

To Assess the Magnitude of Physical, Reproductive and Psychological Health Problems during Menstruation among Adolescent Girls of Urban Slums

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Abstract

Background: The Health problems of adolescent girls has been neglected, as they are considered generally less vulnerable to Disease than younger children. Therefore the first step to improve adolescent girls reproductive and sexual health is to acknowledge the importance of multidimensional approach and the importance of holistic perspective. This study was carried out to assess the magnitude of Physical, Reproductive and Psychological health problems during menstruation among adolescent girls of urban slums. *Material & Methods:* This is a observational community based cross –sectional study carried -out on all the Adolescent girls married and unmarried from the age group above 13 to 19 years residing in the defined area. House to house survey of the eligible subjects was done by the researcher herself using a pre-designed and pretested schedule. *Results:* Our study showed that the maximum (45.74%) adolescent girls in the study group were from 15 to 17 years age group, mean age of girls was 15.5 years. Most (33.51%) of the girls had education up to secondary school, 91.22% perceived physical change during puberty was development of breast. Adolescent girls perceived foul smelling discharge as main reproductive health problem during menstruation. *Conclusion:* Adolescent girls undergo physical, emotional and psychological changes. Many doubts and questions arise in their minds especially regarding reproductive and sexual health leading to worries and anxieties.

Keywords: Adolescent Girls; Physical; Reproductive; Psychological Health Problems.

Introduction

‘Adolescence’ is Latin in origin, derived from ‘Adolescere’ which means to grow into Adulthood. ‘Stanley Hall’ was the first to use the term Adolescence after his study in 1904 [1].

Biologically it starts with the onset of puberty and ends when the ability to Reproduce effectively begins [2]. Thus it is a transitional period between childhood and adulthood beginning from the initial appearance of secondary sexual characteristics to complete sexual maturity. It is a turbulent time, when rapid physical changes occur with addition of 5 kg body weight and 10 cm. height per year, so they require good nutrition with higher content of Protein, Vitamin, Mineral and Calcium [3].

Socially adolescence is a period of transition from the state of total Socio-economic dependence to one of relative independence [4].

Adolescence constitutes about 20% of world’s population. Every one person in five, 1.3 Billion in all is an adolescent [5]. In India adolescents account for 243 million (20% of the population) [6] and there are 15.23 million adolescents in Rajasthan, which Constitutes about 22% of the total population of the state.

Adolescent girls constitute one-fifth of the female population of the world. With substantially high adolescent population in India, the real challenge for the nation is to provide nutrition, health and education especially for girls, according to a UNICEF report. The Health problems of adolescent girls has

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been neglected, as they are considered generally less vulnerable to Disease than younger children.

Reproductive and sexual health problems are quite common in adolescent girls in India e.g. Menstrual-disorders, pre-marital sex, Teenage Pregnancy, unprotected sex and unwanted/unplanned pregnancy and STD etc [7].

Various factors like age, genetic and biological factors, socio-economic class, culture and relationship with family and peers affect psychological growth and awareness of adolescents. It is culturally supported belief that adolescent girls are unclean during menstruation. Moreover unsafe menstrual practices expose them to risk thrice as much of contracting RTI, therefore it is important how adolescent girls maintain hygiene during menstruation? [8]

The lack of knowledge puts the adolescent girl at risk of unplanned pregnancy/Teenage-adolescent pregnancy which are high risk and leads to increase in morbidity like Anemia, Retarded fetal growth, premature birth and complications during labor which may even lead to death. Pregnant adolescent below the age of 18 years is at 2.5 times higher risk and more likely to die than a pregnant woman between 18-25 years [7]. Despite the high level of sexual activity among adolescents, research on reproductive and sexual awareness and attitude in India as well as globally was lacking but now the adolescent problems are one of the agendas of health planners and professionals as a part of reproductive and child health program supported by WHO, UNFPA, IPA and UNICEF.

Studies outside India have shown that adolescent reproductive and sexual health is influenced by factors in play at the level of individual, family and school. This study was carried out to assess the magnitude of Physical, Reproductive and Psychological health problems during menstruation among adolescent girls of urban slums.

Materials & Methods

This is a observational community based cross – sectional study carried -out on all the Adolescent girls

married and unmarried from the age group above 13 to 19 years residing in the defined area.

Inclusion

All adolescent girls of study population between age group 13-19 years.

Exclusion

Those who were non-respondents and refused to give consent and below 13 years of age.

Method

House to house survey of the eligible subjects was done by the researcher herself using a pre-designed and pretested schedule.

In the survey detailed in-depth interview of the subjects was conducted regarding their knowledge about reproductive and sexual health and attitude and practices related to it.

Data Collection and Statistical Analysis

The data generated was analyzed using computer software and appropriate tests were applied.

Results

Our study showed that the maximum (45.74%) adolescent girls in the study group were from 15 to 17 years age group, mean age of girls was 15.5 years (Table 1). Most (33.51%) of the girls had education up to secondary school followed by middle school (32.44%) and only 3.72% were illiterate. Girls when kept in 2 educational group were-up to primary (11.96%), and above primary (88.03%) (Table 2). Most commonly (91.22%) perceived physical change during puberty was development of breast, followed by appearance of hair under armpits (86.96) and Least commonly (35.10%) perceived physical change was white discharge from vagina (Table 3). Majority of girls discussed physical changes with their mothers (80.58). Very few girls discussed this issue with doctor

Table 1: Age Distribution of Adolescent Girls

Age Groups (in years)	No.	%
13 to 14	137	36.43
15 to 17	172	45.74
18 to 19	67	17.81
Total	376	100

Table 2: Distribution of Adolescent Girls according to their Own Education

Educational status	No. (%)
Illiterate	14 (3.72)
Primary or just literate	31 (8.24)
Middle school	122 (32.44)
Secondary	126 (33.51)
Senior secondary	62 (16.48)
Graduate	18 (4.78)
Post graduate	3 (0.79)
Total	376 (100)

Table 3: Distribution of Adolescent Girls according to their Perception about Secondary Sexual Characteristics*

Secondary Sexual Characteristics	Perceived (N=376) (%)	Not Perceived (N=376) (%)
Rapid growth in height and weight	307 (81.64)	69 (18.35)
Growth of hair under armpits	327 (86.96)	49 (13.03)
Appearance of pubic hair	297 (78.98)	79 (21.01)
White discharge from vagina	132 (35.10)	244 (64.89)
Development of breast	343 (91.22)	33 (8.77)
Starting of menstrual cycle	325 (86.43)	51 (13.56)

Table 4: Category Wise Distribution of Individual with whom Adolescent Girls Discussed their Physical Changes*

Category of individuals	No. (N=376)	%
Mother	303	80.58
Friend	38	10.10
Sister	33	8.77
Class-fellow	15	3.98
Doctor	5	1.32
Teacher	1	0.26
Counselor	1	0.26
Don't discuss	17	4.52
Others	10	2.65

Table 5: Distribution of Adolescent Girls according to Perception/Experience of Reproductive Health Problems during Menstruation*

Reproductive problems	No. (N=221)	%
Watery discharge	6	2.71
Thick discharge	23	10.40
Excessive bleeding	17	7.69
Foul smell discharge	27	12.21
Passage of clots during bleeding	3	1.35
Pain during bleeding	16	7.23
Swelling in genital organs	3	1.35
Painful micturition	3	1.35
Burning micturition	3	1.35
Frequent urination	13	5.88
Responses obtained per respondent		0.51

Table 6: Distribution of Adolescent Girls according to Perception/Experience of Psychological Problems during Menstruation*

Psychological problems	No. (N=221)	%
Fear	18	8.14
Tension	15	6.78
Feeling weakness	39	17.64
Depression	7	3.16
Inferiority complex	3	1.35
Felt insulted	8	3.61
Bad feeling	49	22.17
Felt guilty	1	0.45
Felt shy	32	14.47
Impaired memory	7	3.16
Irritability	31	14.02
Mood upset	32	14.47
Responses obtained per respondent		1.09

(1.32), teacher and counselor (0.26) (Table 4). Adolescent girls perceived foul smelling discharge as main reproductive health problem during menstruation (Table 5). Bad feeling as main psychological problem during menstruation, followed by feeling weakness (17.64%), mood upset and felt shy (14.47%) (Table 6).

Discussion

In the present study the mean age of girls was 15.5 years with standard deviation of 1.90 years. While the mean age of girls was 14.56 years in Balasubramaniam study conducted in Tamilnadu, 2005 [9]. The mean age was 13.7 years in Singh et al study of health status of adolescent girls in slums of Lucknow, 2006 [10].

In the present study majority (88.03%) of the adolescent girls were educated above primary and rest (11.96%) were up to primary level. In study of health problems of adolescents in urban field practice area, sadar, Nagpur, 2001 maximum number (39.43%) of Adolescents were educated up to high school; 9.5% had primary education; 51% had education above primary [11]. In Balasubramaniam Tamilnadu study, 2005 majority of adolescents (89%) had attended school [9].

In the present study most (55.85%) of the girls belonged to lower SEC followed by 36.70% in middle and 7.44% in upper SEC. Similarly about 50.28% adolescents belonged to low socio-economic status in study of health problems of adolescents in urban field practice area, sadar, Nagpur, 2001 [11].

In girls the breast enlargement is first sign of sexual maturation, followed by appearance of pubic hair, appearance of axillary hair, rapid growth in height and weight and menarche thus the first sign of sexual maturation is enlargement of breasts in adolescent girls [12]. In this study development of breast was first (91.22) noticed physical change during puberty. Similarly, S.K.ramani et al study of sexual & reproductive health behavior among school going adolescents of Jaipur district, 2007, showed that in class 9th girls most commonly (92.14%) noticed physical change during puberty was development of breast while in class 11th girls, most commonly (99.13%) noticed physical change was starting of menstrual cycle [13]. Saritaagarwal et al found that 76% girls were aware of physical signs of adolescence while 18% thought menarche to be the only sign of onset of adolescence [14].

In this study majority (80.58%) of the girls discussed

these physical changes with their mothers. Similarly, most (66%) of the girls in Ali TS et al study of understanding of puberty & related health problems among adolescents in Karachi, Pakistan [15] study while 50.42% girls in S.K. Ramani et al study of sexual & reproductive health behavior among school going adolescents of Jaipur district, 2007 [13], discussed physical changes with their mothers.

The Physical problems during menstruation, were very common and most (71.04%) of the adolescent girls perceived abdominal pain/cramps as main physical problem during menstruation, followed by tiredness/ weakness (32.12%), pain in legs (22.17%), body ache and lethargy (16.74%), headache (9.04%) and pain in breast (5.88%) in that order. While in Nair et al study on awareness & practices of menstruation & pubertal changes amongst unmarried female adolescents East-Delhi, 2007, during menstruation, complaints like irritability, headache, malaise, and tenderness of the breasts affected 62.9%, 49.6%, 24%, and 9.4%, respectively. Dysmenorrhoea was prevalent in 63.75%. One-third of the girls did not complain of any premenstrual symptoms. The association of age with premenstrual complaints was not significant ($P > 0.05$) [16].

In the present study the Reproductive health problems during menstruation were comparatively less common and most of (12.21%) adolescent girls perceived foul smelling discharge as main reproductive health problem during menstruation, followed by thick discharge (10.40%), excessive bleeding (7.69%), pain during bleeding (7.23%). Problem of foul smelling discharge was found in 12.21% which does not co-relate with response on hygienic practices. Probably the response under 'use of clean cloth or foul smelling discharge was not properly understood by the respondents. The Psychological problems during menstruation, were widely prevalent and most (22.17%) of the adolescent girls perceived bad feeling as main psychological problem during menstruation, followed by feeling weakness (17.64%), mood upset and felt shy (14.47%), irritability (14.02%), fear (8.14%) and tension (6.78%).

S.K. Ramani et al showed that most (71.21%) of the girls of class 9th and 11th (77.42%) perceived some type of problem during M.C. and the association between them was not statistically significant $P=0.03$. Most common Physical, Reproductive and Psychological health problem during menstruation was abdominal pain (64.12%), foul smelling discharge (23.52%) and mood upset (45.86%) respectively [13]. In Saritaagarwal et al study of knowledge & attitude of adolescent girls towards reproductive health and related problems of

Chatisgarh, 2007, various menstrual problems prevalent were dysmenorrhoea (84%), irregular cycle (48.4%), oligomenorrhoea (10.4%), menorrhagia (15.6%), pathological vaginal discharge (10%), polymenorrhoea (3.6%), premenstrual syndrome (3.6%) [14]. Prevalence of reproductive morbidity was very high, and 82% of girls who had attained puberty had one or more gynaecological problems in Tamilnadustudy, 2005 [9]. Menstrual problems, including oligomenorrhoea were present in 30% adolescents in study of health problems of adolescents in urban field practice area, sadar, Nagpur 2001 [11].

Conclusion

Adolescent girls undergo physical, emotional and psychological changes. Many doubts and questions arise in their minds especially regarding reproductive and sexual health leading to worries and anxieties. Adolescent girls till now are specially underserved and most vulnerable group whose problems are entirely different and thus need to be served by different interventions.

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