



EXPLORING MENSTRUAL AWARENESS AMONG HO TRIBAL ADOLESCENT GIRLS IN MAYURBHANJ DISTRICT, ODISHA: A MULTI-DIMENSIONAL ANALYSIS OF PERIODS, PERCEPTIONS, AND PRACTICES

Public Health

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ABSTRACT

The study reveals a predominantly youthful population with an average age of 14 and an average age at menarche of 12. Educational levels are low, with most girls having only primary or secondary education, and a high prevalence of illiteracy among their parents. Menstrual hygiene practices are primarily informed by traditional methods and informal sources of information, with the majority of girls using cloth instead of sanitary pads and facing challenges related to drying and disposal facilities. Cultural restrictions during menstruation are notable, including prohibitions on cooking, social gatherings, religious activities, and specific foods. These findings highlight the necessity for targeted interventions to improve educational access, enhance menstrual hygiene management, and address cultural taboos, with the overarching goal of enhancing the health and well-being of these adolescent girls.

KEYWORDS

HO tribal, adolescent girls, Mayurbhanj, Odisha, menstrual hygiene, traditional methods, cultural restrictions.

INTRODUCTION

Despite being a natural biological occurrence experienced by all women, menstruation remains veiled in secrecy, cultural taboos, and societal stigma across numerous communities (Winkler, 2019). Menstrual Hygiene Management (MHM) involves women and adolescent girls using sanitary materials to absorb or collect menstrual blood, ensuring they can be changed in private as needed throughout their menstrual cycle. It includes washing the body with soap and water as necessary and having access to facilities for the proper disposal of used materials. Adequate resources for absorption, personal hygiene, and waste disposal are essential for managing menstruation effectively and maintaining privacy (van Eijk et al., 2016). In low-income settings, women and girls often lack awareness of hygienic practices and don't have access to culturally appropriate materials for managing menstrual hygiene effectively (MHM) (Sumpter & Torondel, 2013). Menstruation is steeped in numerous myths and mysteries, with one of the most widespread social and cultural norms being the prohibition against entering religious places during menstruation for women (Kumar & Srivastava, 2011; Sharma et al., 2006). During this period, women were deemed impure and frequently barred from entering places of worship or handling religious artifacts (Garg & Anand, 2015; Jena et al., n.d.). Moreover, menstruating women are often subjected to various restrictions regarding household activities, including entering the kitchen, cooking, handling pickles, and sharing meals (Dasgupta & Sarkar, 2008). Menstruation remains not only a taboo subject for public discourse in India but is also seldom talked about in private. This lack of discussion frequently results in misconceptions and a lack of readiness among women (Thakur et al., 2014). Ensuring menstrual hygiene is crucial for girls and women during their menstrual cycles. Menstrual hygiene involves maintaining cleanliness during this time, which includes having access to necessities like hygienic absorbent materials, water, soap, and private toilet facilities (Meher & Sahoo, 2023). A cross-sectional study conducted in hospitals revealed a robust connection between inadequate menstrual hygiene practices and an increased prevalence of reproductive tract infections (RTIs) among women in Odisha (Torondel et al., 2018). Hygienic practices during menstruation are notably inadequate among Juang women in Odisha, India. Menstrual issues are prevalent, yet the sought-after treatments remain insufficient. There is a pressing need for raising awareness about menstrual hygiene, educating about the adverse effects of menstrual problems, and providing access to low-cost sanitary napkins within this disadvantaged and vulnerable tribal community (Mudi et al., 2023). This is evident through their direct influence on women's reproductive health, education, and participation in the workforce. Marginalized communities, like those belonging to the scheduled caste (SC) and scheduled tribe (ST), frequently lag in various socioeconomic development and health indicators, including healthcare knowledge and utilization (Ram et al., 2020). The recent National Family Health Survey (2019–21) also revealed that 59% of tribal women aged 15–24 use cloth as menstrual absorbents, compared to only 25% of their counterparts from the general caste (International Institute for Population Sciences (IIPS) and ICF, 2021).

The Ho tribe are an Indo-Aryan Munda ethnic group in Jharkhand's Kolhan region and northern Odisha, notably in Mayurbhanj District. They speak their own language and Odia, celebrating festivals like Magha Purnima and Makara Sankranti, influenced by Oriya culture. Known for their intricate traditional songs and dances, the Ho face challenges in food, water, agriculture, employment, education, health, and government services. Despite this, they lead simple, cooperative lives with some political involvement for development. Their livelihoods include hunting, farming, and gathering forest products. Staple foods are Handia (fermented rice) and Kurkuti Chutney (made from red ants). This community is primarily homogeneous, characterized by a limited population and residing in a geographically secluded location. Numerous anthropological investigations have highlighted the tribe's deep attachment to traditional rituals and health beliefs. However, scientific research on reproductive health, particularly menstrual hygiene practices, remains scarce. Therefore, the aim of this study was to shed light on the issue of menstruation and assess the status of hygiene and practices related to menstruation among tribal adolescent girls in the Mayurbhanj district of Odisha, India.

METHODS

This cross-sectional study employed a purposive sampling method to focus on Ho adolescent tribal girls in Mayurbhanj district, Odisha, India. The study included 102 girls aged 10–19, selected through purposive sampling. Questions were asked in Odia for better responses and then translated into English for analysis. Data collection occurred from February 7 to February 17, 2024, with participants providing both oral and written consent. Female postgraduate social work students conducted the interviews to ensure data validity.

Analysis

To begin, quantitative data were entered using the KoboToolbox software and analyzed using STATA (V17). A descriptive analysis was carried out to see the distribution of the Juang women by several socioeconomic and demographic characteristics. Bivariate analysis was conducted to check the independent association of various socioeconomic and demographic characteristics with absorbents used to prevent menstrual blood from being evident and the prevalence of any menstrual problems.

RESULTS AND DISCUSSION

Socio-demographic profile of the study population

Table 1 presents the socio-economic and demographic profile of HO tribal adolescent girls in Myurbhanj, Odisha, based on a sample size of 102. Many of the respondents (73.53%) fall within the 15–19 age group, with a mean age of 14. The mean age at menarche is reported to be 12. In terms of education, the distribution shows a significant proportion with primary education (38.24%) followed closely by secondary education (49.02%). Higher levels of education such as higher secondary and graduation are less common among the surveyed population. Looking at the maternal and paternal demographics, most

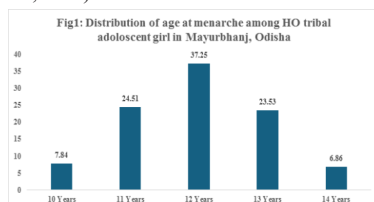
mothers (67.65%) fall within the 31-40 age group, and a substantial portion (68.63%) are reported as illiterate. Similarly, a significant proportion of fathers (56.86%) are aged between 35-45, with a majority (56.86%) also reported as illiterate. These findings offer highlighting potential areas for targeted interventions and support.

Table 1: Socio demographic profile of HO Tribal Adolescent Girls in Myurbhanj, Odisha, India

Background characteristics	Total (N = 102)	
	%	N
Age group		
10-14	73.53	75
15-19	26.47	27
Mean age of surveyed women	14	
Mean age at Menarche	12	
Education		
Illiterate	0.98	1
Primary	38.24	39
Secondary	49.02	50
Higher Secondary	10.78	11
Graduation & Above	0.98	1
Mother's Age		
25-30	6.86	7
31-40	67.65	69
41-50	21.57	22
50+	3.92	4
Mother's Education		
Illiterate	68.63	70
Primary	27.45	28
Secondary	2.94	3
Higher Secondary	0.98	1
Father's Age		
35-45	56.86	58
46-55	33.33	34
56-65	9.8	10
Father's Education		
Illiterate	56.86	58
Primary	33.33	34
Secondary	6.86	7
Higher Secondary	2.94	3

Source: Author's own estimation

The figure 1 illustrate data on the age at menarche among tribal adolescents. The highest percentage of girls experience menarche at 12 years old, comprising 37.25% of the sample. Following this, 11 years old is the next most common age of menarche, accounting for 24.51% of the population. Subsequently, 13 years old is the age for 23.53% of the girls, while 10 years old marks the onset for 7.84%. The smallest percentage (6.86%) is for those who experience menarche at 14 years old. Study revealed that more than 48% girls already attained menarche within the age of 12 years, among them 25.6%, 41.0%, and 58.3% girls experienced menarche at the age of 10, 11, and 12 (Malitha et al., 2020).



The table 2 presents data on the hygiene knowledge, awareness, and practices of 102 tribal adolescent girls during menstruation in Mayurbhanj, Odisha, India. It shows that 75.5% of the girls had prior knowledge about menstruation, mainly from friends (73.7%) and mothers (60.5%), with formal education on menstrual hygiene received by only 26.7%. Study reported that menstrual hygiene was unsatisfactory among adolescent girls. Therefore, girls should be educated about the facts of menstruation and proper hygienic practices (Deshpande et al., 2018). Reactions to their first menstruation varied, with 48% not disclosing their experience to anyone, 37.3% feeling scared or annoyed, and smaller percentages crying, feeling embarrassed, or happy. Adolescent girls in Magway face substantial challenges during menstruation, adversely impacting on their education and wellbeing. Providing age-appropriate education and addressing shame and taboos are important components of a

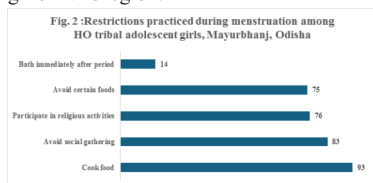
comprehensive menstrual health response (Swe et al., 2022). The majority used new cloth as absorbents (85.3%), with only 12.1% using sanitary pads. Menstrual cloths were predominantly dried inside the house in hiding (48.2%) or in the open (29.4%), with 22.4% drying them outside in sunlight. Most girls (75.7%) kept reused menstrual cloths hidden, and for cleaning, 76.5% used water while 23.5% used soap and water. The frequency of changing menstrual cloths varied, with 45.6% changing it thrice a day. While 57.3% paid 20-30 Rupees for sanitary pads, 42.7% paid more, and 57.6% purchased pads themselves. During menstruation, 93% of the girls attended school, with 54.5% having access to a separate room for changing and 71.3% having disposal facilities for sanitary pads at school. This data underscores the reliance on informal sources for menstrual knowledge, traditional practices, and the need for better menstrual hygiene management facilities in schools.

Table 2: Distribution of HO Tribal Adolescent Girls based on their hygiene Knowledge, Awareness and Practices during menstruation, Mayurbhanj, Odisha, India

Variables	Total (N = 102)	
	%	N
Prior Knowledge about Period	75.5	77
Source of Information		
Mother	60.5	62
Grand Mother	9.2	9
Friend	73.7	75
Teacher	52.6	54
Health Workers	5.3	5
Formal Education Regarding Menstrual Hygiene	26.7	27
Reaction when experienced first menstruation		
Cried	15.7	16
Scared	37.3	38
Embarrassed	13.7	14
Happy	5.9	6
Did not told anyone	48.0	49
Annoyed	37.3	38
Type of absorbent used		
New cloth	85.3	87
Sanitary Pad	12.1	12
Nothing	2.6	3
Place of drying menstrual cloth		
Inside the house but in hiding	48.2	49
Inside the house but in open	29.4	30
Outside and in sunlight	22.4	23
Place of keeping reused menstrual cloth		
Normal like other cloths	24.3	25
At hidden place	75.7	77
Cleaning of external genitalia		
With water	76.5	78
With soap and water	23.5	24
Frequency of changing menstrual cloth		
Once	22.3	23
Twice	32.1	33
Thrice	45.6	47
Pay for Sanitary Pad (Rupees)		
20-30	57.3	59
More than 30	42.7	44
Who Buy Sanitary Pad		
Friend	3.4	2
Mother	28.8	17
My self	57.6	34
Sister	3.4	2
Other	6.8	4
Go to School During Menstruation	93.0	93
Separate Room for Changing at School	54.5	55
Place to dispose Sanitary Pad at School	71.3	72

Figure 2 illustrates the restrictions practiced during menstruation among tribal adolescent girls in Mayurbhanj, Odisha, India, highlighting several significant cultural practices. A substantial 93% of these girls are prohibited from cooking food during their menstrual periods, while 83% avoid social gatherings. Participation in religious activities is restricted for 76% of the girls, and 75% are instructed to avoid certain foods. Notably, only 14% of the girls bathe immediately after their period ends. These practices underscore the considerable

cultural and social constraints placed on menstrual activities among tribal adolescent girls in this region.



CONCLUSION

The socio-economic and demographic profile of HO tribal adolescent girls in Mayurbhanj, Odisha, reveals a predominantly young population with a mean age of 14 and a mean age at menarche of 12. Educational attainment is low, with most girls having primary or secondary education, and high levels of illiteracy among their parents. Menstrual hygiene knowledge and practices indicate a reliance on informal sources of information and traditional methods, with the majority using cloth instead of sanitary pads and facing inadequate drying and disposal facilities. Cultural restrictions during menstruation are significant, with prohibitions on cooking, social gatherings, religious activities, and specific foods. These findings underscore the need for targeted interventions to improve educational opportunities, enhance menstrual hygiene management, and address cultural taboos, aiming to improve the overall health and well-being of these girls.

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