

Prevalence of migraine and its associated factors among undergraduate students at the Jaffna premises of University of Jaffna, Sri Lanka

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Introduction: Migraine is a neurological condition categorized as a primary headache disorder by the International Classification of Headache Disorders (ICHD-3). Migraine affects about 30% of the global population; particularly, students seem to be more susceptible, with rates of 20% to 52%. Academic stress, irregular lifestyles, and genetics increase the risk for migraine and found to negatively impact academic performance and quality of life.

Objective: To determine the prevalence of migraine and its associated factors among undergraduate students at the Jaffna premises of University of Jaffna, Sri Lanka.

Methodology: A descriptive cross-sectional study was conducted among undergraduates at University of Jaffna. A total of 464 students were recruited from selected faculties using a proportionate random sampling method. To gather data, a self-administered questionnaire was used. The data was analyzed using SPSS 27. A chi-square test was performed to identify the associated factors. Ethical approval for the study was obtained from the Ethics Review Committee of the Faculty of Medicine, University of Jaffna.

Results: This study investigated migraine prevalence in 464 participants including the age range from 20 to 28 years (mean age: 23.94, SD=1.839). Female: Male ratio is 1:1. Overall, the prevalence of migraine is 7.5%. Prevalence was highest in ages 26-28 (11.88%), females (11.44%) and undergraduates following medical-related courses (25.74%). Obesity (9.41%) and overweight (8.22%) exhibited higher prevalence variations. Also, those with a family history of migraine, inadequate sleep, and lack of exercise had a high prevalence. The identified factors associated with migraines include gender ($p=0.001$), marital status ($p<0.001$), course of study ($p<0.001$), family history of migraines ($p<0.001$), duration of sleep ($p<0.001$), tea/coffee consumption ($p=0.045$), and exposure to strong odours ($p=<0.001$).

Conclusion: The overall migraine prevalence was 7.5% including higher rates among females, married individuals, and those with a family history of migraines. Lifestyle factors, including inadequate sleep and exposure to strong odors, also play a role. This study highlights the role of demographic factors and lifestyle choices in understanding migraine prevalence by informing targeted preventive measures.

Keywords: Migraine, Undergraduates, Prevalence, Headache, Factors