

A Cross-Sectional Study to Determine the Association Between the Sleep Quality and Meal Patterns of Undergraduates of a Selected Educational Institute in Sri Lanka

SN Bandara^{1#} and GU Jayaweera²

¹School of Health Sciences, British College of Applied Studies, Colombo 06, Sri Lanka

²Faculty of Allied Health Sciences, General Sir John Kotelawala Defence University, Ratmalana, Sri Lanka

#1018527@bcas.ac

Abstract

A quality sleep is crucial for the academic performance, psychological wellbeing and overall health of undergraduates. Since nowadays unhealthy dietary habits such as skipping meals, snack overconsumption and nocturnal eating are quite common, this study aimed to determine the association between sleep quality and meal pattern of undergraduates. An institutional-based cross-sectional study was carried out among undergraduates (n = 165) of BCAS Campus, Colombo 03. A self-administered questionnaire developed based on Pittsburgh Sleep Quality Index (PSQI) and meal pattern questionnaire was used for data collection. Global PSQI and meal pattern score (MPS) were computed. The level of statistical significance was set at $p < 0.05$. The mean \pm SD of the age of the participants was 23.68 years \pm 5.70. There were 53.3% (n = 88) of females and 46.7% (n = 77) of males. The mean \pm SD of the hours of sleep was 6:16 hrs \pm 1:23 and the mean \pm SD of Global PSQI Score was 7.04 \pm 3.17. Sleep disturbances were less commonly observed. Usual bedtime after 2300 hrs and academic year were significantly associated with global PSQI score ($p < 0.05$). A weak, positive correlation ($r = 0.115$, $p > 0.05$) was observed between global PSQI and MPS. However, regression analysis revealed that this association ($\beta = 0.149$, $p < 0.05$) was not significant. The undergraduates showed a reasonable meal pattern and there was no significant association between sleep quality and the meal pattern. However, despite differences in gender, academic year and courses, they exhibited poor sleep based on overall Global PSQI Score indicating the need of addressing the problem of poor sleep among undergraduates.

Keywords: *Sleep quality, Sleep, Meal, Undergraduates, Insomnia*