
Original Articles**Anxiety Related To Elderly Sleep Quality**Chilyatiz Zahroh¹, Azizatul Masnia², Ima Nadatien³, Priyo Mukti Pribadi Winoto⁴^{1,2,3,4}Universitas Nahdlatul Ulama Surabaya**Article history:**

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Email: chilyatiz@unusa.ac.id**Keywords:** *Anxiety level;**Sleepquality; Elderly***Abstract**

Background: Elderly face various health problems that need immediate and integrated handling. With increasing age, there will be a decrease in body function in the elderly both physically, physiologically and psychologically. The mental health problem that often occurs in the elderly is feeling worried.

Objektif: This study aims to analyze whether there is a relationship between anxiety levels and sleep quality among the elderly in Surabaya.

Methods: The design of this study was analytic correlation with the approach used cross-sectional. The population Is all elderly in the qoryah thoyyibah kenjeran Surabaya posyandu, which amounted to 44 elderly. The sampel size of this study was 40 respondents, probability sampling technique was simple random sampling, this study contained an independent variable of anxiety level while the dependent variable was sleep quality. data collection instrument using a questionnaire. The data were analyzed using the spearman rank correlation test with a value of $\alpha = 0,05$.

Results: The results of research from 40 respondents showed that half (50%) experienced severe anxiety and almost half (47,5) had moderate sleep quality. Further analysis using the spearman rank test with a significance level of $\alpha = 0,05$, the value of $p=0.02$ is obtained, which means $p < \alpha$ the H_0 is rejected, which means that there is a relationship between the level of anxiety and the quality of sleep in the elderly at qoryah thoyyibah kenjeran Surabaya

Conclusions: The conclusion of this study is that there is relationship between anxiety and sleep quality in the elderly at qoryah thoyyibah kenjeran Surabaya posyandu. It is hoped that the result of this study can develop the ability of further researchers to conduct more specific research related to the relationship between anxiety levels and sleep quality in the elderly.

INTRODUCTION

Aging is a process of change in which sensitivity increases or the limits of adaptability become reduced which is often known as geriatric giant. Elderly face many health problems that need immediate and integrated treatment. With age, there will be a decrease in bodily function in the elderly both physical, physiological and psychological. Mental health problems that often occur in the elderly are feelings of worry, anxiety and fear, depression, insomnia, paranoid and dimensional. Depression and anxiety are two of the most common mental health problems in the elderly (Kang, et al., 2017). If the elderly experience

such problems, the decrease is due to the reduced number and ability of the body's cells. In general, signs of aging begin from the age of 45 and will cause problems around the age of 60. feelings of worry, anxiety and irrational fear of the event that will occur, difficulty sleeping, tense and rapid anger, often complaining of mild symptoms or fear and worry about severe illness (Hidayat & Uliyah, 2014).

RISKESDAS in 2018, the number of elderly in Indonesia about 18.1 million people (7.6 percent of the total population). Elderly are at high risk of sleep disturbances due to a variety of factors. About 50% of people aged 65 or over who live at home and 66% of people living in long-term care facilities are affected by sleep disorders. Elderly experience a decrease in the effectiveness of sleep at night about 70% to 80% compared to a young age. About 60% of the elderly will experience sleep disturbances after the age of 75. The elderly population in Indonesia is 18.781 million people and by 2025, the number of seniors will reach 36 million (Ministry of Health, 2015). Data from east Java province obtained by the elderly in 2014 reached the figure of 10.96 percent and in 2015 is estimated to be 13.5 percent and until 2020 will increase to 13.5 percent (Badan Pusat Statistik,2018). In Surabaya area, the number of elderly people in 2014 reached 350,000 people (13 percent) out of the total population in Surabaya (Badan Pusat Statistik Jawa Timur, 2020).

Factors that affect sleep quality are disease, environment, emotional stress, anxiety, and alcohol, diet or nutrition and motivation (Mubarak, 2015). Age is an important factor that affects sleep quality (Nugroho, 2012). During the age of sleep patterns undergo some typical changes. The complaints of sleep are less sleep time so waking up at night, waking up early feeling sleepy throughout the day and often sleeping for a while. Sleep problems include insomnia, hypersomnia, narcolepsy, sleep apnea, snoring and deliriousness (Wartolah, 2004).

METHODS

Study Design

The research design used was a cross-sectional study.

Settings

The research was conducted in 2019 at Posyandu Qoryah Thoyyibah Kenjeran Surabaya

Research Subject

The population in this study were all elderly in Posyandu Qoryah Thoyyibah Kenjeran Surabaya a total of 44 person. Sampling in this study based on the following criteria: inclusion criteria (Elderly who do not have hearing loss and visual impairment, Elderly who can read and write, willing to be respondents) and

exclusion criteria (Elderly with dementia, mental disorders, and sick at the time of research). Sample of 40 respondents with simple random sampling.

Instruments

The instruments used in the study were to use the Zung-Self-Twig Anxiety Scale (ZSAS) questionnaire which consisted of twenty questions to find anxiety and a Pittsburgh Sleep Quality Index (PSQI) questionnaire consisting of nine questions to find out the quality of elderly sleep.

Data Collection

Data collection was carried out by distributing questionnaires to respondents directly. In the data collection process, researchers still pay attention to health protocols. Researchers continue to use masks, maintain distance, and use latex gloves in data collection.

Data analysis

The researcher explained the research objectives to the research subjects, the gave an anxiety and a sleep quality questionnaire. The process of data collection and research lasted for 1 month.

Ethical Consideration

This research has been conducted research ethics test at Nahdlatul Ulama University Surabaya

RESULTS

Characteristics of Respondents

Table 1. Description of Elderly in Posyandu Qoryah Thoyyibah Kenjeran Surabaya.

Characteristics	Frequency	Percentage (%)
Gender:		
Male	10	25
Women	30	75
Total	40	100
Age:		
45-59	3	7.5
60-74	25	62.5
75-90	12	30
Total	40	100
Education :		
No School	9	22.5
Elementary	31	77.5
Total	40	100
Working:		
Working	17	42.5
Not Working	23	57.5

Total	40	100
Anxiety :		
Mild	3	7.5
Moderate	17	42.5
Severe	20	50
Total	40	100
Sleep quality :		
High	6	15
Moderate	19	47.5
Poor	15	37.5
Total	40	100

Sources: Primary Data of Questionnaire, 2021

Based on table 1 shows that 75% of respondents are women, 62.5% respondents of 60-74 years. Out of 40 respondents 77.5% completed elementary school and 57.5% did not wor. 42.5% of respondents anxiety level was on moderate anxiety and 47.5% had moderate sleep quality

Correlation Between Anxiety and Sleep Quality

Table 2. Correlation between anxiety and sleep quality in Posyandu Qoryah Thoyyibah Kenjeran Surabaya.

Anxiety	Sleep Quality						Total	
	High		Moderate		Poor		N	%
	N	%	N	%	N	%	N	%
Mild	3	100	0	0	0	0	3	100
Moderate	3	17.6	14	82.4	0	0	17	100
Severe	0	0	5	25	15	75	20	100
Total	6	15	19	47.5	15	37.5	40	100

$\rho = 0.021$

Based on table 2 elderly who have mild anxiety 17.6% have a high sleep quality, 82.4% elderly who have moderate anxiety have moderate sleep quality, and elderly who have severe anxiety 75% have a poor sleep quality so obtained p value = 0.021 with $\alpha = 0.05$, which means means that there is a relationship between the level of anxiety and the quality of sleep in the elderly at qoryah thoyyibah kenjeran Surabaya

DISCUSSION

Factors affecting anxiety in the elderly (anxiety) affective disorders characterized by feelings of strength or deep and sustained concern, not impaired in assessing reality (Reality Testing Ability/RTA is still good), personality remains intact (not experiencing a personality rift), behavior can be impaired but still within normal limits (Hawari, 2013). When one is too worried about the frightening events that occur

in the future that cannot be controlled and if it happens it will be very frightening that can cause anxiety due to the absence of certainty in the future.

Factor that affect the quality of sleep of seniors sleep time in each person vary. The National Sleep Foundation says adults about 30% of the time 24 hours or about 7-9 hours should be used for sleep. In late/elderly adults it is necessary to sleep 6 hours a day. If less, then they will feel some impact that is not for health. Some of the impacts that can be felt will have an impact on the influence of concentration memory and thinking becomes decreased. Sleep deprivation can also trigger obesity or obesity because a person who sleeps tends to look for sugary and fatty foods that are influenced by the hormone Ghrelin which becomes increased while the hormone leptin decreases. It can also increase blood loss in the body or which in health terms is called diabetes mellitus (Mubarak, 2015). Aged 60-74 (Elderly) based on table 5.1 shows that the majority (61%) in the early elderly group where age can affect the performance of the elderly in carrying out their activities. According to Nilawati (2015) age strongly affects a person in carrying out an activity or activity. It states that seniors with middle age contribute more encouragement, motivation, and innovation in carrying out activities in posyandu. The age of a person that is increasing will change the physical and psychological aspects (mental). mature and mature. Physical and psychological problems in the elderly have decreased all organ function, while psychological problems often encountered in the elderly include feelings of loneliness, fear of loss, fear of death, changes in desire, anxiety and depression

Sleep quality disorder in the elderly is a disorder characterized by a feeling of worry so that all behaviors are colored by the disturbance of the state of worry or feelings triggered by many factors such as having unwanted illness or not being able to accept the current disease. This disorder is most common in the elderly aged 60-74 years and the condition will worsen. Maintenance of mental activity, especially anxiety levels, is as important as maintaining physical activity in the elderly. So it is necessary to do an early examination in order to prevent more severe problems so that the elderly can achieve successful aging, because in old age the age. So it is important to provide assistance and provide nursing services to the elderly, so most mental problems especially in the worrying aspect can be prevented. teaching or understanding to the elderly about the importance of maintaining mental health in connection with the decrease in anxiety, so that the elderly do not experience worrying function disorders such as feelings of sadness and feelings of fear during experiencing anxiety levels thus the elderly will achieve a good degree of mental health in their old age and have high anxiety. Sleep quality in the elderly such as disease, during the aging process occurs mental physical changes followed by changes in sleep patterns that are typical of distinguishing from younger people, anxiety that a person feels can also affect a person's sleep quality (Mubarak, 2015). Mental tension that is settling as a general reaction to the inability to overcome a

problem or the absence of a sense of security, such erratic feelings are generally unpleasant that will later cause or be accompanied by physiological and psychological changes.

LIMITATION

This study has limitations regarding mental health

CONCLUSION

Anxious elderly have a poor quality of life. So that anxious management is needed for the elderly. Anxiety in the elderly can be reduced by mentoring and therapeutic communication to the elderly.

AUTHOR CONTRIBUTION

Chilyatiz Zahroh: Collected literature, searched for questionnaires, compiled manuscripts, and conducted data analysis

Azizatul Masnia: Collected data, tabulated the data dan coding, and compiled manuscripts

Ima Nadatien: Collected the data and compiled manuscripts

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CONFLICT OF INTEREST

There is no conflict of interest in this research.

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REFERENCE

Badan Pusat Statistik. (2018). Statistik Indonesia 2018. Jakarta: Badan Pusat Statistik

Badan Pusat Statistik Jawa Timur. (2020). Profil Penduduk Lanjut Usia Provinsi Jawa Timur 2019. Surabaya: Badan Pusat Statistik Jawa Timur

Hawari, D. (2013). *Stres, cemas dan depresi*. Jakarta : FKUI.

Hidayat, A. & Uliyah, M. (2014). *Pengantar Kebutuhan Dasar Manusia*. 2 ed. Jakarta: Salemba Medika.

Kang, H.-J.et al. (2017). Impact of Anxiety and Depression on Physical Health Condition and Disability in an Elderly Korean Population. *Psychiatry Investigation*, 14(3), pp. 240-248.

Mubarak, W. I. (2015). *Buku Ajar Keperawatan Dasar*. Jakarta: Salemba Medika.

Nugroho, W. (2012). *Keperawatan Gerontik dan Geriatrik*. Jakarta: EGC.

Wartonah, T. (2004). *Kebutuhan Dasar Manusia dan Proses Keperawatan*. 3 ed. Jakarta: Salemba Medika.