

Research Article



THE RELATIONSHIP BETWEEN SLEEP QUALITY AND QUALITY OF LIFE IN THE ELDERLY IN ABELI SUBDISTRICT, KENDARI CITY: CROSS SECTIONAL STUDY

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ABSTRACT

Background: Sleep is one of the basic human needs which is a physiological need and gives the body the opportunity to restore and provide energy and relieve tension. Aim: If the need for sleep is not of good quality, this condition will cause fatigue which will hinder the elderly in fulfilling their daily activities and can affect the quality of life of the elderly.

Methods: This study is a quantitative study with a cross-sectional approach in the Abeli Subdistrict, Kendari City. A sample of 84 respondents was obtained through Consecutive Sampling.

Results: The data was processed using the Fisher exact test, obtained ap value = 0.006 <0.05 which shows a relationship between sleep quality and the quality of life of the elderly in the Abeli sub-district of Kendari City.

Conclusion: Therefore, the elderly really need to pay attention to the quality of sleep in order to maintain a good quality of life so that the welfare of the elderly is created.

Keywords: Sleep Quality, Quality of Life, Elderly

INTRODUCTION

The life cycle experienced by an individual will determine the quantity and quality of life and health in the future. Challenges from various aspects of life can result in aging. Aging is a normal process experienced by individuals. Where there will be many physical and behavioral changes when reaching a certain age of development. One of the changes experienced by the elderly will have an impact on the gradual decline in physical function¹.

According to global data, the number of elderly people is estimated to reach 500 million, with an average age of 60 years². The World Health Organization (WHO) estimates that the number of elderly people in the world will reach 1.2 billion in 2025, increasing to 2 billion in 2050. WHO also estimates that by 2025, 75% of the world's elderly population will live in developing countries, and half of the elderly will live in Asia². National Socio-Economic Supervision (2022) that 10.48 percent of the population is elderly, with an elderly dependency ratio of 16.09. This means that every elderly person is supported by around 6 people of productive age (aged 15-59 years). There are more female elderly than male elderly (51.81 percent compared to 48.19 percent) and there are more elderly in urban areas than in rural areas (56.05 percent compared to 43.95 percent). As many as 65.56 percent of elderly people are classified as young elderly (60-69 years), 26.76 percent are middle elderly (70-79 years), and 7.69 percent are old elderly (80 years and over)³. Based on data obtained from the Abeli sub-district (2024), the number of elderly people is 141 people.

The decline that occurs becomes a reason for the elderly to depend on others, withdraw from social activities, and become anxious⁴. Elderly is an advanced stage of human life which is characterized by a decrease in the body's ability to adapt to environmental stress and failure to maintain the body's balance against physiological stress conditions⁵. One of the impacts experienced by the elderly is sleep disorders.

Sleep disorders are conditions when an individual experiences or is at risk of experiencing a change in the quantity or quality of their sleep patterns. This condition causes the cardiovascular and endocrine systems to be disrupted, and increases the perception of pain. Four main symptoms characterize most sleep disorders, namely; insomnia, hypersomnia, parasomnia and sleep-wake schedule disorders. Sleep disorders disrupt sleep quality⁶, which have serious impacts on the elderly such as excessive daytime sleepiness, impaired attention and memory, depressed mood, frequent falls, accidents, cognitive impairment, inappropriate use of hypnotics, contributing to heart disease and diabetes⁷, and causes discomfort to the point of disrupting lifestyle which ultimately affects the quality of life of the elderly⁸.

Based on research conducted by Pasaribu & Perangin-angin, (2020) The results showed that there was a relationship between sleep quality and quality of life in the elderly, where the worse the quality of sleep in the elderly, the lower the quality of life. The results of this study are also in line with research conducted by Listyaningsih & Ratmawati, (2020) which states that there is a relationship between sleep quality and quality of life in the elderly⁷.

Quality of life in old age means a preserved self and a sense of meaning. Areas that contribute to the experience of quality of life are: life values, memories of previous lives, activities, health, important people in life, material wealth and home ⁴. Quality of life has four domains, namely physical health, psychological health, social relationships, and the environment. Problems that are often faced by the elderly over time, there will be a decline in various functions of body organs. This decline in function is caused by a decrease in the number of cells anatomically and reduced activity, inadequate nutritional intake, pollution and free radicals, this causes all organs in the aging process to experience structural and physiological changes ⁹. "Based on the data and description above, the researcher is interested in researching the " Relationship between Sleep Quality and Quality of Life in the Elderly in Abeli Sub-district, Kendari City".

METHODS

Research design

This research is a quantitative research using a cross-sectional study method. This research was conducted in Abeli Subdistrict, Kendari City, which was implemented in May 2024.

Population and Samples

The population in this study were all elderly people in Abeli Village, Kendari City, totaling 141 people. From the total population, after calculating the sample, 59 respondents were obtained who met the inclusion criteria, namely elderly people who live in Abeli Subdistrict, Kendari City and are willing to be respondents. This sample was taken using non-probability sampling,

namely consecutive sampling. The collection of research data came from population data in Abeli Subdistrict, who were willing and filled out the questionnaire that had been given by the researcher.

Data Collection

This study uses a questionnaire instrument as a tool in collecting data from respondents. Instrument yeslusedlyounl to measure strengthllitals sleep alyesllalh questionnaire The Pittsburgh sleep quallity index (PSQI) contained in the research The Sinulingga, (2021) whereas in the quality of life instrument created by the World Health Organization (WHO) which is contained in the research Yulianti, (2017).

Data analysis

The process of processing and analyzing data using fisher exact test.

RESULTS

Respondents in this study were 59 elderly people who live in Abeli Subdistrict, Kendari City. The characteristics of respondents in this study were based on gender, age, and occupation. An overview of these characteristics is listed in Table 1.

Sleep Quality	Quality of Life				P Value	
	Good		Not enough		Total	
	n	%	n	%	n	%
Good	7	43.8	9	56.2	16	100
Bad	36	83.7	7	16.3	43	100
Amount	43	72.9	16	27.1	59	100
t						0.006

Table 1. Respondent Characteristics Based on Gender, Age, and Occupation

Respondent Characteristics	Category	n	%
Gender	Man	24	40.7
	women	35	59.3
Age	60 – 74	55	93.2
	75 - 80	4	6.8
Work	housewife	30	50.8
	Retired	9	15.3
	Self-employed	14	23.7
	Farmer	6	10.2

Based on table 1 above, it can be seen that the characteristics of respondents based on gender are mostly female, namely 35 respondents (59.3%). The age of the respondents is mostly in the range of 60-74 years, namely 55 respondents (93.2%). Of the total respondents, the most common occupation is housewife, amounting to 30 respondents (50.8%), while the least is farmer, amounting to 6 respondents (10.2%).

Table 2. Relationship between Sleep Quality and Quality of Life of the Elderly in in Abeli Subdistrict, Kendari City.

Sleep Quality	Quality of Life				Total		P Value
	Good		Not enough				
	n	%	n	%	n	%	
Good	7	43.8	9	56.2	16	100	0.006
Bad	36	83.7	7	16.3	43	100	
Amount	43	72.9	16	27.1	59	100	

The table above shows that out of 59 respondents who experienced good sleep quality and good quality of life, there were 7 respondents (43.8%), then 9 respondents (56.2%) experienced good sleep quality but poor quality of life. While 36 respondents (83.7%) had poor sleep quality but good quality of life, and the remaining 7

respondents (16.3%) had poor sleep quality and poor quality of life.

The results of the statistical test obtained a p value of 0.006 ($p < 0.05$) which indicates a relationship between sleep quality and the quality of life of the elderly in Abeli Village, Kendari City.

DISCUSSION

Sleep is an active physiological process in which various components of the autonomic central nervous system interact. Sleep is also a state or condition of physical and mental rest¹². Sleep is characterized by changes in posture and muscle tone, reduced responsiveness to the external environment, and significant changes in brain electrophysiology, metabolism and blood flow. Its characteristics involve consideration of duration, timing, subjective quality,

regularity, continuity and efficiency¹³. adequate sleep quality and causes various kinds of sleep complaints. the degeneration process in the elderly causes effective sleep time to decrease, and causes the inability to achieve quality sleep.¹⁴.

The results of this study indicate that out of 59 elderly people, 7 respondents (43.8%) experienced good sleep quality and good quality of life. If in their lives the elderly experience stressful situations or changes in their quality of life will be bad, but if the elderly have the ability and opportunity to face and control the

conditions they experience, the elderly can maintain their quality of life in a positive direction¹⁵. The results of this study indicate that 9 respondents (56.3) experienced good sleep quality but poor quality of life. This is because someone who has entered old age will experience gradual changes in organ metabolism activity and the beginning of the body's inability to regenerate cells. The impact of these changes is that the elderly experience a decline in aspects of quality of life. One of the main predictors of quality of life is physical health, one of which is the aspect of sleep and rest¹⁶. The results of this study indicate that 36 respondents (83.7) have poor sleep quality but good quality of life. Elderly people who live alone and experience loneliness are one of the main indicators of well-being but have been associated with physical and mental health problems, emotional distress, depression, cognitive decline and poorer quality of life. Elderly people who live alone are more vulnerable and tend to be neglected so that several different problems arise¹⁷. The aging process is correlated with changes in sleep-wake control. A very important endogenous change is a significant change or decrease in the circadian amplitude experienced by the elderly due to the natural process of decreasing hormone function¹⁸. The results of this study indicate that⁷ respondents (16.3%) have poor sleep quality and also have poor quality of life. Poor sleep quality is also associated with impaired quality of life. Some factors that can be a problem of sleep disorders are due to stress or anxiety that will affect a person's sleep patterns or quality. Poor quality sleep can cause fatigue¹⁹. prolonged fatigue experienced by the elderly if the quality of sleep is not immediately addressed can affect the daily activities of the elderly and affect their well-being²⁰.

Based on the research conducted, there is a relationship between sleep quality and quality of life of the elderly with a pvalue = 0.006 (pvalue < α = 0.05). The results of this study are also in line with research conducted by Casagrande (2022)²¹ states that there is a relationship between lack of sleep and quality of life related to health. Impaired quality of life in the elderly is likely caused by a significant increase in physical problems and loss of social roles after retirement. So that this problem can affect psychological problems. Based on research conducted by

The results showed that there was a relationship between poor sleep quality and poor quality of life. This can cause sleep disorders characterized by decreased duration and quality of sleep, decreased sleep, increased sleep fragmentation, and excessive sleepiness. Sleep disorders often occur in aging and there is an increase in sleep disorders in pathological aging in this case is the worsening of cognitive function in the elderly²². Sleep is essential for maintaining optimal physical and mental health. The quantity and quality of sleep are critical to nearly every system in the body, and suboptimal sleep impacts cardiovascular health, mental health, memory, immunity, reproductive health, and hormone regulation. Yet many people do not achieve adequate quantity or quality of sleep²³.

CONCLUTION

Therefore, the elderly really need to pay attention to the quality of sleep in order to maintain a good quality of life so that the welfare of the elderly is created

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