

ORIGINAL ARTICLE

Risk Factors of Depression Among Minang Older People Residing in Nursing Homes, Indonesia

Emira Apriyeni¹, Helena Patricia¹, Dwi Christina Rahayuningrum¹

¹ Department of Mental Health Nursing, Institute of Health Science Syedza Saintika, West Sumatra, Indonesia

ABSTRACT

Introduction: Minang older people are important as mentors and advisors in society. However, the increasing number of older people changing family structure and roles has caused older people to prefer living in nursing homes. This leads to older people feeling lonely, anxious, and depressed. Although the prevalence of the Indonesian population has been established, there is a limited study on depression among Minang older people living in nursing homes. This study aims to determine the risk factors that affect depression among Minang older people in the nursing homes in West Sumatra. **Methods:** A cross-sectional study involving older people aged ≥ 60 who lived in two nursing homes in West Sumatra. The sample was 165 respondents using a purposive sampling technique. Data was collected by questionnaire and analyzed in univariate and bivariate. **Results:** An average of 8.9 older people were affected by depression. The results of the chi-square test showed that depression was associated with gender ($p=0.035$), marital status ($p=0.044$), and length of stay ($p=0.017$), but not with education ($p=0.56$). The Pearson correlation revealed that depression was associated with age ($p=0.001$, $r=0.30$), perceived health status ($p=0.023$, $r=0.47$), religiosity ($p=0.020$, $r=0.76$), and social support ($p=0.008$ with $r=0.48$). **Conclusion:** In general, age, gender, marital status, length of stay, perceived health status, religiosity, and social support affect the level of depression in older people. It is recommended to conduct national-level research to assess the depression level and intervention programs among older people.

Malaysian Journal of Medicine and Health Sciences (2025) 21(SUPP6):6-10. doi:10.47836/mjmhs.21.s6.2

Keywords: Depression; Risk factor; Older people; Nursing home, religiosity

Corresponding Author:

Ns, Helena Patricia, S.Kep, M.Kep
Email: patricia.helena@live.iium.edu.my
Tel : +62 85265409500

INTRODUCTION

Populations of older people worldwide are increasing globally from 12% to 22% (1). In Indonesia, the number of older people reached 26.82 million (9.92% of the total population), and West Sumatra is the sixth largest at 10.07% (2). The Minangkabau culture in West Sumatra is matrilineal, with gender equality and older people as mentors and advisors in community life (3,4). However, traditional attitudes toward providing for older people have shifted due to factors such as changes in family roles (5). Older people are at risk of being neglected, so they live in nursing homes in the hope of getting a more

satisfying (5,6).

Nursing homes provide services to older people with complete facilities and infrastructure, supporting their lives and welfare (7). Well-developed facilities and infrastructure also influence older people's welfare, including meeting the needs for balanced nutritious food, health checks, and care (8). The government mostly funds nursing homes in Indonesia, private companies, and charitable organizations (9). Previous studies have found that older people in nursing homes face stressful events (10). They are mostly without spouses (6), have physical problems, drop in socioeconomic status (11), and usually share a room with two or more roommates (12). It can lead to loneliness, anxiety, and depression. Depression was found to be higher among nursing home residents than community dwellers (13).

Depression is one of the mental disorders and may result

in a decrease in health, disability, quality of life, and suicide (11,14). Older people who have depression feel sad, empty, irritable, and lack pleasure in activity (15). Depression-related factors include sociodemographic characteristics (age, sex, length of stay, education level, marital status), loneliness, limitation in physical activity, social support, clinical factors, sleep quality, perceived health status, and religiosity (16).

In Indonesia, research on depression has often been carried out, but research on older people’s depression looks more into older people who live in the community (17). Due to the scarcity of studies on the topic, there is still a lack of research on depression in institutions with the characteristics of Minangkabau older people. Therefore, this study aims to determine the risk factors for depression experienced by older people living in nursing homes.

METHODS

Design and participants

This study was conducted in two West Sumatra nursing homes, Sabai Nan Aluih, Padang Pariaman Regency, and Kasih Sayang Ibu, Tanah Datar Regency, from September 2022 to May 2023. The study design was quantitative with a cross-sectional approach with a population of 194 older people. The sample consisted of 165 older people using a purposive sampling technique. The criteria for inclusion are 60 years or older and not having any cognitive impairment-based mini MoCA test.

Data Collection and Analysis

Data was collected through interviews and questionnaires with demographic questionnaires. Depression was measured using the 15-item Geriatric Depression Scale (GDS) questionnaire with scores ranging from 0-4 and Cronbach’s alpha=0.88 (18). The SF 36 Health Survey evaluated Perceived Health Status with Cronbach’s alpha >0.72 (19). The Multidimensional Scale of Perceived Social Support (MSPSS) questionnaire measures social support with Cronbach’s alpha=0.88 (20). The Belief into Action Scale (BIAC) questionnaire to assess religiosity (21). Data was analyzed using the Chi-Square for ordinal data and the Pearson correlation test for numeric data. This study applies research ethics, which include autonomy, beneficence, maleficence, anonymity, and justice (22).

Ethical Clearance

This study was approved by a Research Recommendation Letter from STIKES Syedza Saintika to the Social Service Welfare Department with the number 048/STIKES-SS/VII/2023 and a Permit Letter from study setting Sabai Nan Aluih Nursing homes and Kasih Sayang Ibu Nursing

homes. This study was approved by the Research Ethics Committee, Faculty of Medicine Andalas University No. 340/UN.16.2/KEP-FK/2023.

RESULTS

Prevalence Risk Factors of Depression Among Minang Older People in Nursing Home

From the total of 165 respondents in Table I, the average age of the respondents was 76.3 years, most were female (65.5%), and widows/widowers (89.9%), with elementary/ junior high school education (77.3%), and had stayed in nursing homes for 3-5 years (51.5%). It can also be seen that the average score of depression for older people in nursing homes was 8.9 (SD 3.82), the perceived health status score was 2.96 (SD 1.09), the Religiosity score was 18.66 (SD 10.03), and the social support score was 4.44 (SD 11.9).

Table I: Characteristics of Respondents and Prevalence Risk Factors of Depression Among Minang Older People in Nursing Home

Variable	n (%)	Average ±SD
Age		76.3 (4.35)
Gender		
Male	57 (34.5%)	
Female	108 (65.5%)	
Marital Status		
Married	17 (10.1%)	
Widow/widower	148 (89.9%)	
Education		
Elementary/Jr. High School	128 (77.3%)	
High School/Diploma/Bachelor	37 (22.7%)	
Length of Stay		
> 5 years	46 (27.8%)	
3-5 years	85 (51.5%)	
< 2 years	34 (20.7%)	
Dependent		
Depression		8.9 (3.82)
Perceived Health Status		2.96 (1.09)
Independent		
Religiosity		18,66 (10,03)
Social Support		4.44 (11.9)

SD: Standard Deviation

Risk Factors of Depression Among Minang Older People in Nursing Home

In this study (Table II), risk factors related to depression are gender (p-value = 0.035), marital status (p-value = 0.044), length of stay at nursing house (p-value = 0.017), respondent's age (p-value = 0.001 with $r = 0.30$), perceived health status (p-value = 0.023 with $r = 0.47$), religiosity (p-value = 0.020 with $r = 0.76$), and social support (p-value = 0.008 with a value of $r = 0.48$). Education variable that has no relationship with the incidence of depression (p-value = 0.56).

Table II: Risk Factors of Depression Among Minang Older People in Nursing Home

Factors	Depression	
	p-value	r
Gender	0.035	-
Marital Status	0.044	-
Education	0.56	-
Length of Stay	0.017	-
Age	0.001	0.30
Perceived Health Status	0.023	- 0.47
Religiosity	0.020	- 0.76
Social Support	0.008	- 0.48

r: The Pearson Correlation Coefficient

DISCUSSION

Depression is a mental health issue lasting at least two weeks and is characterized by sadness, disinterest, disrupted sleep and appetite, and difficulty with focus and attention (23). Older people in nursing homes are more likely to experience depression (7) due to decreased functional needs, lack of family support, feelings of loneliness, and resignation from their situation of illness. Depression will increase in older people, mainly women, widowed, and length of stay for 3-5 years or more. This study is in line with research by Moreno et al. (2022) in Chile, where women were diagnosed more often than men and older and less educated parents were usually associated with depression (24). Men and women have different characteristics for expressing their experiences of depression. Women are more sensitive and use emotion when dealing with a challenging situation (25). Education level plays a significant role in mental health processes (26).

Additionally, Srivastava et al. (2021) stated that older people who live alone and are widowed have a higher likelihood of depression (27). Marital status was found to be a significant associated factor related to depression (28). Older people are unmarried and living separately because losing a partner is life's most stressful and sad experience (29). Older people who live in nursing homes for more than five years have higher rates of depression than those who stay for less than five years (30).

Depression is negatively associated with perceived health status, religiosity, and social support. Meaning that the higher perceived health status, religiosity, and social support, the lower the risk of increasing the level of depression among older people living in nursing homes. On the other hand, older people with depressive symptoms often report negative health and poor health status (31,32). Older people's perception of health is associated with depressive symptoms, dissatisfaction with relationships, use of large amounts of medication, and poor socioeconomic status.

Lower social support affects depressive symptoms in older people. It includes interactions with family, friends, and other people (33). Social activities like eating out and visiting loved ones can improve mental health and reduce symptoms of depression (29). Social support mitigates stress and mental health problems and prevents the harmful effects of physical disabilities on psychological well-being (34,35).

Religiosity is also a factor that influences depressive symptoms in parents. Rahmadayani et al. (2022) stated that depression in older people can be reduced by increasing religiosity (36). Studies show that spirituality correlates with reduced depression, and practices can encourage proactive coping and make it easier to overcome depression.

CONCLUSION

This study found that there is a relationship between increasing age, women, widowed, length of stay for 3-5 years, lower perceived health status, lower religiosity, and lower social support, which influence increasing depression in older people. A limitation of this study was prolonged data collection phase due to the physical and cognitive limitations of the older participants. The implication of this study will be beneficial for reducing depression through intervention programs.

ACKNOWLEDGMENTS

The researcher would like to thank STIKES Syedza Saintika, the Sabai Nan Aluih nursing home, Kasih Sayang Ibu, and especially the respondents.

REFERENCES

1. WHO. Aging and Health [Internet]. World Health Organisation. 2022 [cited 2023 Oct 10]. Available from: <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health>. <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health>
2. Central Bureau of Statistics. Total population results of SP2020 by region and gender (person) [Internet]. Jakarta; 2020. Available from: <https://www.bps.go.id/id/statistics-table/2/MjEzMSMy/jumlah-penduduk-hasil-sp2020-menurut-wilayah-dan-jenis-kelamin.html>

3. Irsyadunnas, Nurmahni, Nailurrahmi. Matrilineal among elderly women in Minangkabau : Study at 2 Tresna Nursing Homes in West Sumatra. *Panangkaran J Penelit Agama dan Masy.* 2022;6(2):218–40. <https://doi.org/10.14421/panangkaran.v6i2.2928>
4. Yeni F, Keperawatan F, Andalas U. The Relationship between Positive Emotions and Life Satisfaction in the Elderly (LANZIA) in Padang City, West Sumatra Province. *Ners J keperawatan.* 2013;9(1):10–21. <https://doi.org/10.1020/njk.9.1.10-21.2013>
5. Hasanah A, Yatim Y, Erningsih. Implementation of the care of older people (elderly) functions by The Tresna Werdha Sabai Nan Aluih Sicincin Nursing Homes, Padang Pariaman Districts. *J Pendidik Sej.* 2022;7(1):1–10. <https://doi.org/10.24114/ph.v7i1.33536>
6. Sabri R, Yani A, Hamid S, Sahar J. The effect of culture-based interventions on satisfaction and quality of life of elderly at social welfare institution in West Sumatera. *Enfermerna Clinica [Internet].* 2019;29(Insc 2018):619–24. <https://doi.org/10.1016/j.enfcli.2019.06.010>
7. Damayanti LA, Wisanti E, Lesrtari RF. Comparison of Quality of Life and Depression in the Elderly in PSTW and Families. *Healthc Nurs J.* 2023;5(1):558–66. <https://doi.org/10.1155/2023/9991390>
8. Gultom HW, Damayanti N, Syauly A. Quality of life comparison between elderly who living in social tresna werdha institution in jambi province with the elderly living with family who became a member in posyandu. *J Psikol Jamb.* 2020;6(1):1–11. <https://doi.org/10.22437/jpj.v6i1juli.12626>
9. Rizka A, Indraspati A, Dwimartutie N, Muhadi M. Frailty among older adults living in nursing homes in indonesia: Prevalence and associated factors. *Ann Geriatr Med Res.* 2021;25(2):93–7. <https://doi.org/10.4235/agmr.21.0033>
10. Zhang XM, Dou QL, Zhang WW, Wang CH, Xie XH, Yang YZ, et al. Frailty as a Predictor of All-Cause Mortality Among Older Nursing Home Residents: A Systematic Review and Meta-analysis. *J Am Med Dir Assoc [Internet].* 2019;20(6):657–663.e4. <https://doi.org/10.1016/j.jamda.2018.11.018>
11. Barakat MM, Elattar NF, Zaki HN. Depression , Anxiety and Loneliness among Elderly Living in Geriatric Homes. *Am J Nurs Res.* 2019;7(4):400–11. <https://doi.org/10.12691/ajnr-7-4-1>
12. Asgari Z, Darvishpour A. The older adults ' experiences of living in the nursing home during the COVID- 19 pandemic : A qualitative study in Iran. *Nurs Open.* 2023;10(March 2022):3122–31. <https://doi.org/10.1002/nop2.1562>
13. Pramesona BA, Taneepanichskul S. The effect of religious intervention on depressive symptoms and quality of life among Indonesian elderly in nursing homes : A quasi-experimental study. *Clin Interv Aging.* 2018;13:473–83. <https://doi.org/10.2147/CIA.S162946>
14. Wassink-vossen S, Collard RM, Voshaar RCO, Naarding P. Effectiveness of late-life depression interventions on functional limitations : A systematic review. *Int J Ment Health Nurs.* 2022;31:823–42. <https://doi.org/10.1111/inm.12982>
15. Widagdo TMM, Widyaningsih BD., Layuklinggi S. Predictors of depression among the elderly persons with disabilities in Indonesia. *J Fam Community Med.* 2023;30(3):188–96. https://doi.org/10.4103/jfcm.jfcm_57_23
16. Silva C, Fonseca C, Ferreira R, Weidner A, Morgado B, Lopes MJ, et al. Depression in older adults during the COVID-19 pandemic : A systematic review. *J Am Geriatr Soc.* 2023;(March):1–18. <https://doi.org/10.1136/bmjopen-2022-065610>
17. Astutik E, Efendi F, Hidajah AC. Prevalence and determinants of depressive symptoms among adults in Indonesia : A cross - sectional population - based national survey. *Nurs Forum.* 2020;(October 2019):1–8. <https://doi.org/10.1111/nuf.12508>
18. Gunawan I, Huang X. Prevalence of depression and its related factors among older adults in Indonesian nursing homes. *Belitung Nurs J.* 2022;8(3):222–8. <https://doi.org/10.33546/bnj.2075>
19. de Oliveira L, Souza E, Rodrigues R, Fett C, Piva A. The effects of physical activity on anxiety, depression, and quality of life in elderly people living in the community. *Trends Psychiatry Psychother.* 2019;00(0):1–7. <https://doi.org/10.1590/2237-6089-2017-0129>
20. Shabahang R, Shim H, Aruguete MS, Zsila B. Adolescent sadfishing on social media : anxiety , depression , attention seeking , and lack of perceived social support as potential contributors. *BMC Psychol.* 2023;11:378. <https://doi.org/10.1186/s40359-023-01420-y>
21. Koenig HG, Nelson B, Shaw SF, Al Zaben F, Wang ZZ, Saxena S. Belief into Action Scale: A Brief but Comprehensive Measure of Religious Commitment. *Open J Psychiatry.* 2015;5:66–77. <https://doi.org/10.4236/ojpsych.2015.51010>
22. Polit DF, Beck CT. *Essential Of Nursing Research Appraising Evidence for Nursing Practice.* Vol. 53, Journal of Chemical Information and Modeling. 2013. 1689–1699 p. <https://doi.org/10.1017/CBO9781107415324.004>
23. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorder, Fifth Edition.* Elsevier; 2022. <https://doi.org/10.1176/appi.books.9780890425787>
24. Moreno X, Gajardo J, Monsalves MJ. Gender differences in positive screen for depression and diagnosis among older adults in Chile. *BMC Geriatr [Internet].* 2022;22(1):54. <https://doi.org/10.1186/s12877-022-02751-y>
25. Suwanmanee S, Minhat HS. Prevalence of Depression Among Community Dwelling Older Persons in Thailand and the Associated Factors : A Systematic Review. 2023;19(2):257–68. <https://doi.org/10.47836/mjmhs.19.5.34>
26. Kate J, Koster W De, Waal J Van Der. Why are Depressive Symptoms More Prevalent Among The Less Educated? The Relevance of Low Cultural Capital and Cultural Entitlement Why are Depressive Symptoms More Prevalent Among The Less. *Sociol Spectr [Internet].* 2017;37(2):63–76. <https://doi.org/10.1111/inm.12982>

- 0.1080/02732173.2016.1274248
27. Srivastava S, Debnath P, Shri N, Muhammad T. The association of widowhood and living alone with depression among older adults in India. *Sci Rep.* 2021;11(1):1–13. <https://doi.org/10.1038/s41598-021-01238-x>
 28. Trongsakul S. Prevalence and Associated Factors of Depression Among Karen Hilltribe Elderly Population in Thailand. 2021;17(July):166–9.
 29. Muhammad T, Maurya P. Social support moderates the association of functional difficulty with major depression among community-dwelling older adults: evidence from LASI, 2017–18. *BMC Psychiatry.* 2022;22:317. <https://doi.org/10.1186/s12888-022-03959-3>
 30. Štarić S, Ljubičić M, Gusar I, Čanović S, Konjevoda S. Self-esteem, anxiety, and depression in older people in nursing homes. *Healthc.* 2021;9(8). <https://doi.org/10.3390/healthcare9081035>
 31. Guimarães L de A, Brito TA, Pithon KR, Jesus CS de, Souto CS, Souza SJN, et al. Depressive symptoms and associated factors in elderly long-term care residents. *Cien Saude Colet.* 2019;24(9):3275–82. <https://doi.org/10.1590/1413-81232018249.30942017>
 32. Devkota R, Mishra K, Shrestha S. Loneliness and Depression among Older People Living in a Community of Nepal. *J Nepal Heal Res Counc.* 2019;17(2):185–92. <https://doi.org/10.33314/jnhrc.v0i0.1561>
 33. Chen Y, Feeley T. Social support, social strain, loneliness, and well-being among older adults: an analysis of the health and retirement study. *J Soc Pers Relatsh.* 2014;31(2):141–61. <https://doi.org/10.1177/0265407513488728>
 34. Blackburn J, Mark J W Van Der O, Selles RW, Chen NC, Feitz R, Vranceanu A, et al. Which Psychological Variables Are Associated With Pain and Function Before Surgery for de Quervain ' s Tenosynovitis ? A Cross-sectional Study. 2019;477(12):2750–8. <https://doi.org/10.1097/CORR.0000000000000992>
 35. Han N, Won M. Association between Social Support and Physical Activity in Patients with Coronary Artery Disease : Multiple Mediating Roles of Self-Efficacy and Autonomous Motivation. *Healthcare.* 2022;10(3):425. <https://doi.org/10.3390/healthcare10030425>
 36. Rahmadayani A, Boy E, Achsanudin M. Religious Aspects of Depression in the Elderly. *MAGNA Med Berkah Ilmu Kedokt dan Kesehatan.* 2022;9(1):35–42. <https://doi.org/10.26714/magnamed.9.1.2022.35-42>