Treatment seeking behaviour of rural adolescent girls–a community based cross-sectional study

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ABSTRACT

Background and Objectives: 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. Present study was undertaken to determine health status of adolescent girls by studying morbidity patterns amongst them and to know treatment seeking behaviour of adolescent girls. **Methods:** This one year community based cross-sectional study was done at village Peeranwadi, PHC Kinaye, Belgaum. Four Hundred (400) adolescent girls were selected randomly from each block. Study was approved by Institutional Ethics Committee, Jawaharlal Nehru Medical College, Belgaum. Written informed consent was obtained from all participants. Information on socio-demographic variables, history regarding illness one month prior and treatment seeking behavior were recorded. Haemoglobin estimation was done by cyanmethaemoglobin method. **Results:** Majority (82.25%) had age between 10 to 14 years and mean age of study population was 12.9 ± 2.06 years and 98.5% were literates. Of 400 adolescent girls, 51% had attained menarche. The mean height, weight and BMI was less among 10 to 14 years compared to 15 to 19 years ($p = 0.000$). In this study 15 (3.75%) were married and of them 60% were pregnant and all had registered for antenatal care. Most common morbidity reported in last one month was GI infections (14.75%), fever (12.75%) and dysmenorrhoea (12%). Prevalence of anaemia was 75% and 49.75% had mild, 20.75% had moderate and 4.5% had severe anaemia. 61.25% had taken treatment of which 74.69% visited health facility for treatment, 19.21% took home remedy and 6.12% did not take any treatment. The place of treatment was decided by themselves in 20.81% whereas 78.78% family members were decision makers. **Conclusion and interpretation:** In this study almost 75% of the girls were anaemic. Their status of anaemia is likely to worsen during pregnancy leading to complications including post partum haemorrhage. Although their literacy status and health seeking behaviour was on the better side, it needs to be still improved.

Key words: Adolescent Girls; Adolescent Health; Morbidity Pattern; Treatment Seeking Behaviour

INTRODUCTION

Adolescence is a transitional period between childhood and adulthood.[1] There are about 1.2 billion adolescents in the world equal to one fifth of world's population and their numbers are increasing. Out of these, five million adolescents are living in developing countries. India's population has reached one billion mark, out of which 21% are adolescents.[2] Girls constitute 5.1% of adolescents in 10 to 14 years age group and 4.8% in 15 to 19 years age group.[3]

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.[1] 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.

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major biological changes like physical growth, sexual maturation and psycho-social development.[1] 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.

In families with financial constraints, the female child is more likely to be neglected. Poor iron intake or diet having poor bio-availability of iron from typical cereal based diet causes infections like malaria, hookworm infestation and blood loss through menstruation. They do not get the appropriate knowledge due to lack of a proper health education programme in schools.

During adolescence period, girls first experience menstruation and related problems, which is marked by feelings of anxiety and eagerness to know about this natural phenomenon. Traditional Indian society regards talks on such topics as taboo and discourages open discussion on such issues. This leads to undesirable health seeking behaviour by adolescent girls and thus seek advice from quacks. Moreover routine health services do not have adequate coverage of adolescent health problems. This exaggerates the problems manifold. Understanding the health problems and the treatment seeking behaviour of the adolescent girls, their awareness about pregnancy and reproductive health will help us in planning programmes for this vulnerable group.

Assessment of health status of adolescent girls and their treatment seeking behaviour has been least explored area of research in rural India. The importance of educating adolescent girls about their reproductive health is gaining momentum in our country during the past few years.[2,4,5]

Few studies have been conducted in India to assess the knowledge of adolescents pubertal changes and associated health problems. Understanding the health problems of adolescent girls and their treatment seeking behaviour will help in planning interventions for this vulnerable group.

In view of the above present study was conducted to determine the health status of adolescent girls by studying morbidity patterns amongst them and to know the treatment seeking behavior of adolescent girls.

METHODOLOGY

This one year community based cross sectional study was undertaken at village of District Belgaum, Karnataka.

The study was approved by Institutional Ethics Committee, Jawaharlal Nehru Medical College, Belgaum. Four hundred (400) adolescent girls of 10 to 19 years were randomly selected. After obtaining a written informed consent, the interview was conducted at the residence of the girls using standardized data collection instruments. It included the information on socio-demographic variables, family formation, dietary habits, educational status, obstetric history of married, history regarding illness one month prior and treatment seeking behavior. Haemoglobin estimation by cyanmethaemoglobin method was done for every participant in the study. For the purpose of analysis adolescent girls were categorized into early and late adolescents.[3] For the comparison of athropometric data NCHS and NHANES standards were used.[6,7]

The statistical analysis was done using SPSS statistical software applying chi-square test and student 't' test.

RESULTS

The mean age among the study population was 12.9 ± 2.06 years (Table 1). Majority (73.5%) of them were Hindus. 394 (98.5%) were literate (Table 1). 360 (90%) were currently studying, six (6%) were illiterate and 34 (8.5%) were school dropouts. Almost 65% were from lower socioeconomic group (class V).

Fifty one percent had attained menarche and almost half of them had attained menarche by age of 11 years. The mean age of menarche was 13.00 ± 2.15 years. Blood pressure of all the girls was within the normal range (SBP 111.50 ± 8.11 mm Hg and DBP 71.00 ± 6.63 mm Hg). The mean weight of the girls was 29.5 ± 8.08 Kgs. The mean height of the girls was 138.60 ± 29.54 cms. Early adolescent girls between the age 10 to 14 years were

Table 1: Demographic characteristics (n=400)

Demographic characteristics		Study participants	
		Number	Percentage
Age	10 to 14	329	82.25%
	15 to 19	71	17.75%
Education	Illiterate	6	1.50%
	Primary School	278	69.50%
	High School	105	26.25%
	Collegiate education	11	2.75%
Socio economic status (Modified B. G. Prasad's Classification)	I	0	0
	II	8	2
	III	50	12.5
	IV	92	23
	V	250	62.5

more stunted (63.82%) as compared to late adolescents 15 to 19 years (40.84%) based on less than third percentile of NCHS standards. Adolescent girls between the age 10 to 14 years were more thin (60.79%) as compared to those between 15 to 19 years (39.43%) based on less than fifth percentile of NHANES standards. In the present study among 400 girls, 385 (96.25%) were unmarried and 15 (3.75%) were married. Of the 15 (3.75%) married girls four (1%) married before 18 years of age and 11 (2.75%) married after 18 years of age. Of the 15 (3.75%) married girls, nine (60%) were pregnant and all nine pregnant women were registered for antenatal care (ANC) care either in private or government health facility. All of them had undergone antenatal checkups according to their duration of their pregnancy.

Morbidity among the girls has been gastrointestinal infections (14.75%), fever (12.75%), dysmenorrhoea (12%), cough (9.5%), white discharge (7.75%), dental problems (28.5%), pediculous capitis (8.2%), scabies (3%) and cardiovascular diseases (1%) (Table 2).

Prevalence of anaemia in adolescent girls was found to be 75%. Majority of them had mild anemia (49.75%) followed by moderate (20.75%) and severe (4.5%) anaemia (Table 3). Age, socioeconomic status and menarcheal status were not associated with anaemia. However, prevalence of severe anaemia was highest in girls belonging to lowest socio economic class (Class V).

Out of 400 adolescent girls, 245 (61.25%) had sought for treatment for the health problems in last one month, of which 183 (74.69%) visited health facility for treatment, 47 (19.21%) took home remedy and 15 (6.12%) had not taken any treatment. Among those who visited health facility majority (46.93%) visited private hospital. The others preferred primary health centre (15.91%), sub centre (5.32%), government hospital (3.26%), Employees State Insurance (ESI) hospital (2.44%) and Homoeopathy hospital (0.81%) (Table 4).

Out of 400 adolescents, 245 (61.25%) had taken treatment for the health problems in last one month, for which 51 (20.82%) had decided themselves about the place of treatment whereas for 193 (78.78%) family members were decision makers (Table 5).

DISCUSSION

Increasing investment in improving the lives of adolescent girls will also have an impact on achieving several of the Millennium Development Goals (MDGs) that includes gender equality, education and improving maternal and child health.

In our study 51% had attained menarche with the mean being 13.00 ± 2.15 years. Age of menarche has been similar

Table 2: Distribution of study participants according to morbidities

	Study participants	
Morbidity	Number	Percentage
Fever	51	12.75
Dysmenorrhoea	48	12.00
Cough	38	9.50
White discharge	31	7.75
GI Infections	59	14.75
Pediculous capitis	33	8.25
Scabies	12	3.00
Cardiovascular diseases	04	1.00
Dental problems	114	28.50

Table 3: Distribution of study participants according to grades of anaemia (n=400)

Grades of anaemia	Hb Range (gm%)	Study participants	
		Number	Percentage
Normal	>12	100	25.0%
Mild	10–12	199	49.75%
Moderate	7–<10	83	20.75%
Severe	<7	18	4.5%

Table 4: Distribution of study participants according to treatment seeking behaviour (n=245)

	Study participants	
Health facility	Number	Percentage
Sub-centre	13	5.32
Primary Health centre	39	15.91
Private Hospital	115	46.93
Government Hospital	8	3.26
ESI hospital	6	2.44
Homeopathy	2	0.81
Home remedy	47	19.21
No treatment	15	6.12
Total	245	100

Table 5: Decision makers for treatment seeking behaviour of adolescent girls (n=245)

	Study participants	
Decision makers	Number	Percentage
Self	51	20.82
Family members	193	78.78
Friends	1	0.40
Total	245	100

in studies[8,9,10] conducted in other parts of India. There are many factors influencing age at menarche besides genetic make up of an individual such as nutritional status, socio-economic status and climate which determine age at menarche. Poor socio-economic status and associated malnutrition delay menarche. However in the present study, 49% of adolescent girls had not attained menarche perhaps due to lower socio-economic, poor nutritional status and low iron stores throughout childhood contributing to delayed menarche.

In this study majority of adolescent girls were anaemic (75%) and of them 46.75% had mild anemia, 20.75% had moderate and 4.5% had severe anaemia. Similar study from India[11] reported prevalence of anaemia as 81% (mild 63.2%, moderate 12.5% and severe 5.3%) whereas studies[12] conducted in other developing countries report prevalence of anemia has varied from 25% to 43%. A very high prevalence of anaemia in this study could be due to lower socio-economic status and nutritional deficiency.

Various studies[13,14] have reported significant association of sociodemographic parameters like age, religion, socio-economic status, diet, menarcheal status, literacy status of parents with anaemia. However in the present study these sociodemographic parameters have not shown any statistically significant association with anaemia (p=>0.05). In both the age groups, percentage of girls with severe anaemia has been more in class V socioeconomic group indicating that nutritional deficiency, ignorance could be the reasons for severe anaemia. .

More than 60% had one or the other health problems. The most common were fever (12.75%), dysmenorrhoea (11.25%), cough (9.5%), pediculous capitis (8.25%), white discharge (7.75%) and scabies (3%). Various studies[8–10,15–17] have reported prevalence of dysmeorrhoea to be 40 to 60%, joint pains and recurrent respiratory problems 20%, white discharge 19.4% and general illness as five percent.

Out of the 61.25% adolescent girls who had health problems in last one month, of which three fourth visited health facility for treatment. Out of 245 girls who had one or the other health problems, the decision regarding treatment seeking behaviour was made by family members (78.78%).

Adolescent girls constitute an important segment of the population. Their health status influences their reproductive functioning–pregnancy outcomes, birth weight, pregnancy wastage etc. In the present study almost 75% of the girls were anaemic. Their status of anaemia is likely to worsen after marriage because of pregnancy and associated complications. Socio-economic factors, literacy status, menarcheal status, diet etc seem to be not having any significant impact on the health status of adolescent girls.

The quality of adolescent care and the services provided to them are very poor in our country, as the awareness of the adolescent problems is lacking in the community. Hence it is essential to create adolescent friendly health services. To sensitize the adolescent girls regarding availability and utilization of adolescent clinics and other welfare programmes, aggressive involvement of teachers, parents, Panchayat Raj institution, NGO's, Mahila Mandals, social activists for the planning and implementation is needed.

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