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The Correlation between Stress and Mental-Emotional Disorders in Older Adults at the Geriatric Polyclinic of Udayana Level II Hospital, Denpasar

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A B S T R A C T

Mental-emotional disorder in older adults may arise as a result of stress that is not adequately managed. This study analyzes the correlation between stress and mental-emotional disorders in older people at the Geriatric Polyclinic of Udayana Level II Hospital, Denpasar. It used a quantitative method with a cross-sectional approach. The population consisted of 337 older adult patients receiving treatment at the Geriatric Polyclinic of Udayana Level II Hospital, with a sample size of 183 individuals. The sampling technique was purposive sampling. The Perceived Stress Scale (PSS-10) was an instrument to measure stress, and the Self Rating Questionnaire (SRQ-20) for mental-emotional disorders. The univariate analysis described the characteristics of the respondents, and the bivariate analysis evaluated the correlation between both variables using Spearman's rank correlation. Almost half of the respondents were 65-74 years old, 78 respondents (42.6%). Half of them were female, 99 respondents (54%). In addition, 62 or 33.88% of respondents graduated from a Senior High School. Most respondents experienced a moderate stress level of 134 respondents (88.5%) and mental-emotional disorders of 158 respondents (86.3%). Most respondents with moderate stress levels experienced mental-emotional disorder (66.12%). The Spearman's Rank Correlation obtained p=0.036 (p<0.05), indicating a significant correlation between stress levels and mental-emotional disorder in older people. Stress levels correlate with mental and emotional disorders in older people at the Geriatric Polyclinic of Udayana Level II Hospital, Denpasar. Efforts to recognize stress early, especially in older adults, are essential.

INTRODUCTION

Government Regulation of the Republic of Indonesia Number 43 of 2004 defines older people as individuals who have reached 60 years or older (Kemensos RI, 2012; Kemenkes RI, 2017). The changes experienced by older people include physical, cognitive, and psychosocial. Physical or biological changes can be observed at the cellular level in all body organs. The body system functionally might decrease activity during this phase (Eliyana *et al.*, 2023). So, there is a reduction of physical strength, stamina, and appearance (Yoost and Crawford, 2019). Depression in older people may occur because of those various changes. However, it is difficult to monitor due to symptoms different from those of someone younger (Listyorini *et al.*, 2024).

Indonesia has been facing an aging population since 2021 because 1 in 10 citizens in Indonesia is older. Their population was large in Yogyakarta Province (16.69%), followed by East Java and Central Java Province. The National Social Economic Survey 2023 revealed that every 17 older people lived dependently to 100 productive age population. Statistics Indonesia stated that the population reached

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11.75% of the total population, with males (47.72%) less than females (52.82%) (Badan Pusat Statistik, 2023). The preliminary study at the Geriatric Polyclinic of Udayana Level II Hospital in March 2024 obtained data on the number of older adults in the Geriatric Polyclinic, namely 337 people.

The changes with age may trigger mental and emotional disorders that possibly change the behavior of older people, one of them is in the form of stress. In addition, the mental disorder that started to appear is feelings of worthlessness, loneliness, or loss (Aji, 2023). The unmanaged stress among older people can potentially lead to depression due to various interactions of biological, psychological, and social factors. Depression may appear and is not easy to detect because most of the complaints in older adults only focus on physical discomfort (Wisnusakti and Sriati, 2021). Manungkalit and Sari (2020) found in their research that mental disorder in the form of depression was significantly affected by stress. Compared to anxiety, stress has a more substantial impact on those incidents in older adults, especially in nursing homes. Yuziani and Maulina (2018) also performed a similar study in Lhokseumawe, which reinforced that stress levels and the level of depression had a strong correlation. The study found that on average, the elderly experience mild stress with a moderate level of depression.

Generally, the research on stress in older people has not extensively discussed its relation to mental disorders. Mental-emotional disorders encompass depression, anxiety, somatic, cognitive, and energy decline. This study analyzes the correlation between stress and mental-emotional disorders in older people at the Geriatric Polyclinic of Udayana Level II Hospital, Denpasar. The result of this study can be a foundation for developing knowledge regarding stress and mental-emotional disorders in older people.

METHOD

This study used a quantitative method with a cross-sectional approach to identify and analyze stress and mental-emotional disorders in older people. The population consisted of 337 older adult patients receiving treatment at the Geriatric Polyclinic of Udayana Level II Hospital, with a sample size of 183 individuals calculated using the Slovin formula. The sampling technique was purposive sampling. The authors applied inclusion and exclusion criteria to determine the research sample. Inclusion criteria included: 1) Older people (>60 years); 2) Cooperative and able to communicate well; 3) Patients with Social Security Agency on Health (*Badan Penyelenggara Jaminan Sosial Kesehatan* or BPJS) funding or self-funded; 4) Willing to become research respondents as evidenced by signing the informed consent. Exclusion criteria were: 1) Older adult patients with stroke or severe illness with complete self-care dependency levels; 2) Patients who consumed antianxiety and antidepressant medicines; and 3) Patients who refused to be respondents. After being declared ethically eligible with Certificate Number: 001/EC-KEPK-SK/II/2024 by the Ethical Committee of Stikes Kesdam IX/ Udayana, the research data were collected by conducting

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direct interviews with respondents who met the inclusion criteria and agreed to become respondents. The Perceived Stress Scale (PSS-10) was an instrument to measure stress, and the Self Rating Questionnaire (SRQ-20) for mental-emotional disorder. Then, the data were subjected to univariate analysis to describe the characteristics of the respondents and bivariate analysis to evaluate the correlation between both variables using Spearman's rank correlation.

RESULT

Table 1 demonstrates that almost half of the respondents are 65-74 years old, 78 respondents (42.6%). Half of them are female, 99 respondents (54%). In addition, 62 or 33.88% of respondents graduated from a Senior High School.

Table 1. Characteristics of Respondents by Age, Sex, and Education

Characteristics of Respondents	Frequency (f)	Percentage (%)
Age (years old)		
60-64	61	33.3
65-74	78	42.6
75-92	44	42.1
Sex		
Male	84	46
Female	99	64
Education		
None	2	1.09
Elementary School	36	19.67
Junior High School	56	30.60
Senior High School	62	33.88
University	27	14.75

Table 2 reveals that most respondents experience a moderate stress level of 134 respondents (88.5%) and mental-emotional disorders of 158 respondents (86.3%).

Table 2. Stress Levels and Mental-Emotional Disorders in Older People

Variables	Frequency (f)	Percentage (%)
Stress levels		
Mild	28	15.3
Moderate	134	88.5
Severe	21	11.5
Mental-Emotional Disorders		
No	25	13.7
Yes	158	86.3

Most respondents with moderate stress levels experienced mental-emotional disorders (66.12%). The Spearman's Rank Correlation obtained p=0.036 (p<0.05), indicating a significant correlation between stress levels and mental-emotional disorders in older people (Table 3).

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Table 3. The Correlation between Stress Levels and Mental-Emotional Disorders in Older People and Spearman's Rank Correlation Result

		Mental-Emotional Disorders				*p*
		No Mental-Emotional Disorders		Mental-Emotional Disorders		
		Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)	
Stress levels	Mild	9	4.92	19	10.38	
	Moderate	13	7.10	121	66.12	0.036
	Severe	3	1.64	18	9.83	
Total		25	13.64	158	86.33	

DISCUSSION

Most respondents in this study experienced a moderate stress level (Table 2). Stress is an accumulation of various symptoms of emotional disorder. When someone experiences stress, there is an imbalance between the needs and abilities to fulfil. They are perceived only as a disease symptom nowadays because of the development and change that require adaptation. Many problems appear due to stress-related difficulties, obstacles, and failures (Buanasari, 2019). Depression, anxiety, psychosis, and other related issues may appear as an effect of continuous mental-emotional disorders (Felson, 2023). Stress is a causative factor of emotional disorder that can be faced with a fight or flight response. The emotional mental disorders due to stress are usually a development and accumulation of previous stressful events (Wang *et al.*, 2021). Numerous physical and mental disorders can result from stress. The results are concentration issues, trouble making decisions, guilt feelings, persistent concern, and forgetfulness, which are symptoms of mental illnesses (NHS, 2022). Physical aging is a natural part of growing older, but the physical stress that older people endure might increase their risk of mental health issues (Gates, 2024).

Furthermore, most older adults in this study experienced mental-emotional disorders (Table 2). Older adults with mental-emotional disorders may exhibit symptoms like erratic mood swings, impatience, a tendency to take offense easily, disappointment, and sadness. Mental disorders such as anxiety in older adults are often accompanied by depression or bipolar disorder, leading to hoarding syndrome and post-traumatic stress (Gates, 2024). They require someone to visit them, talk to them, and greet them warmly. They are also delighted when their counsel is taken seriously (Maulina, 2017).

Moreover, this paper showed a significant correlation between stress levels and mental-emotional disorders in older people (Table 3). It is in line with a study that found that mental disorder in older people in the form of depression was significantly influenced by stress (Manungkalit and Sari, 2020). The research by Slimmen *et al.* (2022) revealed that perceived stress significantly interacted with mental wellness to achieve a good coping mechanism and emotional stability. Furthermore, Petrova and Khvostikova (2021) found that reactive depression in older adults was caused mainly by intensive traumatic events that induce stress, such as loss, loneliness, and feeling useless. Compared to anxiety, stress has a more substantial impact on the occurrence of mental disorders such as depression in older

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adults, especially those living in institutions like nursing homes. Javadzade *et al.* (2024), through their research, provided an intervention to reduce stress using a mindfulness-based stress reduction (MBSR) program for elderly individuals with depression. Their research proved that the intervention was beneficial in reducing depression and improving emotional regulation. Moreover, the intervention could reduce sleep disturbances in older people. Thus, stress management is crucial to prevent mental and emotional disorders, one of which is depression.

CONCLUSION

Stress levels correlate with mental-emotional disorders in older people at the Geriatric Polyclinic of Udayana Level II Hospital, Denpasar. Efforts to recognize stress early, especially in older adults, are essential. Furthermore, stress management is critical to minimizing the negative impact of the emergence of mental and emotional disorders in older adults.

REFERENCES

Aji, R. (2023). *Persiapan mental pada lansia.* Sidoarjo: Zifatama Jawara.

Badan Pusat Statistik. (2023). *Statistik penduduk lanjut usia 2023.* Jakarta: Badan Pusat Statistik.

Buanasari, A. (2019). Gambaran tingkat stres pada lansia. *Jurnal*, 7.

Eliyana, P., Pujiyanti, R., Dewi, T. P., Ubudiyah, M., Rismayanti, I. D. A., Sundayana, I. M., Dahoklory, D. F., Wulandari, S. K., Supriatna, L. D., Iwa, K. R., Munawaroh, S., Budianto, A., Firdaus, R., Rizal, A. A. F., Susanti, I., & Suhariyati. (2023). *Keperawatan gerontik.* Bandung: Media Sains Indonesia.

Felson, S. (2023). What to know about stress and how it affects your mental health. *WebMD*. https://www.webmd.com/balance/stress-management/stress-and-how-it-affects-your-mental-health

Gates, M. (2024). Early signs and symptoms of elderly mental health issues. *A Place for Mom*. https://www.aplaceformom.com/caregiver-resources/articles/mental-illness

Javadzade, N., Esmaeili, S. V., Omranifard, V., & Zargar, F. (2024). Effect of mindfulness-based stress reduction (MBSR) program on depression, emotion regulation, and sleep problems: A randomized controlled trial study on depressed elderly. *BMC Public Health, 24*(1), 1–8. https://doi.org/10.1186/s12889-024-17759-9

Kementerian Kesehatan Republik Indonesia. (2017). *Analisis lansia di Indonesia.* Pusat Data dan Informasi, 1–2.

Kementerian Sosial Republik Indonesia. (2012). *Peraturan Menteri Sosial Republik Indonesia Nomor 19 Tahun 2012.* Jakarta.

Listyorini, M. W., Anisah, N., Muftadi, & Iksan, R. R. D. (2024). *Konsep depresi lansia dan asuhan keperawatan.* Klaten: Lakeisha.

Manungkalit, M., & Sari, N. P. W. P. (2020). The influence of anxiety and stress toward depression in institutionalized elderly. *Journal of Educational, Health and Community Psychology, 9*(1), 65–76. https://doi.org/10.12928/jehcp.v9i1.13917

Maulina, N. (2017). Gambaran tingkat stres pada lansia di panti jompo Kota Lhokseumawe tahun 2017. *Jurnal, 4*(1).

National Health Service. (2022). *Stress.* https://www.nhs.uk/mental-health/feelings-symptoms-behaviours/feelings-and-symptoms/stress

Petrova, N. N., & Khvostikova, D. A. (2021). Prevalence, structure, and risk factors for mental disorders in older people. *Advances in Gerontology, 11*(4), 409–415. https://doi.org/10.1134/S2079057021040093

Slimmen, S., Timmermans, O., Mikolajczak-Degrauwe, K., & Oenema, A. (2022). How stress-related factors affect mental wellbeing of university students: A cross-sectional study to explore the associations between stressors, perceived stress, and mental wellbeing. *PLOS ONE, 17*(11), e0275925. https://doi.org/10.1371/journal.pone.0275925

Wang, F., Pan, F., Tang, Y., & Huang, J. H. (2021). Editorial: Stress induced neural changes in emotional disorders. *Frontiers in Psychiatry, 12,* 710691. https://doi.org/10.3389/fpsyt.2021.710691

Wisnusakti, K., & Sriati, A. (2021). *Kesejahteraan spiritual pada lansia.* Pasaman Barat: Azka Pustaka.

Yoost, B. L., & Crawford, L. R. (2019). *Fundamentals of nursing.* United States of America: Elsevier.

Yuziani, & Maulina, M. (2018). The correlation between stress level and degree of depression in the elderly at a nursing home in Lhokseumawe in the year 2017. *Emerald Reach Proceedings Series, 1,* 497–502. https://doi.org/10.1108/978-1-78756-793-1-00044