

## Sleep Quality And Associated Risk Factors Among Oncology Patients In Turkey

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### Abstract

The study was conducted in a descriptive and cross-sectional manner to determine the factors that influence the sleep quality in oncology patients between December 31, 2016, and December 31, 2017. The participation of 238 patients that were hospitalized in a public hospital in Turkey. The case group consisted of 119 patients who were diagnosed with cancer and hospitalized in the surgery department. The control group consisted of 119 inpatients who were diagnosed with any acute or chronic condition other than cancer and hospitalized in other clinics. The control group was chosen to match the case group in sociodemographic properties. The properties of the patients were determined using a 29-question survey and the Pittsburgh Sleep Quality Index. Percentage analysis, Kruskal-Wallis test, and Mann-Whitney U test were used for evaluating the data. In the case group patients, 33.6% were diagnosed with stomach cancer, 54.6% were in Stage II of cancer, 98.3% underwent surgical treatment and 28% underwent chemotherapy, 89.7% had treatment-related pain, 52.9% had a chronic disease together with cancer, 63% had their sleep quality partially influenced by environmental factors. The median Pittsburgh Sleep Quality Index score was 5 for the study group and 4 for the control group. It was observed that some of sociodemographic and clinical properties influenced the Pittsburgh Sleep Quality Index scores. This study has found that both the case and control groups had good sleep quality. It is recommended that nursing interventions should be planned in the case group patients, 33.6% were diagnosed with stomach cancer, 54.6% were in Stage II of cancer, 98.3% underwent surgical treatment and 28% underwent chemotherapy, 89.7% had treatment-related pain, 52.9% had a chronic disease together with cancer, 63% had their sleep quality partially influenced by environmental factors. The median Pittsburgh Sleep Quality Index score was 5 for the study group and 4 for the control group. It was observed that some of the sociodemographic and clinical properties influenced the Pittsburgh Sleep Quality Index scores. This study has found that both the case and control groups had good sleep quality. It is recommended that nursing interventions should be planned in ± 1.7. participated in the study. The mean overall score of sleep quality was

9.3

±

3.9

, which represents the average sleep quality in most participants. T-test shows that males have better sleep quality than females ( $t=2.1$ ; 95% CI: 0.004-0.25;  $P<0.01$ ). Also, sleep quality increased with age ( $r=0.22$ ,  $P=0.03$ ). Results show that the amount of sleep quality was only moderate in most patients, so it is necessary to take coping strategies to improve their quality of sleep.

Sleep problems have become the most common complaint among the elderly. There are a few studies that explored the prevalence of poor sleep quality and its associated factors among the elderly in nursing homes. Therefore, this study aimed to examine the

prevalence of poor sleep quality and its associated factors among the Chinese elderly in nursing homes. **METHODS:** A total of 817 elderly residents, from 24 nursing homes, were included in this cross-sectional study. Sleep quality was assessed using the Pittsburgh Sleep Quality Index (PSQI), and poor sleep quality was defined as PSQI  $>5$ . Multiple binary logistic regression was used to estimate the strength of the association between risk factors and poor sleep quality in terms of adjusted odds ratios (AORs) and their 95% confidence intervals (CIs), and interactions of risk factors for poor sleep quality were also examined. The prevalence of poor sleep quality was 67.3% (95% CI: 64.0, 70.5%) among the Chinese elderly in nursing homes. Multiple binary logistic regression results showed that participants with the following characteristics had an increased risk of poor sleep quality after adjustments for other confounders: being 70-79 years old (AOR: 1.78, 95% CI: 1.08, 2.92) or 80 years old and above (AOR: 2.67, 95% CI: 1.68, 4.24); having one to two kinds of chronic diseases (AOR: 2.05, 95% CI: 1.39, 3.01) or three or more kinds of chronic diseases (AOR: 2.35, 95% CI: 1.39, 4.00); depression symptoms (AOR: 1.08, 95% CI: 1.04, 1.11), anxiety symptoms (AOR: 1.11, 95% CI: 1.05, 1.18), and social support (AOR: 0.97, 95% CI: 0.95, 0.99). Additive interactions were detected between age and anxiety symptoms (AOR: 8.34, 95% CI: 4.43, 15.69); between chronic disease and anxiety symptoms (AOR: 8.61, 95% CI: 4.28, 17.31); and between social support and anxiety symptoms (AOR: 6.43, 95% CI: 3.22, 12.86). The prevalence of poor sleep quality among the elderly in nursing homes is relatively high. Besides, anxiety symptoms has additive interactions with age, chronic disease and social support for poor sleep quality. These findings have significant implications for interventions that aim to improve sleep quality among elderly residents in nursing homes.