DOI: 10.7860/JCDR/2014/8319.4758

Original Article

Community Medicine Section

Sexuality in Adolescents: have we Explored Enough! A Cross-sectional Study to Explore Adolescent Health in a City Slum in Northern India

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ABSTRACT

Context: Adolescent health is a relatively new focus area of India's National health program. However, little evidence is available for the existing problems especially in adolescent slum population. A study was planned to explore the problems of adolescent pertaining to sexuality, physical health, tobacco and alcohol use in slums of Urban Meerut, and create evidence base for informed planning and decision making by the local health authorities.

Aims: To study the adolescent health in the slums of Meerut City, India.

Settings and Design: Entire slums of Urban Meerut, cross-sectional study.

Materials and Methods: Study was done in the slums of Meerut city, in Northern India. WHO 30 cluster sampling technique was used. Thirty slums were selected from the list of all the slums of Meerut, 210 adolescents were selected with 7 adolescents from each slum.

Statistical Analysis: Proportions and Chi-square test.

Results: More than one third of the (36.7%) adolescents reported to have a current health problem, however only half of these sought medical help for treatment. Tweleve percent of adolescents reported history of alcohol or tobacoo use. Nine percent adolescents complained of stressful atmosphere at home. About 10% adolescents in the surveyed population gave history of sexual activity, but only one third of them had used condom during their last sexual intercourse.

Conclusion: This study reflects the high morbidity and poor treatment seeking behaviour among adolescents in urban slums. A significant proportion of adolescents indulge in high risk sexual behavior, tobacco and alcohol use. There were significant gender differences with regards to treatment seeking behaviour, sexual behaviour, tobacco and alcohol use. The gender nuances must be taken into account while planning interventions for this section of population.

Keywords: Adolescents, Sexual behaviour, Slums, Tobacco alcohol

INTRODUCTION

Adolescence is a period of transition from childhood to adulthood. Adolescence has been defined by WHO (1997) as the period of life between 10-19 years. These are the formative years when the maximum amount of physical and psychological growth takes place. Also these are the years when they want to experiment and explore new things or want to do things which as child they are prohibited. This age group is not vulnerable to disease of very young and old, their problems are different. Along with general health problems, they have sexual problems like teen age pregnancy, unsafe abortion, STDs such as infection with HIV, problems associated with use of tobacco, alcohol and other substances, mental problems like depression etc, [1,2].

"Sexuality" comprises the total sexual make up of an individual, covering the physical aspects, attitude, values, experience and preferences. Frequently, sexuality presents, the first challenge to healthy growth and development during adolescence. Often unplanned and sometimes forced, adolescent sexual relations occur before young people acquire adequate knowledge about contraception, sexually transmitted disease or health services available to them [3,4].

The reproductive health needs of adolescents as a group have been largely ignored to date by existing reproductive health services [5]. The response of societies to the reproductive health needs of adolescents should be based on information that helps them attain a level of maturity required to make responsible decision [5].

This study was planned to explore the problems of adolescent in slums of Urban Meerut, India and create evidence base for informed planning and decision making by the health authorities.

MATERIALS AND METHODS

The present study was conducted in the slum population of Meerut city, India.

WHO standard 30 cluster sampling technique [6] was used. All the slum areas of Meerut city were listed and tabulated with their population.

From each cluster, a minimum of 7 adolescents age group 10-19 years were studied. A total of 226 adolescents were interviewed by using predesigned questionnaire. Sampling interval was determined by dividing total cumulative population by 30 (527469/30=17583) which came 17583. Selection of first cluster was done by drawing a currency note and selecting the digits on it and it was 7164 (Since in this study S.I. is 17583 the random starting point can be anywhere from 00001 to 17583). Second cluster was selected by adding random number with sampling interval. Subsequent clusters were selected by adding sampling interval to the previous number. After reaching the selected cluster the investigator walked to a central location within the community and selected a direction at random by spinning a pencil. The direction towards which the pencil point faced was chosen and the first household in that direction was the starting point. To identify the next household, the investigator followed the lane and sub lane so as to avoid leaving those families

		Girls		Boys		Total	
		No.	%age	No.	%age	No.	%age
Attitude*	Sad	9	6.7	8	8.7	17	7.5
	Indifferent	77	57.5	60	65.2	137	60.6
	Happy	48	35.8	24	26.1	72	31.9
	Total	**134**	**100**	**92**	**100**	**226**	**100**
Family atmosphere**	Stress	8	6.0	12	13.0	20	8.9
	Satisfaction	92	68.7	65	70.7	157	69.5
	Happiness	34	25.3	15	13.3	49	21.7
	Total	**134**	**100**	**92**	**100**	**226**	**100**

[Table/Fig-1]: Distribution of adolescents according to their attitude towards life and their family atmosphere
*x^2=2.448, df=2, p>0.05; **x^2=5.184, df=2, p>0.05

Substance	No. of adolescents	Percentage
Alcohol	15	6.6
Tobacoo (gutkha, cigarette, bidi)	30	13.3
None	198	87.6
Base	226	

[Table/Fig-2]: Distribution of adolescents according to the alcohol and tobacco use*

Sexual intercourse	Girls		Boys		Total	
	No.	%age	No.	%age	No.	%age
Yes	7	5.2	15	16.3	22.0	9.7
No	127	94.8	77	83.7	204	90.3
Total	134	100	92	100	226	100

[Table/Fig-3]: Distribution of adolescents according to sexual intercourse
$x^2$2=7.622, df=1, p<0.05

Sexual intercourse	Girls		Boys		Total	
	No.	%age	No.	%age	No.	%age
Yes	5	71.4	10	66.7	15	68.2
No	2	28.6	5	33.3	7	31.8
Total	7	100	15	100	22	100

[Table/Fig-4]: Distribution of adolescents according to condom used during last sexual intercourse

living away from the lane or sub-lane. The cluster was surveyed till 7 adolescents were interviewed by the investigator, after that investigator moved to the next selected cluster.

RESULTS

A total of 226 adolescents participated in the study, which included 134 (59%) girls and 92 (41%) boys. This reflects higher proportion of boys who had gone out of home for work or for studies.

More than one third of the (36.7%) adolescents had an existing health problem. There was no statistical difference between boys (36%) and girls (37%).

Only 53% of the adolescents who had reported a health problem actually had sought medical help for treatment. A significant higher proportion of boys (64%) had sought medical help compared to girls (46%), thus highlighting the difference in health seeking behaviour and perhaps underlying gender bias in the society.

The survey participants were questioned regards their present attitude towards life. Most of the participants (61%) expressed an indifferent attitude, while 32% had a happy attitude and 8% expressed that they had a sad attitude towards life.

Sexual intercourse	Girls		Boys		Total	
	No.	%age	No.	%age	No.	%age
Not sure	17	12.7	5	5.4	22	9.7
No	48	35.8	17	18.5	65	28.8
Yes	69	51.5	70	76.1	139	61.5
Total	134	100	92	100	226	100

[Table/Fig-5]: Distribution of adolescents according to sexual intercourse
x^2 2=14.016, df=2, p<0.001

Stressful home atmosphere was admitted by 9% of the adolescents [Table/Fig-1]. Tweleve percent of the adolescents admitted to have indulged in tobacco or alcohol use [Table/Fig-2]. Significantly none of the girls admitted to tobacco or alcohol use.

In the survey population 10% of the adolescents reported history of sexual activity. This was higher among boys (16.3%) than among girls (5.2%) and the difference was found to be statistically significant [Table/Fig-3]. But only one third (31.8%) of them had used condom during their last sexual intercourse. The condom usage was more among boys [Table/Fig-4].

A higher proportion of girls (36%) did not wish to learn about safe sexual practices, compared to (19%) of boys [Table/Fig-5].

DISCUSSION

The interviewer was a female doctor in this study. It was her observation that some of the girls were reluctant to discuss issues especially related to sexuality or substance abuse. Although much effort was taken to build a rapport with the participants and offer privacy for the participants, still there is a possibility for response bias to creep in.

A higher proportion of female participants in the study reflect that a higher proportion of boys had gone out of home for work or for studies, thus reflecting the gender bias towards work or studies in community.

More than one third of adolescents (both males and females alike) had a current health problem. This reflects a very high morbidity burden in this age group which is largely ignored by the existing health care services or planning.

Health seeking patterns is significantly different among boys and girls in the same socio-economic group, again highlighting the gender issues in treatment seeking behavior and reflecting the deeper cultural issues regards gender in this community.

Only less than one thirds of the adolescents reported that they had a happy attitude towards life. This reflects poor on the mental health of the society. A significant 8% of the adolescents even expressed frank sadness. It would be worthwhile to explore this area deeper to understand the reasons or issues that cause lack of happiness or frank sadness in this age group. A high proportion of hopelessness (20.7%) and depression (8%) was reported by Khurana et al.,[7] in a study at a child observation home in Delhi. This higher proportion may be because the adolescents were not in their natural environment.

A high 30% of the adolescent boys admitted to indulging in alcohol or tobacco use. None of the girls admitted to tobacco or alcohol use, perhaps reflecting the social norms prevalent in the society where in tobacco or alcohol use is a taboo among girls. Gajalakshmi et al.,[8] reported that about 10% of students aged 13-15 in Tamil Nadu had ever used tobacco. Philip PM et al.,[9] has reported prevalence of tobacco smoking and chewing habits 9.85% and 2.24% respectively among school children in Kerala. However, Sinha et al., [10] reported that in the North-eastern part of India the ever tobacco users ranged from 75.3% (Mizoram) to 40.1% (Assam). Nichter et al., [11] reported that about 45% of college students had used tobacco products in Karnataka. Evidently substance abuse shows a wide variation across the different parts of the country.

The different prevalence rates reported in different studies may also be due to the differences in data collection and the reporting bias which is strong in such issues considered social taboos.

In the present study 9% reported a stressful atmosphere at home. These findings are similar to the study in rural Pune, where Ganguli et al., [12] reported 7% of students had tense home atmosphere.

In the present study 9.7% adolescents gave a positive history of sexual activity. Shashikumar et al., [13] has reported 6.31% boys and 1.31% girls having history of sexual activity in their study done on students of class IX to XII in two co-education schools of Pune. Bansal [14] had reported 25.2% of the adolescent truck cleaners had a history of sexual activity. In the present study 68.2% of the adolescent had not used condom during their last sexual intercourse, while Bansal reported 94.3% of the adolescent truck cleaners had engaged in unprotected sexual intercourse. The higher proportions reported in Bansal's study may be because their study was done on truck cleaners which are at risk of this kind of behaviour. An intervention study conducted in Lucknow slum boys has shown that approximately 15-17% of youths reported intercourse outside of marriage [15]. Rammasubban [16] reported as many as 25% of patients attending government STI clinics in India are younger than 18 y.

Majority of girls in the present study did not show the desire to know about safe sexual practices while majority of boys expressed their desire to know, this may be because in our culture it is a social taboo to talk about sex especially among unmarried girls.

LIMITATION

Some of the issues addressed in the study are not openly discussed especially among girls in our society; hence, the responses may not reflect the actual prevalence of the risk behaviours. In addition in some cases, the family members insisted to be present during the interview with adolescent girls, which further may reduce the reliability of responses especially related to sexual practices and substance abuse.

CONCLUSION

This study highlights the problems of adolescents in slums of Meerut. It is important to note that the health issues faced by the boys and girls are different, and both differ in their health seeking behaviour as well as unhealthy or risky health behaviours. Majority of them do not want to seek medical help when they fall sick, had an indifferent attitude towards life, few of them have already indulged in some kind of alcohol or tobacco use, involved in unsafe sexual activity. The positive finding was that majority were open to know about safe sexual practices. Majority of the adolescents during the study were very co-operative and also were comfortable answering sensitive questions regarding their sexual behaviour and substance abuse.

It is important to appreciate the gender differences, in order to plan appropriate preventive health measures for this section of our population. Adolescents by nature are shy and secretive; they have lot of questions in their mind regarding sexuality. Available services should be made more accessible for adolescents through appropriate evaluation and by improving the skills of the health workers in communication on matters of sexuality and family planning. Specialized training should be given to improve the communication and counseling skills of those key people who interact with adolescents and of adolescents themselves to promote healthier relationships.

ACKNOWLEDGEMENT

The results of the study were shared with the District Health Authorities to appraise them of the ground situation and help them plan evidence based interventions in the selected population.

I am thankful to the Meerut District Health Officer for giving me permission to conduct the study in the slums of the city and share the results with them.

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FINANCIAL OR OTHER COMPETING INTERESTS: None.

Date of Submission: **Dec 31, 2014**
Date of Peer Review: **Apr 18, 2014**
Date of Acceptance: **Jun 25, 2014**
Date of Publishing: **Aug 20, 2014**