

A study to evaluate the effectiveness of Music Therapy on sleep quality among senior citizens at selected old age home

Arun.R
Assistant professor
Panna dhai maa subharti nursing college, subharti university, meerut.

Reeta.C
Lecturer
AMSSCON, Chhindwara, MP.

ABSTRACT

A study to evaluate the effectiveness of Music Therapy on sleep quality among senior citizens at selected old age home in Dindigul dist.

The present study was conducted at “Anbalaya old aged home” in Dindigul. Pre experimental one group pre test and post test design was used for this study. Permission was obtained from the old age home administrator and data collection was done over a period of 4 weeks. The investigator has selected 50 samples with sleep disturbances through convenience sampling technique. Oral consent was obtained from the subjects. Groningen sleep quality scale was used for assessing the level of sleep quality. Then the investigator administered a music therapy for 30- 45 minutes for 14 consecutive days and post test was done after completion of the intervention. Descriptive and inferential statistics were used to analyze the findings of the study.

There was a significant difference ($P < 0.05$) found between the mean pretest score (10.05(+1.72)) and post test score (3.02(+1.78)) of sleep quality. There was a significant association ($P < 0.05$) found between the level of sleep quality and age, gender, education and marital status.

The findings of the study shows that music therapy is effective in increasing the level of sleep quality among senior citizens. So, music therapy can be practiced in old age home and in other set up to help patients and family members to cope with sleep disturbances.

INTRODUCTION

Sleep is necessary for good health at all stages of life. The need for restorative sleep is not dependent on age, and should not be assumed to lessen with age. Generally, some changes in sleep may be considered part of

normal ageing; however, normal changes should not cause personal dissatisfaction with quantity or quality of sleep. Along with a negative influence on health and quality of life, sleep disturbances in older people can be problematic due to safety concerns, increased risk of falls and injury, as well as negatively impacting on the wellbeing of bedroom partners and care.

Ageing is an irreversible process, “Oldage is an incurable disease”. There is 81 million senior citizen in INDIA. 10lakhs in mumbai,. 90% of senior citizen are from unorganized sector with no social security, 40% below poverty line, 75% rural areas, 73% illiterate. Sleep disturbance in senior citizen is a widely under recognized and under treated medical illness. The risk of insomnia in the elderly increases with other illnesses and when ability to function becomes limited.

Surveys have estimated that more than 50% of community living people age 60 or older experience sleep disturbance. Sleep disorder can result in tiredness, depression, greater anxiety, irritability, pain sensitivity, muscle tremors and lack of day time alertness.

Sleep disruption is often a reason for residential care placement as cited in , and in residential care, poor residence sleep is often associated with disruptive Behavior and psychological distress. Music is pleasant and safe and can be used therapeutically for insomnia in older people .The intervention is quick and easy to learn, is low cost, and could be used readily by nurses. Musical therapy provides benefits for people of all various ages and conditions and is therefore utilized in many settings. As a result of the therapy’s effectiveness musical therapy is used in nursing homes, hospitals, sporting events, and also in households.

Primary benefits of music therapy are being completely risk-free, showing cost effective and no side effects. Based on a psycho physiological theory synthesized from literature, sedative music induces relaxation and distraction responses, which reduce activity in neuro-endocrine and sympathetic nervous systems, result in decreased anxiety, heart rate, respiratory rate, blood pressure and increased sleeping pattern.

STATEMANT OF THE PROBLEM

“A study to evaluate the effectiveness of Music Therapy on sleep quality among senior citizens at selected old age home in Dindigul district”.

OBJECTIVES

- To assess the level of sleep quality before and after music therapy among senior citizens
- To evaluate effectiveness of music therapy on sleep quality among senior citizens

- To associate the post test level of sleep quality among senior citizens with their selected demographic variables

HYPOTHESIS

- H1 – There will be a significant difference in sleep quality of senior citizens before and after music therapy at <0.05 level of significance.
- H2 – There will be a significant association between the post level of sleep quality and selected demographic variables at <0.05 level of significance.

RESEARCH METHODOLOGY

Research Approach:

Quantitative evaluative approach was used in this study.

Research Design:

Pre experimental design with one group pre test and post test was used.

O₁

X

O₂

O₁ – pre assessment level of sleep quality

X - Music therapy

O₂ – Post assessment level of sleep quality

Variables:

Independent variable: Music therapy

Dependent variable : Sleep quality

Description of Setting:

The Setting of the Main study was Anbalaya old aged home in Dindigul, which is located 70 km away from Sara Nursing College . The old aged home is a 100 bedded Home at Dindigul. 57 elderly people were residing, they have facilities like water, food, sanitation, electricity and leisure time enjoyment. Relatives visited to the home daily.

Population:

Target Population of this study was senior citizens.

SAMPLING:**Sample**

Sample consists of senior citizens who met the inclusion criteria.

Sample Size:

Sample size was 50 senior citizens residing in selected old age home at Dindigul.

Sampling Technique:

Convenience sampling technique was used to select the Sample.

Criteria for Sample Selection

The samples were selected based on the following inclusion and exclusion criteria.

Inclusion criteria:

- Senior citizens in the age group of 60 and above.
- Senior citizen who are willing to participate in this study.
- Senior citizen who can speak and understand Tamil and English.

Exclusion criteria:

- ✓ Senior citizen with sensory deficit

RESEARCH TOOL AND TECHNIQUE

The data collection tool consist of two section

Section A: Demographic profile of senior citizens

It comprised of demographic data of the senior citizens such as age , sex , religion , education previous occupation, monthly income ,marital status, type of family, food habits and source of income .

Section B: Groningen sleep quality scale:

It helps to assess the sleep quality of the senior citizens, which has 15 items to measure the quality of sleep.

The scale was translated in Tamil. The accuracy of the translation was confirmed by back translation. The first question does not count for the total score. One point was awarded if the answer is true to the item numbers 2,3,4,5,6,7,9,11,13,14 and 15 and zero was given if it is false. For item numbers 8, 10, 12 reverse scoring has been given. The total possible score was 15. The total score of each subject was calculated and interpreted as follows;

1-2: Good sleep

3-5: Average sleep

6-15: Poor sleep

Data collection procedure

Before conducting the main study, the researcher met the concerned authorities in the Anbalaya old aged home in Dindigul and obtained the permission for the data collection. The data collection was done after explaining the procedure to senior citizens and with their oral consent. The senior citizens who met the inclusion criteria were selected by convenience sampling technique.

In the 4 weeks of data collection, each two weeks 25 patients were selected. The data collection was done in the evening 6.30 to 9.30 pm. In the pre test the sleep quality was assessed by Groningen sleep quality scale. The next day, the music therapy was provided to the samples for 30-45 minutes through head phone for 14 days using the relaxation studies. The post test was conducted and the score was interpreted.

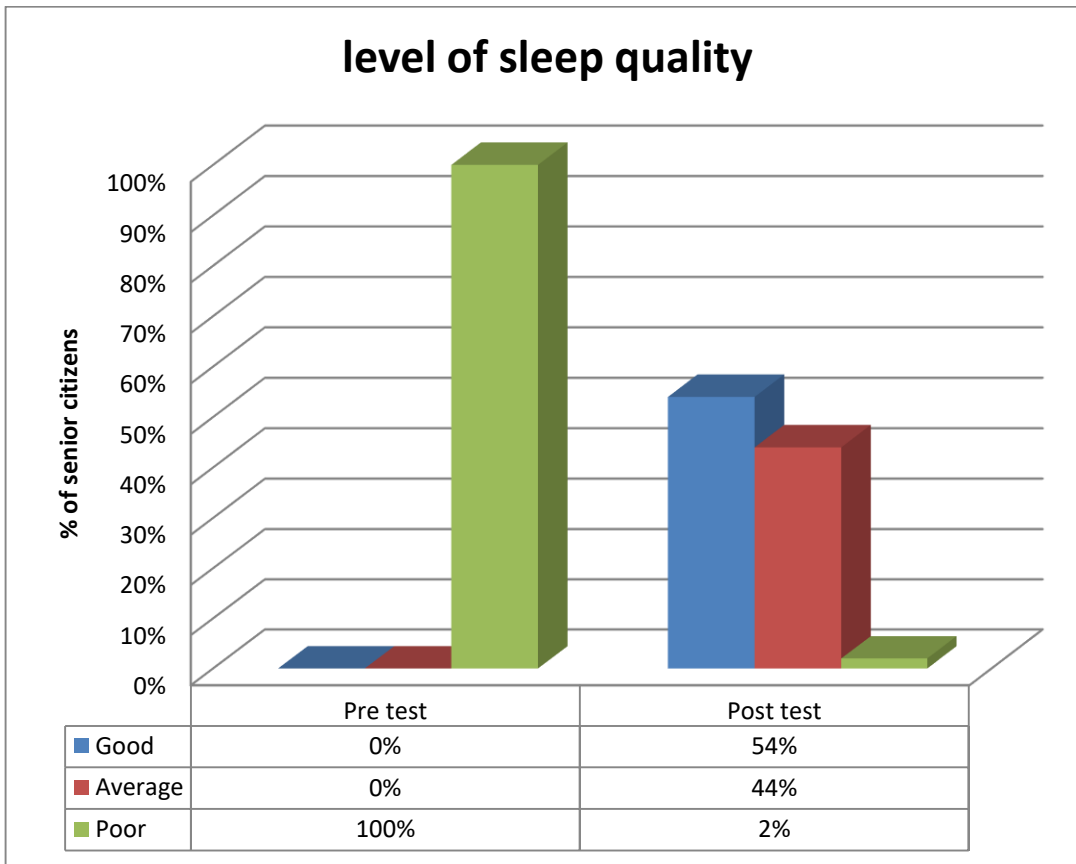
DATA ANALYSIS:

The descriptive statistics was used for categorical data, Paired 't' test was used to evaluate the effectiveness of music therapy on sleep quality and Chi square was used to find out the association between the post test level of sleep quality and selected demographic variables.

ANALYSIS AND INTERPRETATION

It deals with analysis and interpretation of data to evaluate the effectiveness of music therapy on sleep quality among senior citizens in selected old age home at Dindigul Dist.

According to the demographic characteristics of the patient, the major findings of the study were, In the age, majority of the subjects were between 60-65 years, 30 (60%). Gender, majority of the subjects 36 (72%) of the patients were Female. Considering their Religion, majority 46 (92%) of the subjects were Hindu. Based on their Educational status, Majority of the subject 32(64%) were no formal education. Considering their monthly Income, Majority of the subject 28(56%) had 3000-4000 as their Monthly income. Regarding their Marital status, Majority of the subjects were 47(94%) married, With regard to Type of family, Majority of the subject were 36 (72%) were belongs to Nuclear. Regarding their food habits, The Majority of the subject were 41(82%) non-vegetarian. Regarding their source of income is, The Majority of the subject were 30(60%) home.



Among 50 subjects before the music therapy, Majority of the subjects 50(100%)had disturbed sleep. It was found that senior citizens who were diagnosed with any type of sleep disturbances and it revealed that there is a need for relaxation and ventilation of feelings.

After the music therapy among the senior citizens, Majority of the subjects 27(54%) had Good sleep, 22(44%) subjects had Average sleep and 1(2%) had disturbed sleep after the music therapy

In the pre test before an music therapy, the mean score of sleep quality was 10.5(+1.72), In the post test after an music therapy the mean score of sleep quality was 3.02(+1.78).The ‘t’value (20.7) is greater than the Table value (2.132) at $p < 0.05$ level of significance. Hence the music therapy is more effective in changing the level of sleep quality.

There was a significant association ($P < 0.05$) found between the level of sleep quality and age, gender, education and marital status.

RESULTS AND DISCUSSION

The first objective of the study was to assess the level of sleep quality before and after music therapy among senior citizens.

Among 50 subjects before the music therapy, Majority of the subjects 50(100%) had disturbed sleep. It was found that senior citizens who were diagnosed with any type of sleep disturbances and it revealed that there is a need for relaxation and ventilation of feelings.

After the music therapy among the senior citizens, Majority of the subjects 27(54%) had Good sleep, 22(44%) subjects had Average sleep and 1(2%) had disturbed sleep after the music therapy.

The second objective of the study was to evaluate the effectiveness of the music therapy on sleep quality among senior citizens.

In the pre test before the music therapy, the mean score of sleep was 10.5 and In the Post test after Music therapy the mean score of sleep quality was 3.02. Paired 't' test was used to find the difference between the pre and post test sleep quality score was significant at <0.05 level of significance. From the table, the analysis showed that the 't' value (20.7) is greater than the Table value (2.132) at 0.05 level of significance. Hence the Music therapy is more effective in increasing the level of sleep quality.

H1 – There will be a significant difference in sleep quality among senior citizens before and after music therapy at <0.05 level of significance.

Therefore Hypothesis 1 was accepted.

The third objective of the study was to associate the post level of sleep quality among senior citizens with their selected demographic variables.

Chi-square analysis was done to find the association between the post test level of sleep quality and the selected demographic variables. The table 4.3 shows that , There was a significant association ($P<0.05$) found between the level of sleep quality and age, gender, education and marital status.

H2 – There will be significant association between post level of sleep quality with their selected demographic variables at <0.05 level of significance.

Therefore, Hypothesis 2 was supported.

Summary and conclusion:

The chapter dealt with discussion of the study with reference to the objectives the supportive studies according the three objectives have been obtained and the two hypothesis were retained in this study.

The findings of the study shows that music therapy is effective in increasing the level of sleep quality among senior citizens. So, music therapy can be practiced in old age home and in other set up to help patients and family members to cope with sleep disturbances.

REFERENCES:

- Ancoli-Israel, S., Cole, R., Alessi, C., Chambers, M., Moorcroft, W., Pollack, C.P., *The role of actigraphy in the study of sleep and circadian rhythms*. Sleep, 2003. 26(3): p. 342-92.
- Conn, D., Madan, R., *Use of Sleep-Promoting Medications in Nursing Home Residents: Risks versus Benefits*. Current Opinion. Drugs and Aging, 2006.23(4): p. 271-87.
- Curran, H.V., Collins, R., Fletcher, S., Kee, S.C., Woods, B., Iliffe, S., *Older adults and withdrawal frbenzodiazepine hypnotics in general practice:effects on cognitive function, sleep, mood and quality of life*. Psychological Medicine, 2003. 33(7): p. 1223-37.
- Dr.Lalitha “ *TEXT BOOK ON MENTAL HEALTH NURSING*”1st edition, UMG PUBLICATION .
- Feinsilver, S.H., *Sleep in the elderly. What is normal?* Clinics in Geriatric Medicine, 2003. 19(1): p. 177-88.
- Garcia, A.D., *The effect of chronic disorders on sleep in the elderly*. Clinics in Geriatric Medicine, 2008. 24(1): p. 27-38.
- Graham, D., McLachlan, A., *Declining melatonin levels and older people.How old is old?* Neuro Endocrinology Letters, 2004. 25(6): p. 415-8.21
- Haesler, E.J., *Effectiveness of strategies to manage sleep in residents of aged care facilities*. Joanna Briggs Institute, 2004. 2: p. 115-183.