



Perception Of Dysmenorrhea And Its Impact On Academic And Clinical Performance In Physiotherapy Students

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ABSTRACT

Background: Dysmenorrhea is one of the most common gynecological conditions affecting young women and is frequently associated with physical, psychological, and functional limitations. In students, dysmenorrhea may adversely affect, attendance, concentration, academic performance and overall quality of life. Physiotherapy students may be particularly affected because their curriculum requires active participation in practical and clinical training in addition to academic coursework.

Aim: To investigate the perception of dysmenorrhea and its impact on academic and clinical performance among physiotherapy students.

Methodology: A cross-sectional survey-based study was conducted among 240 physiotherapy students. Participants aged 18–25 years were recruited through convenience sampling. Data were collected using a validated self-reported questionnaire. Descriptive statistics were used for data analysis.

Results: Among the participants, 78.7% reported painful menstrual cramps. Academic performance was perceived to be affected by 69.3% of students. Lack of concentration (77.5%) and difficulty studying (57.8%) were the most reported academic challenges. Difficulty during clinical hours was reported by 83.6% of students, while 75.8% reported limitations in activities of daily living. Furthermore, 83.2% had trouble in travelling and participating in social activities during menstruation.

Conclusion: Dysmenorrhea is highly prevalent among physiotherapy students and has a considerable impact on academic performance, clinical participation, and daily functioning. Increased awareness, early management, and institutional support may help reduce the burden of dysmenorrhea and improve student well-being.

Keywords: Dysmenorrhea, Academic Performance, Physiotherapy Students, Menstrual Health.

Introduction

Dysmenorrhea is defined as cyclical pain in the lower abdomen and pelvis that occurs before or during menstruation, sometimes radiating to the back or thighs. It is broadly classified into two types: primary dysmenorrhea, which occurs without underlying pelvic pathology, and secondary dysmenorrhea, which results from conditions such as endometriosis or pelvic inflammatory disease.¹ Symptoms often include abdominal cramps, fatigue, nausea, and headaches, and in severe cases, they may interfere with daily activities.²

Globally, the prevalence of dysmenorrhea is estimated to range between 38% and 71%, while in India it has been reported as high as 50–87%.^{3,4} Dysmenorrhea has been associated with reduced quality of life, impaired daily functioning, absenteeism, and decreased participation in routine activities.^{5,6} The burden is particularly notable among university students, where absenteeism, poor concentration, and reduced quality of life are frequently observed.^{7,8} Dysmenorrhea has also been reported to adversely affect academic activities and attendance among university and health sciences students.^{9,10}

Physiotherapy students represent a unique academic population because their education extends beyond classroom learning and includes extensive practical and clinical training. Physiotherapy curricula require active participation in therapeutic exercise demonstrations, gait training, patient transfers, sit-to-stand training, balance activities, manual therapy techniques, patient handling, and prolonged standing during clinical postings. These activities demand physical endurance, mobility, and sustained concentration. Consequently, symptoms associated with dysmenorrhea may have a greater impact on physiotherapy students by affecting not only academic performance but also clinical participation and practical skill acquisition.

MATERIALS AND METHODS

A cross-sectional survey-based study was conducted among physiotherapy students from various colleges in metropolitan cities. Ethical approval was obtained from the Institutional Ethics Committee prior to commencement of the study. Undergraduate students, interns, and postgraduate students aged 18–25 years were recruited through convenience sampling. A total of 240 participants were included in the study.

Students with a history of recent lumbar spine or abdominal surgery, recent injury to the lumbar spine or abdomen, or diagnosed cases of endometriosis and pelvic inflammatory disease were excluded.

Data were collected using a validated self-administered questionnaire distributed through Google Forms. The questionnaire assessed demographic characteristics, menstrual history, dysmenorrhea characteristics, associated symptoms, academic performance, clinical participation, activities of daily living, and social functioning. Informed consent was obtained from all participants before data collection. Data was analyzed using descriptive statistics and presented as frequencies and percentages.

RESULTS

A total of 240 physiotherapy students participated in the study. The age of participants ranged from 18 to 25 years, with a mean age of 22 years. Most participants (89.75%) belonged to the age group of 19–23 years, and 68.03% were studying in the third year or above.

Regarding menstrual characteristics, 59.01% of students attained menarche between 13 and 14 years of age. Regular menstrual cycles were reported by 78.7% of participants. Most students (60.2%) reported menstrual cycles occurring at intervals of 21–28 days, while 90.2% reported a menstrual flow duration of 3–7 days.

Painful menstrual cramps were reported by 78.7% of participants. Dysmenorrhea was classified as moderate to severe in 80.73% of students and mild in 16.4%. The first day of menstruation was reported as the most painful day by 56.6% of participants. Abdominal pain and low back pain were the most reported sites of pain.

The most frequently reported associated symptoms were fatigue (70.9%), emotional symptoms (64.3%), bloating (51.6%), and loss of appetite (43.9%).

Among students experiencing dysmenorrhea, 69.3% perceived that menstrual pain adversely affected their academic performance. Lack of concentration (77.5%) was the most frequently reported academic difficulty, followed by difficulty studying (57.8%).

Dysmenorrhea also affected clinical participation and daily functioning. Difficulty during clinical hours was reported by 83.6% of participants, while 75.8% reported limitations in activities of daily living. Furthermore, 83.2% of students reported difficulty in travelling and participating in social activities during menstruation.

DISCUSSION

The present study investigated the perception of dysmenorrhea and its impact on academic and clinical performance among physiotherapy students. The findings demonstrated that dysmenorrhea is highly prevalent in this population, with 78.7% of participants reporting painful menstrual cramps. This finding is consistent with previous studies that have reported high prevalence rates among adolescent girls and university students.^{3,4,11}

A substantial proportion of participants reported that dysmenorrhea negatively affected their academic performance. Nearly seventy percent of students perceived an adverse effect on their studies, with lack of concentration and difficulty studying emerging as the most common academic challenges. Similar findings have been reported by Ortiz et al., Mesele et al., Bilir et al., and Hailemeskel et al., who observed that dysmenorrhea adversely affected concentration, attendance, classroom participation, and academic productivity among university students.^{12,13,14,15}

An important finding of the present study was the high proportion of students reporting difficulty during clinical hours. Physiotherapy education differs from many academic programs because clinical training requires both physical endurance and sustained attention. Menstrual pain, fatigue, and associated symptoms may therefore reduce students' ability to participate effectively in clinical learning activities and practical training sessions.

The study also demonstrated that dysmenorrhea affects daily functioning and social participation. More than three-fourths of participants reported limitations in activities of daily living, while a large proportion experienced difficulty travelling and participating in social activities. These findings are consistent with previous literature indicating that dysmenorrhea negatively affects quality of life, physical functioning, and social engagement among university students.^{5,6,16}

Fatigue, emotional disturbances, bloating, and loss of appetite were among the most commonly reported symptoms in the present study. Previous studies have similarly reported that dysmenorrhea is associated with physical and emotional symptoms that interfere with daily functioning and quality of life.^{1,2,5}

The findings of the present study highlight the need for increased awareness regarding menstrual health among physiotherapy students. Educational institutions should consider implementing supportive measures such as menstrual health education, early identification of students experiencing severe dysmenorrhea, and appropriate referral for management when required. Such strategies may help reduce the academic and clinical burden associated with dysmenorrhea and improve student well-being.

CONCLUSION

Dysmenorrhea is highly prevalent among physiotherapy students and significantly affects academic performance, clinical participation, and daily functioning. Increased awareness, early identification, and appropriate management strategies may help reduce its impact and improve student well-being.

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