition of the elderly, along with age, resulted in the elderly being very vulnerable to various diseases. The use of coping mechanisms has a crucial role in influencing both individual physical and psychological well-being. This study aimed to investigate the relationship between coping mechanisms and quality of life among the elderly. This research was conducted in the Gandus District of Palembang City. This quantitative study employs a cross-sectional design, utilizing simple random sampling as the sampling technique. Data collection was conducted through interviews with questionnaires administered to 110 elderly respondents. This study found that of respondents with a good quality of life, 75% used adaptive coping. The logistic regression results showed a significant correlation between coping mechanisms (p-value = 0.001) with OR (95% CI) = 5.540 (2.068-14.844), education (p-value = 0.003 with OR (95% CI) = 4.497 (1.646-12.285), employment (p-value = 0.005) with OR (95% CI) = 4.976 (1.644-15.059) with quality of life of the elderly. Adaptive coping mechanisms play a role in enhancing quality of life. This association was stronger among elderly individuals with higher education and employment.

Keywords: Quality of life, Elderly, Coping Mechanism

Introduction

Entering old age brings about numerous biological, psychological, and social challenges.¹ The demographic transition can cause the emergence of degenerative and non-infectious diseases, depression, dementia, anxiety disorders, sleep disorders, and other mental illnesses. These diseases may lead to chronic conditions if not addressed early. The health of the elderly, which often worsens with age, can lead to a poor quality of life. This condition can disrupt daily physical activities and negatively impact one's quality of life.^{2,3}

In 2020, 727 million people aged 65 years or older worldwide. The number is expected to double to 1.5 billion by 2050. Meanwhile, the increase in the number of elderly people in Indonesia has been ongoing for approximately 50 years. During this period, the proportion of the elderly population in Indonesia doubled from the previous year, 1971 (4.5 percent). In 2021, the elderly population reached 10.82 percent, or approximately 29.3 million people. By 2045, the percentage of elderly Indonesians is expected to reach nearly one-fifth of the population, or approximately 19.9 percent.⁴

The elderly population in Palembang City accounted for 9.6% of the total population in 2020, or 160,912, out of a population of 1,668,848. This means the city of Palembang is one of the cities that will enter the people of old structures. The coverage of elderly health services in South Sumatra reached 50.9% in 2020. The scope of elderly services in Palembang City is 40.9%.⁵ The elderly population in Gandus District, Palembang City, consists of 4,979 people, with elderly service coverage reaching 40.3% in 2021. Elderly service coverage decreased by 76.56% in 2017 and 75.4% in 2018, then increased to 100% in 2019. Mental disorder visits at the Gandus Sub-District Health Center are the highest in number compared to other Health Centers in Palembang City, amounting to 890 people in 2020.⁶⁻⁹

Indonesia ranks low in the health domain, positioned at 70th, with a healthy life expectancy for a person aged 60 of around 14.3 years. This indicates that Indonesian elderly individuals can live in healthy conditions until 74-75 years old, which is below the average life expectancy of 20.8 and 15.8 years, respectively.¹⁰ With rapidly changing age demographics worldwide, the increasing elderly population, and the various associated problems, full attention is needed from the state and society to improve the quality of life for the elderly.¹¹

Psychological well-being is a key factor in determining the quality of life for the elderly. If a person can achieve good psychological well-being, it will improve his quality of life.¹² Efforts to improve the quality of life for the elderly require effective coping strategies for individuals. Coping strategies are cognitive and behavioral tools to help parents cope with these life changes.¹³

Several other authors have identified coping as a factor that can influence well-being. Coping strategies are resources that can be transformed into proactive behavioral adaptations, such as health promotion, helping others, planning, rallying support, or role substitution. Coping

strategies deal with painful problems (stressors) or burdens by avoiding, staying away, and reducing stress or seeking social support.^{14,15} Using coping mechanisms is crucial for individuals' physical and psychological well-being.¹⁶ Biological and psychological problems are common in the elderly. These problems can cause stress in the elderly. Efforts to overcome this require good individual coping. The elderly must adapt to the psychosocial changes that occur during aging. Coping strategies are cognitive and behavioral tools that can help parents to better cope with these life changes.¹³ Previous studies have also found a positive relationship between coping strategies and quality of life in the elderly.¹⁷ The differences in this study include the number of respondents and the age range of respondents, and there has been no previous study examining this relationship in the city of Palembang.

Given the high life expectancy of the elderly and the many problems that will arise regarding the physical and psychological changes they experience, this study aims to determine the relationship between coping mechanisms and the quality of life of the elderly.

Methods

This study used a quantitative approach with a cross-sectional study design to examine the relationship between coping mechanisms and the quality of life among the elderly. Data collection was conducted in June 2022. Data collection was carried out through interviews using questionnaires. The population of this study was all elderly aged ≥ 60 years in Gandus District, Palembang City. The minimum sample size in this study is 50 because, using the two-proportion test formula, the sample size was doubled to 100, with an additional 10% to account for potential dropouts. The study included 110 respondents. The inclusion criteria of this study were respondents aged ≥ 60 years in Gandus District, able to communicate verbally well, able to carry out activities, and willing to be research respondents. The sampling method used was simple random sampling, and each member of the population was selected as a sample based on data from the Gandus District. The intended subjects who did not meet the inclusion criteria after rechecking were replaced with other respondents based on random results from the researcher.

Researchers collected data through interviews with respondents. Some aspects of the interview included respondents' demographic data, which included their age based on their total lifespan (in years) from birth to their last birthday.¹⁸ The measurement indicator is 1 = ≥ 75 years, 2 = 60-74 years. Gender- based on the respondent's sex identity on the official residence document (ID card/Family card) or based on resident recognition.¹⁸ The measurement indicator is 1 = Female, 2 = Male. Education is based on the last level of formal education completed by respondents.¹⁸ Education uses categorization into two 1 = Low (\leq Junior High School), 2 = High (\geq Senior High School). Work is based on respondents' activities, which involve performing work intending to obtain or help earn income or profit.¹⁸ The measurement indicator is 1 = Not working, 2 =

Working. Co-living status, in the sense of the status of household members who live with older people in an elderly household, consisting of the elderly living alone, with a spouse (husband or wife), with a family (husband/wife and children), three generations (with children and grandchildren), and others.¹⁸ The measurement indicator is 1 = Living alone, 2 = Living with family. Marital status includes unmarried, married, live divorced, and dead divorced.¹⁸ The measurement indicators are as follows: 1 = Own (including divorced, widowed, widower, and never married), 2 = Married (living with a married status).

Assessment of the quality of life of the elderly using the World Health Organization Quality of Life-BREF (WHOQOL-BREF) instrument consisting of 26 items from 4 domains: physical health (7 items), psychological (6 items) and social relationships (3 items), and environment (8 items), it also includes QOL and general health items.^{3,19} The measurement indicator is 1 = Poor Quality of Life, 2 = Good Quality of Life. The assessment of coping mechanisms using questionnaire instruments developed by Carver (1997) consists of 28 questions. Coping mechanisms refer to an individual's ability to cope with perceived problems or how a person navigates a stressful or traumatic situation, and they help a person manage painful emotions. Adaptive coping leads to positive adaptation in solving problems by reducing the negative impact of stress or trauma felt by a person. At the same time, maladaptive coping is a coping behavior that does not solve problems in the long term and can worsen the issues faced.²⁰ The measurement indicator is 1 = Maladaptive if the score $T < \text{mean}$, 2 = Adaptive if the score $T \geq T \text{ mean}$. The scale of coping strategy measurement has 28 questions and consists of 14 classifications. Adaptive coping consists of self-distraction, religion, active coping, planning, acceptance, positive reframing, and instrumental support. Maladaptive coping consists of self-blame, venting of emotion, behavioral disengagement, use of strategy emotion support, denial, substance use, and humor. Analyze data using the Chi-square test and Multiple Logistic Regression test. This research has received approval from the Faculty of Public Health Ethics Committee, University of Indonesia, with a certificate of ethical approval number Ket-142 / UN2. F10. D11/PPM.00.02/2022.

Results

Based on Table 1, of the 110 elderly, most are female (60.9%), and a small number are male (39.1%). Almost all elderly aged 60-74 years (80.9%), only a few elderly aged ≥ 75 years (19.1%). The results also showed that the elderly are poorly educated (59.1%) compared to those who are highly educated (40.9%). Regarding employment status, more elderly people are not working (70.0%) than working elderly people (30.0%). Based on the co-living rate, more elderly individuals live with their families (90.0%) compared to those who live alone (10.0%). From marital status, more of the elderly are still married (55.5%), compared to the elderly with their status (unmarried/widowed/widower) (44.5%).

Table 1. Characteristics of Respondents

Characteristics	Frequency (n)	Percentage (%)
Age (years)		
≥75	21	19.1
60-74	89	80.9
Gender		
Female	67	60.9
Male	43	39.1
Education		
Low (≤Junior high school)	65	59.1
High (≥Senior high school)	45	40.9
Employment		
Not working	77	70.0
Work	33	30.0
Co-living status		
Living alone	11	10.0
Living with family	99	90.0
Marital status		
Unmarried/Widowed/Widower	49	44.5
Married	61	55.5

The results of the study in Table 2 show that coping mechanisms, age, sex, education, employment, and marital status have a significant correlation with the quality of life of the elderly, with a p-value of <0.05. Variables with p-values < 0.25 were included in the multivariate analysis with multiple logistic regression. Table 2 shows that variables such as coping mechanism, age, sex, education, occupation, cohabitation status, and marital status were included in the multivariate analysis.

Table 2. Bivariate Analysis of Quality of Life in Elderly

Variables	Quality of Life				Total		P-value	OR	(95% CI)	
	Poor QoL		Good QoL		n	%			Lower	Upper
	n	%	n	%						
Coping Mechanism										
Maladaptive coping	29	69.0	13	31.0	42	100	<0.001	6.692	2.849	15.720
Adaptive coping	17	25.0	51	75.0	68	100				
Age (years)										
≥75	16	76.2	5	23.8	21	100	<0.001	6.293	2.103	18.834
60-74	30	33.7	59	66.3	89	100		-		
Gender										
Female	34	50.7	33	49.3	67	100	0.017	2.662	1.172	6.047
Male	12	27.9	31	72.1	43	100		-		
Education										
Low (≤Junior high school)	38	58.5	27	41.5	65	100	<0.001	6.509	2.621	16.165
High (≥Senior high school)	8	17.8	37	82.2	45	100		-		
Employment										
Not working	39	50.6	38	49.4	77	100	0.003	3.812	1.479	9.824
Work	7	21.2	26	78.8	33	100		-		
Co-living status										
Living alone	7	63.6	4	36.4	11	100	0.125	2.692	0.739	9.809
Living with family	39	39.4	60	60.6	99	100		-		
Marital status										
Unmarried/Widow/Widower	33	67.3	16	32.7	49	100	<0.001	7.615	3.237	17.917
Married	13	21.3	48	78.7	61	100		-		

Based on the final model of multivariate analysis in Table 3, after a confounding test, it was found that there was a correlation between coping mechanisms and the quality of life of the elderly

after being controlled by education and work variables. The analysis results indicated that elderly individuals who employ maladaptive coping mechanisms have a 5.5 times higher chance (95% CI: 2.068-14.844) of experiencing a poor quality of life compared to those who use adaptive coping mechanisms, after controlling for education and work variables.

Table 3. Final Model Multivariate Analysis of The Correlation Between Coping Mechanisms with Quality of Life

Variables	Categories	B	P-value	OR	95% CI
Coping Mechanism	Maladaptive coping	1.712	0.001	5.540	2.068-14.844
	Adaptive coping				
Education	Low (\leq Junior high school)	1.503	0.003	4.497	1.646-12.285
	High (\geq Senior high school)				
Employment	Not working	1.605	0.005	4.976	1.644-15.059
	Work				

Discussion

The results showed that 25% of the elderly who used adaptive coping had a poor quality of life, while 69% of the elderly who used maladaptive coping had a poor quality of life. Bivariate analysis showed a significant relationship between coping mechanisms and the quality of life of the elderly (p-value 0.05). Research by Galiana suggests that adaptive coping mechanisms are essential for maintaining emotional balance and improving quality of life.¹⁷

As they age, elderly individuals must adapt to physical, emotional, and social changes. The quality of life is affected by the changes experienced by the elderly. Physical changes and decreased body function can also manifest as physical and psychological health problems in the elderly.²¹ Psychological well-being is one factor determining the quality of life of the elderly. Psychological aspects are crucial in enabling people to take control of their lives and manage the events that occur within them.²² With positive coping strategies, a person can be helped to adjust or adapt to something that causes stress.²³

Elderly coping consists of adaptive and maladaptive behaviors. An adaptive coping mechanism is a coping strategy that leads to positive adaptation to problem-solving by reducing the negative impact of stress and trauma on an individual. Seeking support can be achieved by sharing the problem faced with someone trusted, which helps alleviate the perceived stress burden. Maladaptive coping mechanisms are poor coping mechanisms and are coping behaviors that do not solve problems in the long term and can increase or worsen the problem at hand, such as withdrawing from the surrounding environment is the choice of someone who is facing a stressful situation, but this can result in someone becoming antisocial to their environment.^{20,24,25} Research on coping strategies and quality of life of the elderly shows that those who use adaptive coping are problem-centered. In comparison, the elderly who use maladaptive coping are problem-centered and emotional.¹³ Other studies have shown that people who live to be 100 (aged 95 to 107) have

high cognitive function, good health, and low levels of depression. This suggests they use more adaptive coping strategies and thus have a better quality of life.²⁶

This study reported that 69% of the elderly who used maladaptive coping had a poor quality of life, while 75% of the elderly who used adaptive coping had a good quality of life. Coping mechanisms are significantly correlated with elderly quality of life (p-value <0.001). Research by Galiana shows that coping ability influences changes in quality of life. An individual's quality of life improves with improved coping skills. Stress levels are likely to increase in the elderly who lack adaptive coping mechanisms.¹⁷

The results of this study show that work and education are controlling variables of coping mechanisms used by the elderly. Activities undertaken by the elderly, such as work or housekeeping, can increase health risks.² According to Adjei and Brand in the National Team for Accelerating Poverty Reduction (*Tim Nasional Percepatan Penanggulangan Kemiskinan* or TNP2K), "the elderly who only do these household chores (do not have the burden to work) are reported to have poor health conditions."²⁷ According to Nuraini, working elderly tend to have a lower risk of experiencing mental and emotional disorders than non-working elderly.²⁸ The elderly who do not work are 3.5 times more likely to have a poor quality of life than working seniors. The elderly who do not work tend to feel easily anxious and frightened, and there is a tendency to have an unstable economy. This condition causes stressors in the elderly and can affect their quality of life.²⁹ Additionally, elderly individuals with higher levels of education tend to have a better quality of life than those with lower levels of education.³⁰ Education affects the employment status, income, and quality of life of the elderly.² The higher a person's level of education, the better his quality of life. The level of education is crucial in addressing problems. The higher a person's education, the more life experiences they go through, so they are better prepared to overcome difficulties. With higher education, the elderly can overcome the challenges that occur in aging and have a more positive quality of life in old age.³¹

This study shows that age is correlated with the quality of life of the elderly, as older individuals experience increased functional limitations that impact their quality of life.³² Other studies have also found that of people aged ≤69 years, 61.6% show a much better quality of life than those aged >69 years.³³

This study shows a correlation between sex and the quality of life of the elderly. Research on Factors Related to the Quality of Life of the Elderly in Cipasung Village, Kuningan Regency, shows that female elderly have a greater chance of 1.8 times having a poor quality of life than male elderly.²⁹ Female elderly have a poorer quality of life than men because women undergo physiological processes (such as fertility) and are more likely to endure various illnesses. Usually, women feel more anxious and depressed than men when entering old age because of the physical changes they undergo, which can result in a lower quality of life for women than men.³⁴

This study had no relationship between co-living status and quality of life. This may be because many respondents live in the Gandus sub-district with their families. Based on research conducted in Indonesia regarding the welfare conditions of the elderly and social protection of the elderly, in-depth interviews with the National Population and Family Planning Agency (*Badan Kependudukan dan Keluarga Berencana Nasional* or BKKBN) show that living with a family will make the elderly feel happier. The head of the social guidance section of one nursing home in Jakarta also said that "the elderly feel happier when family visits them." This will indicate a good quality of life for the elderly.² Family relationships play an essential role in improving the quality of life of the elderly. Attention and psychological support from the family can make the elderly feel happier and improve their quality of life.^{35,36}

This study shows a correlation between married status and the quality of life of the elderly. Research by Jayanti also states that marital status has a strong relationship with the quality of life of the elderly.³⁷ Bilgili and Arpaci, moreover, found higher scores on quality of life among the elderly living in marital relationships. The study rated their quality of life as higher.^{38,39} This is due to the support of elderly spouses. Seniors who live with their spouses and other family members have a potential support system in the face of shock.²⁷ Couples can help each other physically and mentally if there are problems in their marital status. This is instrumental in determining an older person's quality of life.³²

The limitations of this study are the lack of longitudinal studies that track changes in coping mechanisms and quality of life in the elderly in the past, whereas this is important to understand the dynamics of the aging phase. The collection of quality of life data uses subjective interviews that can cause bias.

Conclusion

Coping mechanisms are significantly correlated with quality of life after controlling for the variables of education and employment. Adaptive coping mechanisms reduce anxiety and improve emotional regulation. Individuals who use adaptive coping tend to be more resilient when faced with problems compared to the elderly who use maladaptive coping. This study found that most respondents who used adaptive coping had a good quality of life. However, on the other hand, respondents who used maladaptive coping still had a poor quality of life. Therefore, the researcher suggests several interventions, such as providing training and holding counseling sessions for the elderly to improve coping skills so that it is hoped that the level of psychological disorders in the elderly can decrease. In addition, there is a need to educate the elderly about health screening services according to standards, such as the detection of mental, emotional, and behavioral disorders, so that proper prevention and management can be carried out to achieve healthy, quality, and productive aging.

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Conflict of Interest

The authors state that there is no conflict of interest.

Reference

1. Triningtyas DA, Muhayati S. Mengenal Lebih Dekat Tentang Lanjut Usia. Magetan: CV. Ae Medika Grafika; 2018.
2. Djamhari E. A, Ramdlaningrum H, Layyinah A, Chrisnahutama A, Prasetya D. Laporan Riset Kondisi Kesejahteraan Lansia dan Perlindungan Sosial Lansia di Indonesia. Jakarta: Prakarsa; 2020.
3. Hidayati AR, Gondodiputro S, Rahmiati L. Elderly Profile of Quality of Life Using WHOQOL-BREF Indonesian Version: A Community-Dwelling. *Althea Medical Journal*. 2018 Jun;5(2):105–10.
4. Badan Pusat Statistik. Statistik Penduduk Lanjut Usia. Jakarta: BPS; 2021. No. Publikasi: 04200.2125.
5. Dinas Kesehatan Provinsi Sumsel. Profil Kesehatan Provinsi Sumatera Selatan 2020.
6. Dinas Kesehatan Kota Palembang. Profil Kesehatan Kota Palembang Tahun 2018.
7. Dinas Kesehatan Kota Palembang. Profil Kesehatan Kota Palembang Tahun 2019.
8. Dinas Kesehatan Kota Palembang. Profil Kesehatan Kota Palembang Tahun 2020.
9. Dinas Kesehatan Kota Palembang. Profil Kesehatan Kota Palembang Tahun 2021.
10. Global AgeWatch Index 2015 Insight report [Internet]. Available from: <https://www.helppage.org/silo/files/global-agewatch-index-2015-insight-report>
11. Satya MCN, Soemanto RB, Murti B. Effect of Family Support and Peer Support on The Quality of Life of The Elderly: A Path Analysis Evidence from Jember, East Java. *Journal of Health Promotion and Behavior* [Internet]. 2019;4(3):159–69. Available <https://doi.org/10.26911/thejhp.2019.04.03.01>.
12. Ekawati L, Zahroh C, Munjidah A, Afridah W, Noventi I, Winoto PMP. Quality of Life Pada Lansia. *Jurnal Ilmiah Keperawatan (Scientific Journal of Nursing)*. Vol 6, No 2, Tahun 2020. DOI: <https://doi.org/10.33023/jikep.v6i2.648>

13. León-Navarrete MM, Flores-Villavicencio ME, Mendoza-Ruvalcaba N, Colunga-Rodríguez C, Salazar-Garza ML, Sarabia-López LE, Albán-Pérez GG. Coping Strategies and Quality of Life in Elderly Population. *Open Journal of Social Science*. Vol.5 No.10, October 2017. DOI: <https://doi.org/10.4236/JSS.2017.510017>.
14. Levasseur M, Couture M. Coping strategies associated with participation and quality of life in older adults. *Can J Occup Ther*. 2015 Feb;82(1):44-53. doi: 10.1177/0008417414552188. PMID: 25803947.
15. Prihanti, Gita Sekar. *Strategi Belajar*. Malang: UMM Press; 2017.
16. Nashori F, Saputro I. *Psikologi Resiliensi*. Yogyakarta: Universitas Islam Indonesia; 2021.
17. Galiana L, Tomás JM, Fernández I, Oliver A. Predicting Well-Being Among the Elderly: The Role of Coping Strategies. *Front Psychol*. Vol. 11, Apr 2020. doi: <https://doi.org/10.3389/fpsyg.2020.00616>.
18. Badan Pusat Statistik. *Statistik Penduduk Lanjut Usia*. Jakarta: BPS; 2022. No. Publikasi: 04200.2225. *Statistik Penduduk Lanjut Usia 2022* [Internet]. Available from: www.freepik.com
19. Resmiya L, Misbach IH. Pengembangan Alat Ukur Kualitas Hidup Indonesia. *Jurnal Psikologi Insight*. Vol. 3, No. 1, April 2019. DOI: <https://doi.org/10.17509/insight.v3i1>.
20. Rias YA, Rinancy H, Ratnasari F, Agusthia M, Ariantini NS, Alfianto AG, Nasution N, Sirait HS, Sanon, Raharjo UD, Hadi I. *Psikososial dan Budaya dalam Keperawatan*. Bandung: CV. Media Sains Indonesia; 2021.
21. García LMR, Ramírez Navarro JM. The Impact of Quality of Life on the Health of Older People from a Multidimensional Perspective. *J Aging Res*. 2018;2018. DOI: <https://doi.org/10.1155/2018/4086294>.
22. Yohanes Kiling I, Novianti Kiling-Bunga B. Pengukuran dan Faktor Kualitas Hidup pada Orang Usia Lanjut. *Journal of Health and Behavioral Science*, Vol.1, No.3, September 2019. DOI: <https://doi.org/10.35508/jhbs.v1i3.2095>.
23. Liu S, Xiao H, Qi P, Song M, Gao Y, Pi H, Su Q. The Relationships Among Positive Coping Style, Psychological Resilience, and Fear of Falling in Older Adults. *BMC Geriatrics*. 2025 Dec 1;25(1):51. DOI: <https://doi.org/10.1186/s12877-025-05682-6>.
24. Gunawan I, Lin MH, Hsu HC. Exploring The Quality of Life and Its Related Factors Among The Elderly. *South East Asia Nursing Research*. 2020 Mar 31;2(1):1. DOI: <https://doi.org/10.26714/seanr.2.1.2020.1-10>.
25. Alosaimi FD, Alawad HS, Alamri AK, Saeed AI, Aljuaydi KA, Alotaibi AS, et al. Stress and coping among consultant physicians working in Saudi Arabia. *Ann Saudi Med*. 2018 May 1;38(3):214–24. DOI: 10.5144/0256-4947.2018.214

26. Fontes AP, Neri AL. Coping strategies as indicators of resilience in elderly subjects: A methodological study. *Ciencia e Saude Coletiva*. 2019 Apr 1;24(4):1265–76. doi: 10.1590/1413-81232018244.05502017
27. Tim Nasional Percepatan Penanggulangan Kemiskinan (TNP2K) dan The SMERU Research Institute. *Situasi Lansia di Indonesia dan Akses terhadap Program Perlindungan Sosial: Analisis Data Sekunder*. Jakarta: TNP2K, Sekretariat Tim Nasional Percepatan Penanggulangan Kemiskinan; 2020.
28. Badan Pusat Statistik. *Angka Harapan Hidup (AHH) Menurut Provinsi dan Jenis Kelamin (Tahun), 2019-2021*. Jakarta: BPS; 2021.
29. Indrayani, Ronoatmodjo, S. Faktor-Faktor yang Berhubungan dengan Kualitas Hidup Lansia di Desa Cipasung Kabupaten Kuningan Tahun 2017. *Jurnal Kesehatan Reproduksi*, 9(1), 2018: 69-78. DOI: 10.22435/kespro.v9i1.892.69-78.
30. Soósová, Mária Sováriová. Determinants of Quality of Life in The Elderly. *Central European Journal of Nursing and Midwifery* 2016;7(3):484–493. DOI: <http://dx.doi.org/10.15452/CEJNM.2016.07.0019>.
31. Jariah A, Kusbaryanto. Efektivitas Program Pendidikan Lanjut Usia Terhadap Kualitas Hidup Lansia di Komunitas: A Literature Review. *Jurnal Keperawatan Muhammadiyah Edisi Khusus* 2019. DOI: <https://doi.org/10.30651/jkm.v4i2.2582>.
32. Wikananda, Gede. Hubungan Kualitas Hidup dan Faktor Resiko Pada Usia Lanjut di Wilayah Kerja Puskesmas Tampaksiring I Kabupaten Gianyar Bali 2015. *Intisari Sains Medis* 2017, Volume 8, Number 1: 41-49. DOI: <https://doi.org/10.15562/ism.v8i1.112>.
33. Garbaccio JL, Tonaco LA, B Estêvão WG, Barcelos BJ. Aging and Quality of Life of Elderly People in Rural Areas. *Revista Brasileira de Enfermagem (REBEN)* 2018;71 (suppl 2)724-32 [Thematic Issue: Health of the Elderly]. DOI: 10.1590/0034-7167-2017-0149.
34. Rong J, Ding H, Chen G, Ge Y, Xie T, Meng N. Quality of Life of Rural Poor Elderly in Anhui, China. *Medicine*. 2020 Feb 7;99(6): e19105. DOI: <http://dx.doi.org/10.1097/MD.00000000000019105>.
35. Daely S, Nuraini T, Gayatri D, Pujasari H. Impacts of age and marital status on the elderly's quality of life in an elderly social institution. *Journal of Public Health Research*. Vol. 11:2731, 2022. DOI: 10.4081/jphr.2021.2731
36. Nugraha S, Aprillia YT. Health-Related Quality of Life among the Elderly Living in the Community and Nursing Home. *Jurnal Kesehatan Masyarakat*. 2020 Mar 17;15(3):419–25. DOI: <https://doi.org/10.15294/kemas.v15i3.21282>
37. Jayanti, Dwi. Analisis Kualitas Hidup Lansia di Institusi Sosial Panti Werdha Jakarta dan Faktor-Faktor yang Mempengaruhinya. Tesis Program Pascasarjana, Universitas Indonesia; 2019.

38. Bilgili N, Arpacı F. Quality of life of older adults in Turkey. *Arch Gerontol Geriatri*. 2014. Vol. 59, Issue 2, September-October. DOI: <https://doi.org/10.1016/j.archger.2014.07.005>.
39. Juanita, Nurhasanah, Jufrizal, Febriana D. Health-Related Quality of Life of Indonesian Older Adults Living in Community. *Enfermería Clínica*. 2022. Volume 32, Supplement 2. DOI: <https://doi.org/10.1016/j.enfcli.2022.03.022>