

# Sleep Quality and Fatigue among Breast Cancer Patients Undergoing Chemotherapy

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## Abstract

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**Background:** Breast cancer survivors make up a growing population facing treatment that poses long – standing adverse effects including chemotherapy- related sleep disorders and fatigue. There is limited knowledge of patients' lived experiences of chemotherapy- induced sleep disorders and fatigue. The aim of this study was to explore sleep quality and fatigue among breast cancer patients undergoing chemotherapy.

**Materials and Methods:** One hundred fifteen patients were included in this census-based cross-sectional study. Data were collected through the Pittsburgh Sleep Quality Index and Brief Fatigue Inventory four days after the chemotherapy session. Statistical analysis was carried out using SPSS software version 13 and  $P < 0.05$  was considered statistically significant in all tests.

**Results:** The mean hours of sleep were  $5.6 \pm 1.83$  in the range of 2 to 10 hours. The mean score of fatigue of participants was  $5.59 \pm 1.67$ . Based on the cutting point, 57.4%, 20.9%, and 21.7% of participants had a moderate (4-6.9), mild (0.1-3.9), and severe (7-9.9) level of fatigue, respectively. The mean score of sleep quality among the participants was equal to  $14.06 \pm 3.06$ , with a maximum and minimum of 7 and 21. The results of Spearman correlation coefficient showed that there is a significant relationship between fatigue and quality of sleep ( $P = 0.021$ ).

**Conclusion:** Although the study findings revealed that patients with breast cancer undergoing chemotherapy experience different degrees of sleep disorders and fatigue, there is a need for more detailed studies to improve the quality of sleep and reduce fatigue in these patients due to the little attention paid to this issue in the medical field.

**Key Words:** Sleep, Fatigue\* Breast, Cancer, Chemotherapy