

The Effect of Guided Imagery on Insomnia in the Elderly in the Jara Mara Pati Technical Implementation Unit (UPT) Kab. Buleleng

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ABSTRACT

Background: The aging process is a natural process faced by humans where there is a decrease or change in physical, emotional, psychosocial conditions which will certainly affect their productivity. This situation tends to have the potential to cause health problems, one of which is insomnia. There are some serious effects on sleep disorders such as excessive daytime sleepiness, impaired attention and memory, mood, depression, and decreased quality of life.

Purpose: This study aimed to determine the effect of giving guided imagery to insomnia in the elderly at the Technical Implementation Unit (UPT) Jara Mara Pati Kab. Buleleng.

Methods: The research design used was pre-experimental with a one-group pre-test post-test design. The population in this study were all elderly people who experienced insomnia in the Technical Implementation Unit (UPT) of Jara Mara Pati Kab. Buleleng with a sample size of 36 respondents, by using a simple random sampling technique. Data collection using a checklist sheet. The data obtained were then coded, scored, tabulated, and analyzed with the Wilcoxon test with a significant value of 0.05.

Results: The results of this study show the results of value $<$ which means that there is an influence of guided imagery on insomnia in the elderly.

Conclusion: Seeing the results of this study can be used as non-pharmacological therapy by the elderly in (UPT) Jara Mara Pati Kab. Buleleng to improve sleep quality which is done once a month on a scheduled basis.

Keywords: Guided Imagery, Insomnia, Lansia.

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BACKGROUND

Sleep disorders are one of the health problems that are often faced by the elderly. This condition requires serious attention. Poor sleep quality in the elderly is caused by increased sleep latency, reduced sleep efficiency and early awakening due to the aging process. The aging process causes a decrease in the function of neurotransmitters which is characterized by a decrease in the distribution of norepinephrine. This causes changes in circadian rhythms, where there is a change in elderly sleep in the 3rd and 4th NREM phases. so that the elderly have almost no phase 4 or deep sleep.¹

The elderly need good quality sleep to improve their health and recover from illness. Poor sleep quality can cause disturbances, among others, such as: a tendency to be more susceptible to disease, forgetfulness, confusion, disorientation and decreased ability to concentrate and make decisions. This certainly has a negative impact on the quality of life of the elderly. Therefore, the problem of sleep quality in the elderly must be addressed immediately.²

About a quarter of the adult population has experienced sleep problems and 6% to 10% are estimated to have an insomnia disorder.³ The results of a Warwick Medical School survey from the UK on countries in Africa and Asia found that approximately 150 million adults experience sleep disorders. An average of 16.6% cases of insomnia among the countries surveyed. This figure is close to western countries, which is about 20%.⁴ In Indonesia, in 2010 it was found that 36% of elderly men and 54% of elderly women complained of insomnia. Only 26% of elderly men and 21% of elderly women reported having no difficulty sleeping.⁵ Based on data from the Central Statistics Agency for the Province of Bali, the results of the population census in 2020, the number of elderly people in Bali Province reached 535,449 people.⁶ From the results of a preliminary study at the Technical Implementation Unit (UPT) of Jara Mara Pati, Kab. Buleleng obtained data on the number of elderly about 70 elderly. While the results of interviews from 15 elderly, 10 elderly said they had sleep disturbances and 5 people did not experience sleep disturbances.

OBJECTIVE

The main purpose of this study was to determine the effect of giving guided imagery to insomnia in the elderly at the Technical Implementation Unit (UPT) Jara Mara Pati Kab. Buleleng.

METHODS

The design used in this study was a pre-experimental type of one group pre-test post-test. The population is all elderly who experience insomnia in the Technical Implementation Unit (UPT) Jara Mara Pati Kab. Buleleng, a total of 40 people. Sampling with simple random sampling technique. y using the Slovin formula, it was found that the number of samples in this study was 36 respondents. The independent research variable is guided imagery. The dependent variable is insomnia. The data were collected using a checklist, then the data were analyzed using the Wilcoxon test with a significance level of 0.05.

RESULTS

1. General Data

Table 1. Characteristics of respondents based on elderly age at UPT Jara Mara Pati, Buleleng Regency

Age	Respondent	Percentage
55-65 years	7	19,4
66-74 years	15	41,7
75-90 years	14	38,9
Total	36	100,0

From table 1 above, it can be seen that almost half of 15 respondents (41.7%) are 66-74 years old.

Table 2. Characteristics of respondents based on the gender of the elderly at UPT Jara Mara Pati, Buleleng Regency

Gender	Respondent	Percentage
Male	7	19,4
Female	29	80,6
Total	36	100,0

From table 2 above, it can be seen that almost all 29 respondents (80.6%) are female.

2. Special Data

Table 3. Incidence of insomnia before guided imagery treatment.

Insomnia	Guided imagery treatment	
	Before	After
Yes	36 (100%)	8 (22,2%)
No	-	28 (77,8%)
Total	36 (100%)	36 (100%)

From table 3 above, it can be seen that before being given guided imagery, all respondents experienced insomnia, namely 36 (100%), while after being given guided imagery, most of the respondents did not experience insomnia, namely 28 (77.8%).

Table 4. Wilcoxon Test Results

		Ranks		
		N	Mean Rank	Sum of Ranks
After - Before	Negative Ranks	28 ^a	14,50	406,00
	Positive Ranks	0 ^b	,00	,00
	Ties	8 ^c		
	Total	36		

a. After < Before

b. After > Before

c. After = Before

Test Statistics ^a	
	Sesudah - Sebelum
Z	-5,292 ^b
Asymp. Sig. (2-tailed)	,000

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

Table 4. shows the results of the Wilcoxon test with a value of 0.000 which means that there is an effect of guided imagery on insomnia in the elderly.

DISCUSSION

Based on table 4 shows the results of the Wilcoxon test with the results of value 0.000 which means that there is an effect of guided imagery on insomnia in the elderly. Guided imagery is a relaxation technique by taking deep breaths and exhaling slowly so that the body becomes comfortable. This comfortable feeling is then transformed to the hypothalamus to produce Corticotropin Releasing Factor which stimulates the pituitary gland to increase the production of Proopiomelanocortin (POMC) so that the production of enkephalin by the adrenal medulla increases. The pituitary gland also produces endorphins as neurotransmitters that affect the mood to relax. Guided imagery therapy is a relaxation method to imagine or imagine places and events related to a pleasant sense of relaxation.⁷ With this treatment, the elderly who previously experienced sleep problems after doing guided imagery relaxation had better sleep quality (no insomnia). The success of this relaxation depends on the response of the elderly who carry out relaxation seriously and cooperatively in following the instructions given by the researcher.

This is in accordance with research conducted by Hizkia (2019) which showed that guided imagery relaxation techniques had an effect on sleep quality in the elderly at the Binjai Elderly Social Service UPT $p=0.001$, (<0.05).⁸ This study is also in line with Dwi's research (2015) the results of this study indicate that there is a difference between before and after relaxation at UPT PSLU Pasuruan, the significance value is $p = 0.005 < 0.05$.⁹ The relaxation given will be received as a stimulus and continued to the brain stem to the thalamus sensor and will reappear when there are stimuli in the form of images of things they like, so that the elderly become calmer and more comfortable to start sleeping. Researchers argue that the use of mind power by imagining things that are interesting and liked by the elderly that is carried out continuously can grow and create a relaxed atmosphere so that it can increase feelings of pleasure, reduce muscle tension and the need for sleep can be fulfilled properly, due to increased enkephalin and endorphins after getting guided imagery.

CONCLUSION

Based on the results of the discussion above, it can be concluded that there is an effect of giving guided imagery on insomnia in the elderly. The results of this study can be used as non-pharmacological therapy by the elderly in (UPT) Jara Mara Pati Kab. Buleleng to improve sleep quality which is done once a month on a scheduled basis.

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CONFLICTS OF INTEREST

In the research proposal, the researcher writes that the results of this study will be published in a national journal with the status published in 2021. Researchers hope that the results of this study can be accepted by the editors of health journals so that the output targets of this research can be achieved.

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