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MENSTRUAL MORBIDITIES, HYGIENE PRACTICES AND HEALTH-SEEKING BEHAVIOUR AMONG SCHOOL-GOING ADOLESCENT GIRLS IN A RURAL FIELD PRACTICE AREA: A CROSS-SECTIONAL STUDY

Muthangi Sandhya Rani[1], Sowmyashree U[2], Dharshan Venkatesan Arulselvi[3], Pemmireddy Akshith Reddy[4], Potharaju Vaishnavi[5]

[1]*Associate Professor, Department of Community Medicine, Neelima Institute of Medical Sciences, Hyderabad, Telangana, India.*
[2]*Assistant Professor, Department of Community Medicine, Neelima Institute of Medical Sciences, Hyderabad, Telangana, India.*
[3]*IIIrd Year MBBS Student, Neelima Institute of Medical Sciences, Hyderabad, Telangana, India.*
[4]*IIIrd Year MBBS Student, Neelima Institute of Medical Sciences, Hyderabad, Telangana, India.*
[5]*IIIrd Year MBBS Student, Neelima Institute of Medical Sciences, Hyderabad, Telangana, India.*

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Corresponding Author:
Dr. Muthangi Sandhya Rani,
Associate Professor, Department of Community Medicine, Neelima Institute of Medical Sciences Hyderabad, Telangana, India.
Email: sandhyarani.nims@anurag.edu.in

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ABSTRACT

Background: Menstrual health is an essential component of adolescent well-being. In rural settings, menstrual symptoms, cultural restrictions, poor hygiene support and reluctance to seek care can affect schooling, psychosocial comfort and reproductive health. The Objective is to assess menstrual hygiene practices, identify the prevalence and pattern of menstrual morbidities, and evaluate health-seeking behaviour among school-going adolescent girls in a rural field practice area.

Materials and Methods: This cross-sectional study included 250 school-going adolescent girls who had attained menarche and provided assent with parental consent. Participants were selected from government schools in the rural field practice area of Neelima Institute of Medical Sciences using multi-stage random sampling. Data were collected with a validated semi-structured questionnaire covering sociodemographic details, menstrual symptoms, hygiene-related practices, restrictions, school absenteeism and care-seeking behaviour. Findings were analysed descriptively using frequencies, percentages and mean age.

Results: The mean age of participants was 13.6 years. Abdominal pain was the commonest morbidity, reported by 190 girls, followed by lower backache, muscle cramps, lethargy and decreased concentration. Urinary complaints and abnormal vaginal discharge were also reported by a smaller group. Only 26 girls sought medical help for menstrual complaints. Menstruation-related school absenteeism was reported by 91 participants. Cultural restrictions were reported by 210 girls, and 158 reported reduced physical activity during menstruation. Specific dietary restrictions were uncommon.

Conclusion: The study demonstrates a high burden of menstrual morbidities with poor formal health-care utilisation among rural adolescent girls. School-based menstrual health education, parental involvement, culturally sensitive counselling and adolescent-friendly services are needed to reduce symptoms, stigma and avoidable absenteeism.

Keywords: Adolescent girls, menstrual health, Dysmenorrhoea, Menstrual hygiene, Health-seeking behaviour, School absenteeism, rural health.

INTRODUCTION

Menstrual health is now understood as a broad state of physical, mental and social well-being in relation to the menstrual cycle, rather than the mere absence of disease or monthly bleeding difficulty. This concept places dignity, safety, accurate information and freedom from stigma at the centre of adolescent health.[1]

Menarche marks a major biological and psychosocial transition. For many school-going girls, this transition occurs when they are still developing personal autonomy, body confidence and the ability to express health concerns. When menstrual experiences are painful, secretive or socially restricted, their effect extends beyond reproductive biology and enters the domains of education, family life and emotional well-being.[2]

Evidence from India shows that menstrual hygiene management among adolescents remains shaped by unequal access to information, sanitary absorbents, water, private toilets and safe disposal systems.[3,4] Rural girls are particularly vulnerable because school infrastructure, household income, maternal education and local taboos influence how menstruation is understood and managed. Earlier studies have shown that several girls receive information about menstruation only after menarche, often from mothers or peers, and that misconceptions about impurity, food avoidance and activity restriction continue to persist.[5-7]

These barriers reduce the likelihood that girls will discuss symptoms openly or seek professional help when menstrual discomfort becomes severe. They also influence the choice of absorbents, frequency of changing, washing practices and disposal behaviour, creating a cycle in which misinformation and limited facilities reinforce each other.

Menstrual morbidities are common during adolescence. Dysmenorrhoea, lower backache, cramps, heavy bleeding, fatigue, reduced concentration and premenstrual symptoms interfere with daily functioning and classroom participation.[8-12] Some symptoms, such as burning micturition, itching and abnormal vaginal discharge, also raise concerns about urinary or reproductive tract infections, particularly when hygiene practices are inadequate.[9]

Despite this morbidity burden, treatment seeking remains low. Many adolescents consider pain and distress as a normal part of menstruation, while embarrassment, distance to health facilities and financial constraints delay consultation.[13,14]

In rural schools, the absence of confidential counselling further restricts communication between girls and trained providers. School-based studies from rural field practice areas are useful because they capture menstrual health in the actual social and educational environment in which adolescent girls live. The present study was therefore conducted among school-going adolescent girls in the rural field practice area of Neelima Institute of Medical Sciences. The objectives were to assess menstrual hygiene practices, identify girls suffering from menstruation-related health problems, and evaluate health-seeking behaviour for menstrual complaints among school-going adolescent girls.

MATERIALS AND METHODS

Study design and setting: A school-based cross-sectional study was conducted in the rural field practice area of Neelima Institute of Medical Sciences. The design was selected to estimate the existing pattern of menstrual morbidities, hygiene practices and care-seeking behaviour at a single point in time. The study was carried out over four months, including administrative permission, pre-testing of the study tool, participant recruitment, data collection and data verification.

Study population and eligibility criteria: The study population comprised school-going adolescent girls enrolled in government schools located within the rural field practice area. A total of 300 girls were screened. Girls, who had attained menarche, were willing to participate, provided assent and had parental or guardian consent were included. Girls who were unwilling, had not attained menarche, lacked parental consent or did not provide assent were excluded. The final analysed sample included 250 participants.

Sampling technique: A multi-stage random sampling method was used. In the first stage, a list of eligible schools in the rural field practice area was obtained, and schools were selected by simple random sampling. In the second stage, class divisions with adolescent girls from middle and high-school grades were selected. In the third stage, eligible girls from selected classes were enrolled after confirming menarche status and consent requirements. This method ensured representation from five schools and reduced selection bias linked to a single classroom or single institution.

Study tool and data collection: Data were collected using a validated semi-structured questionnaire prepared after review of published menstrual-health surveys and adolescent menstrual hygiene studies.[3,5-9]

The questionnaire included sociodemographic information, menstrual history, menstrual morbidities, hygiene-related practices, cultural restrictions, physical activity and dietary restrictions, menstruation-related school absenteeism, health-seeking behaviour and medication use. Data collection was done in the school premises during working hours. The purpose of the study was explained in simple language, and girls completed the questionnaire in a private environment to reduce embarrassment and response bias.

Ethical considerations: Institutional Ethics Committee approval was obtained from Neelima

Institute of Medical Sciences before the start of data collection. Written informed consent from parents or guardians and assent from students were obtained. Participation was voluntary. Confidentiality and anonymity were maintained throughout the study, and no identifying information was included in the analysis or reporting.

Statistical analysis

Data were entered and checked for completeness before analysis. Descriptive statistics were used. Age was expressed as mean and range. Categorical variables were presented as frequency and percentage. For menstrual morbidities, multiple responses were allowed; therefore, percentages were calculated using the total sample of 250 as the denominator, and totals exceed 100%.

RESULTS

A total of 300 adolescent girls were screened across five government schools in the rural field practice area, and 250 girls who had attained menarche and fulfilled consent and assent requirements were included in the final analysis. The mean age of the respondents was 13.6 years, with ages ranging from 11 to 17 years? Most participants were studying in classes 7 to 9, representing the early and mid-adolescent school period in which menstrual concerns commonly emerge. The baseline study profile is shown in [Table 1].

Table 1: Baseline profile of the study participants

Variable	Finding
Girls screened	300
Final analysed sample	250
Study setting	Government schools in the rural field practice area
Number of schools represented	5
Age range	11-17 years
Mean age	13.6 years
School classes	Predominantly classes 7-9
Eligibility basis	Attained menarche with assent and parental/guardian consent

Menstrual morbidity was common and frequently multi-symptomatic. Abdominal pain was the leading complaint, reported by 190 girls (76.0%). Lower backache was reported by 163 (65.2%), muscle cramps by 115 (46.0%), lethargy by 110 (44.0%) and decreased concentration by 88 (35.2%). Symptoms suggestive of local irritation, urinary discomfort or abnormal discharge were also observed, including rashes, foul-smelling or excessive vaginal discharge, burning micturition, itching and nausea or vomiting. The distribution of menstrual morbidities is presented in [Table 2].

Table 2: Pattern of menstrual morbidities among participants (n=250)

Menstrual complaint	Frequency	Percentage
Abdominal pain/dysmenorrhoea	190	76.0
Lower backache	163	65.2
Muscle cramps	115	46.0
Lethargy	110	44.0
Decreased concentration	88	35.2
Rashes	47	18.8
Foul-smelling/excessive vaginal discharge	42	16.8
Burning micturition	37	14.8
Itching	33	13.2
Nausea/vomiting	32	12.8

Despite the high symptom burden, formal health-care use was low. Only 26 girls (10.4%) reported seeking medical help for menstrual complaints, while 224 (89.6%) did not seek medical help. Informal guidance from mothers, elder sisters or local sources was more common than consultation with doctors or health facilities. Poor treatment adherence was also reported among girls who were advised medication, mainly due to relief after initial doses, fear of side effects, and the belief that treatment was unnecessary and cultural hesitation about taking medicines during menstruation. Health-seeking behaviour is summarised in [Table 3].

Table 3: Health-seeking behaviour for menstrual complaints (n=250)

Health-seeking behaviour	Frequency	Percentage
Sought medical help	26	10.4
Did not seek medical help	224	89.6

Menstruation-related school absenteeism was reported by 91 girls (36.4%), whereas 159 (63.6%) did not miss school during menstruation. The common reasons reported for absence were severe abdominal pain, heavy bleeding, general discomfort and family-imposed restrictions. Cultural restrictions were widespread: 210 participants (84.0%) reported at least one restriction during menstruation, including avoiding temples or religious spaces, not entering kitchens, avoiding

social functions and limiting household or physical activities. Decreased physical activity during menstruation was reported by 158 girls (63.2%). Specific dietary restrictions were uncommon and were reported by 5 participants (2.0%). These findings are shown in [Table 4].

Table 4: School absenteeism, cultural restrictions and activity-related practices (n=250)

Variable	Category	Frequency	Percentage
School absenteeism during menstruation	Yes	91	36.4
School absenteeism during menstruation	No	159	63.6
Cultural restrictions during menstruation	Yes	210	84.0
Cultural restrictions during menstruation	No	40	16.0
Decrease in physical activity	Yes	158	63.2
Decrease in physical activity	No	92	36.8
Specific dietary restrictions	Yes	5	2.0
Specific dietary restrictions	No	245	98.0

The main barriers to seeking care were distance to health facilities, embarrassment in discussing menstrual complaints, financial constraints, lack of awareness about abnormal symptoms and the perception that menstrual pain or discomfort is a normal event. These barriers indicate that menstrual morbidity in this population was influenced not only by biological symptoms but also by social silence, restricted mobility and limited adolescent-friendly support systems.

DISCUSSION

The present study identified a substantial burden of menstrual morbidity among school-going adolescent girls in a rural field practice area. Abdominal pain was the dominant symptom, followed by lower backache, muscle cramps, lethargy and decreased concentration. This pattern is comparable with evidence from rural Tamil Nadu, where menstrual problems affected a large proportion of adolescent girls and dysmenorrhoea was the leading complaint.[8] Reviews of adolescent dysmenorrhoea also describe wide prevalence ranges and consistently link pain with reduced activities, school absence and low professional consultation.[11,12] The clustering of symptoms in the present study indicates that menstrual morbidity was not limited to pelvic pain; it also affected energy, comfort and concentration during school days.

Symptoms such as burning micturition, itching, rashes and foul-smelling or excessive vaginal discharge were reported by a smaller but clinically important group. Similar reproductive morbidity patterns have been described in school-based studies from India, where poor menstrual hygiene and inadequate genital cleaning were associated with perceived reproductive symptoms.[9] These findings support the need for routine menstrual health counselling that goes beyond pad use and includes warning signs that require medical evaluation.

Health-seeking behaviour was markedly poor, with only 10.4% of girls reporting medical consultation. This finding is consistent with older and recent Indian literature showing that adolescent girls often depend on mothers, sisters or informal sources and avoid professional care because of shyness, lack of awareness or normalisation of pain.[12,14] The low care-seeking rate is important because untreated dysmenorrhoea, heavy bleeding, urinary symptoms and abnormal discharge can continue to disturb schooling and quality of life. It also indicates that the presence of symptoms alone does not ensure service use unless girls feel safe, informed and supported.

Menstruation-related absenteeism affected more than one-third of participants. A study from Delhi reported school absence during menstruation in 40% of adolescent girls and identified restrictions, lack of privacy, absorbent use and maternal education as relevant factors.[10] In the present study, absenteeism appeared to arise from both symptoms and household restrictions. Cultural restrictions were highly prevalent, reflecting persistent beliefs about impurity, religious exclusion and activity limitation. Similar socio-cultural influences have been reported across Indian settings, where education, family environment and local norms shape menstrual behaviour.[5-7,13]

Overall, the findings highlight an interlinked problem: high symptom burden, restricted activities, poor formal care and strong cultural control. School health programmes should therefore combine symptom screening, pain management guidance, hygiene education, private counselling and referral pathways. Mothers, teachers, ASHA workers and adolescent-friendly clinics should be involved so that girls receive accurate information before and after menarche. Such integrated action can improve attendance, reduce stigma and support dignified menstrual experiences in rural communities.

Limitations

The study was cross-sectional, so temporal relationships between menstrual practices, symptoms and care-seeking behaviour cannot be established. Data were self-reported, creating scope for recall error and under-reporting of sensitive symptoms. The study was limited to schools in one rural field practice area; therefore, findings should be interpreted with local context. Clinical examination and laboratory confirmation of urinary or reproductive tract infections were not performed.

CONCLUSION

The present study shows that menstrual morbidities are common among school-going adolescent girls in a rural field practice area, with dysmenorrhoea, backache, cramps, lethargy and reduced concentration forming the major symptom burden. Formal health-seeking behaviour was low despite frequent complaints. Menstruation also contributed to school absenteeism, reduced physical activity and cultural restriction. The findings support the need for regular school-based menstrual health education, early symptom screening, and parental counselling and adolescent-friendly referral services. Community health workers and teachers should be actively involved in correcting misconceptions, encouraging timely care and supporting girls to manage menstruation with comfort, dignity and confidence within home, school and community environments across rural public-health settings and families.

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