



# Effect of COVID-19 Quarantine on the Sleep Quality and the Depressive Symptom Levels of University Students in Jordan During the Spring of 2020

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**Objectives:** This study was designed to assess the effect of COVID-19 home quarantine and its lifestyle challenges on the sleep quality and mental health of a large sample of undergraduate University students in Jordan. It is the first study applied to the Jordanian population. The aim was to investigate how quarantine for several weeks changed the students' habits and affected their mental health.

**Methods:** A cross-sectional study was conducted using a random representative sample of 6,157 undergraduate students (mean age  $19.79 \pm 1.67$  years, males 28.7%) from the University of Jordan through voluntarily filling an online questionnaire. The Pittsburgh Sleep Quality Index (PSQI) and the Center for Epidemiologic Studies-Depression Scale (CES-D) were used to assess sleep quality and depressive symptoms, respectively.

**Results:** The PSQI mean score for the study participants was  $8.1 \pm 3.6$ . The sleep quality of three-quarters of the participants was negatively affected by the extended quarantine. Nearly half of the participants reported poor sleep quality. The prevalence of poor sleep quality among participants was 76% (males: 71.5% and females: 77.8%). Similarly, the prevalence of the depressive symptoms was 71% (34% for moderate and 37% for high depressive symptoms), with females showing higher prevalence than males. The overall mean CES-D score for the group with low depressive symptoms is 9.3, for the moderate group is 19.8, while it is 34.3 for the high depressive symptoms group. More than half of the students (62.5%) reported that the quarantine had a negative effect on their mental health. Finally, females, smokers, and students with decreased income levels during the extended quarantine were the common exposures