



PERCEPTIONS REGARDING MENSTRUATION AND PRACTICES DURING MENSTRUAL CYCLES AMONG SCHOOL GOING ADOLESCENT GIRLS IN URBAN FIELD PRACTICE AREA OF IGIMS, PATNA INDIA

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ABSTRACT:

Onset of menstruation is one of the most important changes occurring during adolescence. Menstruation is a milestone event in a girl's life and the beginning of reproductive life. In various parts of India, there are several cultural traditions, myths and misconceptions related to menstruation, which make them vulnerable to genital tract infections. Lack of menstrual hygiene in adolescent girls can make them susceptible to various morbidities, for example, reproductive tract infection, urinary tract infection and their long-term consequences i.e. cervical cancer, infertility, and ectopic pregnancy. The objective of this present study was to know the level of knowledge, attitude towards menstruation and to find out practices of menstrual hygiene and their health related problems during menstruation among school going adolescent girls in the field practice area of Urban Health Training Centre IGIMS, Patna. A Sample size of 400 (10-19 years of age) was calculated and a pre designed questionnaire was used to collect the respective data. After the statistical analysis of the data the mean age and standard deviation of girls included in the study was 15.6 ± 2.86 . 62% of the total sample population reported age of menarche 12-13 years. Majority of them (82%) reported to have a regular menstruation cycle. The menstruation bleeding duration was found to be 3-5 days by 72.5% of the total sample population. Almost 91% states to have menstruation cycle length of 21-35 days monthly. The primary informer regarding menstruation in half of the sample population was their mothers (50%), 92% reported to menstruation as a normal physiological process. During the analysis of menstruation hygiene practice the major finding was the method of disposable. It was found that only 16% of them was using dustbin to dispose the used napkins. In the assessment of restrictions during the menstruation it was found that 83.75% was restricted to enter into the Pooja room. The major health problem was found to be the abdominal pain during menstruation which was reported by 70% of them. Hence it is important to educate the girls with scientific knowledge and dispelling their myths and misconceptions thereby encouraging safe and hygienic practices for safeguarding themselves against various infections.

Keywords: Menstruation, Adolescent, Hygiene, Urban field

Introduction

The World Health Organization (WHO) has defined adolescence as the age group of 10-19

years. Adolescence in India has been defined to be a period between 10-18 years. There are an estimated 200 million adolescents in India who comprise one-fifth of the total Indian

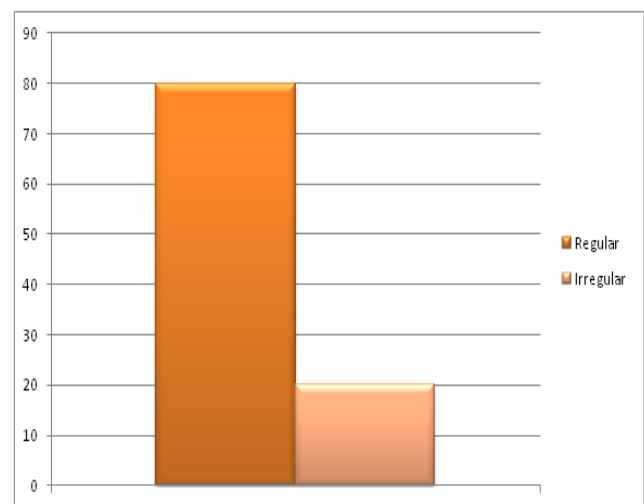
population.¹Menstruation is a phenomenon unique to the females. The onset of menstruation is one of the most important changes occurring among the girls during the adolescent years. The first menstruation (menarche) occurs between 11 and 15 years with a mean of 13 years. Among all the developmental milestones associated with the adolescent years, menarche may be the most important. The onset of the first menstrual period is a qualitative event of major significance in a woman's life, denoting the achievement of a major functional state. The bodily changes associated with puberty will have an impact in the girl's physical, psychological and social development. Hence adolescent girls constitute a vulnerable group, particularly in India where female child is discriminated in the society. Menstruation is still regarded as something unclean or dirty in India and 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. Although menstruation is a natural process, it is linked with several misconceptions and practices, which sometimes result into adverse health outcomes. Adolescents' problems constitute a bulk of morbidities which are generally unrecognized and uncared furthering the disease burden. A large variety of morbidities such as nutritional deficiency disorders (stunting, wasting), menstrual disorders, etc. prevail among adolescents RTIs STIs/HIV/AIDS have already appeared as serious problems which can further complicate existing problems like teenage pregnancies, unsafe abortions. These complex psycho-social morbidities and high risk behavior of adolescents have been recognized as a threat to survival, growth and development. Therefore, increased knowledge about menstruation right from childhood may escalate safe practices and may help in mitigating the suffering of millions of women. There is a substantial lacuna in the knowledge about menstruation among adolescent girls. Poor personal hygiene and unsafe sanitary conditions may results in gynecological problems and high prevalence of reported cases of infections among adolescent girls. Good hygienic

practices such as the use of sanitary pads and adequate washing of the genital area are essential during menstruation.²

METHODOLOGY

This was a Cross-sectional study design which was conducted from September 2017 to September 2018 among adolescent school going girls in the field practice areas of the Urban Health Training Centre, IGIMS, Patna. A sample of 400 students was selected randomly of classes 6th to 10th and age group of 10-19 years attending the schools during the study period. Sample size of 400 was calculated by G Power version 3.00. A pre formed, pre tested semi-structured questionnaire was used in this study. The data was collected with face to face interview. Permission was taken from the school authorities and Oral consents were taken from girls to take participate in study. Those who have not attained menarche and those unwilling to participate were excluded from the study. The purpose of the study and the nature of the information which had to be furnished by the study subjects were explained to them. The data collected were entered in Microsoft excel sheet and analyzed in SPSS version 21.00

Results: Menstrual Profile of the subjects included in the study



Graph 1: Demonstrates that the 80% of the study population was having a regular cycle of Menstruation while 20% was found to have an irregular pattern of menstruation cycle among the selected population

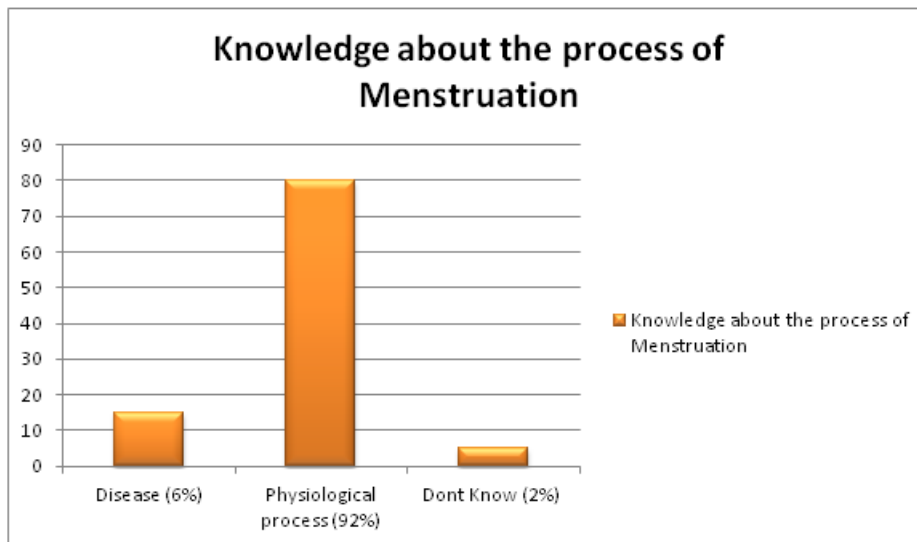
Table 1: Shows that majority (61%) had attained menarche between the age of 12 - 13 yrs. Duration of the menstrual cycle was 21- 35 days for most of them (90%), and bleeding was for 3 - 5 days during each cycle in 72.5% subjects. Menstrual cycle was regular among 82% girls.

Variable		N.O	Percentage(%)	Stat.cal
Age at menarche	10 – 11	20	5 %	$X^2=719.20$ $p<2.2\times 10^{-11}$
	12– 13	244	61 %	
	14– 15	132	33 %	
	>16	4	1 %	
Menstrual cycle pattern	regular	328	82 %	$X^2=919.40$ $p<2.6\times 10^{-9}$
	irregular	72	18 %	
Menstrual bleeding duration	< 3 days	4	1 %	$X^2=519.20$ $p<2.4\times 10^{-7}$
	3 – 5 days	290	72.5 %	
	5 – 7 days	94	23.5 %	
	>7 days	12	3 %	
Menstrual cycle length	<21 days	8	2 %	$X^2=419.20$ $p<3.2\times 10^{-3}$
	21 – 35 days	364	91%	
	>35 days	28	7 %	

Knowledge about menstruation among the study population (n = 400)

Table 2: Shows the majority of the respondents (50 %) said that the primary source of information regarding menstruation was their mother. Only 34 % of the students knew that menstruation was a normal physiological process. 6% said that it is a disease and 2% don't know about it.

Source of information	N.O	Percentage (%)
Mother	200	50 %
Sister	90	22.5 %
Friend	94	23.5 %
Relatives	4	1 %
Teacher	12	3 %
Distribution of subjects as per reason known for menstruation	N.O	Percentage (%)
Normal physiological process	368	92 %
Disease	24	6 %
Don't know	8	2 %



Graph 2: Demonstrates about the knowledge among the total population that was included in the study.

Menstrual Hygiene Practices among study population:

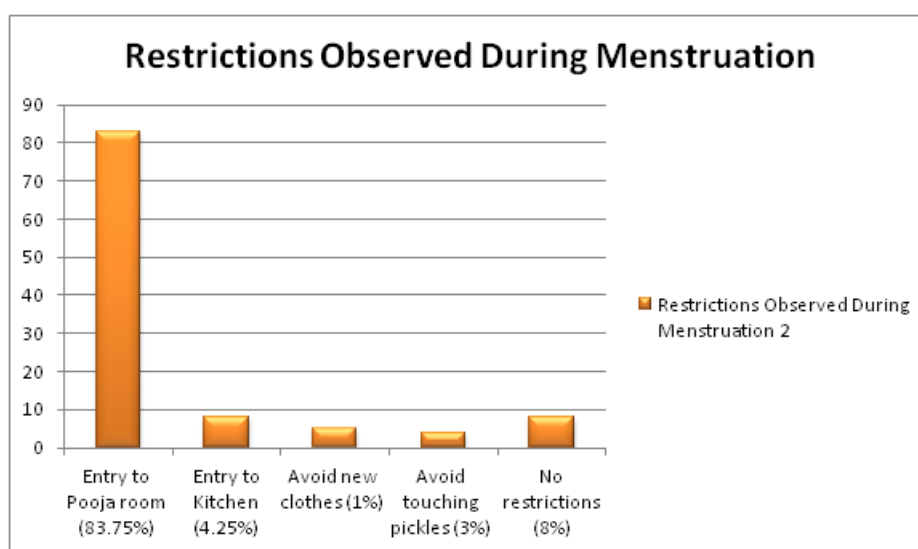
Table 3: Shows that majority of the study population (84%) use sanitary napkin .Both sanitary napkin and cloth users are (4%) whereas 12% uses only cloth. Those who were using cloth majority of them were not reutilizing it (87.5%). Majority of the study population dispose the menstrual absorbent by throwaway. Among the cloth user main reason for using cloth was financial problem. 60 % of the study population were change the absorbent <4 times.

Variable	N.O	Percentage (%)	Stat.cal
Type of absorbent used (n =400)			
Only sanitary napkin	336	84 %	$X^2=119.05$
Only cloth	48	12 %	$p<2.5\times 10^{-3}$
Both sanitary napkin & cloth	16	4 %	
Absorbent change time (n= 400)	N.O	Percentage (%)	
>4 times	160	40 %	$X^2=919.07$
<4 times	240	60 %	$p<2.4\times 10^{-8}$
Distribution of subjects as per pad/cloth disposal method (n= 400)	N.O	Percentage (%)	
Dustbin	64	16%	$X^2=788.06$
Throwaway	288	72 %	$p<2.2\times 10^{-9}$
Used again	48	12%	
Reutilize the cloth (n =64)			
yes	8	12.5 %	$X^2=889.03$
No	56	87.5 %	$p<2.1\times 10^{-12}$
Distribution of subjects as per reason for not using pad (n=64)			
Financial problem	56	87.5 %	$X^2=919.22$
No body use at home	7	10.94%	$p<2.6\times 10^{-11}$
Mother not agree	1	1.56 %	

Restrictions Observed During Menstruation among the Study Population

Table 4: Shows that Social restriction was observed during menses by a majority of girls (83.75%) mainly avoid entry to Pooja room. Only 8 % girls said that they had no restrictions during menstruation.

Restrictions (n=400)	N.O	Percentage (%)
Entry to Pooja room	335	83.75 %
Entry to kitchen	17	4.25 %
Avoid new cloth	4	1 %
Avoid touching pickle	12	3 %
No restrictions	32	8 %

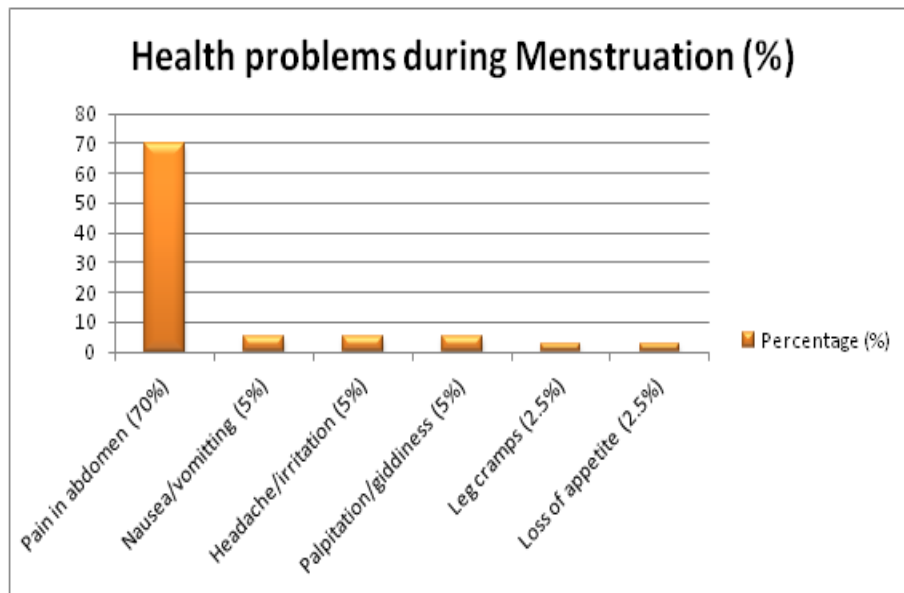


Graph 3: Demonstrates about the distribution of the total population into the categories of restrictions observed during menstruation.

Health problems during Menstruation:

Table 5: Demonstrates the major health related problems during Menstruation

Complications	N.O of responses	Percentage (%)
Pain in abdomen	280	70%
Nausea/vomiting	20	5%
Headache/irritation	20	5%
Palpitation/giddiness	20	5%
Leg cramps	10	2.5%
Loss of appetite	10	2.5%



Graph 4: Demonstrates the major health related problems during menstruation

Discussion

The transition from childhood to adulthood occurs during adolescence period which is characterized by major biological changes like physical growth, sexual maturation and psycho-social development. During this phase of growth the girls first experience menstruation and related problems which is marked by feelings of anxiety and eagerness to know about this natural phenomenon. However, they do not get the appropriate knowledge due to lack of a proper health education programme in schools. Moreover, the traditional Indian society regards talks on such topics as taboo and discourages open discussion on these issues. This leads to culmination in repression of feelings which can cause intense mental stress and seek health advice from quacks and persons who do not have adequate knowledge on the subject. Moreover, the routine health services do not have provisions for adequate care of adolescent health problems⁸. This further exaggerates the problems manifold. Understanding the health problems related to menstruation and the health seeking behavior of the adolescent girls, their awareness about pregnancy and reproductive health will help us in planning programmes for this vulnerable group. Several issues impact the health and well-being of women as they go through their reproductive age group. The most under recognized of these are water, sanitation and hygiene, yet the benefits of

these basic interventions are extensive and self perpetuating, impacting women and their daughters from generation to generation. This study has tried to assess the knowledge, attitude and practices regarding menstrual hygiene among high school girls in resource poor settings like an urban area which has direct repercussions on their health and well being.⁷

In a similar study in rural Andhra Pradesh on high school girls, all students had attained menarche at 12-13 years.⁸ Since it has been observed that the age of attaining menarche has shown decreasing trend in India there is an immediate necessity of early initiation and sensitization of young girls as early as 10-11 years of age especially in resource poor settings.

Hygiene related practices of women during menstruation are of considerable importance as it affects health by increasing vulnerability to infection especially the infections of urinary tract and perineum. It was seen that the major source of information in this study was mother (50%) which is also similar to other studies.^{9, 10} Even though most of (92%) the adolescents felt that it was a normal physiological phenomenon. In this study it was seen that 84% girls used sanitary pad and 12% used cloth. The use of sanitary pad was higher which was probably due to the fact that the availability was high in these areas and also due to influence of television which has increased

their awareness regarding the availability and use of sanitary pads.

In the present study, a large proportion of 70% of the study population complains of a common health problem i.e. pain in abdomen during menstruation. Approximately 84% of them were restricted from taking part in religious activities, touching pickles, and wearing new clothes. During the analysis of menstruation hygiene practices the major finding was the method of disposable. It was found that only 16% of them was using dustbin to dispose the used napkins. Hence it is important to educate the girls with scientific knowledge and dispelling their myths and misconceptions thereby encouraging safe and hygienic practices for safeguarding themselves against various infections and health issues. It has been found that there is lack of data presented at national level yearly regarding the status of hygiene during menstruation. Some related studies have been found which emphasis on specific regions during adolescence on hygiene during menstruation. Knowledge regarding menstrual hygiene among the study population was found to be poor although the practices were noted well. They don't have adequate and precise knowledge about menstruation. Restrictions during menstruation shows poor attitude of family related to these issues. So there is a need of health education in the schools regarding menstrual hygiene. Improving education level of the mothers can go a long way in improving menstrual hygiene practice. The girls should be made aware of the facts of menstruation and proper hygienic practices through mass media, school teacher, health personnel and well-informed parents.

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