



EFFECTIVENESS OF SLEEP ENHANCEMENT PROGRAMME ON QUALITY OF SLEEP AMONG ELDERLY

Nursing

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ABSTRACT

As people age they tend to have a harder time falling asleep and more trouble staying asleep than when they were younger. This study investigates the effectiveness of sleep enhancement programme on quality of sleep among elderly. A quantitative approach was used and the objectives of the study were to assess the quality of sleep among elderly residing in selected old age homes, to evaluate the effectiveness of sleep enhancement programme on quality of sleep among elderly and to find out the association between quality of sleep among elderly and selected variables. The research design adopted for the study was one group pre test post test design. The study was theoretically supported by Betty Neuman's system model. A total of 30 elderly were selected for the study using nonprobability purposive sampling technique. The data were collected using socio personal data sheet and Pittsburgh Sleep Quality Index. The sleep enhancement programme consisted of sleep hygiene education and Guided Somato Psychic Relaxation which was provided to the participants for a period of one month. Post test for assessing quality of sleep was conducted after one month using Pittsburgh Sleep Quality Index. The data were analyzed using descriptive and inferential statistics. The results of the study revealed that sleep enhancement programme was effective to improve the quality of sleep among elderly. The study also identified that the quality of sleep among elderly is associated with their religion. Findings of the study have implications in nursing practice, education, administration and research.

KEYWORDS

quality of sleep; elderly; sleep enhancement programme

1. INTRODUCTION

Sleep is a basic human need; it is a universal biological process common to all people. Humans spend about one third of their lives asleep. We require sleep for many reasons: to cope with daily stresses, to prevent fatigue, to conserve energy, to restore the mind and body, and to enjoy life more fully. Sleep enhances daytime functioning. It is vital for not only optimal psychological functioning but also physiological functioning as the rate of healing of damaged tissue is greatest during sleep¹.

Aging is associated with several well described changes in patterns of sleep. Typically, there is a phase advance in the normal circadian sleep cycle; older people tend to go to sleep earlier and wake up earlier. The prevalence of many sleep disorders increases with age. Insomnia, rapid eye movement sleep behaviour disorder, restless leg syndrome and snoring are the common sleep problems².

Non pharmacologic management of Insomnia may be advisable for many elderly patients. Regular physical exercise is a simple strategy suggested for dealing with sleep problems in elderly because it may promote relaxation and raise core body temperature which could help in initiating and maintaining sleep³. The goal of relaxation therapy is to guide individuals to a calm, steady state when they wish to go to sleep. The method includes progressive muscle relaxation (tensing and then relaxing each muscle group), guided imagery, diaphragmatic breathing, meditation and biofeedback⁴.

2. OBJECTIVES

- To assess the quality of sleep among elderly residing in selected old age homes.
- To evaluate the effectiveness of sleep enhancement programme on quality of sleep among elderly.
- To find out the association between quality of sleep among elderly and selected variables.

3. MATERIALS AND METHODS

A quantitative approach was used for the study. The study design selected was non experimental descriptive design. Non probability purposive sampling technique was employed to select 30 elderly between 60 to 80 years of age. Those excluded from the study were elderly who were bed ridden or who had mental illness.

The tools used were Pittsburgh Sleep Quality Index and sociopersonal data sheet. The sleep enhancement programme was given to the elderly which consist of two sessions. First session includes sleep hygiene education for the elderly on the first day. Session two consist of Guided Somato Psychic Relaxation from the next day. The caretakers and wardens also attended the session. The investigator demonstrated

Guided Somato Psychic Relaxation for the group and the elderly performed the relaxation individually. An audio taped instruction was provided for the elderly for performing Guided Somato Psychic Relaxation in the mobile phones of participants. Post test was conducted after one month.

4. RESULTS

4.1 Findings related to sample characteristics

Most of the elderly (33.33 %) were between the age group of 76-80 years, 30 percent were aged between 60-65 years of age, 23.3 percent were aged between 66-70 years and 13.3 percent were aged between 71-75 years. Among the participants 73.3 percent were females. It is also seen that 36.7 percent of the elderly were widows, 33.3 percent were unmarried and 30 percent were married. The data also revealed that 70 percent of elderly were Christians and 30 percent were Hindus. Majority of the elderly (36.7%) were staying in old age home for less than one year, 33.33 percent were staying for more than 10 years, 16.7 percent were staying for less than 5 years and 13.3 percent were staying for a period of 6-10 years. Majority of the elderly (23.3%) had diabetes mellitus and Hypertension, 20 percent of had hypertension and heart disease, 13.3 percent had diabetes, 13.3 percent had hypertension, 13.3 percent had diabetes, hypertension and hypercholesterolemia.

4.2 Findings related to quality of sleep among elderly

Table 1 Frequency distribution and percentage of elderly based on quality of sleep

		(n=30)	
Quality of sleep		f	%
Poor	(6-13)	27	90
Very poor	(14-21)	3	10

Table 1 shows that majority (90 %) of the elderly had poor quality of sleep and 10 percent had very poor quality of sleep.

4.3 Findings related to effectiveness of sleep enhancement programme on quality of sleep among elderly

Table 2 Mean rank, sum of ranks and Z value of pre test and post test scores of quality of sleep among elderly

Group	Quality of sleep		
	Mean rank	Sum of ranks	Z
Pre test	15.50	465	4.82*
Post test			

*Significant at 0.05 level

Table 2 shows that mean rank was 15.50, sum of rank was 465 and Z value was 4.82. The obtained Z value score was significant at 0.05 level hence the sleep enhancement programme was effective in improving

quality of sleep of elderly.

4.4 Findings related to association of quality of sleep among elderly and religion.

Table 3 Frequency distribution and chi square value of quality of sleep among elderly with respect to religion

(n=30)

Religion	Quality of sleep		df	χ^2
	Poor f	Very poor f		
Hindu	6	3	1	7.77*
Christian	21	0		

*Significant at 0.05 level

Table 3 shows the chi square (χ^2) value of quality of sleep with respect to religion. The obtained chi square value was significant at 0.05 level. Hence the null hypothesis was rejected, which shows that there was a significant association between quality of sleep and religion.

5.DISCUSSION

The present study was focused on the effectiveness of sleep enhancement programme on quality of sleep among elderly residing in selected old age homes of Kottayam district. The findings of the study have been discussed with reference to the objectives in the light of other studies.

The present study found out that 90 percent of the elderly were having poor quality of sleep and 10 percent of the participants were having very poor quality of sleep. The findings of the study was supported by a study conducted in Kerala to assess sleep quality and associated psychosocial factors among elderly in a rural population which revealed that 72.4 percent of the elderly were having poor quality of sleep⁵.

The major objective of the study was to evaluate the effectiveness of sleep enhancement programme on quality of sleep among elderly. It was found that the sleep enhancement programme was effective in improving quality of sleep among elderly.

The findings of the present study is consistent with studies done all over the world as well as in India. A study conducted in Tamil Nadu to assess the effects of nursing interventions on quality of sleep among elderly people with sleep disturbances residing in selected old age homes found out that 43 percent of the elderly in experimental group had good sleep quality after providing with nursing interventions such as sleep hygiene education and progressive muscle relaxation⁶.

The present study found out a significant association between quality of sleep and religion which is supported by a study carried out in USA which linked measures of religious involvement with better sleep outcomes. The study showed that religious attendance and frequency of prayer were positively associated with overall sleep quality⁷.

6. CONCLUSION

Based on the findings of the study it can be concluded that majority of the elderly was suffering from sleep problems and sleep enhancement programme was effective in improving sleep quality of elderly.

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