

*Original article*

## The Association Between Demographic Factors and Quality of Life in Indonesian Older Adults with Hypertension Attending Outpatient Unit

Rosida<sup>1</sup>, Nga Thi Thuy Nguyen<sup>2,3</sup>, Anung Ahadi Pradana<sup>1,4\*</sup>

1. Department of Nursing, STIKes Mitra Keluarga, Bekasi, Indonesia
2. Faculty of Nursing and Midwifery, Hanoi Medical University, Hanoi, Vietnam
3. School of Nursing, College of Nursing, Taipei Medical University, Taipei, Taiwan
4. International PhD Program in Gerontology and Long-Term Care, Taipei Medical University, Taipei, Taiwan

\*Correspondence: Anung Ahadi Pradana | STIKes Mitra Keluarga | [anung.ahadi@stikesmitrakeluarga.ac.id](mailto:anung.ahadi@stikesmitrakeluarga.ac.id)

### Abstract

**Introduction:** Aging process often results in functional declines in various bodily systems, one of which is the cardiovascular system. Hypertension is a major risk factor for cardiovascular diseases, characterized by an increase in systolic blood pressure > 140 mmHg and diastolic blood pressure > 90 mmHg. This aging process affects older adults and subsequently requires efforts to improve their quality of life in order to achieve well-being. Quality of life refers to an individual's perception of their position in life in relation to cultural and societal norms, values, goals, desires, standards, and interests. This study aims to examine which demographic variables are associated with the quality of life among older adults with hypertension in the outpatient unit of a private hospital.

**Method:** The research employed a non-probability sampling method, specifically total sampling, with 32 respondents, using a cross-sectional approach based on pre-established inclusion and exclusion criteria.

**Results:** The results indicated that demographic variables such as age (p-value 0.066), gender (p-value 0.593), employment status (p-value 1.000), education (p-value 0.057), marital status (p-value 0.295), income (p-value 1.000), and residence (p-value 0.238) were not significantly associated with the quality of life of older adults with hypertension.

**Conclusion:** In conclusion, there were no significant associations between age, gender, employment status, education, marital status, income, and residence with the quality of life of older adults with hypertension in the outpatient unit.

**Keywords:** Demographic status, Quality of life, Older adults, Hypertension

Received March 13, 2025; Received in revised form March 30, 2025; Accepted April 1, 2025; Available online April 21, 2025

### INTRODUCTION

The global prevalence of individuals aged 60 and above increased by approximately 6% in 1990 and rose to 9.3% in 2020. This older population is projected to reach around 16% by 2050, meaning that one in every six people will be aged 60 or older (WHO, 2022). According to the 2020 population census, the percentage of older adults in Indonesia nearly reached 10%, and this proportion is predicted to grow significantly. Badan Pusat Statistik (2020) reports that the older adults in Indonesia has doubled over the past five decades (Badan Pusat Statistik RI, 2021). As the older population increases, the productive age group of 15-59 years will face a reduced burden of dependents, which may lead to a decline in the Gross Domestic Product (GDP) and an increase in the economic burden on the country (Djamhari, E. A., Ramdhaningrum, H., Layyindah, A., Chrisnahutama, A., & Prasetya, 2021).

Hypertension is a major cardiovascular risk factor and a leading cause of death worldwide (Taiso dkk., 2020). Hypertension is a condition characterized by a continuous increase in blood volume within the vasculature due to the force exerted by blood and arterial vessels when blood is pumped by the heart. As the pressure rises, the heart must work harder (WHO, 2023). According to the 2018 national RISKESDAS report, the prevalence of hypertension continues to rise with age. Notably, there is a significant increase in hypertension prevalence among individuals aged 55-56, rising to 55.23%, and among those aged 75 and above, it reaches 69.53% (Kemenkes RI, 2018). These facts underscore the vulnerability of older adults to non-communicable diseases (Kemenkes RI, 2022).

Quality of life is an individual's perception of their position in life in relation to the cultural rules and

norms they adhere to, concerning their missions, desires, standards, and interests (*World Health Organization*, 2012). Quality of life is assessed across four domains: physical, psychological, social relationships, and environment. A healthy, independent, productive, useful, and prosperous older adults is one of the ways to improve the quality of life for older adults, ensuring their happiness in later years (Kemenkes RI, 2013). The quality of life of older adults with hypertension is generally poor. This decline in quality of life is often due to reduced family support, which negatively impacts the older adults's life expectancy and, consequently, their overall quality of life (Pangestuti dkk., 2022).

The results of a preliminary study indicate a relationship between demographic status and the quality of life of older adults. In terms of age and marital status, 5 articles reported a relationship. For gender and employment, 4 articles showed a relationship. Regarding income status, 3 articles found a relationship. For education level, 7 articles indicated a relationship. As for living arrangements, 1 article mentioned a relationship, while 8 other articles did not consider living arrangements as a demographic variable (Rosida & Pradana, 2022). In efforts to ensure the quality of life for older adults, both the government and the private sector have provided health services for older adults at primary care levels, along with other health service networks and facilities. The standard service provided by local governments includes health screening, hypertension detection, and blood pressure measurement for those aged 60 and above, at least once a year (Kemenkes RI, 2022). Based on the aforementioned details and the data gathered, the author plans to conduct research on the "The Association Between Demographic Factors and Quality of Life in Indonesian Older Adults with Hypertension Attending Outpatient Unit".

## METHOD

This study is an analytical observational research with a cross-sectional design. The research was conducted from May to June 2023 in the working area of Bekasi City. The independent variables investigated include demographic status, which consists of age, gender, employment status, education level, income, marital status, and living arrangements. The dependent variable is the quality of life of older adults with hypertension. The population of this study includes all older adults with hypertension who visited private hospital in June 2023. The sampling technique used was total sampling, with a sample size of 32 respondents. The inclusion criteria for this study were: older adults (aged >60) diagnosed with hypertension, agreed to participate as respondents and signed the informed consent form, those who are literate, and able to communicate and speak Indonesian. The exclusion criteria for this study were: older adults with communication or psychiatric disorders, and those with hypertension who have other comorbid conditions. This study has obtained ethical clearance from the Health Research Ethics Commission of STIKes Bani Saleh, with approval number: EC. 029/KEPK/STKBS/V/2023.

## RESULTS

The study results show that the majority of older adults visiting the private hospital were aged 60-74 years, with 28 respondents (87.5%). The predominant gender among older adults is female, with 21 individuals (65.6%). Most of older adults are unemployed, with 26 individuals (81.3%). The average level of education among older adults is high school or higher (High school/ University), with 23 individuals (71.9%). Regarding marital status, the majority are still married, with 18 individuals (56.3%). Concerning income, most older adults earn a low income of less than IDR 5 million, with 26 individuals (81.3%). Most of older adults live with their family/ spouse, with 30 individuals (93.8%). The average quality of life of older adults is predominantly good, with 28 individuals (87.5%) reporting a good quality of life (Table 1).

**Table 1.** Demographic characteristics of the participants (n=32)

Variable	n	Percentage (%)
<b>Age</b>		
60-74	28	87,5
75-90	4	12,5
Total	32	100
<b>Gender</b>		
Female	21	65,6
Male	11	34,4
Total	32	100
<b>Employment status</b>		
Unemployed	26	81,3
Employed	6	18,8
Total	32	100
<b>Education level</b>		

Low (None or primary education)	9	28,1
High (Secondary or higher education)	23	71,9
Total	32	100
<b>Marital status</b>		
Unmarried/Widow/Widower	14	43,8
Marriage	18	56,3
Total	32	100
<b>Monthly Income</b>		
< IDR 5 million	26	81,3
> IDR 5 million	6	18,8
Total	32	100
<b>Living status</b>		
Living alone	2	6,3
With family/spouse	30	93,8
Total	32	100
<b>Quality of life</b>		
Low ( $\leq 50$ )	4	12,5
High ( $> 50$ )	28	87,5
Total	32	100

Source: primary data 2023

Table 2 presents the results of the bivariate analysis. The analysis of age and quality of life in older adults revealed a p-value of 0.066, indicating no significant relationship between age and the quality of life of hypertensive older adults. The analysis of gender and quality of life showed a p-value of 0.593, suggesting no significant association between gender and the quality of life of hypertensive older adults. Regarding employment status and quality of life, the statistical test yielded a p-value of 0.652, indicating no significant relationship between employment status and the quality of life of hypertensive older adults. The analysis of education level and quality of life in older adults revealed a p-value of 0.057, which suggests no significant association between education level and the quality of life of hypertensive older adults. The analysis of marital status and quality of life showed a p-value of 0.295, meaning there is no significant relationship between marital status and the quality of life of hypertensive older adults. Similarly, the analysis of monthly income and quality of life produced a p-value of 1.000, indicating no significant association between monthly income and the quality of life of hypertensive older adults. Finally, the analysis of living status and quality of life resulted in a p-value of 0.238, suggesting no significant relationship between living status and the quality of life of hypertensive older adults.

**Table 2.** Bivariate analysis of the variables

Variables	Quality of life						p	OR (95% CI)		
	Low ( $\leq 50$ )		High ( $> 50$ )		Total			OR	Low	High
	n	%	n	%	n	%				
<b>Age</b>										
60-74	2	7,1	26	92,9	28	100	0,066	0,077	0,143	1,857
75-90	2	50	2	50	4	100				
Total	4	12,5	28	87,5	32	100				
<b>Gender</b>										
Female	2	9,5	19	90,5	21	100	0,593	0,474	0,524	1,106
Male	2	18,2	9	81,8	11	100				
Total	4	12,5	28	87,5	32	100				
<b>Employment status</b>										
Unemployed	3	11,5	23	88,5	26	100	1,000	0,652	0,692	1,062
Employed	1	16,7	5	83,3	6	100				
Total	4	12,5	28	87,5	32	100				
<b>Education level</b>										
Low (None or primary education)	3	33,3	6	88,5	9	100	0,057	11,000	7,667	0,697
High (Secondary or higher)	1	4,3	22	95,7	23	100				

education)

Total	4	12,5	28	87,5	32	100				
<b>Marital status</b>										
Unmarried/Widow/Widower	3	21,4	11	78,6	14	100	0,295	4,636	3,857	0,832
Marriage	1	5,6	17	94,4	18	100				
Total	4	12,5	28	87,5	32	100				
<b>Monthly Income</b>										
< IDR 5 million	3	11,5	23	88,5	26	100	1,000	0,652	0,692	1.062
> IDR 5 million	1	16,7	5	88,3	6	100				
Total	4	12,5	28	87,5	32	100				
<b>Living status</b>										
Living alone	1	50	1	50	2	100	0,238	9,000	5,000	0,556
With family/spouse	3	10	27	90	30	100				
Total	4	12,5	28	87,5	32	100				

Source: primary data 2023

## DISCUSSION

The study results indicated that demographic variables such as age, gender, employment status, education, marital status, income, and residence were not significantly associated with the quality of life of older adults with hypertension. This study was the first to be conducted for older adults with hypertension in selected private hospital.

The results of this study indicate that the majority of hypertensive older adults in the 2023 sample were aged 60-74 years. The incidence of hypertension increases with age, with high blood pressure often emerging when individuals reach 60 years or older, and the highest prevalence of hypertension occurs in the 55-64 age group (Kemenkes RI, 2023). The study also found that hypertension is most common in individuals aged 60-74 years (Akbar, Nur, dkk, 2020). The bivariate analysis revealed no significant relationship between the demographic variables (age) and the quality of life of hypertensive older adults in the outpatient unit. These findings are consistent with those of Masliati, Maidar, (2022), who reported no association between age and the quality of life of hypertensive older adults. This is further supported by the research of Susilawati & Hutabarat, (2022), which also found no relationship between age and the quality of life of older adults. Hypertension in older adults is predominantly observed in those aged 60 and above, as the risk of health complications increases with age.

The results of this study indicate that the majority of hypertensive older adults are female. This finding is consistent with the research of Akbar, Nur, dkk, (2020), which reported a higher prevalence of hypertension among women. This is attributed to the menopausal process that women experience after the age of 50, which can make them more prone to stress, thereby increasing the risk of hypertension compared to men (Manuntung, 2018). The bivariate analysis revealed no significant relationship between gender and the quality of life of hypertensive older adults in the outpatient unit. This finding aligns with Abdiana, (2019), who explained that there is no association between gender and the quality of life of individuals with high blood pressure. The results of this study are further supported by the research of Nilawati, intan, Kasron, (2023), which also showed no significant relationship between gender and the quality of life of older adults.

The results of this study indicate that hypertension in older adults was predominantly observed among those who were unemployed. Other studies also suggest that unemployed older adults tend to experience hypertension more frequently (Sudin, 2023). This finding is consistent with the research by Masliati, Maidar, (2022), which concluded that there is no relationship between employment status and the quality of life of older adults. Additionally, the results of this study are supported by the work of Philip Theo, Angela &. Kalesaran, (2022), who found that employment status is not associated with the quality of life of hypertensive older adults.

The results of the bivariate analysis show that there is no significant relationship between the demographic variable (education) and the quality of life of hypertensive older adults in the outpatient unit. This finding aligns with Wahid dkk., (2021), who concluded that there is no association between education level and the quality of life of older adults. The results are also supported by Nilawati & Kasron, (2023), who found no meaningful relationship between education and the quality of life of hypertensive older adults. Furthermore, this finding is reinforced by Chendra & Zulkarnain, (2020), who also reported no

significant relationship between education level and the quality of life of hypertensive older adults.

The results of this study indicate that hypertension in older adults is more prevalent among those who are married. Other studies also suggest that, psychologically, married older adults receive emotional support and motivation from their partners. Additionally, financially, they are assisted by their spouses in activities such as shopping and managing finances (Nurkhasanah, dkk., 2022). This finding aligns with the research by Ramezankhani dkk., (2019), which compared married and unmarried older adult men, revealing that married older adults have a higher risk of hypertension, whereas those who are unmarried have a lower risk of developing hypertension. This is because marital status is indirectly linked to health status, including hypertension, which is influenced by behavioral risk factors and stress levels in older adults (Lailli, Nur Fahma, 2018).

The results of this study show that, on average, the older adults in the sample have a low income. Other research also indicates that hypertensive older adults are predominantly in the low-income category (Nuraeni, 2019). Rismadi, Kiki, Albiner Siagian, (2021) explain that individuals with low income are often limited in their choice of healthcare facilities. For hypertensive respondents who do not exhibit symptoms or signs, they tend to carry out daily activities without disruption from the condition, leading to a tendency to avoid regular health check-ups. This is because these individuals perceive their condition as not life-threatening. This situation is closely related to their perception of health and illness.

The results of this study indicate that the majority of older adults with hypertension live with their family or partner. Other studies also show that most older adults live with their family (Dewi dkk., 2022). The living arrangement plays a significant role in the coping strategies that older adults employ, and this can vary between those living with family and those in nursing homes. The challenges faced by older adults living at home are different from those living in institutional care (Andriani dkk., 2019). The quality of life of older adults is directly related to their level of satisfaction and happiness with their health. Family acts as a crucial support system in maintaining the health of older adults (Annisa, Ibrahim, 2023). This is because the role of the family has a positive impact on the psychological well-being of older adults, helping them maintain a good quality of life. A supportive living environment allows older adults to better adapt to the decline they experience (Panjaitan & Agustina, 2020).

Limitations of this study include the use of a cross-sectional design, which limits the ability to establish causal relationships between demographic factors and quality of life among hypertensive older adults. Additionally, the study was conducted at only one hospital, which may not fully represent the broader population of older adults with hypertension. Furthermore, the sample size was relatively small (<50), which may limit the generalizability of the findings to a larger population of hypertensive older adults. These factors suggest that the results should be interpreted with caution, and further research with a larger, more diverse sample across multiple healthcare settings is needed to draw more definitive conclusions.

## CONCLUSION

This study found that there were no significant associations between demographic variables such as age, gender, employment status, education, marital status, income, and residence with the quality of life of older adults with hypertension in the outpatient unit of a private hospital. Despite the expectation that these factors might influence the well-being of older adults, the findings suggest that other, unexamined factors may play a more significant role in determining their quality of life. These results underscore the need for further research to explore other potential determinants of quality of life in this population, especially in larger, more diverse settings.

## REFERENCE

- Abdiana, A. (2019). Kualitas Hidup Penderita Penyakit Hipertensi Peserta Prolanis Di Puskesmas Kecamatan Padang Utara Kota Padang. *Jurnal Sehat Mandiri*, 14(2), 38–47. <https://doi.org/10.33761/jsm.v14i2.109>
- Akbar, F., Nur, H., & Humaerah, U. I. (2020). Karakteristik Hipertensi Pada Lanjut Usia Di Desa Buku (Characteristics of Hypertension in the Elderly). *Jwk*, 5(2), 2548–4702.
- Andriani, S., Lukitasari, A., & Hasbalah, K. (2019). Strategi Koping Lansia dengan Tempat Tinggal di Ulee Kareeng Banda Aceh. *Serambi Sainia: Jurnal Sains Dan Aplikasi*, 7(2), 74. <https://doi.org/10.32672/jss.v7i2.1405>
- Annisa, Ibrahim, K. (2023). Hubungan Dukungan Keluarga Dengan Kualitas Hidup Lanjut Usia Pada Penderita Hipertensi Di Wilayah Kerja Puskesmas Baiturrahman Banda Aceh. *Jurnal Ilmu Keperawatan*.
- Badan pusat statistik. (2020). statistik penduduk lanjut usia 2020. In *Badan pusat statistik*.

- Badan Pusat Statistik RI. (2021). Statistik Penduduk Lanjut Usia 2021. In *BPS RI*. Badan Pusat Statistik Republik Indonesia. <https://www.bps.go.id/publication/2021/12/21/c3fd9f27372f6ddcf7462006/statistik-penduduk-lanjut-usia-2021.html>
- Chendra, R., & Zulkarnain, M. (2020). Kualitas Hidup Lansia Peserta Prolanis Penderita Hipertensi Di Wilayah Kerja Puskesmas Kenten Laut. *Jurnal JUMANTIK*, 5(2), 126–137.
- Dewi, S. R., Pertiwi, K. A., & Mahriza, I. (2022). Analisis Determinan Status Nutrisi pada Lansia yang Tinggal di Komunitas (Studi Kasus Lansia di Kabupaten Jember). *The Indonesian Journal* ....
- Djamhari, E. A., Ramdlaningrum, H., Layyinah, A., Chrisnahutama, A., & Prasetya, D. (2021). *Laporan Riset 2020 Kondisi kesejahteraan lansia dan perlindungan sosial lansia di Indonesia*.
- Kemendes. (2013). *PENTINGNYA PERAN MASYARAKAT DAN KELUARGA DALAM MENINGKATKAN KUALITAS HIDUP LANSIA*.
- Kemendes RI. (2018). Laporan Nasional RISKESDAS 2018. In *Kementerian Kesehatan RI* (Vol. 1, Issue 1).
- Kemendes RI. (2022). *lansia berdaya bangsa sejahtera*.
- Kemendes RI. (2023). *Hipertensi Penyakit Paling Banyak Diidap Masyarakat*.
- Lailli, Nur Fahma, A. R. (2018). *analisis faktor-faktor yang mempengaruhi terjadinya hipertensi pada pasien lansia di kelurahan semampir kota Kediri tahun 2018*. 6(1), 1–8.
- Manuntung, A. (2018). *terapi perilaku kognitif pada pasien hipertensi*. Wineka media.
- Masliati, Mairidar, A. (2022). Faktor-Faktor Yang Berhubungan Dengan Kualitas Hidup Lansia Desa Paya Dapur Kecamatan Kluet Timur Kabupaten Aceh Selatan Tahun 2021. *Journal of Health and Medical Science*, 1(91), 0–1.
- Nilawati, intan, Kasron, So. (2023). *Hubungan Jenis Kelamin, Pendidikan Dan Lama Menderita Hipertensi Dengan Kualitas Hidup Lansia Hipertensi*. 6, 6–12.
- Nuraeni, E. (2019). *USIA JENIS KELAMIN BERESIKO DENGAN KEJADIAN HIPERTENSI DI KLINIK X KOTA TANGERANG*. 4(1), 1–6.
- Nurkhasanah, S., Wirakhmi, I. N., & Khasanah, S. (2022). *Hubungan Derajat Hipertensi dan Status Pernikahan Terhadap Tingkat Kemandirian Lansia dalam melakukan Aktivitas Harian di Puskesmas Kutasari Kabupaten Purbalingga*.
- Pangestuti, E., Larasati, A. D., Amayu, R., Vitani, I., & Semarang, K. (2022). Gambaran kualitas hidup pada pasien hipertensi selama pandemi covid-19. *Jurnal Keperawatan Jiwa*, 10(1), 219–228.
- Panjaitan, B. S., & Agustina, M. (2020). Hubungan Dukungan Keluarga dengan Kualitas Hidup Lansia. *Jurnal Keperawatan*, 2(2), 35–43.
- Philip M. P. O. Theo, Angela F. C. Kalesaran, F. L. F. G. L. (2022). *hubungan antara faktor sosiodemografi dan penyakit hipertensi dengan kualitas hidup lansia di kelurahan Manado tua dua kecamatan Bunaken kepulauan kota Manado*. 6.
- Ramezankhani, A., Azizi, F., & Id, F. H. (2019). *Associations of marital status with diabetes, hypertension, cardiovascular disease and all-cause mortality: A long term follow-up study*. 1–15.
- Rismadi, Kiki, Albiner Siagian, fazidah agustina S. (2021). pengaruh penghasilan dan gaya hidup terhadap kejadian hipertensi pada nelayan di kota Medan. *Jurnal Health Sains*, 2(3), 1–13.
- Rosida, R., & Pradana, A. A. (2022). Faktor-Faktor Yang Mempengaruhi Kualitas Hidup Lansia: Literature Review. *Jurnal Mitra Kesehatan*, 5(1), 49–56. <https://doi.org/10.47522/jmk.v5i1.175>
- Sudin, M. dkk. (2023). Faktor Yang Berhubungan Dengan Kejadian Hipertensi Pada Lansia di Wilayah Kerja Puskesmas Pertiwi Kota Makassar. *Jurnal Promotif Preventif*, 6(1), 37–47.
- Susilawati, E., & Hutabarat, L. F. (2022). Hubungan Karakteristik, Interaksi Sosial Terhadap Kualitas Hidup Lansia Di Kelurahan Aek Nauli Pematangsiantar Tahun 2022. *Jurnal Ilmiah PANNMED* ....
- Taiso, S. N., Sudayasa, I. P., & Paddo, J. (2020). *Analisis Hubungan Sosiodemografis Dengan Kejadian Hipertensi di Wilayah Kerja Puskesmas Lasalepa, Kabupaten Muna*.
- Wahid, F. A. Z., Puguh, K. S., & Victoria, A. Z. (2021). Hubungan Faktor Spiritual Dan Faktor Demografi (Usia, Jenis Kelamin, Pendidikan dan Pekerjaan) Terhadap Kualitas Hidup Penderita Rheumatoid Arthritis. *Prosiding Seminar Nasional UNIMUS*, 4, 1179–1196.
- who. (2023). *Hypertension*.
- WHO. (2012). PROGRAMME ON MENTAL HEALTH WHOQOL User Manual. *WHO/HIS/HSI*, 9(1), 123–131. [https://doi.org/10.4091/iken1991.9.1\\_123](https://doi.org/10.4091/iken1991.9.1_123)
- WHO, 2022. (2022). *World health statistics 2022 (Monitoring health of the SDGs)*.