The Relationship Of Incident Insomnia With The Level Of Depression In The Elderly At Panti Sosial Tresna Wredha (PSTW) Jember

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Abstract: Insomnia is a sleep disorder in the elderly that can cause depression. The prevalence of insomnia in the elderly is quite large, with 50% of the total elderly population experiencing insomnia. The aim of this study was to determine the relationship between the incidence of insomnia and the level of depression in the elderly at the Tresna Werdha Social Services UPT (PSTW) Jember. Correlational research design with a cross sectional approach. The population in this study were 62 elderly people at UPT PSTW Jember with independent daily activities. The sampling technique in research uses cluster sampling. The number of samples based on the results of the fraction per cluster formula calculation was 54 people. This research was conducted in October-November 2023. The data collection technique used a questionnaire. The relationship between the incidence of insomnia and the level of depression in the elderly at UPT PSTW Jember using Spearmen Rho statistical analysis. The research results showed that 43 elderly were women, 50 elderly aged 70-80 years, 51 elderly whose marital status was divorced and discontinued and 45 elderly did not go to school. The statistical test results show that ϱ value = 0.000 with α = 0.05. This explains that there is a relationship between the incidence of insomnia and the level of depression in the elderly at UPT Social Services Tresna Werdha (PSTW) Jember.

Keyword: Insomnia, Depression, Elderly

Introduction

Insomnia also known as sleep disorders, is a condition often experienced by the elderly. People in general also often complain of insomnia (Riemann et al., 2022). The majority of insomnia sufferers are elderly as a result of a decline in physical condition due to increasing age, chronic diseases and degenerative diseases. Insomnia affects approximately half of the elderly population (Cai et al., 2021). Insomnia that occurs in the elderly is around 50% of the total population in Indonesia. Every year it is estimated that around 20-50% of elderly people report insomnia and around 17% experience serious insomnia (Dhari & Silvitasari, 2022).

Depression is a mental disorder characterized by low mood, loss of interest or pleasure, feelings of guilt or low self-esteem, eating or sleeping disorders, lack of energy, and difficulty concentrating (Cui et al., 2022). This problem can occur for a long or short

time and interfere with daily activities. In serious cases depression can lead to suicide. Around 80% of elderly people with depression who receive treatment are able to recover completely and enjoy life, however 90% of people with depression ignore or refuse treatment (De Sousa et al., 2021). The incidence of depression in the elderly is around 8 - 15%. Based on survey results, it was found that the average prevalence of depression in the elderly based on gender is a ratio between women and men of 14.1: 8.6, where women are twice as many as men (Hartutik et al., 2021).

East Java Province has elderly data recorded at 13.10% of the total population of East Java (Yun Yun Vinsur et al., 2023). In Jember Regency, it is recorded as 14.30% of the total population in Jember Regency (Badan Pusat Statistika, 2021). IN Jember Regency there is the Tresna Werdha Social Service (PSTW) for the elderly. The PSTW is in Kasiyan Village, Puger District. The number of elderly people in PSTW is 140 people, with 54 male elderly people, 86 female elderly people. The elderly living in PSTW are divided into 3 parts, namely independent guest houses with 62 people, semi-care houses with 51 people and total care houses or Special Care Rooms with 20 people (Puji Rahayu et al., 2022).

The prevalence of insomnia in the elderly is quite large, which is recorded at 50% of the total population, with serious levels of insomnia being a problem faced by the elderly today. Depression and stress as a result of insomnia experienced by the elderly. Female gender in the elderly is also a factor related to the incidence of depression. The existence of social services for the elderly in Jember Regency as an elderly service center that has basic health services should be able to reduce the incidence of insomnia in the elderly. The phenomenon of the high incidence of insomnia in the elderly and the existence of special services for the elderly in Jember Regency made researchers interested in examining "The relationship between the incidence of insomnia and the level of depression in the elderly at UPT PSTW Jember".

Methodology

This research was using correlational research design with a cross sectional approach. The population in this study were 62 elderly people at UPT PSTW Jember with independent daily activities. The sampling technique in research uses cluster sampling. The number of samples based on the results of the fraction per cluster formula calculation was 54 people. This research was conducted in October-November 2023. The data collection technique used a questionnaire. The relationship between the incidence of insomnia and the level of depression in the elderly at UPT PSTW Jember using Spearmen Rho statistical analysis. This research has passed the ethical feasibility test at the Health Research Ethics Commission Faculty of Health Sciences, Muhammadiyah University of Jember with number: 0225/KEPK/FIKES/VII/2023

Result and Discussion

Based on the results of research conducted at PSTW Jember Regency, general data results were obtained for all respondents as follows:

Table 1. Demographic Data

		Frequecy	Percentage (%)
Gender	Male	11	20,4
	Female	43	79,6
Age	60-70 th	4	7,4
	71-80 th	50	91,6
Merriage	Divorced alive	3	5,6
	Divorced dead	51	94,4
Education	Not school	45	83,3
	Elementary school	9	16,7

Based on table 1, it was found that there were 43 respondents who were female (79.6%), 50 respondents aged >70 years (91.6%), the marital status of 51 respondents (94.4%) were divorced, the educational level of the respondents was 45 (83.3%) not in school. The incidence of insomnia and depression in the elderly at UPT PSTW Jember Regency can be seen in the table below:

Table 2. Insomnia in Elderly at UPT PSTW Jember Regency

Incident of Insomnia	Frequency	Percentage (%)
Light	39	72,2
Mild	11	20,4
Heavy	4	7,4
Total	54	100

Based on table 2, it was found that 39 elderly people in UPT PSTW Jember Regency experienced mild insomnia (72.2%).

Table 3. Depression in Elderly at UPT PSTW Jember Regency

Tingkat Depresi	Frequency	Percentage (%)
Not depression/normal	2	3,7
Light	19	35,2
Mild	29	53,7
Heavy	4	7,4
Total	54	100

Based on table 3, it was found that 29 elderly people in UPT PSTW Jember Regency experienced moderate levels of depression (53.7%).

Table 4. Spaerman Rho' Test

			Insomnia	Depresi
Spearman's rho	Insomnia	Correlation Coefficient	1.000	.528**
		Sig. (2-tailed)	.	.000
		N	54	54
	Depresi	Correlation Coefficient	.528**	1.000
		Sig. (2-tailed)	.000	.
		N	54	54

Based on table 4, it was found that the correlation value between the incidence of insomnia and the level of depression is positive (0.528), which means that the incidence of insomnia and the level of depression in the elderly have a unidirectional relationship. This

unidirectional relationship means that the higher the degree of insomnia, the higher the degree of depression experienced by the elderly.

The significance or sign (2-tailed) value is 0.000. The significance value (0.000) means it is smaller than the tolerable error value (α = 0.05), which means there is a relationship between the incidence of insomnia and the level of depression in the elderly at UPT PSTW Jember Regency.

Discussion

The results of the study showed that the insomnia experienced by elderly people at UPT PSTW Jember Regency showed mild to moderate degrees. Isussilaning Setiawati et al (2021) in her research results also said that 75% of the respondents in the research experienced moderate insomnia. Kim et al (2022) also said that 56.8% of the total 359 elderly respondents in Banda Aceh City experienced mild insomnia. Mookerjee et al (2023) insomnia in the elderly is caused by several factors, namely health status, use of drugs, environmental conditions, psychological stress, diet/nutrition, lifestyle. Insomnia in the elderly is associated with decreased memory, impaired concentration and changes in functional performance. The most prominent changes are an increase in the frequency of awakenings at night or an increase in sleep fragmentation due to frequent awakenings (Lutfia et al., 2022). Disturbances also occur in the depth of sleep so that elderly people are very sensitive to environmental stimuli, whereas a normal young adult will wake up around 2-4 times.

The high prevalence of depression in the elderly is closely related to various factors that allow depression to occur, such as the impact of the natural aging process, which has consequences in the form of a decline in the entire anatomy and function of the body as well as negative consequences due to aging, so that the elderly have a high risk of experiencing depression (Isik et al., 2021). Aging conditions combined with acquired disease factors, disturbed psychosocial conditions due to loss, will lead to negative functional consequences for the elderly. The form of negative functional consequences is in the form of self-esteem disorders which can result in depression (Guo et al., 2022)

The results of this research show that there is a relationship between the incidence of insomnia and the degree of depression in the elderly in UPT PSTW Jember Regency, this is in line with the research results of Gunardi et al (2021) which states that there is a relationship between insomnia and depression in the elderly in Sukamantri Village, Karangtengah District, Cianjur Regency. Hardivianty (2023) also said that there is a relationship between depression and the incidence of insomnia in the elderly in the Primary Health Care Tanjungpinang. Poor sleep quality in the elderly can have a negative impact on their mental health. Lack of sleep or inadequate sleep can increase the risk of developing depression or worsen existing depression symptoms (Maulani et al., 2024). To achieve good quality sleep in the elderly, it is important to adopt healthy sleep practices and manage sleep disorders well. Some steps you can take to improve sleep quality include maintaining a consistent sleep routine, creating a comfortable and restful sleep environment(Richard

Mataputun et al., 2024), avoiding consuming caffeine and other stimulants before bed, and adopting relaxation strategies before bed such as meditation or deep breathing. If sleep disorders are related to depression, then it is important to treat depression effectively (Hertenstein et al., 2022).

Conclusion

Based on the results of research conducted by researchers regarding the relationship between the incidence of insomnia and the level of depression in the elderly in the UPT PSTW Jember Regency as follows: 1) insomnia occurs to a mild degree in the elderly who are respondents at the UPT PSTW Jember Regency, 2) depression occurs to a moderate degree which mostly occurs in the elderly who are respondents at the UPT PSTW Jember Regency, 3) there is a relationship between the incidence of insomnia and the level of depression in the elderly at the UPT PSTW Jember Regency.

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