Mental Health Issues Among University Students with Sleep Disturbances: A Comprehensive Investigation

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ABSTRACT

Introduction: University students encounter a variety of sleep problems which have an impact on their mental status. Previous studies have shown that sleep disorders might contribute to mental problems such as depression, anxiety, and stress. The aim of this study was to assess the prevalence of mental health illnesses among Saudi university students with sleep disorders and their associated predictors.

Methods: A cross-sectional study was conducted on undergraduate students through online screening surveys including the Epworth Sleepiness Scale to assess excessive daytime sleepiness, insomnia was measured using the Insomnia Severity Index, the Berlin questionnaire to examine oobstructive sleep apnea (OSA). In regard, Restless Leg Syndrome was measured using Restless Legs Syndrome Rating. Mental health indicators including depression and anxiety were measured by Depression, Anxiety, and Stress (DASS-21).

Results: This is an online cross-sectional study that involved university students and was conducted between November 2022 and February 2023 in Saudi Arabia. A total of 393 students were involved in this study. The prevalence of depression, anxiety, and stress among university students with sleep disorders was 37.9%, 40.7%, and 19.6%, respectively. For depression, gender was not significantly associated (p=0.839), while anxiety was significantly lower in males compared to females (OR=0.55, p=0.004. Nighttime sleeping was associated with significantly lower anxiety (OR=0.30, p=0.009). Restless leg syndrome was strongly associated with higher odds of depression, anxiety, and stress (all p<0.001). Having a regular sleeping time was associated with higher odds of depression (p=0.003) and stress (p=0.009). Taking naps sometimes was associated with lower odds of depression (p=0.019). Having comorbidities was associated with lower odds of anxiety (p=0.015).

Conclusion: Our study shows that university students have a high percentage of sleep disorders, which are linked to depression, anxiety, and stress. Males have lesser anxiety than females. Nighttime sleep lowered anxiety, and naps reduced depression. Restless leg syndrome strongly predicted depression, anxiety, and stress. Our findings show that tailored therapies for student sleep disturbances are needed to improve mental health. Decision-makers should promote healthy sleep chorotype and provide more mental health care in universities. To further understand the complicated relationship between sleep, mental health, and school achievement, longitudinal study is needed.

Keywords: Prevalence - Sleep disorders - Mental - Saudi - University students

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