Abstract 27:

Factors associated with smart-mobile device addiction and its impact on sleep quality among first-year students of the Faculty of Allied Health Sciences, University of Jaffna

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Background and objective: The rapid expansion of smart mobile devices has revolutionized daily life, offering both benefits and challenges. One growing concern is the potential link between excessive smart-mobile use and poor sleep quality, particularly among university students. While previous research has explored various factors affecting sleep, limited studies have examined its association with smart-mobile addiction. This study aims to identify factors associated with smart mobile device addiction and its impact on sleep quality among first year undergraduate students in the Faculty of Allied Health Sciences, University of Jaffna.

Methods: A cross-sectional study was conducted among 194 students from November 2023 to February 2024 using proportionate stratified sampling. Data were collected via a self-administered questionnaire, including the Smart-Mobile Addiction Scale (SAS), and the Pittsburgh Sleep Quality Index (PSQI), validated tools for assessing smart-mobile addiction and sleep quality, respectively. Statistical analysis including chi-square test, one-way ANOVA, and Pearson correlation were performed using SPSS v27. Ethical clearance was obtained from the Ethics Review Committee of the Faculty of Medicine, University of Jaffna.

Results: Among 183 students, 53% used smart-mobiles excessively (SAS score >99) with 41.5% showing problematic use (SAS score 99-131), and 11.5% exhibiting addiction (SAS score ≥132). Daily usage hours and single session duration correlated significantly with addiction ($p<0.001$). Social media use, online gaming and video watching were associated with addiction ($p<0.05$), while learning, texting, calling and browsing the internet showed no significant association. Poor sleep quality (PSQI>5) was reported in 37.7% of students and was significantly associated with smart-mobile addiction ($P=0.003$). SAS positively correlated with PSQI score ($r<0.3$, weak correlation).

Conclusions and recommendations: A significant proportion of students, exhibit problematic smart-mobile use and addiction, negatively affecting sleep quality. Awareness programmes on responsible smart-mobile use are needed. Future studies should utilize multivariate analysis for deeper insights into causative factors.

Keywords: Addiction, Sleep Quality, Smart-mobile device addiction, Undergraduate students