

Original research article**Study on perceptions regarding menstrual problems among adolescent girls, at rural field practice area of government medical college, Nizamabad, Telangana**

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Abstract

Introduction: Menstruation poses various challenges for adolescent girls, impacting their physical, psychological and social well-being. This study focuses on menstrual hygiene practices among adolescent girls in the rural field practice area of Government Medical College, Nizamabad. It aims to assess knowledge and practices regarding menstrual hygiene and estimate the prevalence of school absenteeism associated with menstrual issues.

Methods: A cross-sectional study was conducted amongst 250 adolescent girls aged 10-19 years from selected schools during September 2022 to January 2023. Data were collected using a pre-tested questionnaire, analyzing factors such as age distribution, educational status, economic conditions, religious affiliation and education level of mothers. Descriptive statistics such as frequencies and percentages were employed for data analysis.

Results: The majority of participants (58%) were aged 13-14 years, with 65.6% having a high school education or below. Economic conditions showed 58.8% below the poverty line. Hindus constituted the largest religious group (58.8%). Findings revealed gaps in knowledge, as some participants held misconceptions about menstruation. Negative practices included pad reuse (prevalent) and stigma surrounding discussing menstruation with male family members. The prevalence of school absenteeism due to menstrual problems is found to be 15.2%.

Conclusion: This research highlights a significant knowledge gap regarding menstruation among adolescent girls. The study emphasizes the need for comprehensive educational interventions to enhance awareness and understanding of menstruation, including its processes and common problems. The study also reveals significant school absenteeism due to menstruation, calling for measures like providing menstrual hygiene facilities and promoting menstrual health education in schools.

Keywords: Menstrual hygiene, adolescent girls, rural area, knowledge, practices, school absenteeism

Introduction

Menstruation is a normal biological process that occurs in females, but it can pose various physical, psychological, and social challenges. Adolescent girls, in particular, are prone to experience several issues related to menstruation that can significantly affect their health, education, and overall well-being [1-4]. Menstruation-related physical challenges that can affect the daily activities of adolescent girls include menstrual cramps, irregular periods, heavy bleeding, and premenstrual syndrome (PMS) [5]. Such challenges can hinder their ability to attend school or participate in physical activities. Menstruation-related psychological challenges, such as mood swings, anxiety, and depression, can have negative impacts on the mental health and well-being of adolescent girls. Additionally, social challenges like stigma, shame, and limited access to menstrual hygiene products can contribute to social isolation and exclusion [6]. Furthermore, the challenges associated with menstruation can result in school absenteeism, ultimately affecting the education and future prospects of adolescent girls [7]. Having sufficient knowledge about menstruation is critical for adolescent girls as it enables them to comprehend the

biological process and equip themselves to handle the physical and emotional changes that come with menstruation. Inadequate knowledge of menstruation can lead to misunderstandings, cultural taboos, and social discrimination, which can adversely affect the health and well-being of adolescent girls [2]. Menstrual problems and hygiene management are critical issues faced by adolescent girls in rural areas. Due to the lack of education and social taboos around menstruation, adolescent girls often face difficulties in managing their menstrual cycles. This research aims to understand the perceptions of adolescent girls regarding menstrual problems in the rural field practice area of Government Medical College, Nizamabad. The study will explore the awareness and knowledge about menstrual hygiene practices. By examining these factors, the study intends to generate insights that can help in developing targeted interventions to improve menstrual hygiene management and promote menstrual health among adolescent girls. This study is significant as it addresses the gap in the existing literature on menstrual hygiene practices among adolescent girls in rural areas. The study provides an opportunity to educate and improve the menstrual hygiene among of adolescent school girls and promote their overall health and well-being. Additionally, this research can also contribute to breaking down the social stigma and taboos surrounding menstruation, leading to a more open and informed dialogue about menstrual health in the community.

Objectives

1. To assess the knowledge and practices of adolescent girls regarding menstrual hygiene.
2. To estimate the prevalence of school absenteeism associated with menstrual issues.

Materials and Methods

A cross-sectional study was conducted in the rural field practice area of Government Medical College, Nizamabad, Telangana. The study population includes adolescent girls aged 10 to 19 years who were attending schools in the rural field practice area. The total study duration was 5 months i.e. from September 2022 to January 2023. A multistage sampling technique was used to select the study participants. Firstly, two schools were randomly selected from the list of schools in the rural field practice area. Then, a list of all eligible girls from these schools was prepared, and a random sample of 250 girls was selected from the list using simple random sampling technique. Adolescent girls who were not willing to participate in the study and those who were pregnant at the time of the interview were excluded. After obtaining written informed consent from both the participants and their parents/guardians, a pre-tested semi-structured questionnaire was administered. The questionnaire contained questions on knowledge, attitudes, and practices regarding menstrual hygiene and school absenteeism. The data collected from the study participants were analyzed using the Statistical Package for the Social Sciences (SPSS). Descriptive statistics, such as frequencies and percentages, were used to summarize the data.

Results

Table 1: Socio-demographic characteristics of the respondents

Socio-demographic factors	No. of study participants	%
Age		
11 to 12 years	11	4.40%
13 to 14 years	145	58.00%
15 to 17 years	94	37.60%
Education of Girl		
High school and below	164	65.60%
Inter	86	34.40%
Socio-economic Status		
BPL	147	58.80%
APL	103	41.20%
Religion		
Hindu	147	58.80%
Muslim	66	26.40%
Christian	37	14.80%
Education of Mother		
Illiterate	73	29.20%
Primary & Secondary	62	24.80%
High school	63	25.20%
Inter	38	15.20%
Graduate	14	5.60%
Total	250	100.00%

As Table 1 shows that the demographic factors observed like age distribution of the participants revealed that the majority, 58%, belonged to the age group of 13 to 14 years. A smaller percentage, 4.4%, fell

within the 11 to 12 years age range, while 37.6% were aged between 15 and 17 years. Regarding educational status, 65.6% of the girls belonged to the High school or below category, while the remaining 34.4% had an Intermediate level of education. Assessing the economic conditions, it was found that 58.8% of the participants were below the poverty line, while the remaining participants were classified as above the poverty line. The religious affiliation of the participants indicated that the majority, 58.8%, identified as Hindus, followed by 26.4% as Muslims, and 14.8% as Christians. Analyzing the education level of the mothers, the data revealed that 29.2% of mothers were illiterate, 24.8% had received primary and secondary schooling, 25.2% had completed High school, 15.2% had an Intermediate level of education and 5.6% were graduates.

Table 2: Knowledge on Menstruation among study participants

Knowledge on Menstruation		No.	%
1. Menstruation			
	A normal body function in females	170	68.0%
2. Frequency of menstrual periods.			
	Every month	144	57.6%
3. Part of the female reproductive system is responsible for menstruation.			
	Uterus	48	19.2%
4. Menstrual hygiene			
	Keeping yourself clean during your period	113	45.2%
5. Disposal of used menstrual products.			
	Garbage bin	105	42%
6. Menstrual cup			
	A device inserted into the vagina to collect menstrual fluid	68	27.2%
7. Common menstrual problems			
	Heavy bleeding, pain during menstruation, irregular menstruation	54	21.6%
8. Premenstrual Syndrome (PMS)			
	Collection of physical and emotional symptoms that occur before menstruation.	56	22.4%
9. Menorrhagia			
	A condition where menstrual periods are heavy and prolonged	70	5.6%
10. Amenorrhea			
	A condition where menstrual periods are absent	112	44.8%

The results of Table 2 indicate that the majority of study participants had a good understanding of menstruation and menstrual hygiene practices. For instance, 68% of participants correctly identified menstruation as a normal body function in females, while 57.6% knew that most women have their menstrual periods every month. However, some participants believed that menstruation is a result of poor hygiene or a disease. The table also highlights the need for more education on menstrual hygiene practices, as only 45.2% of participants understood menstrual hygiene as keeping oneself clean during their period, and only 46.4% knew that it is necessary to wash one's genital area with soap during one's period. Overall, the results suggest that there is still a need for more education on menstruation and menstrual hygiene practices among young girls to dispel myths and misconceptions about this natural process.

Table 3: Practices during Menstruation among study participants

Practice on Menstruation		No.	%
1. Type of absorbent used during menstruation			
a. Sanitary pads		152	60.8%
b. Cloth		96	38.4%
c. Tampons		2	0.8%
d. Menstrual cup		0	0%
2. Washing of genital area with soap during menstrual cycle		116	46.4%
3. Changing underwear daily during menstrual cycle		232	92.8%
4. Disposal of menstrual pads in a dustbin		183	73.2%
5. Re-use of menstrual pad/cloth		101	40.4%
6. Avoidance of swimming and other physical activity during menstruation		237	94.8%
7. Buying of menstrual related products by men in the family		20	8%
8. Difficulty in accessing menstrual hygiene products		108	43.2%
9. Hand hygiene during menstruation period		208	83.2%
10. Discussion of menstrual practices with men in the family		26	10.4%

As Table 3 shows the results on menstrual practices observed among the study participants. It provides information regarding various aspects, including the type of absorbent material used during the menstrual cycle and whether participants wash their genital area with soap during menstruation, among other practices. The results encompass both positive and negative practices.

Noteworthy findings of the study reveal significant negative menstrual practices adopted by the participants. The most prevalent improper practice observed was the reuse of menstrual pads during menstruation. Additionally, a substantial number of participants (89.6%) reported experiencing stigma associated with talking about menstruation with their male family member and indicated a lack of open discussions about menstruation with their parents or guardians.

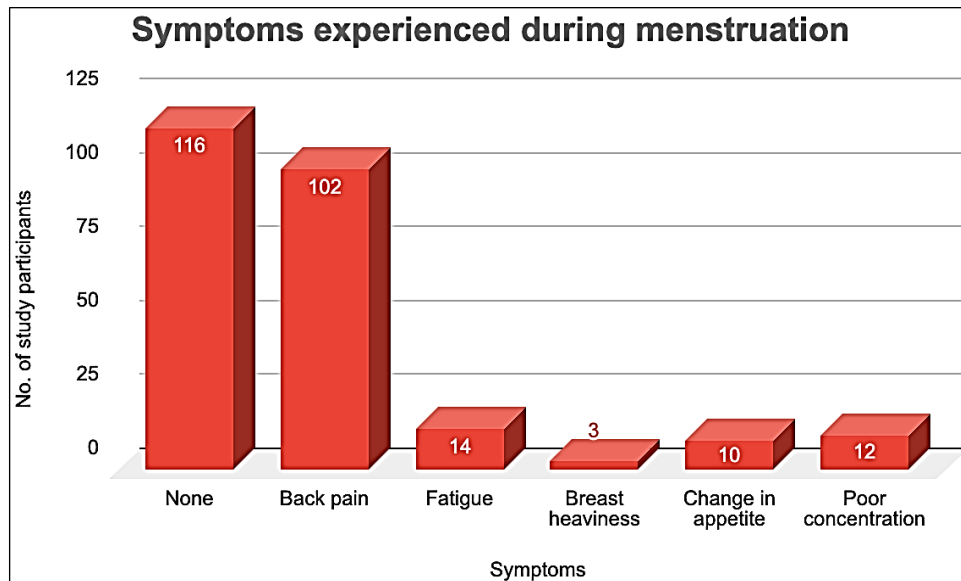


Fig 1: Non-menstrual symptoms experienced during menstruation

According to Figure 1, the displayed data highlights the various symptoms commonly encountered during menstruation. It is worth noting that a significant portion of the study participants reported no symptoms at all, which is reassuring. However, it is noteworthy that approximately 40.8% of the participants experienced back pain, while others encountered a range of symptoms such as fatigue, appetite fluctuations, diminished concentration and a feeling of breast heaviness.

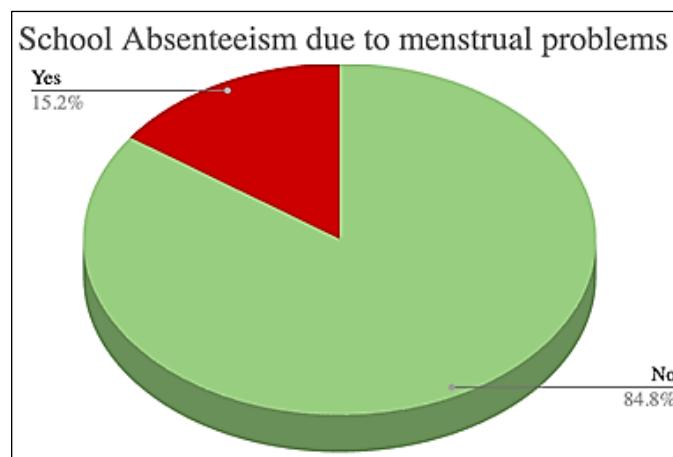


Fig 2: School absenteeism due to menstrual problems

As Figure 2 shows the proportion of adolescent girls going in for school absenteeism due to menstrual problems and it is found to be 15.2%.

Discussion

The findings of this study shed light on various aspects related to knowledge, attitude, and practice regarding menstrual hygiene and problems among adolescent girls in the rural field practice area of Government Medical College, Nizamabad, Telangana. The study findings reveal a notable lack of knowledge among the study participants regarding menstruation, which aligns with findings from previous studies. In comparison to other study conducted by Mamilla *et al.*,^[8] where knowledge about menstruation is 79%, only 68% of the participants in our study recognized menstruation as a physiological process. The variation can be explained since the studies were conducted in different areas on different population. Moreover, the percentage of participants who were aware of the origin of menstruation from the uterus (less than 20%) was lower than in other studies, which reported knowledge

ranging from 16% to 33% [3, 8, 9]. Additionally, the limited awareness of common menstrual problems, such as premenstrual syndrome, menorrhagia, and dysmenorrhea, highlights the need for targeted educational interventions.

In the present study the most commonly used absorbent material during menstruation is sanitary napkin (60.8%) which is similar to other studies (60% to 96%) [2, 3, 8, 9]. The variation is again can be explained due to geographical difference between the studies. The school absenteeism due to menstrual symptoms in the present study is about 15.2%. In another studies [7, 10], the school absentees due to menstrual symptoms were as high as 30 to 40%.

Conclusion

This research highlights a significant knowledge gap regarding menstruation among adolescent school-going girls. The findings addresses the urgent need for comprehensive and targeted educational interventions to enhance awareness and understanding of menstruation, including its physiological processes and common menstrual problems. Another significant finding of the study is the utilization of non-sanitary cloth pads, highlighting the persistence of unhygienic practices in menstrual hygiene management. This emphasizes the importance of promoting the use of safe and sanitary menstrual hygiene products to protect the health and well-being of adolescent girls. The study also highlights the presence of stigma surrounding menstruation, which can have negative implications for girls' overall experiences and perceptions. Addressing this stigma through education and awareness initiatives is crucial for fostering a supportive and inclusive environment that promotes menstrual health and well-being. Furthermore, the study reveals the concerning issue of significant school absenteeism due to menstruation. This signifies the need for implementing measures that address the challenges faced by girls during menstruation, such as providing menstrual hygiene facilities, promoting menstrual health education, and creating supportive policies within educational institutions.

Limitations

The study relied on self-reported data from participants, which may be subject to bias or inaccuracies. The study did not examine the impact of cultural or social norms on menstrual hygiene practices, which could influence the results.

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