

Prevalence and associated factors of poor sleep quality among nursing undergraduates in state universities, Sri Lanka

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Good sleep is vital for overall well-being, but nursing undergraduates in Sri Lankan state universities often face heavy workloads, academic stress, and clinical demands that affect their sleep quality. Understanding prevalence and contributing factors such as sociodemographic, health, academic, stress-related, and lifestyle factors is key to addressing this issue. The aim of this study was to determine the prevalence and associated factors of poor sleep quality among nursing undergraduates in state universities, Sri Lanka. Stratified random sampling was used to select 412 nursing undergraduates from Sri Lankan state universities for a descriptive cross-sectional study. Those who had commenced academic schedules were included, while those who had completed their studies and were awaiting graduation were excluded. Data were collected using validated, pre-tested online self-administered versions of the Pittsburgh Sleep Quality Index (PSQI) and Perceived Stress Scale (PSS). Ethical clearance was obtained from the Ethics Review Committee, Faculty of Medicine, University of Colombo. Descriptive and inferential analyses were conducted using SPSS (Version 27), with significance set at $p < 0.05$, including chi-square tests. Poor sleep quality (PSQI > 5) was found in 84% ($n = 346$) of participants. The majority of participants were aged 24–26 years (51%). There were 239 females (71.1%), and 251 (60.9%) were of Sinhala ethnicity. Final-year undergraduates made up 146 (35.4%) of the sample. Significant associations were found between poor sleep quality and socio-demographic factors, including place of residence ($p < 0.002$), lifestyle and diet ($p < 0.008$), electronic device use ($p < 0.01$), and sleep hygiene ($p < 0.000$). Clinical rotations ($p < 0.002$) and academic stress ($p < 0.01$) were also significant academic-related factors. The study found that nursing undergraduates in Sri Lankan state universities experience poor sleep quality, linked to factors like living conditions, diet, electronic device use, sleep hygiene, academic stress, and clinical schedules.

Keywords: *Prevalence, Sleep quality, Stress, Nursing undergraduates*