## Abstract 18:

## Participation in extracurricular activities and quality of sleep among Grade 12 students of Jaffna Educational Zone

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**Background and objective:** Quality sleep is essential for cognitive function and memory consolidation. Involvement in extracurricular activities (ECA) may disrupt sleep patterns among students, potentially impacting their health and academic performance. This study aimed at investigating the association between participation in ECA and sleep quality among Grade 12 (GCE A/L 2025 Batch) students in schools in the Jaffna Educational Zone.

**Methods:** A school-based descriptive cross-sectional study was conducted from November 2023 to February 2024, involving 854 Grade 12 students in the Jaffna Educational Zone, using cluster sampling. Data collection was performed using a self-administered questionnaire, which contained a section to assess participation in ECA and the Pittsburgh Sleep Quality Index (PSQI) to assess sleep quality. Statistical analysis was done using SPSS (version 20). Ethical clearance was obtained from the Ethics Review Committee, Faculty of Medicine, University of Jaffna.

**Results:** In total, 825 students participated in the study (response rate 95.93%). Majority were 17 years (69.9%) of age, female (56.6%) with most from the biological sciences stream (46.8%). In the sample, 18.8% reported a high level of participation in ECA (>7h/ week), 20.4% a moderate level (4-7h/week), 32.1% a low level (1-4 h/week), while 28.7% rarely participated (<1h week). The highest proportion reported a significant level of participation (>1h/week) in aesthetics (32.5%), followed by hobbies (30.5%), outdoor activities (27.6%), fine arts (21%), indoor activities (20.1%), community service (13.8%), clubs (7.8%), digital creations (4.5%), martial arts (2.9%), and other activities (0.2%). The mean PSQI score was 6.24. Over two-thirds (69.8%) had good sleep quality (PSQI score 1-7), while 28.7% and 1.5% showed moderate (PSQI score (8-14) and bad (PSQI score of 15-21) sleep quality, respectively. Chi-square tests revealed no statistically significant association between participation in ECA and sleep quality (p=0.452).

**Conclusions and recommendations:** There was no significant relationship between the time spent on ECA and sleep quality of students. Despite varying levels of extracurricular involvement, sleep quality remained relatively high. Schools may encourage students to engage in ECA to enhance their well-being. Future studies should explore the types of ECA and their specific effects on sleep quality.

**Keywords:** Adolescents, Extracurricular activities, Secondary school students, Pittsburgh Sleep Quality Index, Sleep quality.