



EFFECTIVENESS OF NURSING INTERVENTION AND RELAXATION TECHNIQUE ON SLEEP PATTERN AND DISTURBANCE AMONG ELDERLY

Nursing

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KEYWORDS

Ageing is the process of becoming older. Ageing represent the accumulation of changes in a human being encompassing physical, psychological and social changes. In recent times there has been a change in family system & structure in India. Indians are moving out of the traditional made of ageing such as cave of elderly at home, due to changes in family system large number of elderly joining old age home. Most of elderly living in old age home faces sense of powerlessness, problem of adjustment and adaption.

Population at aging is a worldwide phenomenon. It is estimated that by 2050, one of five persons will be aged ≥ 60 years. In India ageing is much faster than previously thought and may have nearly 20 per cent population of 60 years and above by 2050.

Objectives of the Study:

1. To assess the sleep pattern and disturbance that rises during sleep among elderly residing in old age home through pre-test.
2. To identify the factors that cause sleep disturbances among elderly residing in old age home.
3. To evaluate the effectiveness of nursing interventions on sleep among elderly residing in old age home.
4. To evaluate the effectiveness of progressive muscle relaxation techniques with deep breathing exercise on sleep among elderly residing in old age home.
5. To compare effectiveness of interventions on sleep among elderly residing in old age homes through post-test.
6. To find out the association between post-test knowledge score of elderly with selected demographic variable.

Hypothesis:

H₁: There will be significant difference in the sleep pattern among the elderly before and after the nursing interventions.

H₂: There will be significant difference in the sleep pattern among the elderly before and after administering relaxation techniques such as progressive muscle relaxation with deep breathing exercise.

H₃: There will be significant difference in the mean score of sleep pattern among the elderly exposed to nursing interventions in the experimental group I, elderly exposed to relaxation techniques in experimental group II the elderly who were not exposed to any intervention in the control group.

MATERIAL AND METHOD:

A quasi-experimental research design (pre-test, post-test with two experimental groups and one control group) was used for the study. 300 elderly were selected from five old age homes by convenience sampling technique. Out of 300 elderly, 100 elderly were allotted to experimental group I (nursing interventions), 100 elderly were allotted to experimental group II (progressive muscle relaxation techniques with deep breathing exercises) and the remaining 100 elderly were allotted to control group who were not exposed to any interventions.

Group	Pre-test	Intervention	Post-test
Experimental Group I	O1	X1	O2
Experimental Group II	O3	X2	O4
Control Group	O5	X0	O6

Variables:

Independent Variables

- Nursing interventions to promote sleep among elderly with sleep disturbances.
- Relaxation technique sessions, such as progressive muscle relaxation with deep breathing exercise, to promote sleep among elderly with sleep disturbances.

Dependent variables

- Sleep pattern and sleep disturbances.
- Perception level of sleep.

Instrumentation:

Section A: Socio-Demographic variables consist of (age, gender, marital status, religion, place of residence, type of family, general health status and hospitalization) Section B: Sleep pattern assessment questionnaire was used to assess sleep pattern and disturbances Section C: Visual analogue scale was used to assess the elderly perceived level of sleep and Section D: Checklist to identify the factors causing sleep disturbances.

RESULT:

Out of the 300 elderly, 26 (8.67%) of them were found to be having very severe sleep disturbances, 140 (46.67%). The visual analogue scale revealed that out of the 300 subjects, 154 (51.33%) of them perceived sleep as severely disturbed. Multiple stepwise linear regression analysis showed at $P < 0.05$ level that the following factors were found to be significant like Pain Anxiety or depressed, Frequent need to urinate, Noise and light, Listening to relaxing music, Watching television, Personal hygiene and Day-time nap. The calculated paired t-test result showed that there is an increase in the post-test scores, but statistically it was not significant with P value of 0.136. The scores were significant at $P < 0.05$ level when compared with the control group. Therefore, it is proved that the nursing interventions were effective in promoting sleep among the elderly residing in old age homes. Hence hypothesis H₁ is accepted. The calculated paired t-test result showed an increase in the post-test scores which was statistically proved at $P < 0.05$ levels. It was statistically proved at $P < 0.001$ level when compared with the control group. Therefore, hypothesis H₂ is accepted. While comparing the experimental group I with control group, it was proved that the nursing interventions were found to be significant at $P < 0.05$ level. On comparing the experimental group II with the control group, it was inferred that the relaxation techniques such as progressive muscle relaxation techniques with deep breathing exercises was significant at 0.001 levels. The relaxation technique was more effective than the nursing interventions therefore hypothesis H₃ is accepted.

Limitations of Study:

1. Extra time was given to the some subjects as they were not able to stretch their muscles freely during the practice of progressive muscle relaxation techniques.
2. The findings of the study cannot be generalized as sampling technique is convenience.
3. The tools were checked only for the content validity.

Recommendations:

1. A comparative study can be conducted with urban and rural elderly groups in the community.

2. A study can be conducted to assess the caregiver's knowledge, practice and attitude regarding elderly people.

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