

The Burden of Dysmenorrhea: Prevalence, Severity, and Impact on Daily Life Among Reproductive-Age Women — An Epidemiological Study.

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ABSTRACT

Dysmenorrhea, a common gynaecological condition characterized by menstrual pain, exerts a profound influence on the quality of life and productivity of reproductive-age women. This epidemiological investigation examines its prevalence, severity, and functional implications using data collected from 79 respondents via a structured questionnaire. Parameters analysed include demographic data, menstrual characteristics, pain typology, symptom severity, and disruptions to occupational, educational, and social life. Findings are presented through a combination of narrative, tabular, and graphical formats, providing comprehensive insights into dysmenorrhea's burden and emphasizing the need for informed clinical and policy responses.

Keywords: Dysmenorrhea, menstrual health, reproductive epidemiology, pain management, women's health

INTRODUCTION

Dysmenorrhea, or painful menstruation, represents a prevalent yet frequently under-recognized gynecological disorder-affecting women during their reproductive years. It manifests as either primary dysmenorrhea—pain without underlying pathology—or secondary dysmenorrhea, typically associated with identifiable pelvic abnormalities such as endometriosis or fibroids [1].

Despite its high incidence, dysmenorrhea is often trivialized or normalized within both clinical and social discourse, resulting in underreporting and suboptimal treatment. Numerous studies have underscored its disruptive influence on educational attainment, workforce participation, and mental health [2-4]. The multidimensional burden of this condition necessitates a deeper epidemiological understanding to inform targeted interventions.

This study aims to assess the prevalence, pain severity, and socio-functional impact of dysmenorrhea among reproductive-age women. Utilizing a structured questionnaire and descriptive analysis, we offer empirically grounded insights to support evidence-based health strategies.

OBJECTIVES

- To determine the prevalence of dysmenorrhea among women aged 15–49.
- To evaluate the severity and typology of menstrual pain.
- To assess the impact of dysmenorrhea on daily activities, academic performance, and psychosocial well-being.

METHODOLOGY

A descriptive cross-sectional design was employed to gather quantitative data from 79 women aged 15–49 through a self-administered structured questionnaire. Participants were selected via convenience sampling from educational and community settings. The questionnaire was pre-tested on a small subset of participants prior to full deployment to ensure clarity and reliability.

The questionnaire captured variables such as demographic attributes (age, marital status), menstrual cycle features (regularity, duration), symptom profile (pain type, location, associated features), pain severity (categorized as mild, moderate, or severe via a numerical rating scale), and dysmenorrhea's functional effects (on productivity, mood, physical activity, and sleep).

Statistical analysis was conducted using Microsoft Excel. Bar charts and pie charts were utilized for enhanced visualization of trends. Ethical protocols—including informed consent and anonymity—were strictly observed.

RESULTS

4.1 Demographic Profile

- **Age distribution:** 68.4% (21–30 years), 24.1% (31–40 years), 3.8% each (<20 and >40 years).
- **Marital status:** 58.2% unmarried; 41.8% married.

4.2 Menstrual Characteristics

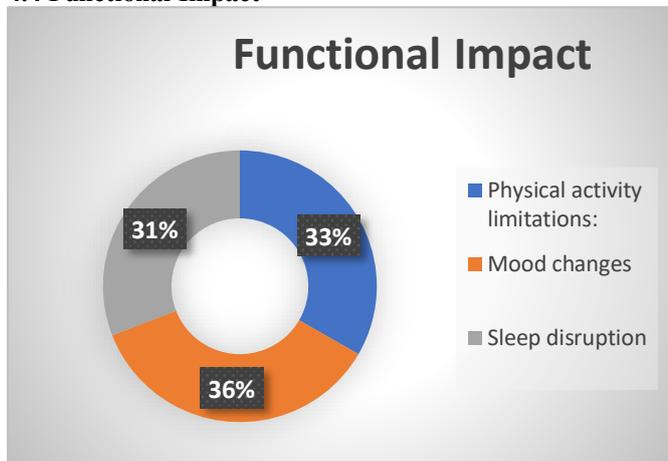
- **Regular cycles:** 67.1%
- **Cycle length (26–30 days):** 48.1%
- **Flow duration (3–5 days):** 65.8%

4.3 Pain Characteristics

Pain Severity	Frequency (n)	Percentage (%)
Mild	8	10.1%
Moderate	33	41.8%
Severe	38	48.1%

Pain Type	Frequency (n)	Percentage (%)
Cramping	46	58.2%
Aching	15	19.0%
Sharp/Stabbing	18	22.8%

4.4 Functional Impact



4.5 Pain Management Strategies

- ❖ **Use of over-the-counter analgesics:** 60.8%
- ❖ **Use of home remedies:** 34.2%
- ❖ **Sought professional medical consultation is** 21.5%

DISCUSSION

The findings from this study reveal a high prevalence of dysmenorrhea among reproductive-age women, a pattern that mirrors global trends. For instance, Harlow and Campbell (2004) estimated that between 50% to 90% of menstruating women globally report experiencing dysmenorrhea [3]. Similarly, Ortiz (2010) reported that 85% of Mexican university students endured menstrual pain, with more than half acknowledging its interference with academic responsibilities [4]. These figures align with our data, wherein moderate to severe pain was notably prevalent, particularly among women aged 21–30—an age group often balancing academic, professional, and familial obligations.

The functional repercussions observed in this cohort—spanning physical limitations, mood fluctuations, and sleep disturbances—are echoed in other international contexts. For example, Agarwal and Venkat (2009) found that 70% of Indian adolescent girls experienced dysmenorrhea, with 20% missing school due to symptoms [5]. Likewise, Parker et al. (2010) identified menstrual pain as a significant contributor to school absenteeism and emotional distress among Australian adolescents [7].

Cultural and healthcare dynamics also shape the lived experience of dysmenorrhea. In Nigeria, Okoro et al. (2013) highlighted how sociocultural norms affect symptom perception and self-medication behaviours, illustrating the need for culturally tailored health education and intervention strategies [6]. These nuances underscore the importance of context-sensitive solutions that go beyond biomedical frameworks.

Taken together, our study reinforces the notion that dysmenorrhea is both a clinical and social concern. Its effects are compounded by stigma, limited healthcare access, and gaps in health literacy, especially in low-resource settings. Addressing this burden demands a holistic, multisector approach that integrates menstrual health education, policy reforms, and equitable clinical care pathways.

CONCLUSION

The high prevalence of moderate to severe dysmenorrhea and its multifaceted disruptions to daily functioning affirm its public health significance. Proactive strategies encompassing medical, educational, and psychosocial interventions are essential to mitigate its burden and empower affected populations.

Recommendations

- Integrate menstrual health literacy into school and university curricula.
- Encourage open discussion and de-stigmatization of menstrual issues.
- Strengthen access to gynecological consultation and pain management.
- Enforce flexible institutional policies to accommodate menstrual health needs.

Limitations

The study's generalizability is limited by its sample size, non-probability sampling, and reliance on self-reported data. Future longitudinal and multi-site studies are warranted.

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