



“A PRE-EXPERIMENTAL STUDY TO ASSESS THE EFFECT OF SECTIONAL BREATHING EXERCISE AND SLEEP HYGIENE ON QUALITY OF SLEEP AMONG CANCER PATIENTS IN SELECTED HOSPITAL OF GWALIOR.”

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ABSTRACT

BACKGROUND OF THE STUDY:

Cancer can be understood as the series of stressors- the diagnosis and its implications, including fear of death, arduous treatments and changes in one's social and physical environment. Good sleep is necessary and restorative for the people in good health. There is growing evidence that sleep plays an even more important role in the health of cancer patients.

It is estimated that one third to one half people with cancer experiences sleep disturbances physical illness, pain, hospitalization, drugs and other treatments for cancer and the psychological impact of a malignant disease may disrupt the sleeping patterns of persons with cancer. Sleep disturbances have been found to affect between 30-75% of cancer patients. More than 50% of cancer patients with sleep disturbances reported their symptoms to be moderate, severe or intolerable. The highest rates of sleep disturbances are seen in hospitalized cancer patients and advanced cancer patients with prevalence rates as high 67-72%.

OBJECTIVES:

- The main aim of the study to assess the pre-interventional quality of sleep among Group A and group B cancer patients. Also to compare the quality of sleep among both the groups after the interventions.
- To assess the pre-interventional quality of sleep among Group A and Group B cancer patients.
- To determine reasons for sleep disturbances as expressed by the cancer patients in Group A and group b.
- To fine the effect of sectional breathing exercises and sleeps hygiene on quality of sleep among Group A.
- To assess the effect of sleep hygiene on quality of sleep in Group B.
- To compare the quality of sleep among group A and group B after the interventions.

METHODS:

The research design selected for this study was pre-experimental two groups' pretest and posttest design. Based on Sr. Callista Roy's adaptation model (1970). Investigator developed the conceptual framework for the present study. The design was intended to measure the quality of sleep before and after interventions (sectional breathing exercises and sleep hygiene).

The target population was the patients diagnosed as cancer and undergoing treatment. Samples are 17 diagnosed of cancer and undergoing radiotherapy as treatment modality from cancer hospital, Gwalior. Purposive sampling was done to conduct the study. A total of 17 samples were selected as participants through the purposive sampling.

The present study deals with analysis and interpretation of data collected to assess the effect of sectional breathing exercises and sleep hygiene on the quality of sleep among cancer patients. Data was collected from 17 selected cancer patients receiving treatment. Data collected through Pittsburgh sleep quality index given by Daniel J. Buysese, using descriptive and inferential statistics based on the objectives of the study and hypotheses to be tested and did analysis and interpretation of the data.

RESULT:

The mean (SD) score of individuals sleep component in Group A revealed that subjective sleep quality was 1,71(0.76); sleep latency 2.28(0.91); sleep duration 1,57(0.75); habitual sleep efficiency 1.85(0.76); sleep disturbances 2.85(0.48). Scores in Group B were, subjective sleep quality 1(0.69); sleep latency 1.8(0.51); sleep duration 1.7(0.69); habitual sleep efficiency 2.2(1.12); and sleep disturbances 1.5(0.31).

The mean (SD) global score of participants in Group A was 9.4(1.99) which was >5 (the cutoff score) that showed a poor quality of sleep again the score 8.5 (1.56) was .5 in Group B exhibited a poor quality of sleep. Post test global (Quality of sleep) score in Group A was 3.5, which was 5.9 score less than pretest. The SD of pretest and posttest was 1.99.

Post –test global (Quality of sleep) score in Group B was 6.2, which were 2.3 score less than pretest. The SD of pretest and posttest was 1.56.

Post interventional global (Quality of sleep) score in Group A was 2.7 less than group B. the SD post test of Group A and Group B was 2.21.

The intervention was feasible, adherence rates improved over time and most sleep and wake patterns were consistent with normal values. There is significant difference in post interventional quality of sleep in Group A as compared to Group B at the level of $p \leq 0.005$ accepted.