

## Assessment of Menstrual Hygiene, Menstrual Practices And Menstrual Problems Among Adolescent girls Living in Urban Slums of Bilaspur (Chhattisgarh).

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**Abstract:** Adolescence in girls has been recognized as a special period in their life cycle that requires specific and special attention. This period is marked with onset of menarche. Menstruation is a phenomenon unique to all females. This study was undertaken with the aims to assess the knowledge of adolescent's girls living in urban slums regarding menstruation and also to study their problem and perception and hygiene practice regarding menstruation. Hence a questionnaire based prospective cross-sectional study was carried out in urban slum of Bilaspur (Chhattisgarh) 100 female adolescent girls (age group 12-18 years) participated in this study. In this study as per problems related to menstrual cycle it is noted that majority of girls had one or the other problems related to their menstrual cycles. It can be concluded that the proper menstrual hygiene and correct perception can protect the women from suffering.

**Keywords:** Adolescent girls, menstrual hygiene, menstrual practices, menstrual problems.

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### I. Introduction

Menstruation is a normal physiological process but the onset of menstruation is a unique phenomenon for adolescent girls both physically and emotionally. In India it is considered unclean, and young girls are restricted from participating in household and religious activities during menstruation. These restrictions extend to eating certain foods like jaggery and papaya as well.<sup>1,2</sup>

Menarche marks the beginning of woman's menstrual and reproductive life which occurs between 11 and 15 years with a mean of 13 years. It is qualitative event of major significance in woman's life, denoting the achievement of major functional state. During this phase of growth, the girls first experience menstruation and related problems marked by feelings of anxiety and eagerness to know about this natural phenomenon.<sup>3</sup>

The reaction to menstruation depends upon awareness and knowledge about the subject. The manner in which a girl learns about menstruation and its associated changes may have an impact on her response to the event of menarche. Moreover, the routine health services do not have provisions for adequate care of adolescent health problems which in turn exaggerate the problems in multiple. Understanding the health problems related to menstruation, the health seeking behavior of the adolescent girls, their awareness about pregnancy and reproductive health will be the main focus of this study which will help further in planning programs for this vulnerable group.

Moreover, as the traditional Indian society considers talks on such topics as prohibited and discourages open discussion on these issues. Which in turn leads to intense mental stress and they seek health advice from quacks and persons who do not have adequate knowledge on the subject.<sup>4</sup>

Practices of hygiene related matter of menstruation are of considerable importance as it has health impact in terms of increased vulnerability to reproductive tract infections (RTI). The interplay of socio-economic status, menstrual hygiene practices, and RTIs are noticeable. Today, millions of women are sufferers of RTI and its complications and often the infection is transmitted to offspring of the pregnant mother.<sup>5</sup> It has been found that women having better knowledge regarding menstrual hygiene and safe practices are less vulnerable to RTI and its consequences. Therefore, increased knowledge about menstruation right from childhood may escalate practices and may help in mitigating the suffering of millions of women. With this in mind, the present study was carried out with the following objectives.

### II. Aim & Objectives

**This study was undertaken with the following aims as follows**

1. To assess the knowledge of adolescents girls living in urban slums regarding menstruation
2. To study their perception and hygiene practice regarding menstruation.
3. To study the types and frequency of problem related to menstruation in adolescent girls.

### III. Methodology

After obtaining necessary institutional ethical clearance .A questionnaire based prospective cross-sectional study was carried out in urban slum of Bilaspur (Chhattisgarh) 100 female adolescent girls (age group 12-18 years) participated in this study. They were explained the purpose of study and prior written informed consent was obtained from them. A good rapport was established with them. They were informed about the confidentiality of the information collected so as to get more reliable answers from them.

The study tool used was pre-designed, pre-tested, structured and self-administered questionnaire which was developed and translated into local language. The questionnaire was structured to obtain information relating to age at menarche, awareness about menstruation, source of information regarding menstruation, practices during menstrual cycles, menstrual history, regarding menstrual problems and the effect of these menstrual problems on the daily routine of the subjects and treatment practices.

### IV. Observations and Results

In the present study, 100 adolescent girls from urban slum region of Bilaspur (Chhattisgarh) having age group 12-18 years were included. We observed that maximum girls (46%) attended menarche at the age of 12 years with

The mean age of menarche as 13.3 years (Range 12-16 years) . Regarding right age of menarche, only 41% girls were aware. Regarding the emotional response towards this phenomenon, it was observed that in 50% girls, response to menarche was sad, in 22% girls it was normal, 18% girls were scared, but we could not get any response in 10% girls. Only 62% girls knew about the source of menstrual blood and 57% girls knew about the right interval between the two menses.

As shown in Table 1, regarding the source of information about menstruation, we observed that Mother seemed to be source of information in maximum (80%) girls followed by relatives and friends (12%) and least from teachers (2%) and social programs (6%) 95% girls thought menstruation to be dirty, 98% girls bathed during menses, 77% girls performed household activities during menses, 56% girls attended social activities during menses, 84% girls did not visit holy places during menses, 62% girls felt isolated during menses.

**Table: 1.** Source of information (n=100)

Source of information	Number (%)
Mother	80
Relative and friends	12
Teachers	02
Social programs	06

A pain of cramping type in the lower abdomen which may radiate to back and lower legs during or before onset of menstruation has been termed as Dysmenorrhea.<sup>6</sup> Pre-Menstrual Syndrome (PMS) is recurrent, variable cluster of trouble some physical and emotional symptoms that develop 7-14 days before the onset of menstruation and subsides when menstruation occurs. The PMS may consists of the following like low backache, fatigue, breast heaviness, abdominal bloating, increased weight, headache, irritability, skin disorders, aggressiveness, depression, gastrointestinal symptoms and loss of appetite.<sup>7</sup> A cycle that occurs every 21-35 days in which the flow lasts for 2-7 days with an average flow of not more than 80ml and not less than 30 ml are taken to be normal cycles. A normal cycle is one which is regular, with an average amount of flow and lasts for an average duration of 2-7 days. Any two cycles with duration of more than three months is labeled as one missed cycle.<sup>8</sup>

In this study as per problems related to menstrual cycle it is noted that majority of girls (82%) had one or the other problems related to their menstrual cycles. Dysmenorrhea (75.6%) was the commonest problem faced by the adolescent girls. 71.9% of the study subjects had one or the other symptoms of Pre-Menstrual Syndrome (PMS).Backache (67%), fatigue (52%), breast heaviness (46.3%) and joint pain (26.82%), increased weight during and a few days before menstruation (42.68%), headache (50%), abdominal bloating (35.36%) were the common pre-menstrual symptoms complained by the subjects. Most of the girls had cycles of normal duration whereas abnormal duration of the cycle was the problem faced by 52.4% of the subjects. About 36.5 % girls had abnormal bleeding. About irregular cycles 28.0% girls experienced it and a few had even missed their cycles (4.8%). (Table 2)

**Table: 2. Menstrual Problems among Adolescent Girls**

Problems	No of girls having problems (n=82, 82%)	%
Dysmenorrhea	62	75.6
Pre-Menstrual Syndrome (PMS)	59	71.9
Backache	55	67.0
Fatigue	42	51.2
Increased weight	35	42.68
Breast heaviness	38	46.3
Joint Pain	22	26.8
Abdominal bloating	29	35.36
Headache	41	50
Irregular Cycles	23	28.0
Abnormal duration of menstruation	43	52.4
Abnormal Bleeding	30	36.5
Missed cycle	04	4.8

Regarding the persons opted by the study subjects for discussion of their problems it was found that most of the girls discussed their menstruation related problems with their mothers (61%) followed by their relatives (18%) like sisters and friends (15%). Only 4% took professional advice for their problems from a doctor. Although 2% girls had one or the other problems but never discussed it with anybody. (Table 3)

**Table: 3. Discussants Opted by Study Subjects for Their Problems**

Discussants	No	%
Mother	61	61
Relatives	18	18
Friends	15	15
Doctor	04	5
No body	01	1

Out of 79 girls who used sanitary napkins, 1.3% girls changed it once a day, 35.4 % twice a day, 40.5% girls thrice a day, 18.9% girls changed it 4 times a day, and 3.8% girls > 4 times a day. Only paper for wrapping the used napkins was used by 40.5% girls, 32.9% girls used paper and plastic, and 10.1% girls used only plastic. 82.2% girls threw the pads in house dustbin and 2.5% girls threw on roadside. Out of 21 girls who used clothes as absorbent during menses, 66.6% girls used clothes of cotton variety while 33.4% used clothes of other variety. Frequency of changing clothes was 2 times a day in 52.4% girls, 3 times a day in 38.1%, and 4 times a day in 9.5% girls. The used clothes were washed using soap and water by 80.9% girls, 9.5% used only water, and 9.5% used disinfectant. The clothes were dried in house corner by 80.9% girls and 19.1% girls dried the clothes in sunlight whereas 80.9% girls finally disposed off the used clothes after 2-3 months, 4.8% after 4-5 months, and 9.5% after 6-12 months by burning(19.1%), throwing in dustbin (14.3% ), and 4.8% threw on roadside. 41% girls washed the genitals with only water, 40% girls with soap and water, and 19% girls with water and disinfectant as show in the table no-4

**Table: 4. Tabulation of hygiene practice during menstruation**

Hygiene Practice among the girls studied		No	%
	Use of sanitary pad	62	62
	Use of cloth	38	38
Practice of menstrual hygiene in girls using clothes(n=38)	Type of cloth used		
	Cotton	25	65.7
	other	13	34.2
How often do girls change clothes a day	Two times a day	15	39.4
	Three times a day	18	47.3
	Four times a day	05	13.15
How do you wash your clothes	Soap and water	30	78.9
	Only water	08	26.6
Where do you dry the sanitary Clothes	Corner of the house	28	73.6
	Dry in the open under sunlight	10	26.3
When do you Dispose of the clothes used for sanitary purpose	After 1-2 months	18	47.3
	After 2-3 months	11	28.9
	After 4-6 months	09	23.6
How the clothes is disposed	Throw in the dustbin	22	57.89
	Throw in the roadside	16	42.10
Practice of menstrual hygiene in girls using sanitary pad(n=62)			

How often do you change your pad a day	Two times a day	19	30.6
	Three times a day	32	51.6
	Four times a day	11	28.94
In what material do you wrap the pads while disposing it	Paper	22	35.48
	Plastic	35	56.4
	Paper and plastic	05	8.06
Where do you dispose the sanitary pads	House dustbin	19	30.6
	Road side	43	69.35

In the study, it was found that 46% girls washed the genitals with soap and water, 42% with only water and only 12% with water and disinfectant.

## V. Discussion

Adolescence may be termed as a period of transition from puberty to early adulthood. Transition phase involves major physical and emotional changes in the individual. In a traditional family setting in developing countries, mothers are usually the care takers of their daughters during these critical phases of physical and emotional development. In a conservative society and in rural population, the subject of menstruation and its hygiene is still considered a taboo subject for discussion.

In present study the mean age of menarche was 13.3 years. Beena Sachan et al.<sup>9</sup> in study on school-going adolescent girls of a North Indian district observed the mean age at menarche to be 13.6 years. Joseph et al.<sup>10</sup> In a study on adolescent girls in rural India, observed the mean age at menarche to be 13.9 years. In the study by P. B. Verma et al.<sup>11</sup> the mean age of menarche was 14 (13.99, SD 1.8). Nair et al.<sup>12</sup> in study on unmarried females in rural area of Delhi, observed the mean age at menarche to be at 13.6 years, which were almost similar to the mean age at menarche (13.5 years) in our study.

Though it is desirable to have school teacher or health worker to be the first source of information ensuring that right knowledge has been imparted, it was seen that major source of information in the study was mother (80%) followed by relatives and friends (12%) which is also similar to other studies.<sup>13-14</sup> It was observed that the mothers were the most common source of information which retells the fact that mothers of adolescents should be integral part of all programs on adolescent health and especially menstrual hygiene. It was seen that though almost all girls had heard about menstruation, the level of knowledge was poor which is similar to study by Shanbhag D et al.<sup>15</sup>

It was seen in present study that 62% used pads and 38% used clothes whereas in similar study conducted it was found that 79% girls used clothes while 21% used sanitary pads. The use of pads was higher which was probably due to the fact that availability was high in these areas and also due to influence of television which has increased awareness regarding availability and use of sanitary napkins. It was observed that the usual practice was to wash cloth with soap and water after use and dry it at some secret place like house corner. To keep the clothes away from prying eyes, they are hidden in some unhygienic places. Privacy for washing, changing or cleaning purpose is something very important for proper menstrual hygiene. In the study, it was found that 46% girls washed the genitals with soap and water, 42% with only water and only 12% with water and disinfectant. This when compared to another study undertaken in rural West Bengal which showed that 97.5% girls used soap and water.<sup>16</sup> This shows that personal hygiene practices were unsatisfactory in the study population. Regarding the method of disposal of the used material, most of the girls reused cloth pieces for 2-3 months and 57.9% properly disposed the used clothes.

Pre menstrual Syndrome (PMS) was reported by 71.9% of study subjects. Backache, fatigue, breast heaviness, joint pain and feeling of increased weight were the most common pre-menstrual symptoms experienced by the participants. PMS has been reported to be one of the most distressing problems associated with menstrual cycle in the literature also. The complaints of the participants in the study were well within the range as reported by others.<sup>17-18</sup>

## VI. Conclusion

It can be concluded that the proper menstrual hygiene and correct perception can protect the women from suffering. Before bringing any change in menstrual practices, the girls should be educated about the facts of menstruation, physiological implication, about the significance of menstruation and development of secondary sexual characters, and above all about proper hygienic practices and selection of disposable sanitary menstrual absorbent. This can be achieved through educational television programs, school/nurses health personnel, compulsory sex education in school curriculum and knowledgeable parents so that her received education should wipe away the age-old wrong ideas and make her feel free to discuss menstrual matters including cleaner practices without any hesitation. As we observe that mothers being the first source of information in maximum girls should be taught about the menstruation and hygienic practices and to break their

inhibitions about discussing with their daughters about menstruation much before the age of menarche. As reproductive tract infections, which has become a silent epidemic that devastates women's life is closely interrelated with poor menstrual hygiene. Therefore, proper menstrual hygiene and correct perceptions and beliefs can protect the womenfolk from this suffering.

The school health programme should include provision for screening of adolescent girls for menstruation related problems and provide them with relevant information on the subject clearing up the misconceptions and offer them the possible treatment options. This may help in improving school attendance rates and academic performance of the girl students.

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