ORIGINAL RESEARCH PAPER
Volume - 13 | Issue - 06 | June - 2024 | PRINT ISSN No. 2277 - 8179 | DOI : 10.36106/ijsr
INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

PREVALENCE OF PAIN AND ITS EFFECT ON TEENAGE GIRLS WITH PRIMARY DYSMENORRHEA

Physical Medicine & Rehabilitation

Preeti Research scholar, College of Physiotherapy, Baba Mastnath University.

Prof (Dr) Vinay Jagga Dean, College of Physiotherapy, Baba Mastnath University.

ABSTRACT

Primary dysmenorrhea, or painful menstruation in the absence of any particular pelvic disorders, is one of the most prevalent complaints among women and the most common gynaecological condition globally. The majority of them feel some level of pain and discomfort during their menstrual cycle, which might interfere with their everyday activities and productivity at work. This appears to be the major cause of absence. This study looks on the prevalence of primary dysmenorrhea in young people in order to better understand the disorder and its impact on teenage females. **Aim And Objectives:** The study's objective is to determine the prevalence of primary dysmenorrhea in young individuals in order to gain a better understanding of the illness and its impact on teenage girls. **Methods:** A cross-sectional research was undertaken among 200 students (females) from several institutions in Rohtak, Haryana, with the goal of determining the frequency and severity of dysmenorrhea and its implications on quality of life, namely absence from school. Students were given a self-administered questionnaire to complete, which included questions on the menstrual cycle, the severity of dysmenorrhoea, PMS, and how dysmenorrhoea affected their employment, studies, and daily lives. Data was gathered and evaluated. **Results:** Prevalence of dysmenorrhoea was 93% out of which 61.5% participants suffered pain every time they menstruate whereas 31.5% sometimes got menstrual pain. 26.5% participants take painkillers for menstrual pain, 20% reported social withdrawal during mensuration, 33% of students stop going to school when they mensurate whereas 23.5% have trouble concentrating at school when they mensurate. **Conclusions:** Dysmenorrhea is a prevalent condition among females, affecting both their quality of life and their productivity at work. It is critical to raise knowledge about the causes and treatment of dysmenorrhoea in order to minimise unnecessary pain and absence from job and study.

KEYWORDS

Dysmenorrhea, Absenteeism, pain, mensuration

With a prevalence of 60% to 93%, dysmenorrhea is the most prevalent gynaecological condition among teenage girls.[1] A frequent disorder known as dysmenorrhea is unpleasant menstruation that causes excruciating cramps in the lower abdomen.[2]. It is among the most typical gynaecological issues that arise when there is no specific pelvic illness present, such as endometriosis.[3]. Different types of pain, such as acute, throbbing, dull, nauseous, searing, or shooting pain, can accompany dysmenorrhea.[4] The menstrual cycle causes pain and misery to varying degrees for most people.[5] In addition to dizziness, exhaustion, sweating, headaches, backaches, nausea, vomiting, and diarrhoea, dysmenorrhea is frequently accompanied by other biological symptoms that appear either before or during the menstrual cycle. Ten percent of them experience severe enough pain every menstrual cycle to incapacitate them for one to three days. This scenario affects people's quality of life and personal health significantly, but it also has an effect on the world economy.[6] Dysmenorrhea negatively affects a person's quality of life, which has a substantial impact on their behavioural, social, and psychological wellbeing and increases their likelihood of missing work and school due to illness.[3]

Primary and secondary dysmenorrhea are the two main categories into which it can be separated. The term "primary dysmenorrhea" refers to painful menstruation without a known cause. 50% to 90% of women experience dysmenorrhea, the most prevalent gynecologic complaint, which is characterised by persistent, crampy lower abdomen pain that occurs during menstruation.[7] Affected women experience sharp, intermittent spasmodic pain usually concentrated in the suprapubic area. Pain may radiate to the back of the legs or the lower back. Mood changes, fatigue, headache, nausea and oedema during menstruation are reported with dysmenorrhea.[8]

Pelvic pathology is the cause of secondary dysmenorrhea. Endometriosis is the most frequent reason.[9] Adenomyosis, infection, myomas, müllerian anomalies, obstructive reproductive tract anomalies, or ovarian cysts are some additional reasons of secondary dysmenorrhea.[10] A few years following menarche is often when secondary dysmenorrhea occurs.[9]. The lower abdominal pain is not just associated with menstruation; it can also be diffuse or localised. Other symptoms like menorrhagia or intermenstrual haemorrhage may accompany pain. The following conditions may cause abdominal pain: diarrhoea, sexual contact, fever, or unusual bleeding.[9]

In one study, 12% of adolescent girls and young women aged 14–20 years lost days of school or work each month because of dysmenorrhea, and almost one in four respondents self-administered pain medication monthly without having seen a physician to investigate the cause of their pain.[10] Fewer studies have focused on younger adolescents, such as junior high school students (aged 12–15 years), while many have focused on older women and young women, including older adolescents (i.e., high school students).[11] Investigations into the prevalence of Parkinson's disease (PD) around the globe have revealed that it varies depending on the locale. In particular, 87.8% and 72.7% of Turkish university students, 89.1% of Iranian students, 65% of Indian students, 76% of Malaysian students, and 60% of Canadian students were found to have Parkinson's disease. The reported prevalence of Parkinson's disease (PD) was 94%, 89.4%, 74.3%, and 60.9% in Arab nations including Oman, Iraq, Lebanon, and Saudi Arabia, respectively. Egypt is a large country in terms of both land area and population. Studies have only looked at two districts, and among secondary school girls and nursing university students in Asyut, the prevalence of dysmenorrhea was found to be 76.1% and 90.4%, respectively, compared to 75% and 78.8% among general and technical secondary school girls in Mansoura. When combined, these results unmistakably show that dysmenorrhea is a prevalent complaint across a range of populations.[12] The study was conducted to determine the prevalence and its impact on school attendance, social and sports activity in teenage girls.

Methodology:

Participants And Procedure:

This was a cross sectional study targeting female school students of various schools in Rohtak city, Haryana. Self-administered questionnaire was distributed to students after explaining the purpose of the study. A total of 200 students participated in the study. Menstrual health questionnaire was used to determine the prevalence of primary dysmenorrhea in young individuals in order to gain a better understanding of the illness and its impact on teenage girls. The questionnaire included various questions related to period pains, use of menstrual products, financial barrier to menstrual products access, access to menstrual heath consultants, school absenteeism, effect of menstruation on school performance and other activities, menstrual hygiene and its management.

Statistical Analysis:

Descriptive statistics to determine the prevalence and intensity of pain, age of menarche, treatment options for pain and its effect on various activities affected by the condition. Association between the degree of menstruation pain and various activities including school, homework, class participation, concentration level, cultural and sports

participations, social activities were analysed. The result was analysed using SPSS18 and Excel 2010 software.

RESULT:

200 female students completed the questionnaire. The prevalence of dysmenorrhea was discovered to be 98.5% (61.5% reported pain every time they menstruated, 31.5% occasionally felt pain, and 5.5% had pain just a few times).

Variables	Options	Percentage (%)	Frequency (f)
Do you get menstrual pain?	Yes, always	61.5%	123
	Yes, sometimes	31.5%	63
	Very few times	5.5%	11
	No, never	0.5%	1
	I don't know	0.5%	1

Among the individuals who reported menstrual discomfort, 46.5% felt it was normal, 44% thought it was normal on sometimes, and 6.5 thought it was not typical at all. Only 10% of the participants were embarrassed to discuss about menstruation, whereas 87.5% of the participants were not. The participants were asked about various methods used to relieve pain. Despite the fact that a significant proportion of participants reported menstrual pain, 37.5% did not take any action, 26.5% used pain relievers, 28.5% used natural remedies, and 2.5% stated they were unable to purchase products for menstrual pain.

Variables	Options	Percentage (%)	Frequency (f)
What do you do when you have menstrual pain? Tick all the things that you do.	I take painkillers	26.5%	53
	I take hormonal contraceptives every day	0.5%	1
	I use natural remedies	28.5%	57
	I cannot buy products for menstrual pain	2.5%	5
	I don't do anything	37.5%	75
	I do something else	2.5%	5
	I don't get menstrual pain	0.5%	1
	I don't know	1.0%	2

26.5% of individuals stopped exercising or doing any physical activity at all, 32% occasionally, 21.5 few times, and 16% said that menstrual pain had no influence on their exercise or physical activity. While 7% of the participants weren't worried, 74.5% of them ceased using the pool or engaging in water activities. Among all the participants, 20% skipped their plans to hang out with friends during their menstrual cycle, 39.0% occasionally shied away from social situations, 21% occasionally exercised self-control, and 18.5% scheduled get-togethers with friends in spite of discomfort.

Variables	Opts	Percentage (%)	Frequency (f)
Do you stop going to school when you menstruate?	Yes, always	5.0%	10
	Yes, sometimes	28.5%	57
	Very few times	28.0%	56
	No, never	38.0%	76
	I don't know	0.0%	0
Do you stop exercising or going to physical education when you menstruate?	Yes, always	26.5%	53
	Yes, sometimes	32.0%	64
	Very few times	21.5%	43
	No, never	16.0%	32
	I don't know	3.5%	7
Do you stop doing activities such as going to the pool or to the beach when you menstruate?	Yes, always	74.5%	149
	Yes, sometimes	9.5%	19
	Very few times	4.5%	9
	No, never	7.0%	14
	I don't know	4.0%	8
Do you miss any plans with your friends when you menstruate?	Yes, always	20.0%	40
	Yes, sometimes	39.0%	78
	Very few times	21.0%	42
	No, never	18.5%	37
	I don't know	1.0%	2
Do you have trouble concentrating at school when you menstruate?	Yes, always	23.5%	47
	Yes, sometimes	46.0%	92
	Very few times	17.5%	35
	No, never	12.5%	25
	I don't know	0.0%	0
Do you feel less capable of taking an exam or evaluated activity when you menstruate?	Yes, always	25.5%	51
	Yes, sometimes	42.5%	85
	Very few times	14.5%	29
	No, never	16.0%	32
	I don't know	1.0%	2

Menstrual pain also had an impact on the participants' academic performance. Of those who reported missing school, 5% said they did so every time they menstruated, 28% and 28.5 percent said they stopped going at times and sometimes and 38% said they continued to attend classes even throughout the menstrual cycle. Dysmenorrhea may have an impact on multiple facets of academic performance. Therefore, 47 students (23.5%) said that they were unable to focus in class during mensuration. 17.5% of students occasionally reported having issues focusing in class during mensuration, compared to 46.0% who reported occasional concentration problems. Dysmenorrhea caused 25.5% of the students to miss exams, and 42.5% of them occasionally felt less prepared to take tests. Additionally, 14.5% of participants reported trouble with tests or evaluation tasks a few times, whereas 16.0% had no effect.

DISCUSSION:

In this study, prevalence of dysmenorrhea and its effect on the academic and social aspect of life in female students of various institutes in Rohtak, Haryana were assessed. This study showed that among students with dysmenorrhea, 61.5% reported that dysmenorrhea had an impact on their academic performance. Earlier studies show that 84.8% in Serbia[11], 88.0% of women in Australia[12], 80.0% in Saudi Arabia[13], 76.7% in Ethiopia[14], 89.1% in Malesia[15], 64.9% in Poland[16], 76.5% in Spain[17], and 84.1% in Italy[18] have menstruation discomfort. The difference in prevalence of primary dysmenorrhea may be explained by several factors such as social and cultural difference, ethnic considerations, geographical and topographic changes, lifestyle factors, individuals' perception of pain, and lack of a universally accepted method of identifying primary dysmenorrhea. Our study analysed that several variables of academic performance and social life were significantly influenced by dysmenorrhea. dysmenorrhea and increased pain also are strong factors leading to decreased physical activities and also sporting activities.

Pain was also associated with lack of concentration and attentiveness during classes in schools. Menstrual pain has been reported to have a significant influence on their ability to focus in class, complete assignments, attend class regularly, and perform well on exams. The influence of menstrual pain on academic performance is shown to be much stronger when comparing the results with those of other studies. According to a study conducted by Marta Horvat et al. (2023) the prevalence of primary dysmenorrhea was found to 90.1%. The study also stated that primary dysmenorrhea has a great impact on the academic performance in female students stating most of the participants had difficulty in concentrating in class 94.1% and 94% had difficulty in doing homework and learning.[19] It is important to remember that pain perception is a subjective experience influenced by a variety of hereditary and cultural factors.

Data from this study also indicated that dysmenorrhea affected the students' physical and social wellbeing. Romina-Marina Sima, Mihaela Sulea, et al. (2022) also reported that 78.4% of female students in Romania had dysmenorrhea. According to their findings, the majority of female students reported feeling more anxious or agitated (72.7%), fatigued (66.9%), as though they had less energy for everyday tasks (74.9%), extremely stressed (579.9%), and finding it difficult to follow a regular diet (30.0%). Depending on the length and severity of the pain, other areas were also impacted, including relationships with friends and family (15.4%), university courses (49.4%), social life (34.5%), and couples' relationships (29.6%).[20]

Students with and without primary dysmenorrhea showed very little difference in absenteeism; this was somewhat unexpected because primary dysmenorrhea has been mentioned often as a major factor influencing the rate of class attendance. Earlier studies also reported school absence of 13.1%[21] and 42.7%[22] in Nigeria, 31.9% in italy[23], 39% in bafoussam[24], 24% in maxico[25] and 38 % in texas[26] due to menstrual menstruation discomfort. According to Mulla, A., Lotfi, G., and Khamis, A. (2022), 432 (94.7%) of the participants indicated dysmenorrhea as a critical issue. Out of the total, 208 (45%) participants said they had excruciating pain when they menstruated,

and 152 (33.4%) students said they missed every monthly cycle. Among the 147 (32.3%) students who used nonsteroidal anti-inflammatory medicines (NSAIDs), the majority said they saw little to no improvement.[27]

According to the findings of a study by Dalia M. Kamel et al. (2017), 73.6% of the participants' mothers were their primary source of information, while 11.2% of the participants learned about menstruation on their own. A very small percentage of participants sought advice from a doctor, nurse, friend, or sibling when discussing menstruation.[28] Therefore, in order to ensure that proper information about the menstrual cycle is supplied and to avoid misconceptions created by a lack of information, health awareness and education initiatives should be concentrated on moms, siblings, and friends. It is anticipated that these initiatives will promote positive attitudes towards menstruation and assist women and girls in coping with menstruation-related issues.

This study's limitations come from the subjectivity and accuracy of the responses provided by the students as well as the fact that the majority of the questions were closed-ended, meaning that participants were unable to alter their responses.

CONCLUSION:

Students are most likely to experience dysmenorrhea, which can negatively impact their quality of life in a number of ways. Most female students experience lower energy levels for daily tasks and struggle to focus in class or even get to school throughout their menstrual cycle. The severity of the symptoms varies greatly and causes people to stop participating in social and academic activities. The majority of students (55%), in order to lessen pain, use both home remedies and pharmaceuticals. However, the majority of participants do little to deal with their suffering, which negatively affects their social and academic lives. Therefore, it is extremely disturbing that even though 98.5% of students have dysmenorrhea, the affected students hardly ever seek medical assistance. Responsible authorities can use these findings to help establish more comprehensive and improved techniques to manage dysmenorrhea and encourage more productive coping mechanisms. Furthermore, the management of dysmenorrhea is advised to involve a group of interdisciplinary healthcare professionals.

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