

## Original Research Article

# Perceptions and practices related to menstruation amongst tribal adolescent girls in rural field practice area of tertiary health care institute in Mumbai

Pravin Dilipkumar Meshram<sup>1</sup>, Amandeep Kaur Ratta<sup>2</sup>, Vinod Kumar<sup>3\*</sup>

<sup>1</sup>Department of Community Medicine, Teerthankar Mahaveer Medical College and Research Center, Moradabad, Uttar Pradesh, India

<sup>2</sup>Norway India Partnership Initiative, New Delhi, India

<sup>3</sup>Department of Pediatrics, Teerthankar Mahaveer Medical College and Research Center, Moradabad, Uttar Pradesh, India

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### \*Correspondence:

Dr. Vinod Kumar,

E-mail: [vinodmbbs52@gmail.com](mailto:vinodmbbs52@gmail.com)

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## ABSTRACT

**Background:** Adolescence is the crucial phase in the woman's life has on the woman's health and later on reproductive and maternal life. Around 20% of the global health burden among women is attributed to reproductive and sexual ill health, lack of menstrual hygiene is one of the factors among the adolescent. They lack awareness about menstruation when they first experience it, especially in rural and tribal areas. This study aimed to provide an insight into the most sensitive issue of menstruation among the tribal community which would help in promoting improved awareness level and increase in right knowledge about menstruation.

**Methods:** A cross sectional study. Total of 114 adolescent girls (11-18 years), have attained the menarche were included. Universal sampling method is used. Data was collected regarding their perceptions and practices related to menstrual hygiene.

**Results:** The mean age of the subjects and of menarche were  $15.48 \pm 1.75$ ,  $13.09 \pm 1.04$  years respectively. About 27.20% had no clue about the menstrual cycle. Majority of them asked their mothers about the problems followed by close friends. About 37.72% used sanitary napkins. Not to attend religious occasion (54.39%) was common restriction.

**Conclusions:** In the present study, it is reflected that mothers of the adolescent girls were a crucial and important role in giving information about menstrual hygiene. More awareness related to hygiene and practice and education related to social issues related to menstrual hygiene has to be addressed. Focussed programmes related to tribal adolescent health have to be implemented.

**Keywords:** Adolescent health, Menstrual hygiene, Reproductive health

## INTRODUCTION

Adolescence age among girls is one of the crucial periods which signify the transition from girlhood to womanhood.<sup>1</sup> This transition is earmarked with the ability

to marry and reproduce in most low and middle-income countries. This stage is not only regarded as a physiological process but has strong social, psychological and cultural impact.<sup>2,3</sup> According to the WHO reports, 20% of the global ill health burden for women is

attributed to reproductive and sexual ill health. Menstrual hygiene is one of the important issues which every girl and women should practice.<sup>2-6</sup> India is a diverse country with a majority of the population living in rural areas. Amongst the rural areas, the tribal population is the most neglected one. Hence, we targeted tribal adolescent girls in the present study. Data on the perception and practices among adolescents will help us understand the gaps in awareness related to menstruation and thus promote good quality of life. With this short background, we conducted a study to understand the perceptions related to menstruation amongst tribal adolescent girls in our setup. Further, we also understood their routine menstrual hygiene practices and educated them about their malpractices.

## METHODS

A cross sectional study was conducted in the administrative area of a tertiary care institute in Mumbai. Adolescent girls of seven anganwadis in the Sakwar sub centre were included in the present study. About 114 eligible adolescents in the age group of 11 to 18 years were included in the present study. Adolescents who did not attend menarche and who did not consent for the study were excluded. The study was conducted for 5 months from February 2012 to June 2012. The questionnaire was prepared with references to the objectives of the study. Detailed interviews were conducted with the selected sample to obtain information regarding their perception and practices related to menstruation and menstrual hygiene. The practices followed during menstruation, the level of personal hygiene during the menstrual cycle and its correlation with menstrual problems is studied. The individual interview was conducted. This was followed by a seminar on menstruation and menstrual hygiene. Any participant seeking advice was counselled and referred to sakwar RHTC on sundays and examination, treatment facilities were provided to them by the team of expert doctors (gynaecologists). Confidentiality of the subjects was maintained all throughout and written informed consent was taken before the start of the study. Necessary permission from the hospital authorities was taken.

### Statistical analysis

The data were entered in Microsoft excel. The quantitative variables were either categorised and expressed in percentages or expressed in terms of mean and standard deviation. Qualitative variables were expressed in terms of percentage.

## RESULTS

We included 114 adolescent girls in the present study. The mean age of the subjects was  $15.48 \pm 1.75$  years, the mean age of menarche reported was  $13.09 \pm 1.04$  years. About 50% of the subjects had educational status between 7th to 10th standard, 14.91% had post

matriculation, 24.56% had education between 4th to 7th, 9.65% between 1st to 4th standard and one subject did not have any educational background (Table 1).

**Table 1: Demographics of the sample.**

Demographics	Frequency	Percentage (%)
<b>Age group (in years)</b>		
12 to 14	17	14.91
14 to 16	62	54.39
16 to 18	35	30.70
<b>Age at menarche (in years)</b>		
<12	7	6.14
12 to 14	65	57.02
>14	42	36.84
<b>Educational status</b>		
Illiterate	1	0.88
1 <sup>st</sup> to 4 <sup>th</sup>	11	9.65
4 <sup>th</sup> to 7 <sup>th</sup>	28	24.56
7 <sup>th</sup> to 10 <sup>th</sup>	57	50.00
Post matriculation	17	14.91

**Table 2: Perceptions about menstruation among adolescent tribal (n=114).**

Perception	Frequency	Percentage (%)
<b>Source of information</b>		
Mothers	83	72.80
Friends	24	21.05
TV	2	1.75
Teachers	4	3.50
Relatives	11	9.64
Others	1	0.87
<b>What is menstrual cycle</b>		
Know	83	72.80
Don't know	31	27.20
<b>Reaction to first menstruation</b>		
Scared	56	49.12
Usual	40	35.08
Discomfort	16	14.03
Irritation/disgusted	6	5.26
Others than above	3	2.63

About 72.80% reported that they asked their mothers for the source of information about menstruation. About 27.20% of the girls reported they had no clue about the menstrual cycle. About 49.12% of the girls reported that they were scared at the first time, 35.08% expressed that normal routine, 14.03% had some sort of discomfort, 5.26% had irritation and felt disgusted and 2.63% expressed other issues (Table 2). The most common restriction expressed was not to attend religious occasions (54.39%) and family functions (49.12%) during the menses. About 1.75% said they never washed the genitalia during menses and 79.82% said they wash it less than 2 times per day. Only one girl expressed that she

used soap, 84.21% said they used only water, 13.16% used cloth and 1.75% used other materials for cleaning. About 55.26% washed them and reused, 26.31% threw them in the dustbin, 6.14% flushed them in toilets and 15.78% expressed disinterest in answering it. About 37.72% used sanitary napkins, 19.30% used new cloth, 32.46% used reused old cloth and 10.53% reported to have used alternatively all of these (Table 3).

The most common medical problem faced during the previous cycle and present cycle was pain in the abdomen as reported by the girls. Majority of them asked their mothers about the problems followed by close friends. About 71.05% took both home and medical treatment for medical problems (Table 4).

**Table 3: Practice about menstruation among adolescent tribal (n=114).**

Practice	Frequency	Percentage (%)
<b>Restrictions during menstruation</b>		
No restrictions	26	22.81
Religious occasion	62	54.39
Physical activity/playing	3	2.63
Schooling	1	0.88
Attending family functions	56	49.12
Household work	27	23.68
Keeping fast	10	8.77
Avoiding visit to others home	28	24.56
Avoiding regular bath	0	0
<b>Material used during menstruation</b>		
Sanitary napkins	43	37.72
New cloth	22	19.30
Reuse old cloth	37	32.46
Alternate use of above all	12	10.53
<b>Cleaning of external genitals</b>		
Not at all	2	1.75
<2 times	91	79.82
>2 times	21	18.42
<b>Cleaning with</b>		
Soap and water	1	0.88
Only water	96	84.21
Cloth	15	13.16
Other	2	1.75
<b>Disposal of menstrual materials</b>		
Throwing in dustbin	30	26.31
Flushing in toilets	7	6.14
Washing and reusing	63	55.26
Don't want to tell	18	15.78
Dumping/burning	1	0.87
Other	0	0

**Table 4: Medical problems related to menstruation among adolescent tribal (n=114).**

Medical problems	Frequency	Percentage (%)
<b>Past history</b>		
Vaginal discharge	29	25.44
Vaginal itching	36	31.58
Pain in abdomen	85	74.56
Nausea/vomiting	7	6.14
Headache/irritation	15	13.16
Palpitation/giddiness	12	10.53
Leg cramps	8	7.02
Loss of appetite	28	24.56
Others	9	7.89

Continued.

Medical problems	Frequency	Percentage (%)
<b>Present history</b>		
Vaginal discharge	3	2.63
Vaginal itching	3	2.63
Pain in abdomen	80	70.18
Nausea/vomiting	2	1.75
Headache/irritation	4	3.51
Palpitation/giddiness	6	5.26
Leg cramps	2	1.75
Loss of appetite	17	14.91
Others	4	3.51
<b>Source of information regarding problems</b>		
Mothers	58	50.87
Friends	18	15.78
Relatives	8	7.01
Doctor	6	5.26
Others	5	4.38
Treatment taken	30	26.31
Home remedy	3	2.63
Both	81	71.05

## DISCUSSION

Reproductive and sexual health is one of the crucial issues for an adolescent. Menstrual hygiene is either ill informed or not informed to the adolescent girls especially among low and middle-income countries. Awareness needs a baseline assessment for rectifying the issues.<sup>7-9</sup> With this background, we conducted a cross sectional study to assess the perception and practices about menstrual hygiene among tribal adolescents in an administrative area of a tertiary care hospital in Mumbai, Maharashtra.

About 72.80% reported that they asked their mothers for the source of information about menstruation. Similar inferences were drawn by Dhingra et al, Sapkota et al, Savanthe et al, Udayyer et al and Agarwal et al.<sup>10-14</sup> On the contrary, a qualitative study was done by Behera et al among 34 adolescent girls reflected that the major source of information and solution to problems associated was friends and the circle they carry with them.<sup>15</sup> They further quoted that mothers had a very limited role in this scenario. Majority of the studies including our study reported that mothers play an important role in inculcating the knowledge of the menstrual practice, hygiene and problems related to that. So, it is important that adolescent girls along with their mothers needs to be targeted to create awareness about the same.

The present study inferred that more than 25% of the subjects had no clue about the menstrual cycle. About 36% of the tribal adolescent girls in a study from Gujarat by Dhingra et al reported that they were unaware of the menstrual cycle.<sup>10</sup> About 24.6% of rural Nepali adolescents reported that they had no knowledge of menstruation in a study conducted by Sapkota et al.<sup>11</sup> Savanthe et al inferred that only 24.7% of the adolescents

had knowledge about the menstrual cycle.<sup>12</sup> Majority of the adolescent girls expressed fear towards the first episode of menstruation. A study done among Nepali rural adolescents inferred that 44.3% were expectant, 19.6% were confused and 36.1% were frightened about the menses for the first time.

The most common restriction expressed was not to attend religious occasions (54.39%) and family functions (49.12%) during the menses. In a study done by Dhingra et al, all the girls reported that they were restricted to attend the religious occasions and family functions during the menses.<sup>10</sup> Sridhar et al and workers reported that about 72.5% of the adolescent girls in their study were told to restrict bath, 86.81% were restricted in religious activities and 20% resulted in school absenteeism.<sup>16</sup> A study by Sapkota et al inferred that majority of them were not allowed to cook or touch utensils during the menses.<sup>11</sup> About 41% of them reported that they were not allowed to go to the temple and visits religious occasions in their study. Similar restrictions were reported by Savanthe et al, Udayyer et al and Agarwal et al.<sup>12-14</sup> Even with the advent of the scientific knowledge the cultural and social outcast related to menstrual practices still exists in society.

About 1.75% said they never washed the genitalia during menses and 79.82% said they wash it less than 2 times per day. Only one girl expressed that she used soap, 84.21% said they used only water, 13.16% used cloth and 1.75% used other materials for cleaning. Half of the adolescents reported that they washed the clothes and reused them in the present study. A study by Savanthe et al reported that 40.9% burned the material, 22.3% washed and flushed off, 20.7% threw them in the dustbin and 16.1% washed and reused them.<sup>12</sup> In a study conducted by Udayyer et al reported that 82.9% of the subjects used

only water to wash their genitalia. In the present study, only 37% of the girls used sanitary napkins.<sup>13</sup> A study conducted by Behera et al inferred that some of their study subjects used sanitary pads, while most girls used old cloths.<sup>15</sup> A study from rural Nepal inferred that 54.1% of their subjects reported using sanitary pads. A study by Udayyer et al reported that 78.5% of their study sample used sanitary pads.<sup>13</sup> This reflects the core menstrual hygiene practices which need to be made aware to the adolescent girls. Education related to practice and maintaining hygiene needs to be attended to through teachers, mothers and peer groups.

The most common medical problem faced by the adolescent girls in the present study was pain in the abdomen followed by vaginal itching and discharge in the present study. Studies conducted by Dhingra et al, Sridhar et al, Sapkota et al, Savanthe et al, Udayyer et al and Agarwal et al reported similar medical problems as inferred by our study.<sup>10-16</sup> Lack of awareness and appropriate care of problems associated was reported by the in depth interviews conducted by Behera et al among the adolescent girls in Maharashtra.<sup>15</sup>

## CONCLUSION

In the present study, it is reflected that mothers of the adolescent girls were a crucial and important role in the giving the information about menstrual hygiene. Vicious cycle of sharing knowledge will be reflected in the future generations by targeting them. More awareness related to hygiene and practice and education related to social issues related to menstrual hygiene have to be addressed. Focussed programmes related to tribal adolescent health have to be implemented.

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