Subtheme 1: Exploring health and illness

Abstract 1

Prevalence of common menstrual problems and their association with psychological stress among female medical students of University of Jaffna

Dilshan AGP¹, Nishahari E¹, Minoli HE¹, Nibal MFA¹, Ahamed FRR¹, Shivaganesh S², Sritharan A³

Background and objective: Variations in menstrual patterns due to several factors are frequently observed among young females. Common menstrual problems and stress are two very common complaints among female medical students. This study aims to describe the prevalence of common menstrual problems, levels of stress and the association between common menstrual problems and stress among female medical students of the University of Jaffna.

Methods: This was an institution-based descriptive cross-sectional study. Data was collected from November to December 2022 from female medical students in the University of Jaffna using a self-administered questionnaire. Perceived stress level was assessed using PSS-10 (Perceived Stress Scale). Perceived stress above 27 was considered as "with perceived stress". This study was analyzed by SPSS (26th version) using descriptive statistics and chi-square test. P value <0.05 was considered as statistically significant.

Results: Among 389 students, 97.4%, 67.9%, 23.1%, 13.9%, 11.1%, and 6.4% reported having dysmenorrhea, heavy menstrual periods, abnormal menstrual intervals, abnormal extra light period, abnormal bleeding and intermenstrual spotting, and three or more missed periods in a row, respectively. More than half of the students were affected by premenstrual symptoms. In total, 36.5% of participants were stressed on most occasions on a usual basis. There was a significant association (<0.05) between psychological stress and heavy menstrual bleeding (p=0.009) and abnormal menstruation intervals (p=0.041). However, there was no evidence of a statistically significant association between psychological stress and abnormal bleeding or spotting between menstruation, abnormal extra-light periods, three or more missed periods in a row during the last 4 months, any of the premenstrual symptoms or dysmenorrhea.

Conclusion: The study found a statistically significant association between psychological stress and heavy menstrual bleeding, as well as abnormal menstrual intervals. However, dysmenorrhea, despite its high prevalence among menstrual abnormalities, did not show evidence of a statistically significant association with psychological stress. Even though common menstrual problems in the target population were not strongly associated with psychological stress, all medical faculties should make arrangements for the identification of students with psychological stress and menstrual problems and implement ways to overcome these issues.

Keywords: Dysmenorrhea, Heavy menstrual bleeding, Premenstrual symptoms, Psychological stress, Female medical students

¹Faculty of Medicine, University of Jaffna

²Office of the Provincial Director of Health Services – Northern Province

³Teaching Hospital Jaffna