



A STUDY ON REPRODUCTIVE MORBIDITY AND MENSTRUAL HYGIENE AMONG ADOLESCENT GIRLS OF URBAN SLUM AREA OF CHITRADURGA

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Financial Support: None declared
Conflict of interest: None declared
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How to cite this article:

Ramya V, Reddy MR, Sridevi BK . A Study on Reproductive Morbidity and Menstrual Hygiene among Adolescent Girls of Urban Slum Area of Chitradurga. Ntl J Community Med 2016; 7(3):180-183.

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Date of Submission: 11-12-15

Date of Acceptance: 17-03-16

Date of Publication: 31-03-16

ABSTRACT

Introduction: A large number of Adolescents in India are out of school, get married early, work in vulnerable situations, sexually active and are exposed to peer pressure. This study was conducted among adolescent girls with the objective to assess their menstrual problems, health seeking behavior and practices during menstruation.

Methods: A Community based cross sectional observational study was conducted among 490 late adolescent girls (15-19 years) in the urban field practice area of Chitradurga.

Results: The mean age at menarche, marriage and pregnancy among subjects was 13.54 ± 1.0 years, 17.5 ± 1.29 years and 18.23 ± 0.9 years respectively. The most common reproductive health problems were dysmenorrhoea (37.1%) and menstrual irregularities (18.6%). Only 23.89% adolescent girls having reproductive health morbidities sought health. Majority (83.92%) of adolescent girls were using sanitary pads during menstruation. There was statistically significant association between the type of menstrual absorbent material used and educational status of girls, educational status of their mothers and socio economic status.

Conclusion: The problems of adolescent girls like early marriage, school dropout and teenage pregnancy are still prevalent in the community. Health care seeking behavior during period of reproductive illness was found to be very poor.

Keywords: Adolescent girls; Reproductive morbidity; Menstrual hygiene

INTRODUCTION

The term adolescence comes from Latin word meaning "to grow to maturity".¹ WHO has defined adolescence as a period between 10-19 years. This is the period of transition from childhood to adulthood which are formative years when maximum amount of physical, psychological and behavioral changes take place.

For statistical purposes this period is further divided into 'Early adolescence' aged 10-14 years and 'Late adolescence' aged 15-19 years.² However the period of adolescence vary widely depending on

the tradition, culture and social factors within each society.

Adolescent girls constitute about 1/5th of total female population in the world. A large number of adolescents are out of school, get married early, work in vulnerable situations, are sexually active and are exposed to peer pressure.³ These factors have serious economic and public health implications. It is important to influence the health seeking behavior of adolescents as their situation will be central in determining nations health mortality and morbidity and the population growth scenario.

The girls constitute a more vulnerable group especially in the developing countries where they are traditionally married at an early age and are exposed to greater risk of reproductive morbidity and mortality.

Against this background the present study was under taken with the objectives to assess reproductive health status and health care seeking behavior of study subjects during reproductive illness and to study menstrual hygiene among adolescent girls and factors associated with it.

MATERIALS AND METHODS

A community- based descriptive cross- sectional observational study was carried out among girls in the age group of 15-19 years from the urban field practice area of Chitradurga. Urban health training centre caters services to the population of 31186. There are 30 Anganawadi centers in UHTC area. The data collection was carried out for one year from Nov 2013- Oct 2014.

Adolescent girls in the age group of 15-19 years residing in urban field practice area were included in the study after taking informed consent. The sample size was calculated by taking the proportion of late adolescent girls as 5 % according to NFHS III with 95% confidence level and 4 % absolute precision sample size comes as 450.⁴ Considering the 5-10% of non- response rate the sample size was 490.

It was decided to take 16 study subjects from each Anganawadi area. A central point in each Anganawadi area was identified and the direction of the first house was selected randomly. The process helped in selecting the first house. Subsequently, house to house search was done, and if any adolescent girl was found in the house, it was included in the study. If there were more than one subject in a single house, a listing of the girls was done on the back of the paper and the numbers of a currency note was used to select only one girl in the study. The verbal consent of the subjects was taken before the interview. The survey information included socio-demographic profile, reproductive health problems, health care seeking behavior and menstrual hygiene practices. Adolescent girls with symptoms of RTI were treated at UHTC.

Health education sessions for adolescent girls were conducted in each Anganawadi centres. Health education regarding maintaining menstrual hygiene, family life education and utilization of health care services was given to all the respondents.

Survey data entry and analysis was done by using SPSS Package version 18. Simple proportions, mean, standard deviation and Chi-square test was

used. Chi-square test was used to find out the association between two attributes. P value of less than 0.05 is considered as statistically significant.

RESULTS

A total of 490 adolescent girls were interviewed. The mean age of the subjects was 15.8 ± 0.8 years and more than 50% of the girls belonged to 15-16 years of age group. Majority (77.96%) of the subjects was Hindus, 50.82 % of them belonged to class V socio- economic status and 93.67% belonged to nuclear family. Majority of the girls were studying in P.U College (45.71%). About 9.6% of adolescent girls had dropped out of school with the main reasons being marriage (38%) and not interested in schooling (25%). In the present study 5.31% of adolescent girls were married. The mean age at marriage was 17.5 ± 1.29 years. Mean age at first pregnancy was 18.23 ± 0.9 years.

Reproductive morbidity

The mean age at menarche in study subjects was 13.54 ± 1.0 years. Out of total subjects only 5 girls have not attained menarche. Among those who have attained menarche, 293(60.41%) girls were having one or more reproductive morbidity. A high prevalence of dysmenorrhoea (37.10%) was found among adolescent girls followed by menstrual irregularities (18.6%), menorrhagia (1.4%), white discharge per vagina (1.2%) and burning micturition (1.4%).

Health care seeking behavior

Among those who were having morbidities only 23.89% girls sought health care and 76.11% girls remained silent without approaching health care. The health care seeking behavior among adolescent girls during period of reproductive illness was found to be very poor.

Out of 70 girls who received health care, maximum number of girls (50.0%) received treatment from private practitioners, 32.86% from Urban Health Training Centre and 17.14% from government hospitals.

Out of total 223 girls who did not seek health care, majority (92.38%) of girls reported 'Didn't think it was necessary' as a reason for not seeking health care. There were different misbeliefs and misconceptions about menstruation among the respondents.

Menstrual hygiene

Majority (70.72%) of girls attained menarche in 13-14 years. The mean age of menarche in our study was 13.54 ± 1.00 year. Maximum i.e. 98.56% of adolescent girls had menstrual bleeding for 2-7 days.

Table 1: Socio demographic variables of the study subjects

Socio demographic variable	Number (%)
Religion	
Hindu	382 (77.96)
Muslim	108 (22.04)
Education	
High School	196 (40)
P.U. College	224 (45.71)
Studying Degree	70 (14.29)
Type of family	
Nuclear Family	459 (93.67)
Joint Family	23 (4.69)
Three generation Family	8 (1.63)
Socio Economic Status *	
Class I	134 (27.35)
Class II	28 (5.71)
Class III	15 (3.06)
Class IV	64 (13.06)
Class V	249 (50.82)
Marital status	
Unmarried	464 (94.69)
Married	26 (5.31)

* (According to Modified Kuppuswamy's classification) ⁵

Table- 2: Distribution of respondents according to the reproductive health problems

Reproductive health problems	Number* (%)
Menorrhagia	7 (1.4)
Dysmenorrhoea	182 (37.1)
Menstrual irregularities	91 (18.6)
White discharge per vagina	6 (1.2)
Burning micturition	7 (1.4)

* Multiple responses

Table- 3: Distribution of respondents according to the Health care seeking behavior for reproductive morbidities

Health care seeking behavior	Number (n=293) (%)
Present	70 (23.89)
Absent	223 (76.11)

Table - 4: Practice of menstrual hygiene

Menstrual hygiene	Number (%)
Use of material during menstruation	
Sanitary pads	407 (83.92)
Cloth piece	78 (16.08)
Methods of Disposal	
Cloth pieces reused	78 (16.08)
Sanitary pads disposed properly	394 (81.24)
Sanitary pads thrown indiscriminately	13 (2.68)
Restrictions practiced during menstruation	
Physical activities (playing)	22 (4.54)
Visit place of worship	423 (87.22)
Participation in family functions	30 (6.19)
No restrictions practiced	10 (2.06)

The mean duration of menstrual bleeding was 4.31 ± 1.03 days. Maximum i.e. 81.65% of girls the duration of menstrual cycle was 28-35 days. The mean inter-menstrual interval was 29.75 ± 1.07 days.

Majority (83.92%) of adolescent girls were using sanitary pads during menstruation and 81.24% of them disposed it properly. There was statistically significant association between the type of menstrual absorbent material used and educational status of girls ($p = 0.037$), educational status of their mothers ($p = 0.000$) and socio economic status ($p = 0.000$). These factors play a significant role in the choice of menstrual absorbent used. Majority of the girls were practicing different types of restrictions during menstruation.

DISCUSSION

Reproductive morbidities were prevalent in the adolescent girls. It was observed that 59.79% of the adolescent girls were having one or more reproductive morbidity. Whereas Kulkarni M V ⁶ and Rehman *et al.*⁷ in their study among adolescent girls reported the reproductive morbidity as 65.18% and 64.5% respectively. Balsubramanian⁷ carried out a study in unmarried adolescent girls reported 82% of girls had one or more morbidity which is higher than present study.

In our study Dysmenorrhoea was the most common morbidity among adolescent girls. The prevalence of dysmenorrhoea in our study was 37.1%. In studies by Anil K A *et al.*⁹ Atchuta K A *et al.*¹⁰ the prevalence of dysmenorrhoea was 79.67% and 54% respectively.

The study indicated that the existing health services are not fully accessible, affordable and acceptable to adolescents. It also indicated that adolescents prefer to consult either peers or suffer in silence when they face reproductive health problems.

In the present study, awareness regarding health care seeking behaviour during reproductive illness was found to be very poor, only 23.89% girls sought health care and 76.11% girls remained silent without approaching health care. Similar observations were made by Kulkarni M V *et al.*⁶ In their study only 37.67% girls sought health care for reproductive illness and 62.33% girls remained silent without approaching health care. Lee *et al.*¹¹ in Malaysia and Adinma E D *et al.*¹² in Nigeria conducted studies among adolescent girls and observed that girls who sought medical consultations for menstrual disorders were only 11.1% and 3.3% respectively.

In the present study, majority (70.72%) of girls attained menarche in 13-14 years. The mean age of

menarche in our study was 13.54 ± 1.00 year. In studies by Dasgupta A *et al.*¹³ and Thakre S B *et al.*¹⁴ the mean age of menarche in the adolescent girls was 12.8 years and 12.85 ± 0.867 years respectively.

Majority (83.92%) of adolescent girls were using sanitary pads during menstruation. A study by Dasgupta A *et al.*¹³ showed that 11.25% girls used sanitary pads during menstruation, 42.5% of girls used old cloth pieces and 6.25% used new cloth pieces and 40% of girls used both cloth pieces and sanitary pads during menstruation. A study by Thakre S B *et al.*¹⁴ in Nagpur among adolescent girls, it was observed that sanitary pads were used by 49.35% of girls and 45.74% of the subjects used old clothes. Most of the girls prefer to use disposable pads as they are more comfortable, less smelly and easier to use. They are also aware of hygiene-related practices during menstruation and its health impact in terms of increased vulnerability to reproductive tract infections (RTI).

The present study shows a statistically very highly significant association between socio economic status of adolescent girls and absorbent material used during menstruation. Adolescent girls with better socio-economic status used sanitary pads than cloth piece. Because girls who belonged to higher socio economic status have educated parents and were affordable. Similar observations were reported by Omidvar S *et al.*¹⁵ Gilany *et al.*¹⁶ working with Egyptian girls were also of similar opinion. Above studies have shown lower socio-economic status, lack of access to information about menstruation and money to buy sanitary products for menstrual hygiene are all related factors affecting menstrual behaviors. Evidently poverty is more than just the lack of income as it includes lack of access to services, resources and skills, vulnerability, insecurity and powerlessness.

CONCLUSION

Reproductive morbidities were prevalent in adolescent girls. Dysmenorrhoea was the most common morbidity among adolescent girls. Backache, menorrhagia, irregular menstrual cycles were other common morbidities. Health care seeking behaviour during reproductive illness was found to be very poor. Almost all girls reported 'no need of treatment' as a reason for not seeking health care. Health education sessions regarding reproductive health and its morbidities should be conducted in schools and colleges and in communities.

RECOMMENDATIONS

Education regarding reproductive health and hygiene should be included as a part of school curriculum. Better hygienic practices can be adopted

by making sanitary pads available at affordable prices (social marketing). Female education plays a significant role in maintaining good health and in turn the upliftment of socio economic status.

Acknowledgment

I am thankful to my guide Dr. B. S. Payghan and Prof .Dr. Swapna .S. Kadam for their support while conducting this research work.

REFERENCES

1. Bansal RD, Mehra M. Adolescent girls an emerging priority. *Indian J Public Health* 1998; 22(1): 1-2.
2. WHO Health needs of adolescents. Report of WHO Expert Committee, Technical Report series, 609:15.
3. Training Module on orientation Programme for Medical officers (PHC) to provide adolescent friendly reproductive and sexual health services. Government of India, Ministry of Health and Family Welfare IEC division.
4. Lwanga SK, Lemeshaw S. Sample size determination in health, a practical manual: WHO; 1991.
5. K Park. Park's Textbook of Preventive and Social Medicine, 22nd ed. Jabalpur: Bhanot Publishers; 2013. p 641.
6. Meenal VK, Durge P M, Kasturwar N B. Prevalence of Anemia among Adolescent Girls in an Urban Slum. *National J Community Med* 2012; 3(1):108-11.
7. Rehman M, Kabir M, Shahidullah M. Adolescent self - reported reproductive morbidity and health care seeking behavior in Bangladesh. *J Ayub Med Coll Abbottabad* 2004, 16(2): 9-14.
8. Balasubramanian P. Health needs of poor unmarried adolescent girls-A community based study in rural Tamilnadu. *Indian J Population Education* 2005; 18-33.
9. Anil KA, Anju A. A Study of dysmenorrhoea during menstruation in adolescent Girls. *Indian J community med* 2010; 35(1):159-62.
10. Atchuta KA, Saibhargavi Panchangam. Dysmenorrhoea in different Settings: are the rural and urban adolescent girls perceiving and managing the dysmenorrhoea problem differently? *Indian J community med* 2008; 33(4); 246-9.
11. Lee LK, Chen PC. Lee KK, Kaur J. Menstruation among adolescent girls in Malaysia: a cross-sectional school survey. *Singapore Med J* 2006; 47.
12. Echendu DA, Adinma. Perceptions and Practices on menstruation amongst Nigerian secondary school girls. *African Journal of Reproductive Health* 2008; 12 (1): 76-83.
13. Dasgupta A, Sarkar M. Menstrual hygiene: How hygienic is adolescent girl? *Indian J Community Med* 2008; 33(2):77-80.
14. Subhash B. Thakre *et al.* Menstrual Hygiene: Knowledge and Practice among Adolescent School Girls of Saoner, Nagpur District. *Journal of Clinical and Diagnostic Research* 2011; 5(5): 1027-33.
15. Shabnam O, Begum K. Factors influencing hygienic practices during menses among girls from south India- A cross sectional study. *Int J Collaborative Research on Internal Med & Public Health* 2010; 2(12): 411-23.
16. El-Gilany A Badawi K and El-Fedawy S. Menstrual hygiene among adolescent schoolgirls in Mansoura, Egypt in *Reproductive Health Matters*. 2005; 13(26):147-52.