

The Influence of Relaxation Technique in Zikr Breathing Against Sleeping Needs for Elderly People in Nursing Home of Hargo Dedali Surabaya

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Abstract

Generally, many elderly people underwent a disorder in sleeping needs, either the quality or the quantity. The elderly people often said that they had difficulty to start sleeping, they were often awakened while sleeping, and they could not sleep again. Besides, they spent the time in sleepy stage and had less time in dreaming stage. Therefore, it was needed the way for overcoming sleeping needs for elderly people that could be fulfilled and one of them was by doing relaxation technique in zikr breathing. This study aimed at analyzing relaxation technique in zikr breathing against elderly people's needs in Nursing Home of Hargo Dedali Surabaya, East Java, Indonesia. The design of this study was Queasy Experiment. The population was all of elderly people in Nursing Home of Werdha Hargo Dedali Surabaya who fulfilled inclusion criteria and the sample were 14 respondents who were taken through simple random sampling technique. The independent variable was relaxation technique of zikr breathing, meanwhile, the dependent variable was sleeping needs. The method of data collection was through using questionnaire of The Pittsburgh Sleep Quality Index (PSQI) and analyzed by using fisher exact test with significant level (α)=0,05. The result of the study showed that after being given a treatment of sleeping needs for elderly people in experimental group, most of them were qualified (71%). Meanwhile, in control group, they were more unqualified (71%). However, the result of statistical test was obtained $p=0,029$, which meant that there was a significant difference of sleeping needs for elderly people between experimental group and control group. Moreover, the sleeping needs for elderly people could be qualified by using relaxation technique of zikr breathing. Therefore, it was needed the implementation of this technique routinely for elderly people who underwent a problem in sleeping needs and the support from the nursing home party for enhancing elderly people's motivation so that they did relaxation technique of zikr breathing.

Keywords: sleeping needs, relaxation technique of zikr breathing, elderly people

1. INTRODUCTION

Sleeping was a need and it was not a break condition that had no advantages. Sleeping was needed process by human in order to form new human cells, to improve damaged body cells in natural healing mechanism, to provide the time for the body itself for either having rest or keeping the balance of body metabolism and biochemical body. In the condition of sickness, if a person had less sleeping, the less sleeping could prolong recovery time of the sickness (Hudak & Gallo, 1997). The time of sleeping that was needed by a person was very various and it depended on the person's age.

Generally, many elderly people underwent disorder in fulfilling sleeping needs in either the quality or quantity. The elderly people often said that they had difficulty to start sleeping, they were often awakened while sleeping, and they could not sleep again. Besides, they spent the time in sleepy stage and had less time in dreaming stage (Carpenito, 2000). The problem in sleeping for elderly people was usually showed by a complaint of lack of sleeping quality that was caused by one of : the difficulty to start sleeping, they were often awakened in the night, then, they were difficult to sleep again, awakened in early morning, and slept untightly. The problem in sleeping was not caused by someone's less sleeping because everybody had own total time for sleeping. However, a thing that became an emphasis was a consequence that was caused by lack sleeping in the night, such as fatigue, lack of passion and spirit, and having difficulty in concentration while doing activity (Edinger, 2000).

The problem of sleeping was often found most in elderly people. Every year, it was estimated around 20%-50% of adult people reported that they underwent sleep disorders and around 17% of them underwent serious sleeping problem. The prevalence of sleep disorders in elderly people was quite high which was around 67 %. Nevertheless, only one of eight cases which stated that his/her sleep disorders had been diagnosed by doctor. Conducted survey by National Institute of Health in America stated that the total of population who underwent insomnia in 17% was from population and the percentage of sleep disorders was higher undergone by elderly people, which one of four elderly people in the age of 60 years underwent serious difficulty in sleeping (Chopra, 1994 in Purwanto, 2007). Based on the preliminary data that was obtained through interview technique with 7 elderly people in Nursing Home of Hargo Dedali Surabaya, there were 60% of the elderly people underwent complaint of being difficult to start sleeping, besides, they were often awakened while sleeping and if they were awakened, they could not sleep again.

According to the etiology hypothesis, sleep disorders were divided by four groups, which were primary sleep disorder, sleep disorder due to other mental disorders, sleep disorder due to general medical condition, and sleep disorder that was induced by substances. The sleep-wake disorder could be caused by physiological changes, for example in the normal aging process. The history of sleep problem, sleep hygiene recently, history of consumed drugs, report of the couple, sleep records, polysomnogram in the night were needed to be evaluated on the elderly people who complained the sleep disorder. The complaint of sleep disorder that were often stated by the elderly people were insomnia, sleep rhythm disorder, and sleep apnea. An impact that was occurred if somebody could not fulfill his/her sleeping needs, it would cause the changes of personality and behavior, such as : aggressive, depression, being tired that enhanced, perception disorder, hallucination of listening or sighting, being confused and disorientation against the place and time, coordination decreased and talked unclearly, easily offended, and feeling unrelax (Priharjo, 1996). Sleep disorder was also known as significant morbidity cause. There were several serious impacts of sleep disorder on elderly people, such as being sleepy over in the noon, attention disorder and memory, mood depression, being often fallen, the use of hipnotic unusually, and the decrease of life quality. Moreover, the mortality rate, hear attack rate and cancer rate were higher on somebody who had sleeping time in more than 9 hours or less than 6 hours in a day if it was compared with somebody who had sleeping time in between 7-8 hours in a day.

One of conducted effort in order to overcome the problem above was through using the way of relaxation technique of zikr breathing. This relaxation technique could decrease the symptoms of the condition, such as sleep disorder, pain, and anxiety (Melissa, 2004). Based on the explanation above, the researcher would like to research about “ The way of overcoming sleep disorder on the elderly people through relaxation technique of zikr breathing in Nursing Home of Hargo Dedali Surabaya “, which was one of nurse’s competences for doing nursing action.

Generally, this research aimed at analyzing the influence of relaxation technique of zikr breathing against the qualifying sleeping needs for elderly people in Nursing Home of Hargo Dedali Surabaya. Furthermore, there were also specific purposes, which were: 1) Analyzing sleeping needs for elderly people between before and after being given relaxation technique of zikr breathing in experimental group in Nursing Home of Hargo Dedali Surabaya, 2) Analyzing sleeping needs for elderly people between before and after the relaxation technique of zikr breathing in control group in Nursing Home of Hargo Dedali Surabaya, 3) Analyzing sleeping needs for elderly people between experimental group and control group in the Nursing Home of Hargo Dedali Surabaya

3. RESEARCH METHOD

In this research, the researcher utilized Queasy Experiment Design by involving either control group or experimental group. In this design, the experimental group was given a treatment, meanwhile, the control group was not given the treatment. In the both groups were preceded by a pre-test and after being given a treatment, it was conducted measuring again (post-test). The population in this research was all of the elderly people who were in Nursing Home of Werdha Hargo Dedali Surabaya and who qualified inclusion criteria. Moreover, the elderly people were 17 respondents in July 2016. The sample of this research was some of the population who qualified the inclusion criteria. The total of the sample of this research was 14 respondents who were divided by two groups, which were 7 respondents as experimental group and 7 respondents as control group. In this research, the sample was chosen in simple random sampling which all of elderly people who underwent sleep disorder had similar opportunity in choosing the respondents after being conducted a voting. However, the independent variable of this research was relaxation technique of zikr breathing, meanwhile, the dependent variable of this was the qualifying/ fulfilling sleeping needs. The used instrument of data collection of zikr relaxation technique in this research was through the implementation of guidance from either the researcher or the observation. For data collection of sleeping needs was through questionnaire of sleeping needs (modification of psqi, in Sanningtyas 2013). The research was conducted in Nursing Home of Werdha Hargo Dedali Surabaya in July – December 2016. According to the interview result and observation which had been conducted by researcher, for next step was conducted data tabulation and data analysis by utilizing statistic test of ” Fisher Exact Test ”.

4. RESULT AND DISCUSSION

Table 1. Distribution of Sleeping Needs for Elderly People in Nursing Home of Hargo Dedali Surabaya in July 2016

Sleeping Needs	Before being Given a Treatment		After being Given a Treatment	
	f	%	f	%
Qualified	0	0	5	71
Unqualified	7	100	2	29
Total	7	100	7	100

Based on the table 1 above, it showed that before being given a treatment of sleeping needs for elderly people, the 100% of them was unqualified and after being the treatment, the 5 respondents (71%) were qualified

their sleeping needs and 2 respondents (29%) were still unqualified their sleeping needs.

Data of Sleeping Needs in Control Group

Table 2. Distribution of Sleeping Needs for Elderly People in Nursing Home of Hargo Dedali Surabaya in July 2016

Sleeping Needs	Before Treatment		After Treatment	
	f	%	f	%
Qualified	2	29	2	29
Unqualified	5	71	5	71
Total	7	100	7	100

Table 2 showed that before and after the treatment, the sleeping needs for elderly people that was qualified was occurred in 2 respondents (29%), meanwhile, the unqualified one was occurred in 5 respondents (71%).

Table 3. Cross Tabulation of Sleeping Needs for Elderly People between Experimental Group and Control Group in Nursing Home of Hargo Dedali Surabaya in July 2016

Sleeping Needs Treatment	Unqualified		Qualified		Total	
	f	%	f	%	f	%
Treatment	2	28.6	5	71.4	7	100
Control	5	71.4	2	28.6	7	100
Total	7	50	7	50	14	100

Based on table 3 above, it showed that in experimental group, there were 5 respondents (71.5%) who had been qualified their sleeping needs after being given relaxation of zikr breathing and it was different with the control group. In control group, there were 5 respondents (71.5%) who were unqualified their sleeping needs.

According to the result of Fisher Exact Test with $\alpha=0,05$, it was obtained that the significant value (p) was 0,029 because $p < \alpha$, therefore, H_0 was rejected and it meant that there was a significant difference of sleeping needs for elderly people between experimental group and control group.

In experimental group, after being given relaxation technique of zikr breathing, it was occurred the enhancement of qualifying the sleeping needs to be much better rather than in the control group, which was not given the relaxation technique. This was caused by this relaxation technique of zikr breathing, which was a passive attitude by using repeated words, thus, it caused relaxation response (calm). Calm response could enhance endorphin hormone as natural analgesic for the body by activating parasympathetic system for relaxing the body and lowering the blood pressure, stabilizing breathing and heart beat and lowering ACTH hormone, cortisol noradrenaline or norepinephrine. The activation of parasympathetic nerve could cause the reduction of HPA-axis activity (*hypothalamus, pituitary, and adrenal*). This condition caused the body was in homeostasis condition (Kanji,2000; Murakami et.al., 2006), hence, the sleeping needs was qualified.

When the elderly people underwent sleep disorder, there was a stress in brain and muscle, thus, by activating parasympathetic nerve through relaxation technique, automatically the stress reduced. Hence, the elderly people would be easy for entering into sleep condition. Based on Benson (1975), he said that relaxation was the way for overcoming pain, eliminating muscle tension, and could improve sleep disorder.

5. CONCLUSION

There was a significant difference of sleeping needs for elderly people in experimental group between before and after being given relaxation technique of zikr breathing in which the elderly people's sleeping needs was more qualified after being given the treatment. There was no significant difference of sleeping needs for elderly people in control group between before and after treatment, in which the elderly people's sleeping needs was more unqualified. There was a significant difference for elderly people between experimental group and control group in which the elderly people's sleeping needs in experimental group was more qualified rather than in control group.

6. SUGGESTION

1. For Related Institution, the manager of the Nursing Home should have role in enhancing elderly people's motivation for implementing relaxation technique of zikr breathing, considering its advantages were able to qualify the sleeping needs.
2. The elderly people should always implement relaxation technique of zikr breathing every time, particularly when they did not have any activities and when they started sleeping.
3. The other researchers could did further research by adding other factors besides the factors in this research, such as the factor of age, psychological elderly people, sex, and different setting location.

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