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Reproductive Health Morbidities among Adolescent Girls: Breaking the Silence!

Meenal V. Kulkarni and P. M. Durge

NKP Salve Institute of Medical Sciences, Nagpur 440 019, Maharashtra, India

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ABSTRACT Present study was undertaken to find out prevalence of reproductive health morbidities among unmarried adolescent girls and to study the health care seeking behaviour during period of reproductive illness. A cross- sectional community based study was carried out in an urban slum field practice area under Urban Health Training Centre, Dept. of Community Medicine, NKP Salve Institute of Medical Science, Nagpur from June 2009 to February 2010. Out of five slum areas under field practice area, one area was selected by simple random sampling. The population of the selected area was 3000. All unmarried, non-pregnant, non-lactating adolescent girls (10 to 19 years) with attainment of menarche at least one year prior to the study were included in the study (n=224).Information regarding reproductive morbidities was collected in pre-designed and pre-tested proforma .Statistical analysis was done by epi- info statistical software. Out of total 224 girls, 146(65.18%) girls were having one or more reproductive morbidity. A high prevalence of dysmenorrhoea (53.6%) was reported among adolescent girls. Backache was found to be a second common morbidity. A highly significant statistical association was found between age of girl and dysmenorrhoea. A highly significant statistical association was found between education of girl and reproductive morbidity .Out of 146 girls with reproductive morbidities, only 55(33.67%) girls sought heath care and 91(62.33%) girls remained silent without seeking health care. Out of 91 girls who did not seek health care 88(96.70%) girls reported 'no need of treatment' as a reason for not seeking health care. A high prevalence of reproductive morbidities was found among adolescent girls but heath care seeking behaviour was found to be very low.

INTRODUCTION

WHO has defined 'Adolescence' as the period between 10 to 19 years of life. Adolescent girls constitute about 1/5 th of total female population in the world. Adolescence in girls has been recognized as a special period in their life cycle that requires specific and special attention. It is the period of transition from childhood to adulthood. This transition phase makes them vulnerable to a number of problems for example, psychosocial problems, general and reproductive health problems, sexuality related problems.

The period of adolescence for a girl is a period of physical and psychological preparation for safe motherhood. As direct reproducers for future generations, the health of adolescent girls influences not only their own health, but also the health of future generation. A vast majority of adolescent girls in India are suffering from reproductive health morbidities (Agrawal S et al. 2007; Balsubramanian 2005; Sharma et al. 2008). Reproductive morbidities such as dysmenorrhoea, pre-menstrual syndrome, irregular menses, excessive bleeding during menstruation etc. are common in adolescent girls. In spite of this, health care seeking for reproductive morbidities is very low. Most of the adolescent girls remain silent without seeking health care. If these are not treated early, they could lead to various reproductive disabilities.

Most of the studies on reproductive health are based on information from hospital and carried out in adult women. So the present cross-sectional study was carried out in an urban slum to assess reproductive health status of adolescent girls and to find out health care seeking behaviour during reproductive illness.

MATERIAL AND METHODS

The Urban Health Training Centre at Jaitala is an urban field practice area attached to the department of Community Medicine, NKP Salve Institute of Medical Science and Lata Mangeshkar Hospital which is a tertiary care hospital in Nagpur. The field practice area is divided into five slum areas, out of which one area, that is, Ramabai Ambedkar Nagar was selected by simple random sampling (lottery method).The

Address for correspondence:
Dr. Meenal V. Kulkarni,
AssociateProfessor,
Community Medicine,
NKP Salve Institute Of Medical Sciences,
Digdoh Hills , Hingna Road ,
Nagpur 440 019,
Maharashtra, India
Cell No.: 9422949668
Fax No.:07104-232905
*E mail:*meenalzambare@indiatimes.com

population of the area was approximately 3000. Total 300 adolescent girls were present in the study area. All unmarried, non-pregnant, non-lactating adolescent girls (10 to 19 years) with attainment of menarche at least one year prior to the study were included in the study (n=224). A community based cross- sectional study was carried out from June 2009 to February 2010. House to house survey was conducted in the selected study area. Data were collected from June 2009 to October 2009.Two to three girls was interviewed per day. After obtaining informed consent, detail information regarding socio-demographic variables of family, menstrual morbidities, premenstrual syndrome, reproductive morbidities, health care seeking behaviour during reproductive illness and reasons for not seeking health care was collected. History regarding self- reported reproductive morbidities in last 3 cycles was collected. All information was recorded in pre-designed pre-tested proforma. Statistical analysis was done by simple proportions, mean, standard deviation and Chi-square test by using epi- info statistical software. The girls with reproductive morbidities were referred to Urban Health Training Centre and Lata Mangeshkar Hospital for further treatment and management.

Definition of Variables (after Dutta 2009)

Dysmenorrhoea- Painful menstruation of sufficient magnitude so as to incapacitate day to day activities.

Pre- menstrual Syndrome- A change in mood or behaviour or appearance of some abnormal vague symptoms noticed in second half of menstrual cycle.

Menorrhagia- Cyclic bleeding of normal intervals but excessive in amount or duration or both.

RESULTS

Socio-demographic Profile of Adolescent Girls

Out of total 300 adolescent girls, in 179 (60%) of girls the age ranged between ten to sixteen years. Most of the girls, that is, 210 (70%) belonged to lower socio-economic class (Class IV and V). 268 (89.4%) girls were from nuclear family. Though literacy rate among girls was found to be 100 percent, school dropout was ten percent. Rate of illiteracy reported among mothers and fathers of adolescent girls was 15.1 percent and 8.7 percent respectively.

Reproductive Morbidities in Adolescent Girls

Out of total 224 girls who have attained menarche, 146(65.18%) girls were having one or more reproductive morbidity. A high prevalence of dysmenorrhoea (53.60%) was found among adolescent girls. Backache during menstruation was found to be a second common morbidity among 93(41.52%) girls. Other common morbidities were menorrhagia (16.07%) and irregular cycles (11.16%).Very few girls (5.35%) reported of having excessive white discharge. Headache, irritability and breast pain were common symptoms in pre- menstrual syndrome (Table 1).

Table 1: Self- reported reproductive morbidities in adolescent girls

Reproductive morbidity	*No. (N=224)*[1]	*%*
1) Menstruation		
Dysmenorrhoea	120	53.6
Backache during menses	93	41.52
Menorrhagia	36	16.07
Irregular cycles	25	11.16
Scanty bleeding	12	5.35
2)Pre-menstrual Syndrome		
Backache	93	41.52
Headache	18	8.03
Irritability	15	6.69
Breast pain	7	3.12
Others (edema , nausea etc.)	2	0.89
3)Excessive White Discharge	12	5.35
4)Itches and Sores on External Genitalia	2	0.89

[1]Multiple responses were allowed.

Prevalence of dysmenorrhoea was higher in adolescent girls of age more than fourteen years. A highly significant statistical association was found between age in years and dysmenorrhoea (Table 2).First few cycles after attainment of menarche remain anovulatory and without dysmenorrhoea. This may be the reason for the present study finding. No significant association was found between age in years and other morbidities

A highly significant statistical association was found between level of education of girl and

Table 2: Age in years and reproductive morbidity in adolescent girls

Reproductive morbidity	*Age in years*		*Total N=224*	*Chi-square*	*P value*
	10-14 (n=60)	*15-19 (n=164)*			
Dysmenorrhoea	18(30%)	102(62.19%)	120	18.31	0.0000181
Menorrhagia	14(23.33%)	22(13.41%)	36	3.2	0.0734
Irregular cycles	8(13.33%)	17(10.36%)	25	0.39	0.532
Premenstrual syndrome	10(16.66%)	29(17.68%)	39	0.03	0.8590

[1]Highly significant

Table 3: Socio-demographic factors and reproductive morbidity in adolescent girls

Socio-demographic factor	*No. of reproductive morbidity (N=146)*	*Total (N=224)*	*Chi-square for linear trend*	*P value*
1)Socio-economic Status of Family				
Class I	3	6	0.408	0.5228
Class II	10	13		
Class III	32	54		
Class IV	77	116		
Class V	24	35		
2)Girl's Education				
Primary and middle	8	23	9.440	0.002121
SSC	60	91		
HSC	38	60		
≥ Graduate	40	50		
3)Mother's Education				
Primary and middle	25	33	0.924	0.336
SSC	39	63		
HSC	55	84		
≥ Graduate	27	44		

[1]Highly significant

reproductive morbidity (Table 3). With increase in the level of education, age in years increases and with increase in age, reproductive morbidity increases. Girls with less level of education may feel hesitant in talking about reproductive morbidity. This may be the reason for present study finding.

Health Care Seeking Behaviour among Adolescent Girls

In spite of high prevalence of reproductive morbidities among adolescent girls, health care seeking behaviour during period of reproductive illness was found to be very poor. Only 55(37.67%) girls sought health care and 91(62.33%) girls remained silent without approaching health care (Table 4).

Out of total 55 girls who received health care, maximum number of girls (61.8%) received treatment from private practitioners, few girls (34.6%) from Urban Health Training Centre and very few (3.6%) from government hospitals.

Table 4: Health care seeking behaviour during reproductive illness in adolescent girls

Health care seeking behaviour	*No. (N=146)*	*%*
Present	55	37.67
Absent	91	62.33
Total	146	100.00

Reasons for not Seeking Treatment

Out of total 91 girls who did not seek health care, 88 (96.70%) girls reported 'no need of treatment' as a reason for not seeking health care.

DISCUSSION

Reproductive morbidities were highly prevalent among adolescent girls and 65.18% of adolescent reported one or more morbidity. Rehman et al. (2004) conducted a study on reproductive morbidities among ten to nineteen years girls from urban and rural area of Bangladesh and found 64.5% of girls were having one or more

morbidity which is comparable with present study. Balsubramanian (2000) carried out a study in unmarried adolescent girls in rural Tamil Nadu and reported 82% of girls had one or more morbidity which is higher than present study.

Dysmenorrhoea was the most common reproductive morbidity among 53.6% girls. A variable prevalence of dysmenorrhoea (62.5% to 84%) was reported in various studies (Balasubramanian 2000; Lee et al. 2006; Agrawal S et al. 2007; Deo and Ghattargi 2007; Sharma et al.2008; Agarwal A and Venkant 2009; Chan et al. 2009; Agarwal K and Agarwal A 2010; Esimoyi and Esan 2010). In a study conducted by Joshi et al. (2006) in 300 urban school- going adolescents found dysmenorrhoea among 48% girls. A study carried out by Haldar et al. (2004) found 43.31% of girls were suffering from dysmenorrhea which is less than present study finding. Goswami et al. (2005) conducted a study among 124 adolescent girls attending Gynecology Out patient department and found 58.6% girls were suffering from menstrual disorders. Balsubramanian (2000) revealed 26.62% girls were having irregular menses which is higher than present study (11.16%) .

Prevalence of dysmenorrhoea was high in late adolescent age group. Balsubramanian (2000) and Rehman et al. (2004) also reported similar study findings.

In the present study, awareness regarding health care seeking behaviour during reproductive illness was found to be very poor and only 37.67% girls sought health care for reproductive illness. Balsubramanian (2000)and Rehman et al. (2004) reported a poor (19% and 18% respectively) health care seeking behaviour during reproductive morbidities and no need of treatment as the most common reason for not seeking health care which is similar to the present study findings. Lee et al. (2006) conducted a cross sectional study in secondary school adolescent girls from Malaysia and revealed only 11.1% girls seek medical treatment during reproductive illness.

CONCLUSION

Reproductive morbidities were prevalent in adolescent girls. More than half of girls reported having dysmenorrhoea. Backache, menorrhagia, irregular menses were other common morbidities. Prevalence of dysmenorrhoea was higher in mid and late adolescent age and in girls with a better level of education. 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. It can be included as a part of school health programme. Emphasis should be given to make them aware about the importance of seeking of health care by breaking the silence!

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