
Guided Imagery To Reduce Insomnia in Elderly

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ABSTRACT

The problems that occur in the elderly among them are easily falls, fatigue, cardiovascular disorders, pain or discomfort, elimination disorders, impaired vision acuity, hearing loss, sleep disturbances, simple itching (Nugroho, 2008). One of the actions that can be given to improve sleep quality in elderly with insomnia is Guided Imagery Therapy. The long term goal of research was to determine the effect of Guided Imagery Therapy against Insomnia In Kota Wilayah Utara Public Health Center Kediri. The design in this research was Pre Experiment Design of Pre-Post Test Design. The population were all elderly who have insomnia with sample number that is equal to 36 respondents, data retrieval by using purposive sampling technique. The collection of data for measurement using a questionnaire of Insomnia Rating Scale. The data was analyzed by using statistical test of Wilcoxon Signed Rank Test, $p = 0.000$ and z score = 4.054. There are 9 (nine) respondents declined Insomnia Rating Scale after therapy. This proves that the Guided Imagery can reduce Insomnia in the Elderly in Kota Wilayah Utara Public Health Center Kediri.

Key Words: Guided Imagery Therapy, Insomnia, Elderly, Insomnia Rating Scale

Received February, 20, 2020; Revised April 24, 2020; Accepted May 1, 2020



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INTRODUCTION

Aging is a process of decreased endurance in dealing with stressors from within and from outside the body. Problems that occur in the elderly include risk for fall, fatigue, cardiovascular disorders, pain or discomfort, elimination disorders, impaired visual acuity, hearing loss, sleep disturbance, pruritus (Nugroho, 2008). Sleep disorders that occur one of which is insomnia. Insomnia is one of the disorders of sleep, if the needs of sleep and rest are not met properly eating will affect health. Many elderly complain that they wake up feeling refreshed and experience fatigue during the day. According to the results of interviews in the Kota Wilayah Utara Public Health Center Kediri it was found that the average elderly who complained of difficulty sleeping and often woke up at night, causing many complaints to the elderly, the body felt weak, tired, anxious and sleepy.

Sleep disorders attack 50% of people aged 65 years or older who live at home and 66% of people who live in long-term care facilities. (Mickey, 2006). The number of elderly people in Indonesia in 2012 was recorded at around 19 million (7.7 out of 245 million population). According to the central statistical projection (BPS) the number of elderly will continue to increase until it exceeds the amount of quality improvement and life expectancy. While the number of elderly people in East Java in 2007 reached 11.14 million. According to Herod (2010) about 60% experience insomnia or difficulty sleeping. Research conducted by Hariadi (2013) entitled The Effect of Progressive Muscle Exercise Against Insomnia in the Elderly in Posyandu Elderly RW 01 Bangsal Urban Village in Kediri found that progressive muscle relaxation therapy is very effective in helping to overcome insomnia in the elderly. Based on data from the Elderly Posyandu Cadre Register book at the Kota Wilayah Utara Public Health Center Kediri, the number of elderly people experiencing insomnia is 38 elderly.

Sleep is needed for the body to heal and repair body systems. If the problem of sleep is not resolved it will cause other problems, such as serious illness, temperature changes, anxiety, irritability, impaired judgment, weight loss, decreased appetite (Joni H, 2008). Physiologically, if a person does not get enough sleep to maintain a healthy body, effects such as forgetfulness, confusion and disorientation can occur, especially if sleep deprivation occurs for a long time (Mickey S, 2006). Along with aging, let alone entering old age (elderly) various changes occur in the body. Psychological changes in the elderly include: irritability, sadness, anxiety, loneliness and irritability from these changes can affect the sleep patterns of the elderly, where the elderly can not relax, too many thoughts so that sleep disturbance in the elderly in the elderly (insomnia). This insomnia is the inability to sleep, interruptions during sleep, the presence of normal sleep behavior during sleep, or the timing of sleep episodes that do not fit. Complaints experienced by the elderly in their sleep patterns is that if the elderly have woken up in the middle of the night it is difficult to start sleeping again. The impact of this sleep disorder if it occurs continuously will cause: depression, impaired ability to control yourself, reduced motor performance, an increase in accidents, impaired immune response, cardiovascular disease, diabetes, obesity (Vaughans, 2013). If the need for sleep in the elderly can be overcome, then the quality of sleep becomes good so that the elderly can maintain a balance of mental, emotional, health, reduce stress on the lungs, cardiovascular, endocrine, and others (Hidayat, 2009).

Management of insomnia can be divided into pharmacologically and non pharmacologically. Pharmacologically that is by giving sadative and hyponotic drugs, this type of drug is very effective in accelerating the achievement when starting to sleep, prolonging sleep, and reducing the frequency of waking up. However, these drugs cause negative effects, including leaving a residual effect of the drug, which is nausea and drowsiness during the day, and cause people with sleep disorders experience drug dependence. While non-pharmacological management does not cause side effects and can be done alone by the elderly to maintain their health. Some non-pharmacological treatments that are used to treat insomnia are progressive muscle relaxation therapy, diaphragmatic breathing, imagery training, biofeedback, hypnosis, and warm water bath therapy (Miltnerberger 2004). Guided imagination is one of the relaxation techniques to reduce heart rate, blood pressure, and breathing speed, increase global awareness, reduce oxygen demand, reduce muscle tension and speed of metabolism so as to evoke feelings of relaxation and peace (Potter-Perry, 2010). The human body has a natural sedative, endorphin. Endorphin is a neurohormone that is associated with pleasant sensations. Endorphin production will increase in the blood when a person is able to relax or calm. Relax and calm can be achieved with relaxation one of them using guided imagination therapy. Natural sedatives produced by the body are expected to reduce stress and improve sleep quality. Based on the description above, the purpose of this study is to analyze the effect of guided imagery therapy on insomnia in the elderly in the Kota Wilayah Utara Public Health Center Kediri.

METHODS

Based on the research objectives, the research design used is Pre Experiment Design in the form of Pre-Post Test Design. The population is all elderly. The number of subjects in the study were 36 respondents. In this study the sampling technique used was non-probability sampling with the type of purposive sampling. Respondents conducted initial data collection that is measuring the insomnia scale using the Insomnia Rating Scale. Furthermore, patients are given guided imagination therapy interventions. At the end of the therapy series, a scale of insomnia is measured again. The result will be analyzed the decrease in insomnia scale in the elderly. Data processing to compare changes between pre-test and post-test in the two groups using the Wilcoxon Signed Ranks Test statistic

RESULTS

Table 1 Frequency Distribution of Insomnia Rating Scale Elderly at Kota Wilayah Utara Public Health Center Kediri.

No.	Category	Before		After	
		Total	(%)	Total	(%)
1.	Insomnia	29	80,55	20	55,56
2.	Not Insomnia	7	19,44	16	44,44
	Total	36	100	36	100

Tabel 2 Statistic Test of Guided Imagery To Reduce Insomnia in Elderly at Kota Wilayah Utara Public Health Center Kediri

		N	Mean Rank	Sum of Rank
Insomnia Rating Scale After Intervention- Insomnia Rating Scale Before Intervention	Negative Ranks	21 ^a	11.00	231.00
	Positive Ranks	0 ^b	.00	.00
	Ties	15 ^c		
	Total			
a. Insomnia Rating Scale After Intervention < Insomnia Rating Scale Before Intervention				
b. Insomnia Rating Scale After Intervention > Insomnia Rating Scale Before Intervention				
c. Insomnia Rating Scale After Intervention = Insomnia Rating Scale Before Intervention				
Insomnia Rating Scale After Intervention - Insomnia Rating Scale Before Intervention				
Z				-4.054
Asymp. Sig. (2-tailed)				.000

DISCUSSION

Insomnia in Lanisa in Kota Wilayah Utara Public Health Center Kediri.

Based on the research results of the influence of Guided Imagination therapy on insomnia in the elderly at the Kota Wilayah Utara Public Health Center Kediri, it was found that most of the elderly experienced insomnia, 29 of them (80.55%) and 7 of those without insomnia (19.45%). Theoretically, aging or aging is a condition that occurs in human life. Growing old is a natural process, which means someone has gone through three stages of life, namely children, adults, and old people. It was concluded that humans slowly experienced a decline in the structure and function of organs. Deterioration of the structure and function of organs in the elderly can affect the independence and health of the elderly (Nugroho, 2008). In this aging process the elderly experience problems that occur in the elderly including easy fall, fatigue, cardiovascular disorders, pain or discomfort, elimination disorders, visual acuity disorders, hearing loss, sleep disorders, easy itching (Nugroho, 2008). Sleep disorders in the elderly is caused by: external factors (outside), for example a less calm environment, intrinsic factors, both organic and pycogenic. Organic moves (akathisia), and certain diseases that make you nervous. Psychogenic, for example depression, anxiety, stress, irritability, and anger that is not channeled (Nugroho, 2008). Sleep disorders that occur one of which is insomnia. Insomnia is a state of inability to get adequate sleep, both quality and quantity, with a state of sleep only briefly or insomnia (Hidayat, 2009). According to Potter & Perry (2009) causes of insomnia include: situational stress such as family, work, or school problems, jet lag, illness, loss of loved ones. The elderly physiologically experience changes in sleep patterns, even to the point of insomnia. Changes that occur in the brain from the molecular level, to the structure and function of brain organs. As a result of these changes there will be a decrease in blood circulation to the brain in certain areas. As a result of the above process, then the phenomenon that arises is structural and physiological changes, such as: insomnia, behavioral disorders, sexual disorders, and cognitive disorders. In addition, it can also be caused because REM sleep episodes tend to shorten there are progressive stages of sleep NREM 3 and 4. Based on the results of insomnia research

experienced by the most dominant respondent that is insomnia scale 14 as many as 6 respondents, this is because the average elderly aged 60-74 years have changed sleep quality. The total amount of sleep does not change with age, however, the quality of sleep seems to change in most elderly (Potter & Perry, 2009). The increase in the elderly population is followed by various problems for the elderly themselves, this is due to the aging process. Reducing the number of hours of sleep is not a problem if the elderly themselves feel a good quality of sleep because with good quality sleep even though only two hours can restore the function of the body and brain. In addition to the things above, sleep disturbance (insomnia) in the elderly is also caused by biological and psychological factors. Biological factors such as the presence of certain diseases that cause a person can not sleep well. Psychological factors can be anxiety, psychological stress, fear and emotional tension together with other physical changes. In the elderly, the homeostatic urge to sleep first decreases, followed by the circadian rhythm drive to awake.

In addition to the above, the rhythmic circadian sleep-wake of the elderly is also often disrupted, shorter biological hours and more advanced sleep phases. The hormones are secreted during deep sleep, especially at night, so a decrease in hormone levels will make it difficult for older people to maintain sleep. The changes that occur in the elderly are a normal thing. In the degeneration process that occurs in the elderly, effective sleep time will be increasingly reduced. Therefore, respondents who have lived a long time, especially over 60 years, are more difficult to get quality and quantity sleep. In addition, the majority of respondents do not work, so they use more time to rest at home, while the lack of elderly activities such as sports, work, and help with housework causes the elderly more time to rest or sleep during the day. Meanwhile, if the elderly who rest more or sleep during the day then at night the elderly are difficult to sleep. In addition, it can be seen that the average respondent is female, so older women have more difficulty sleeping than men, this is because every woman will enter the menopause stage in her life. Apart from hormonal changes, getting older makes sleep efficiency less and less.

Analysis of the Effect of Guided Imagination Against Insomnia in the Elderly in the Kota Wilayah Utara Public Health Center Kediri.

Based on the research results of the influence of Guided Imagination therapy on insomnia in the elderly at the Kota Wilayah Utara Public Health Center Kediri, it was found that after therapy, some elderly people experienced insomnia, namely 20 people (55.55%) and 16 people did not experience insomnia (44.45%). Based on the Wilcoxon signrank test statistical test with computer software the results obtained $p = 0,000$ and z score = 4,054, then the results of the data group value is $p > 0.05$ which means H_a is accepted, then it can be concluded that there is a significant influence of insomnia changes before and after Guided Imagery therapy in the elderly at the Kota Wilayah Utara Public Health Center Kediri.

Based on the results of research conducted at the Kota Wilayah Utara Public Health Center Kediri, it was found that after Guided Imagery therapy, 21 people experienced a decrease in insomnia scale and there were changes in 9 people who did not experience insomnia. This is due to the action of Guided Imagination therapy performed on the elderly, including a non-pharmacological treatment that can affect insomnia in the elderly.

Guided imagination is one of the relaxation techniques for decreasing heart rate, blood pressure and breathing speed, increasing global awareness, decreasing oxygen demand, feeling of peace, and decreasing muscle tension and speed of metabolism. (Potter-Perry, 2010). The relaxation that is achieved will make the elderly enter in an optimal sleep period.

With the support of the family such as motivating the elderly to continue to carry out guided imagination therapy, and also the family wants to learn the procedure of guided imagination therapy so that they can teach the elderly the guided guided imagination therapy at home. This makes many elderly people who actively conduct guided imagery therapy, so that they benefit from maximum guided imagery therapy for insomnia.

CONCLUSION

Most of the elderly in Kota Wilayah Utara Public Health Center Kediri, experienced insomnia. Guided Imagination Therapy can reduce the scale of insomnia in the elderly in the Kota Wilayah Utara Public Health Center Kediri.

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