Evaluating the Impact of Primary Dysmenorrhoea Intensity on Anxiety, Sleep Quality, and Academic Performance among University Students: A Cross-sectional Study

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ABSTRACT

Introduction: Primary Dysmenorrhea (PD), characterised by painful menstrual cramps, is a common condition affecting many women, particularly university students. In India, studies report that approximately 50-80% of women experience dysmenorrhea, with significant variations in intensity and duration. The condition can lead to increased anxiety, poor sleep quality, and decreased academic performance, affecting students' overall well-being and productivity.

Aim: The present study aimed to investigate the impact of primary dysmenorrhea intensity on anxiety, sleep quality, and academic performance among university students.

Materials and Methods: A cross-sectional design was employed, with a sample of 88 female participants aged 18-30 years. The inclusion criteria were female students experiencing primary dysmenorrhea symptoms, while individuals with secondary dysmenorrhea, endometriosis, adenomyosis, pelvic inflammatory disease, cervical polyps and uterine fibroids were excluded. The primary outcome measures included anxiety levels, sleep quality,

and academic performance. The study found a high prevalence of the negative effects of primary dysmenorrhea on academic performance among female undergraduates in the Delhi NCR and Haryana regions.

Results: Analysis revealed a weak positive correlation between pain intensity and sleep quality, and a moderate positive correlation between pain intensity and anxiety levels. Participants reported several academic difficulties, including challenges with studying, completing homework, concentrating in class, actively participating in discussions, and engaging in sports activities.

Conclusion: The findings of this study highlight the significant impact of primary dysmenorrhea on various aspects of university life, particularly academic performance, among female students. The study also underscores the need for further research to explore effective interventions to alleviate the academic and psychological burdens associated with dysmenorrhea in this population.

Keywords: Cross-sectional design, Productivity, Well-being