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**HYGIENIC ASSESSMENT OF THE IMPACT OF ELECTROMAGNETIC RADIATION
FROM MOBILE DEVICES ON THE SUBJECTIVE WELL-BEING AND SLEEP
QUALITY OF MEDICAL STUDENTS**

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Relevance. The widespread use of mobile devices has significantly shaped student's lifestyles. Prolonged exposure to non-ionizing electromagnetic radiation, combined with extended screen time and irregular routines, may negatively affect health. Medical students are particularly vulnerable due to high academic demands and disrupted sleep patterns.

Aim: to investigate the relationship between mobile device use intensity and indicators of subjective well-being and sleep quality among second-year medical students.

Materials and methods. A cross-sectional study was conducted among 50 second-year medical students. Data were collected using an anonymous structured questionnaire including items on daily screen time, use of wireless devices, subjective symptoms, and sleep-related behaviors. Statistical analysis was performed using descriptive methods and inferential statistics. Associations between variables were assessed using the chi-square (χ^2) test. Differences were considered statistically significant at $p \leq 0.05$.

Results and their discussion. Among respondents (52% male, 48% female; aged 20–21), 88% reported >3 hours of daily device use. Screen time exceeded 6 hours in 46% of students. Bluetooth headphone use >2 hours/day was noted in 62%.

Subjective complaints included fatigue (60%), visual discomfort (60%), and headaches (58%). Significant associations were found between prolonged screen time (>6 hours) and headaches/visual discomfort ($\chi^2=4.12$, $p=0.042$), as well as between bedtime device use and morning fatigue ($\chi^2=5.03$, $p=0.025$). Visual discomfort correlated with screen time ($p=0.038$), and headaches were more frequent with higher usage ($p=0.047$).

Poor sleep hygiene was common: 70% used devices before sleep, 58% kept them near the head, and only 34% used blue light filters. Sleep disturbances were reported by 46% (delayed sleep onset-30%, insomnia-16%). A significant association was found between pre-sleep device use and delayed sleep onset ($\chi^2=4.76$, $p=0.029$). No gender differences were observed ($p>0.05$).

Conclusions. High intensity of mobile device use among medical students is significantly associated with increased fatigue, headaches, visual discomfort, and sleep disturbances. The results emphasize the importance of preventive strategies, including limiting screen time, avoiding device use before bedtime, maintaining a safe distance between devices and the body during sleep, and regularly using blue light filters. Implementation of these hygienic recommendations may contribute to improving students' overall health and quality of sleep.