

THE EFFECT OF MOZART CLASSICAL MUSIC TO THE SLEEPING QUALITY OF THE PATIENTS

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ABSTRACT

The sleeping quality of someone is good if it is showed the signs lack of sleeping and don't have problems in his/her sleeps, their. The sleeping quality refers to individual that increase to the REM sleeping phase. The quality is the NREM number of stages and REM that experienced by someone in his/her sleeping cycle, and the sleeping quantity is the total duration of sleeping that spent by someone in a day. A person's body during sleeping will have changed the physiology process such as the decreasing of blood pressure and pulse rate, overcome the peripheral blood vessels, sometimes there is increasing of traktus gastrointestinal activity, the relaxation of the muscles, and metabolism basal rate (BMR) decreasing 10-30%. The aim is to know the effect of Mozart classical music to the sleeping quality of the patients that hospitalized in PMI hospital Bogor 2019. To know the effect of Mozart classical music to the sleeping quality of the patients that hospitalized in PMI hospital.

The kinds of this research is pre experimental with one group pre post test design and it is held in PMI hospital Bogor in September 2018 with 25 patients that hospitalized by using Federer. The instrument that is used are observation sheet and questionnaire. The measuring instrument that is used in this research is The Pittsburgh Sleep Quality Index (PSQI).

The univariate analysis research result before doing the Mozart classical music therapy that said good quality sleep there are 8 persons (32%) and bad quality sleeping there are 17 persons (68%). After doing the Mozart classical music therapy said that the good quality sleeping there are 22 persons (88%) and the bad quality sleeping there are 3 persons (12%). The bivariate analysis using Shapiro Wilk test with the result $0,000 < 0,05$, the n_h , potesis test using Wilcoxon with P value $0,001 < 0,05$ then can be conclude that H_a is accepted.

The conclusion is the influence of classical music therapy Mozart on sleeping quality in hospitalized in PMI hospital Bogor 2019. Advice is used as additional material to enrich knowledge and as a reference for emergency science on non-pharmacological sleep quality management.

Keywords : Mozart Classical Music Therapy, Quality Sleeping

PRELIMINARY

Rest and sleep are basic needs that absolutely must be met by everyone. Without enough rest and sleep, the new body can function optimally. Rest and sleep have different meanings in each individual. In general, rest means a state of calm, relaxed, without emotional pressure, and free from feelings of anxiety. So resting does not mean not doing any activity¹.

Whereas Sleep is the status of change of consciousness when individual perceptions and reactions to the environment decrease. Sleep is characterized by minimal physical activity, varying levels of consciousness, changes in the body's physiological processes, and decreased response to external stimuli. Nearly one third of our time, we use to sleep.

This is based on the belief that sleep can restore or rest physically after a day of activities,

reduce stress and anxiety, and can increase the ability and concentration when trying to do daily activities¹.

A person's body during sleep will experience changes in physiological processes such as a decrease in blood pressure and pulse, overcome peripheral blood vessels, sometimes an increase in activity of the intestinal tract, relaxation of skeletal muscles, and basal metabolic rate (BMR) decreases by 10-30% ²

Quality is a very complex phenomenon involving various domains, among others, an assessment of sleep duration, sleep disturbance, latency period of sleep, sleep dysfunction during the day, sleep efficiency, sleep quality, use of sleeping pills. So if one of the seven domains is disrupted it will result in a decrease in sleep quality³.

A person's sleep quality is said to be good if it does not show signs of sleep deprivation and does not experience problems in sleep, sleep quality refers to individuals experiencing an increase in REM sleep phase. The quality and quantity of sleep a person has where the quality of sleep is the number of NREM and REM stages a person experiences in his sleep cycle, and the quantity of sleep is the amount of sleep a person spends in a day⁴.

Non-pharmacological cure of sleep disorders is needed to minimize the effects of pharmacological therapy. Nonpharmacological therapy can be done by giving music therapy. Music has long been a part of human life that is able to keep someone entertained. Music can also be a therapy. Music is given to improve, maintain and restore one's mental, physical, emotional, and spiritual health. Music therapy is included in complementary therapy, in which music therapy is a technique used to cure an illness by using certain sounds or rhythms. The type of music used, instrumentalia in music therapy can be adjusted to your liking, such as classical music, slow music, orchestras, and other modern music. Soft and regular music such as instrumental and classical music is music that is used for music therapy⁵.

According to Campbell listening to Mozart classical music for 30 minutes before bedtime can affect heart rate, causing calm because music with soft rhythm that is heard through the ear will directly enter the brain and directly processed so as to produce a good effect on the health of postoperative patients. Complaints of postoperative patients such as disturbed sleep patterns are caused by pain in the scar. Listen to Mozart's classical music to improve, maintain, and restore mental and physical health so that patients feel less pain in postoperative wounds. Mozart classical music that is listened to postoperative patients has a slow tempo so as to calm the mind, stabilize blood pressure and expedite the circulation of white blood cells in the surgical wound to accelerate wound healing.

The results of research conducted by Hendrik, prove that there is an effectiveness of classical music on the quality of sleep by listening to classical music able to calm the mind, launch blood pressure and stabilize heart pressure so that inpatients are right to start sleeping and stabilize heart pressure so that inpatients are right for start to sleep and never wake up in the middle of the night. Patients who listen to classical music Mozart provide a relaxed psychological condition and a feeling of comfort.

Based on the results of a preliminary study at the 2019 Bogor PMI Hospital in the Seruni ward of 10 respondents 2 respondents had a stroke, 3 respondents had respiratory problems and 5 respondents had hypertension. From 10 respondents 6 respondents who

listened to music before going to sleep and 4 respondents who did not listen to music before going to sleep, the time needed to sleep for > 20 minutes there were 7 respondents while the time needed to sleep for <20 minutes there were 3 respondents, for regarding questions about the feeling of listening to classical music Mozart there were 6 respondents who slept listening to music and 4 respondents who could not sleep when listening to music.

Based on the above phenomenon, the research is interested in conducting research with the title "The Effect of Mozart Classical Music Therapy on Sleep Quality in Patients in the Inpatient Room at the PMI Hospital".

RESEARCH METHODS

This study uses experimental research with a pre-experimental design research design. While the design of this research design uses one-group pre-post test design, because pre-experimental does not require control⁶.

One group pre-post design is research with one group of subjects that is treated or intervened which is measured before and after treatment. The hallmark of this research is to use a causal relationship by involving a group of subjects. Subjects were observed again after the intervention. This design was used to determine the effect of Mozart classical music therapy on sleep quality in patients in the inpatient room at PMI Hospital.

RESEARCH RESULT

1. Characteristics of Respondents

The majority of male respondents were 13 respondents (52.0%). The majority of respondents aged 31-40 years were 12 respondents (48.0%). The majority of respondents with high school education were 10 respondents (40.0%).

Based on table 4 shows that the majority of respondents with the work of Housewives as many as 10 respondents (40.0%) and with Workers as many as 10 respondents (40.0%).

2. Normality Test

Data normality testers in this study used the Shapiro Wilk test. The Shapiro Wilk test was used because the sample in this study was included in a small sample of 25 study subjects (<50). Testing is done using the help of the SPSS program.

Based on Table 5 the Tests of Normality shows that the analysis of normality tests in the pre-test and post-test intervention groups is known to be a significant value of 0,000 or a significant value <0.05. So it can be concluded that the data in this study are not normally distributed, the statistical method used is the Wilcoxon Signed Ranks Test.

3. Univariate Analysis

The quality of sleep before performing classical music therapy Mozart as many as 17 respondents (68.0%). The quality of sleep after performing classical music therapy Mozart as many as 22 respondents (88.0%).

4. Bivariate analysis

Effects of Mozart Classical Music Therapy on Sleep Quality

Based on Table 8 Effect of Mozart Classical Music Therapy on Sleep Quality in Inpatients at 2019 PMI Bogor Hospital it can be seen that there is a difference between changes in sleep quality for pretest and posttest and these differences after the Wilcoxon test is obtained p-value

= 0.001 which means p-value <0.05 so that the decision taken is H_a accepted and H_o rejected. So it can be concluded that there is an effect of Mozart's classical music therapy on sleep quality in inpatient rooms at PMI Bogor Hospital.

DISCUSSION

1. Frequency Distribution of Sleep Quality Before Mozart's Classical Music Therapy

Based on table 6 shows that patients with poor sleep quality are 17 people, patients who have good sleep quality are 8 people. Before being given classical music therapy Mozart to inpatients, pre-test is done first. In the pre-test results there are non-parameters obtained, the total mean of sleep quality is 1.00 (SD = 0,000). This is in accordance with the provision of Mozart classical music therapy to 25 people treated in the inpatient room. From the interview results, respondents said that they felt their sleep quality was poor, most respondents complained that their sleep quality was poor.

This is in accordance with research conducted by Yasinta Nadu (2018) the quality of sleep of patients before doing classical music therapy Mozart on 30 respondents was poor sleep quality.

Sleep quality is everyone's ability to maintain a state of sleep and to get the appropriate REM and NREM sleep stages. Sleep quality is a condition that is experienced by individuals to get freshness and fitness when awakened from sleep. A person's sleep quality is said to be good if it does not show signs of sleep deprivation and has no problems sleeping.

There are 8 factors influencing the quality of sleep, namely disease factors, environmental factors, motivational factors, exercise factors and fatigue, psychological stress factors, alcohol factors, nutritional factors, drug factors.

This is in line with the theory that rest and sleep have different meanings in each individual. In general, rest means a state of calm, relaxed, without emotional pressure, and free from feelings of anxiety. So resting does not mean not doing any activity, sleep is a status change of consciousness when individual perceptions and reactions to the environment decline. Sleep is characterized by minimal physical activity, varying levels of consciousness, changes in the body's physiological processes, and decreased response to external stimuli. Sleep is one of the body's very complex biological rhythms. Circadian synchronization occurs if the individual has a sleep-wake pattern that follows the biological clock the individual will wake up at the highest physiological and psychological rhythm or most active and will sleep at the lowest rhythm.

Based on the discussion and theory above, it can be concluded that the quality of sleep felt by inpatients is poor sleep quality. This is caused by the status of change of consciousness when individual perceptions and reactions to the environment decrease. but the physiology of sleep is a regulation of sleep activities by the relationship of a celebrity mechanism that alternately activates and depresses the brain to sleep and wake up. One of these sleep activities is regulated by the reticular activation system which is a

system that regulates all levels of central nervous system activities including alertness and sleep. Thus, systems in the brain stem that regulate cycles or changes in sleep are RAS and BSR.

2. Frequency Distribution of Sleep Quality After Mozart's Classical Music Therapy

Based on table 7 shows that the results of the study have improved After the classical music therapy mozart conducted on respondents who slept well as many as 22 people (88.0%), patients who slept poorly as many as 3 people (12.0%). The results obtained from the total mean of a decrease in sleep quality is 1.44 (SD = 0.507).

This is in accordance with research conducted by Yasinta Nadu (2018), after being given classical mozart music therapy patients experience good sleep quality after listening to mozart classical music because as many as 99.0% of patients sleep soundly even without using sleeping pills while in hospital .

Music therapy is included in complementary therapy, in which music therapy is a technique used to cure an illness by using certain sounds or rhythms. The type of music used, instrumental in music therapy can be adjusted to your liking, such as classical music, slow music, orchestras, and other modern music. Soft and regular music such as instrumental and classical music is music that is used for music therapy. Mozart classical music for 30 minutes before going to sleep can affect heart rate, causing calm because music with soft rhythm that is heard through the ear will go straight into the brain and directly processed so as to produce a good effect on patient health.

Based on the description above it can be concluded that the classical music therapy Mozart affects the quality of sleep. Sleep quality of 17 respondents is poor sleep quality has increased to 22 respondents whose sleep quality is good. Improved sleep quality before and after therapy is caused by the effects of Mozart's classical music. With the help of mozart classical music one's mind becomes soothing, listening to mozart classical music can make people more relaxed and comfortable.

3. The Effect of Mozart Classical Music Therapy on Sleep Quality in Inpatients at PMI Bogor

Based on table 8 the quality before and after giving classical music therapy mozart to inpatients at PMI Bogor Hospital shows that a decrease in sleep quality after classical music therapy and improved sleep quality has been tested using the Wilcoxon signed ranks test concluded that the administration of mozart classical music therapy increased significantly (p-value = 0.001 which means p-value <0.05). So that the decision that H_0 was accepted and H_a was rejected. To test this hypothesis the Wilcoxon signed ranks test was used because the values before and after the treatment were not normally distributed (p < 0.005).

So it can be concluded that there is an influence of classical music therapy on the quality of inpatient sleep at PMI Bogor Hospital .

This research is in line with what was done by yasinta nadu on "The Effect of Mozart's Classical Music Therapy on Sleep Quality in Postoperative Patients at Batu Baptist Hospital". This type of research is Pre-Experimental with One Group Pre-Post test design. The sample in this study were 30 postoperative patients. The results showed

that before listening to classical mozart music therapy, most 21 (70.0%) postoperative patients experienced poor sleep quality and after listening to classical music therapy. Mozart almost all 25 (83.3%) postoperative patients experienced good sleep quality. Paired t-test results obtained p-value = (0,000) <(0.050) so that it can be concluded that there is an influence of classical music therapy on sleep quality in postoperative patients at the Baptist Hospital of Stone.

Non-pharmacological cure of sleep disorders is needed to minimize the effects of pharmacological therapy. Non pharmacological therapy can be done by giving music therapy. Music has long been a part of human life that is able to keep someone entertained. Music can also be a therapy. Music is given to improve, maintain and restore one's mental, physical, emotional, and spiritual health. Music therapy is included in complementary therapy, in which music therapy is a technique used to cure an illness by using certain sounds or rhythms. The type of music used, instrumental in music therapy can be adjusted to your liking, such as classical music, slow music, orchestras, and other modern music. Soft and regular music such as instrumental and classical music is music that is used for music therapy.

Sleep is a status change of consciousness when an individual's perception and reaction to the environment decreases. Sleep is characterized by minimal physical activity, varying levels of consciousness, changes in the body's physiological processes, and decreased response to external stimuli. Nearly one third of our time, we use to sleep. This is based on the belief that sleep can restore or rest physically after a day of activities, reduce stress and anxiety, and can increase the ability and concentration when trying to do daily activities.

Sleep quality is everyone's ability to maintain a state of sleep and to get the appropriate REM and NREM sleep stages. Sleep quality is a condition that is experienced by individuals to get freshness and fitness when awakened from sleep. A person's sleep quality is said to be good if it does not show signs of sleep deprivation and has no problems sleeping.

There are 8 factors influencing the quality of sleep, namely disease factors, environmental factors, motivational factors, exercise factors and fatigue, psychological stress factors, alcohol factors, nutritional factors, drug factors.

Based on the discussion and theory above, there is an effect of mozart classical music on improving the sleep quality of patients in the inpatient room in this study with data before doing mozart classical music therapy for respondents with good sleep quality of 8 people (32.0%), patients with poor sleep quality were 17 people (68.0%). After performing classical music therapy on respondents who had good sleep quality were 22 people (88.0%), patients who had poor sleep quality were 3 people (12.0%). This shows that there are changes in the quality of sleep before and after the administration of classical music mozart. Improving the quality of sleep because of the classical music mozart can make a person more relaxed.

From the description above it can be concluded that there is harmony between theory and research results, because the provision of classical music therapy mozart basically influences the quality of sleep of inpatients. Because mozart classical music can calm the mind so as to provide calm that makes the brain receive new input, relax and

sleep effect.

CONCLUSION

1. It is known that the frequency distribution before performing classical mozart music therapy for inpatients at PMI Bogor Hospital in 2019 from 25 respondents 8 respondents who had good sleep quality and 17 respondents who had poor sleep quality.
2. It is known that the frequency distribution after performing classical mozart music therapy in inpatients at PMI Bogor Hospital in 2019 from 25 respondents 22 respondents who had good sleep quality and 3 respondents who had poor sleep quality.
3. There is an influence between classical music therapy with a decrease in the pain scale of postoperative patients at PMI Hospital in 2019, it can be seen that there is a difference between the change in pain scale for pretest and posttest and the difference after being tested using Wilcoxon test obtained p -value = 0.001 which means p – value <0.05 so the decision taken is H_a accepted and H_0 rejected. So it can be concluded that there is an influence of classical music therapy on reducing the level of pain scale in postoperative patients in Bogor PMI Hospital .

SUGGESTION

1. For Educational Institutions
For educational institutions to increase the capacity and quality of education so that the information from the results of this study can be used as additional material to enrich the knowledge and reference needs of emergency nursing on non- pharmacological sleep quality management with classical music therapy mozart and its effects on sleep quality.
2. For Health Services
For health services, especially nursing can improve the quality of nursing care provision, especially the nurse's independent intervention in the management of non-pharmacological sleep quality. Nurse independent intervention or non-pharmacological therapy so that there are alternatives other than drugs that sometimes cause side effects. From the results of the study showed that mozart classical music therapy can help sleep quality to be more relaxed. To improve sleep quality, classical mozart music can be played before going to sleep.
3. For Respondents
The results of this study are expected to be input for patients treated in the inpatient room to help sleep quality by combining medical and non-medical treatment.
4. For Further Researchers
The results of this study are expected to be used as basic data for further research in the same scope.

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