

## Pre-Menstrual Syndrome among Students of a Medical College in Mangalore, South India

Sidharth Kharbanda\*, Vaman Kulkarni\*\*, Mahak Bhandari\*\*\*, Shweta Poojari\*\*\*\*, Sakshi Gaur\*\*\*\*\*, Aishwary Shivhare\*\*\*\*\*

Kasturba Medical College (Manipal University), Mangalore, India  
E-mail: sidk25@gmail.com

### Background

Premenstrual Syndrome (PMS) is a collection of emotional symptoms related to a woman's menstrual cycle, with or without the presence of any physical symptoms. While most women of child-bearing age report having experienced physical symptoms related to normal ovulatory function, medical definitions of PMS are limited to a consistent pattern of emotional and physical symptoms occurring only during the luteal phase of the menstrual cycle. PMS is particularly common in the younger age groups, thus representing a significant public health problem in young girls. There is a need for health and educational authorities need to recognize the problem and provide appropriate support for female students with premenstrual disorders.

### Aims & Objectives

To study Pre-Menstrual Syndrome in medical students of South India.

### Material & Methods

In this cross sectional study we calculated a sample size of 348 medical students considering an absolute error of 5%, a confidence interval of 95% and prevalence of PMS among medical students to be 35.6%. The required information was obtained using a pre-tested, semi-structured questionnaire from female medical students of Kasturba Medical College, Mangalore, after obtaining approval from the Institutional Ethics Committee of KMC Mangalore. A written informed consent was obtained from those willing to participate. All the collected information was kept confidential. Data analysis was done using SPSS ver. 17. Analysis was done in terms of descriptive and bivariate statistics (chi-square test). The proportion of PMS among medical students was calculated on the basis of the ACOG (The American College of Obstetrics and Gynecology) criteria.

### Results

We approached 348 female students among them 327 filled and returned the questionnaire (response rate-94%). Among the 327 study participants, 219 (67%) were found to be suffering from Premenstrual Syndrome according to ACOG criteria. Irritability was found to be the most common affective symptom (n=252, 77%) followed by anger outbursts (n=208, 63%). Abdominal bloating was found to be the most common somatic symptom (n=169, 52%). The daily activity that was affected the most due to the prevailing symptoms was found to be the going out habits (n=188, 57.5%) and loss of concentration (n=196, 59.9%). Majority of the students managed their symptoms by taking pain killers (n=81, 25%). The affective symptoms were found to affect mostly the overweight category, though the somatic symptoms were found to be distributed equally among the groups. Among the affective symptoms, the prevalence of depression, anxiety and irritability was found to be significantly higher ( $p < 0.05$ ) in the overweight category. The proportion of PMS was found to be marginally higher among obese/overweight girls but there was no statistical significance.

### Conclusions

After doing a research among female medical students, we can conclude that there was a high burden of PMS among the study participants. Hence, we need to intervene by various methods such as providing proper counseling, forming support groups and promoting lifestyle changes such as regular exercise, meditation and reduction in sugar intake. Further research in this area needs to be conducted among other sub-groups of students and general population to reduce the morbidity and improve the quality of life of women in reproductive age group.