

# Relationship Between Anxiety Levels with Insomnia Events in Elderly at the Welas Asih Nursing Home in Tasikmalaya City

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**Abstract—Objectives:** The purpose of this study was to determine the relationship of anxiety levels with the incidence of insomnia in the elderly at the Welas Asih Nursing Home in Tasikmalaya City. **Method:** This type of research is quantitative research design was descriptive correlational that aims to determine the relationship of the dependent variable with leading independent variables with a cross-sectional approach. The population of this study is the elderly in the Welas Asih Nursing Homes who meet the inclusion criteria. The sampling technique used purposive sampling. **Data analysis using Pearson test. Results and Discussion:** The results of normality test data showed anxiety levels  $p$ -value  $<0.005$  ( $p$ -value = 0,000), and normality test data for the incidence of insomnia  $p$ -value  $<0.005$  ( $p$ -value = 0,000). Normality data test results showed normal distribution, then the Pearson correlation test was obtained the coefficient  $r = 0.751$  means that the strength or closeness of the relationship between the level of anxiety with the incidence of insomnia in the elderly at the nursing homes of compassion is very strong. Hypothesis test results obtained  $p$ -value = 0,000

$<\alpha (0,005)$  so that it can be concluded that  $H_0$  is rejected and  $H_1$  is accepted, which means there is a very strong relationship between anxiety levels with the incidence of insomnia in the elderly at the Nursing Homes Welas Asih In Tasikmalaya.

**Conclusion:** The conclusion is that there is a significant relationship between the level of anxiety and the incidence of insomnia in the elderly in the Nursing Homes.

**Keywords:** anxiety, insomnia, elderly

## I. INTRODUCTION

Increasing economic progress in a nation can improve various technologies and health facilities that lead to increased human life expectancy. Human life expectancy is one measure of the progress of a nation (Wiyono, 2009). A large number of the elderly population in Indonesia in the future brings positive and negative impacts. The positive impact obtained if the elderly are in a healthy, active and productive condition. While the negative impact caused by the large population of the elderly becomes a burden if the elderly have health problems that result in increased health care costs, decreased income, increased disability, the absence of social and environmental support that is not friendly to the elderly (Kemenkes, 2017).

The composition of the elderly population increases in both developed and developing countries, this is due to the fertility and mortality rates as well as an increase in life expectancy. Based on data from the Indonesian Ministry of Health (2017) there are 23.66 million elderly people in Indonesia (9.03%). It is estimated that the number of elderly in 2020 will reach 27.08 million, 2025 will reach 33.69 million elderly, 2030 will reach

40.95 elderly and 2035 will reach 48.19 million elderly (Kemenkes RI, 2017).

The effect of the aging process results in various problems namely physically, mentally or socially economically. Mental disorders that are often found in the elderly is anxiety (Tamher, 2009). Anxiety is a psychiatric disorder that often occurs in the elderly (Kogan, Edelstein & McKee, 2000). Excessive anxiety experienced by an individual will cause negative effects one of which is insomnia (Stanley, 2007). The causes of insomnia include chronic disease, environmental / behavioral factors, the use of alcohol, caffeine and drugs for a long time as in sufferers of chronic diseases, and mental illnesses such as anxiety, depression, loss of personal identity or perceived poor health (Walsh JK, 2004 & Roth T. Roehrs, 2003).

If the situation with insomnia is left will cause the body to become weak causing a decrease in body function and impaired quality of life. The impact of insomnia is a physical loss (heart problems, diabetes, psychological losses, and financial losses (Widya, 2010). If the situation with insomnia is left will cause the body to become weak causing a decrease in body function and impaired quality of life. If an individual does not get enough rest to balance the condition of the body there will be effects such as forgetfulness, confusion, and disorientation (Stanley, 2007).

Elderly vulnerable to insomnia. I underestimated it results in serious health problems and can reduce the quality of human life. The effects of insomnia are physical losses, psychological losses, financial losses, and even death. In the old age, physical, social and psychological changes can cause anxiety. It is a cause of insomnia in the elderly (Giastiningsih, 2011). Anxiety and insomnia are the most common problems in elderly patients (Folks D, Fuller W, 1997).

Based on preliminary studies conducted by researchers of 10 residents of the orphanage, as many as 80% of them have difficulty starting sleep, and often wake up at night while those 20% often experience waking up at night even unable to go back to sleep during the day. So that getting up during the day is not excited.

Based on the background above, the authors are interested in conducting a study of the relationship of anxiety levels with the incidence of insomnia in the Tasikmalaya City of Compassionate Home.

## II. MATERIAL AND METHOD

### A. Procedure

*This type of research is quantitative research design used is descriptive correlational which aims to determine the relationship of the dependent variable with independent*

were conducted by researchers. Data analysis uses Perason correlation test.

### III. RESULTS

#### 1. Location Description

The research was carried out at the Welas Asih Nursing Homes in Tasikmlaya City, which is located on Jalan Raya Singaparna, Cikadongdong, Singaparna. Welas Asih Nursing Homes is the only nursing home in Tasikmalaya. The building is in the form of a house with a front room where you can watch TV, and rooms for the elderly. Many elderly people variables with cross sectional approach. The population of this study is the elderly in the Welas asih Nursing Homes who meet the inclusion criteria. The sampling technique in this study uses purposive sampling, which is a sampling technique based on certain considerations, which are made by researchers based on characteristics that are already known (Notoatmodjo, 2012).

#### B. Data Analysis

The sample in this study were 21 respondents with criteria of being willing to be respondents, not dementia and not currently taking drugs, not being physically ill. Data collection instruments using the KSPBJ Insomnia Rating Scale questionnaire and Hamilton Rating Anxiety Scale (HARS). Data collection method by reading the questionnaire to respondents.

Before the questionnaire was read, researchers distributed informed consent or willingness to be respondents to be distributed and signed by respondents. Then the researchers read the KSPB Insomnia Rating Scale questionnaire to determine the incidence of insomnia in the elderly and continued with the Hamilton Rating Scale Anxiety (HARS) questionnaire.

Modified anxiety rating questionnaire for the Hamilton Rating Scale (HARS). This questionnaire was adopted from Wijayanti (2009) entitled The relationship between the level of anxiety and the incidence of hypertension in the elderly in the elderly Posyandu in the work area of Pundong Bantul 2009. And the questionnaire was tested for validity and reliability so that no validity and reliability tests

who did not get to stay in the room so they had to sleep in the halls of residence due to space constraints. Hospice owned by a foundation run by a couple of people and one of them was a nurse graduate Diploma of Nursing.

#### 2. Characteristics of respondents

Characteristic of respondents by age

Tabel 1

Description of the characteristics of respondents by age  
Age Frequency Percentage

No	Age	Frequency	Percentage
1	< 65 years old	10	47,6
2	>65 years old	11	52,4
Total		21	100

Table 1 it can be seen that from the 21 respondents, the most age is 65 years old (52.4%).

#### 3. Characteristics of respondents based on gender

Table 2

Description of respondent characteristics based on gender

No	Age	Frequency	Percentage
1	Male	10	47,6
2	Female	11	52,4
Total		21	100

Table 2 it is known that from 21 respondents the percentage of gender is female (52.4%) while male is (47.6%).

#### 4. Characteristics of respondents by duration of stay in a nursing Homes

Table 3

Description of respondent characteristics based on gender

No	Age	Frequency	Percentage
1	<1 years old	7	33,3
2	>1years old	14	66,7
Total		21	100

Table 3 note that from 21 respondents, the percentage of respondents who lived at most equal to or more than 1 year as many (66.7%), while the new live less than 1 year as many (33.3%).

5. Description of anxiety levels

Table 4

The frequency of anxiety levels in the elderly at the Welas asih Nursing Homes in Tasikmalaya

No	Category	Frequency	Percentage
1	No anxiety < 14	-	-
2	Mild anxiety 14-20	1	4,8
3	Moderate anxiety 21-27	3	14,3
4	Severe anxiety 28-41	14	66,7
5	Very heavy anxiety 42-56	3	14,3
Total		21	100

Table 4 it is known that the frequency of anxiety most experienced by the elderly in nursing homes is severe anxiety (66.7%), while the elderly with very severe anxiety and moderate anxiety are equal (14.3%) and the elderly who experience moderate anxiety occupied the fewest presentations (4.8%).

5. Description of insomnia level

Table 5

Frequency of insomnia level in the elderly in Welas asih Nursing Homes in Tasikmlaya

No	Category	Frequency	Percentage
1	No insomnia 11-19	0	0%
2	Mild insomnia 20-27	4	19,0
3	Severe Insomnia 28-36	15	71,4
4	very heavy Insomnia 37-44	2	9,5
Total		21	100

Table 5 it is known that the highest frequency of insomnia level of respondents is in the level of severe anxiety (76.2%) while the frequency of mild anxiety level (14.3%) and the least frequency of insomnia of respondents is with mild and very severe insomnia levels (4, 8%).

6. Description of the level of anxiety and the incidence of insomnia

Table 6

Description of the frequency of occurrence levels of anxiety and insomnia in the elderly in nursing homes welas asih in Tasikmalaya

		Incidence of Insomnia in the elderly				
		Insomnia does not occur	mild insomnia	severe insomnia	very severe insomnia	sum
anxiety	mild anxiety	0	0	0	0	0
	moderate anxiety	0	1 (4,7%)	0	0	1 (4,7%)
	severe anxiety	0	2 (9,5%)	0	0	2 (9,5%)
	severe anxiety once	0	0	15 (71,6%)	0	15 (71,6%)
		0	0	2 (9,5%)	1 (4,7%)	3 (14,2%)
						100

Table 6 it can be seen that respondents who experienced mild anxiety with mild insomnia 1 respondent (4.7%), respondents who experienced moderate anxiety with mild insomnia 2 respondents (9.5%), respondents who experienced severe anxiety with severe insomnia 15 respondents (71.6%), respondents who experienced severe anxiety with severe insomnia 2 respondents (9.5%) and respondents who experienced severe anxiety with severe insomnia 1 respondent (4.7%).

The results of normality test data showed anxiety levels p value <0.005 (p value = 0,000), and normality test data for the incidence of insomnia p value <0.005 (p value = 0,000). Normality data test results showed normal distribution, then the Pearson correlation test was obtained the coefficient r = 0,751 means that the strength or closeness of the relationship between the level of anxiety with the incidence of insomnia in the elderly at the nursing homes of compassion compassion is very strong. Hypothesis test results obtained p-value = 0,000 <α (0,005) so that it can be concluded that H0 is rejected and Hadi is accepted, which means there is a very strong relationship between anxiety levels with the incidence of insomnia in the elderly at the Nursing Homes Welas Asih In Tasikmalaya.

IV. DISCUSSION

Based on the results of the study, the age of the respondents was at most yaitu 65 years 11 respondents (52.4%). Increasing a person's age will affect physical and biological conditions. In the elderly will experience changes or decline in body function. One of them is the reduced need for sleep. An elderly person will often wake up at night, and need lots of time to fall asleep. However, in the elderly who can adapt to physiological and psychological changes in aging

it is easier to maintain sleep and continuity in the adult sleep cycle.

Stanley and Patricia (2002), most of the elderly experience a decline in cognitive and psychomotor function. Factors that have a major influence on mental change: physical changes, health, education level, hereditary and the surrounding environment. From the mental emotional side of the elderly often appear pessimistic, the presence of insecurity and anxiety, suffering from chronic illness or even feel his life is no longer useful, especially for many people. Thus the elderly will prioritize the interests of the ukhrowi over the worldly and usually reflect more on what they have done in their youth.

More women experience insomnia (52.4%) compared to men (47.6%). It is psychologically a woman is more likely to have a lower coping mechanism than a man so that she will experience tension and anxiety which will eventually lead to stressors for insomnia in a woman.

Physically a woman is at risk of developing degenerative diseases compared to men, this is because physiologically women will experience a process of pregnancy and childbirth, in these conditions are very susceptible to contracting various diseases and inadequate hormonal changes in the body resulting in a woman experiencing a decrease immune system. If the immune system declines, the body will be at risk of developing a disease. A woman psychologically has a lower coping mechanism compared to men in dealing with a problem. There are problems both physically and psychologically then a woman will experience anxiety, if anxiety lasts for a long period of time it can be painful for an elderly person to experience insomnia compared to men (Rawlins, 2001).

Based on the length of stay, the majority of 66.7% lived more than or equal to 1 year. There are several factors that cause an elderly person to live in a nursing home, namely: 1) lack of awareness and family social support for the elderly, 2) lack of family support for the health of the elderly, 3) elderly who do not have a family.

Lack of care for the elderly's life needs provided by the family can make feelings uncomfortable so that not only family care must be considered, but also care for physical needs and can maintain the feelings of the elderly so they feel happy, comfortable and at ease.

Lack of family care causes health problems, psychological decline and will cause older people to withdraw. Attention and family support is very important for an elderly person. The treatment provided will increase comfort. Lack of support provided by families to the elderly causes physical, mental, psychological and social decline.

Papalia, Olds and Feldman (2004) state that when an individual engages in social relations such as peers and family. Social contact that the elderly have will affect well being more than before. Social contact is a source of emotional support while friends are also an important source of happiness.

Based on the results of the study obtained the highest level of anxiety data is severe anxiety (66.7%). This shows that the elderly are vulnerable to anxiety. It is a mental

disorder that can attack an elderly person (Kogan, Eldestein & McKee, 2000). Most of the elderly experience anxiety caused by physical, psychological or somatic disorders. The results of research conducted by Wijayanti (2009) states that the elderly are vulnerable to anxiety. This is because in old age there are physical, social and psychological changes that will cause the elderly to experience anxiety.

Anxiety is a series of feelings of discomfort associated with the threat of danger to individuals. Anxiety can narrow one's perspective (Stuart, 2006).

The more age of an individual, the more he will think about and become his personal responsibility both as a person and as a family member. Something like that which is one cause of anxiety. Anxiety can cause a variety of symptoms both physiologically (shaking, sweating, increased heart work) and psychological symptoms (panic, tense, confused and unable to concentrate), everything that threatens can cause anxiety.

The results obtained by the data of respondents who experienced severe insomnia (71.4%), very severe insomnia (9.5%) and mild insomnia (19%). At this age problems are often found in changes in sleep patterns, illness, drug use and psychological problems. This shows that for the elderly are very susceptible to insomnia. Most of the elderly experience insomnia because their sleep needs have started to decrease, sleep quality is not good, it is difficult to start sleeping and often experience waking up at night.

Old age is very susceptible to insomnia. Insomnia is the inability to sleep even though the desire to sleep is very strong. The elderly with insomnia often complain of fatigue, mood swings (depression or irritability), difficulty concentrating, and disruption of other bodily functions during the day (Ancoli-Israel, Cooke JR, 2005, Avidan AY, 2005 and Walsh JK., 2004). Research conducted by Avidan AY et al (2005) states that insomnia is associated with a substantial increase (up to 50%) experiencing a risk of falling in the elderly even after being in the phase of adjusting functional levels, cognitive resource utilization and health status. Somatic comorbidities as risk factors for insomnia and depression. Therefore, chronic insomnia increases the burden on medically ill elderly (Hayward R, Jordan KP, Croft P., 2010, Rongve A, Boeve BF, Aarsland D, 2010).

The relationship between the level of anxiety with the incidence of insomnia in the elderly. it is known that respondents who experienced mild anxiety with mild insomnia were 1 respondent (4.7%), respondents who experienced moderate anxiety with mild insomnia were 2 respondents (9.5%), respondents who experienced severe anxiety with severe insomnia were 15 respondents ( 71.6%), respondents who experienced severe anxiety with severe insomnia were 2 respondents (9.5%) and respondents who experienced severe anxiety with severe insomnia were 1 respondent (4.7%).

Based on the results of normality test data showed anxiety levels  $p$  value  $<0.005$  ( $p$  value = 0,000), and normality test data for the incidence of insomnia  $p$  value  $<0.005$  ( $p$  value = 0,000). Data normality test results showed normal distribution, then the Pearson correlation test was obtained the

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coefficient  $r = 0.751$  means that the strength of the relationship between the level of anxiety with the incidence of insomnia in the elderly in the nursing home of the Compassion of Compassion was very strong. Hypothesis test results obtained  $p\text{-value} = 0,000 < \alpha (0,005)$  so that it can be concluded that  $H_0$  is rejected and  $H_a$  is accepted, which means there is a very strong relationship between anxiety levels with the incidence of insomnia in the elderly at the Wreda Welas Asih Tasikmalaya orphanage.

The higher level of anxiety experienced by the elderly will experience insomnia, conversely the lower the level of anxiety experienced by the elderly will avoid the occurrence of insomnia. Anxiety that is naturally experienced by the elderly can be caused by several factors including due to retirement, physical disruption, loss of loved ones, and economic loss. Anxiety and insomnia in the elderly is considered normal if it does not significantly affect health.

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## V. CONCLUSION

The conclusion in this study, we provide information about the correlation between anxiety levels with the incidence of insomnia in the elderly at the Wreda Asih Nursing Homes in Tasikmalaya City. Old age is very susceptible to insomnia. Insomnia is the inability to sleep even though the desire to sleep is very strong. The elderly with insomnia often complain of fatigue, mood swings (depression or irritability), difficulty concentrating, and disruption of other bodily functions during the day (Ancoli-Israel, Cooke JR, 2005, Avidan AY, 2005 and Walsh JK., 2004). The higher level of anxiety experienced by the elderly will experience insomnia, conversely the lower the level of anxiety experienced by the elderly will avoid the occurrence of insomnia. Anxiety that is naturally experienced by the elderly can be caused by several factors including due to retirement, physical disruption, loss of loved ones, and economic loss. Anxiety and insomnia in the elderly is considered normal if it does not significantly affect health.

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