

A Clinic-Demographic Profile and Assessment of Menstrual Problems of Adolescent Girls Attending Tertiary Care Facility

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Abstract

Aim: The aim of the present study was to observe the menstrual disorders among adolescent girls and to observe the demographic profile and assess hygiene practices during menstruation.

Material & Methods: This descriptive prospective study was conducted in adolescent girls attending gynaecology outpatient Department of obstetrics and Gynaecology, JLNMCH, Bhagalpur, Bihar, India for the period of one year. During the study period, 100 girls visiting OPD for menstrual disorders consented for study participation and were enrolled.

Results: Adolescent girls age group ranged from 10-19 years. 56% of girls belonged to age group 14-16 years, with the mean age of 15.5 ±1.3 years. The mean age of menarche was 13.7 ±0.94 years. Majority of girls attained menarche between 12-14 years of age. The inter-menstrual period among majority of girls (72%) was 21-35 days, followed by more than 35 days in 16% and less than 21 days in 12%. The duration of menstruation cycle was 3-5 days in 77% girls, with moderate flow in 68% girls. In menstrual symptoms, almost all girls (94%) experienced abdominal pain/cramps. Backache (43%), body ache (32%) & irritability (27%) were other common symptoms. Sanitary pads were used by 85% girls and remaining girls used both sanitary pads and cloth. Majority of girls (71%) changed their absorbent less than 4 times. 75% girls cleaned their genitalia less than 4 times and 57% used soap & water for the same. The most common presenting complaint was dysmenorrhea (76%) among adolescent girls. Percentage of menorrhagia, irregular menses and polymenorrhoea was almost equal and ranged from 7-9%.

Conclusion: Dysmenorrhoea was the commonest cause of morbidity among adolescent girls, which may affect their mental and social wellbeing. This may also result in significant school absenteeism. Though, use of sterile sanitary pads was seen in majority of the girls, hygiene practices may be further improved with the engagement of health care professionals, teachers, and community groups.

Keywords: Adolescent girls, Menstruation hygiene, Dysmenorrhoea sterile sanitary pads and health care professionals.

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Introduction

Adolescence is a transient and dynamic period between childhood and adulthood, characterised by several changes in the body and the child's mind. [1] Adolescence is the phase of life between childhood and adulthood, from ages 10 to 19 years. It is a unique stage of human development and an important time for laying the foundations of good health. Adolescents experience rapid physical, cognitive, and psychosocial growth. In India, adolescents age group (10-19 years) comprise 18% of the total population. [2] There are about 1.2 billion adolescents, one-fifth of the world's population and their number is increasing. Adolescents constitute over 21.4% of population in India. Adolescence is a period of enormous

physical and psychological change for young girls. Nutritional deprivation, increased demand of adolescents body, excessive menstrual blood loss all aggravate and exacerbate anemia and its effects. Menstrual disturbances are not uncommon and may add further disruption during this difficult phase for adolescents and their families. [3] Puberty is a period during which secondary sex characters begin to develop and the capability of sexual reproduction is attained. [2] Menstruation is a natural, normal biological process experienced by all adolescent girls and women in reproductive age. Among the developmental milestones associated with the adolescence, menarche i.e., the onset of

first menstruation cycle is the most important in girls.

Menstruation is the continuous process which occurs once a month as a regular rhythmic period. Throughout the childbearing years of the women, it remains as a normal physiological phenomenon and discontinues permanently at menopause approximately between the ages of 45 to 55 years. [4,5] Though, menstruation is asymptomatic bleeding per vagina in majority of girls, some may experience pain in abdomen, gastrointestinal disturbances like anorexia, vomiting, leg pain and back pain. [6] Dysmenorrhoea is a major problem during menstruation, affecting their daily activities including school absenteeism. [6] One of the major physiological changes that take place in adolescent girls is the onset of menarche, which is often associated with problems of irregular menstruation, unwarranted bleeding, and dysmenorrhea.

Of these, dysmenorrhea is one of the common inconvenience experienced by many adolescent girls. A dysmenorrhea incidence of 33.5% was reported by Nag (1982), among juvenile girls in India. [7] Health care providers have an opportunity to discuss reproductive health issues with adolescent girls and their mothers. [8]

The current study was carried out study the pattern of menstrual disorders in adolescent girls attending tertiary care centre in Bihar Region.

Material & Methods

This descriptive prospective study was conducted in adolescent girls attending gynaecology

outpatient Department of obstetrics and Gynaecology, JLNMCH, Bhagalpur, Bihar, India for the period of one year. During the study period, 100 girls visiting OPD for menstrual disorders consented for study participation and were enrolled.

Inclusion criteria

- All adolescent girls with gynecological problems like menstrual disorders, unwanted pregnancy, and vaginal discharge, trauma to genital tract, ovarian tumors, molar pregnancy, infertility, breast tumors, ectopic pregnancy and evaluation of abdominal mass in the age group of 11 to 19 years will be included in the study.

Exclusion criteria

- Those who does not belong to adolescent age group.

The details of parameters related to age; menstruation history & hygiene were recorded in a pre-structured questionnaire. Post interview the adolescent girls were counselled regarding proper menstruation hygiene practices and nutrition.

Statistical analysis

Data entered using Microsoft Excel and analysed using SPSS 20.0. All conditions were reported using frequency and percentage.

Results

Table 1: Age variables of adolescent girls

Variables	Age (Years)	Number (%)
Age group	10-13	29 (29)
	14-16	56 (56)
	17-19	15 (15)
Age of menarche	11	3 (3)
	12	8 (8)
	13	44 (44)
	14	32 (32)
	15	13 (13)

Adolescent girls age group ranged from 10-19 years. 56% of girls belonged to age group 14-16 years, with the mean age of 15.5 ± 1.3 years. The mean age of menarche was 13.7 ± 0.94 years. Majority of girls attained menarche between 12-14 years of age.

Table 2: Distribution of adolescent girls according to menstrual pattern

Variable	Number (%)	
Inter-menstrual interval	Less than 21 Days	12 (12)
	21-35 days	72 (72)
	more than 35 days	16 (16)
Amount of bloodflow	Scanty	6 (6)
	Moderate	68 (68)
	Heavy	26 (26)
Days of blood flow	Less than 3 days	5 (5)
	3-5 days	77 (77)
	more than 5 days	18 (18)

The inter-menstrual period among majority of girls (72%) was 21-35 days, followed by more than 35 days in 16% and less than 21 days in 12%. The duration of menstruation cycle was 3-5 days in 77% girls, with moderate flow in 68% girls.

Table 3: Menstrual Symptoms in adolescent girls

Symptoms	Number	Percent
Body ache	32	32
Backache	43	43
Abdominal cramps/Pain	94	94
Headache	11	11
Irritability	27	27

In menstrual symptoms, almost all girls (94%) experienced abdominal pain/cramps. Backache (43%), body ache (32%) & irritability (27%) were other common symptoms.

Table 4: Menstrual hygiene practices in adolescent girls

Type of absorbent	Number	Percent
Only sanitary napkin	85	85
Both sanitary napkins & clothes	15	15
Absorbent change times		
≥ 4 times	29	29
< 4 times	71	71
Cleaning of genitalia during last menstrual cycle		
≥ 4 times	25	25
< 4 times	75	75
Cleaning of genitalia		
Soap & water	57	57
Only water	43	43

Sanitary pads were used by 85% girls and remaining girls used both sanitary pads and cloth. Majority of girls (71%) changed their absorbent less than 4 times. 75% girls cleaned their genitalia less than 4 times and 57% used soap & water for the same.

Table 5: Menstrual Disorder in adolescent girls

Disorder	Number	Percent
Dysmenorrhoea	76	76
Menorrhagia	9	9
Irregular menses	8	8
Polymenorrhoea	7	7

The most common presenting complaint was dysmenorrhea (76%) among adolescent girls. Percentage of menorrhagia, irregular menses and polymenorrhoea was almost equal and ranged from 7-9%.

Discussion

Puberty is a progression period from childhood to adulthood and is associated with physical, endocrinal, emotional, and mental growth, with a change from complete dependence to comparative independence. The period of adolescence for a girl is a period of physical and psychosomatic groundwork for safe motherhood. As the undying reproducers of future generations, the health of adolescent girls influences not only their own health, but also the health of the future population. Almost a quarter of India's population comprises of girls below 20 years. One of the major physiological changes that take place in adolescent girls is the onset of menarche, which is often

associated with problems of irregular menstruation, unwarranted bleeding, and dysmenorrhea. Of these, dysmenorrhea is one of the common inconvenience experienced by many adolescent girls. A dysmenorrhea incidence of 33.5% was reported by Nag (1982), [7] among juvenile girls in India. A study done in Sweden [9] showed that more than 50% of all menstruating women experience some discomfort. It has also been reported by a senior obstetrician that probably 5 - 10% of girls in their late teens suffer from severe occasional dysmenorrhea interrupting their educational and social life. [10] Menstrual cramps or agonizing cramps are pain in the lower abdomen, back or upper thigh and if this is severe it is recognized as dysmenorrhea. Pain is the main complaint in lower abdomen which may possibly radiate to thigh etc. and may be associated.

Adolescent girls age group ranged from 10-19 years. 56% of girls belonged to age group 14-16 years, with the mean age of 15.5 ±1.3 years. The

mean age of menarche was 13.7 \pm 0.94 years which is similar findings studies conducted in other parts of the country. [11-13] The most common presenting complaint was dysmenorrhea (76%) among adolescent girls. Percentage of menorrhagia, irregular menses and polymenorrhoea was almost equal and ranged from 7-9%. Other studies across country have also reported abdominal cramps as commonest symptom, though in lesser frequency. [12,13] Majority of girls attained menarche between 12-14 years of age. The inter-menstrual period among majority of girls (72%) was 21-35 days, followed by more than 35 days in 16% and less than 21 days in 12%. The duration of menstruation cycle was 3-5 days in 77% girls, with moderate flow in 68% girls. In menstrual symptoms, almost all girls (94%) experienced abdominal pain/cramps. Backache (43%), body ache (32%) & irritability (27%) were other common symptoms. The most common presenting complaint was dysmenorrhea (76%) among adolescent girls. Percentage of menorrhagia, irregular menses and polymenorrhoea was almost equal and ranged from 7-9%. A study done by Patil S et al in amongst Adolescent Girls In Rural Areas of Ratnagiri District of Maharashtra showed that mean age of menarche was 13.7 years. [14] This study showed that only a few girls (2.7%) had menarche before 10 years. Progressive reduction in the menarche age has been observed over a period of almost three decades in studies done in different parts of India. [15,16]

Sanitary pads were used by 85% girls and remaining girls used both sanitary pads and cloth. Majority of girls (71%) changed their absorbent less than 4 times. 75% girls cleaned their genitalia less than 4 times and 57% used soap & water for the same. Similar findings have been reported in other studies. [17,18] In rural area, the hygiene practices may have been poor due to various reasons i.e., availability, accessibility, and affordability of sanitary pads. Education status also affects these practices. However, recent studies in urban areas have shown results like the current study. [17]

Conclusion

Dysmenorrhoea was the commonest cause of morbidity among adolescent girls, which may affect their mental and social wellbeing. This may also result in significant school absenteeism. Though, use of sterile sanitary pads was seen in majority of the girls, hygiene practices may be further improved with the engagement of health care professionals, teachers, and community groups.

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