

Weerappuli G.S.I.J., Amerasinghe A.D.K.

MENSTRUAL CYCLE CHARACTERISTICS IN FEMALE STUDENTS: A SURVEY BASED INVESTIGATION

Tutor: PhD, senior lecturer Tihonovich E.V.

*Department of Obstetrics and Gynecology with a Course of Advanced Training and Retraining
Belarusian State Medical University, Minsk*

Relevance. Menstruation is a normal physiological event in a woman's life. Its regularity, amount and premenstrual symptoms determine the overall menstrual health. Premenstrual symptoms and physiological and psychological changes occurring due to menstruation have a significant impact on a woman's life and her productivity at levels of academic achievements and social life. A variety of influences such as academic and emotional stresses and physical intensities are attributed to menstrual cycle abnormalities. Additionally, period can be affected by a number of medical conditions.

Aim: to identify menstrual period characteristics in female students and their association with academic stress and lifestyle factors.

Materials and methods. A cross-sectional survey-based study was conducted among 90 students. Respondents completed a survey via Google forms comprising the Perceived Stress Scale (PSC), a menstrual cycle questionnaire, and basic questions. The questionnaire comprised 23 questions inquiring about the age, BMI, dietary habits, physical activity levels, known menstrual pathologies and quality of menstruation. Assent from participants was obtained. Descriptive statistic was used for data analysis, while chi-square tests were applied to categorical variables, with statistical significance set at $p < 0.05$.

Results and their discussion. Ninety female students aged 15 – 28 years participated in the survey, with age distribution peaking in the 21- 25-year range. A majority of 75.6% are university students. Even though anthropometric data revealed a higher percentage of the normal BMI range, a concerning amount of 33.3 % showed deviations from the normal range on the assessment of dietary habits. The mean cycle length was 27.5 days with a mean duration of 6.2 days. The majority of respondents (78.9%) reported a regular period and the other 21.1% reported an irregular cycle. The most prevalent symptoms reported by respondents were cramps (76%), fatigue (58%), bloating (45%). Out of all students, 10% had been diagnosed with PCOS, 2.2 % with ovarian cysts and 1.1% with endometriosis. Regular physical activity was reported by 73.4% of students whereas 26.7% reported no regular physical activity. The study sample comprised entirely of non-smokers and individuals who do not engage in regular alcohol intake. Most participants experienced moderate ($n=47$) to high ($n= 27$) stress levels. Although stress was highly prevalent, it was not identified as a predictor of abnormal menstruation ($p=0,63$).

Conclusions. Abnormal menstrual cycles are often caused by disruption of hypothalamic-pituitary-ovarian axis, the system that is susceptible to stress and heightened cortisol concentration. However, the current study revealed no statistically significant link between the two variables. Our results emphasize the need for additional investigation into academic stress both to mitigate high stress level and to clarify the factors associated with menstrual irregularities. Interventions such as university-based wellness programs, stress management programs, and female-focused awareness programs may help to improve the quality of life in young women.