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## Research article

### UNMET NEED OF SEX EDUCATION AMONG ADOLESCENTS IN URBAN SLUM AREA: AN INTERVENTIONAL STUDY

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#### ABSTRACT

**Context:** Adolescents comprise one-fifth of India's total population. There is widespread ignorance associated with unprotected sex, contraceptives, among young people. As majority adolescents in slum areas have illiterate and ignorant family backgrounds; they are misguided by the myths. Hence providing sex education for them is the need of the hour. **Aims:** 1) To assess the knowledge and awareness of adolescents in an urban slum area regarding some aspects of reproductive health. 2) To assess the need of sex education among them. 3) To study the impact of sex education on their knowledge **Material and Methods:** An interventional study was done on 132 adolescents of urban slum area, selected by simple random sampling. Informed consent was obtained from the participants. Data was collected with the help of structured questionnaire prepared by literature search. Response of adolescents was recorded through questionnaires. A sensitization workshop was organized as intervention. The same questionnaire was given to them and the effect of intervention was assessed. Statistical analysis of data was done using percentage, proportion and appropriate tests of significance. **Result and Conclusions:** Only 31.06% adolescents had discussed the topic of reproductive health with some or other person and out of them friends were the major sources (39.2%) of information. Only 38.63% knew the hazards of teenage pregnancy which significantly rose to 89.4% after intervention workshop. The study concludes that the slum adolescents profoundly lack adequate knowledge of sexuality related matters. Even before intervention workshop, unmet need of reproductive health education was 59.1% and 93.93% was the felt need in the post test.

**Keywords:** Adolescent health, Sex education, Urban slum area, Intervention

#### INTRODUCTION

The period between 10-19 years is referred to as "adolescence" by the World Health Organization (WHO). There are 225 million adolescents comprising nearly one-fifth (22 %) of India's total population. Of the total adolescent population, nearly 10% are in the 15-19 years age group.

Adolescent sexuality is still a taboo in many societies; there is widespread ignorance about the risks associated with unprotected sex, contraceptives etc.

among the young people <sup>[1]</sup>. Teenagers are still hungry for accurate, adequate information about sex and sexuality and yearn to hear about it openly and honestly <sup>[2]</sup>. There seems increase in the prevalence of adolescent sexual problems due to lack of knowledge in them. It is now thought that around 2.39 million people in India are living with HIV. Highest HIV prevalence among the age group 15-19 is 0.04%. It is 0.01% in males, 0.07% in females, according to

NFHS-3 2005-06, India: Volume- 1. Teenage pregnancy is one of the main problems in the world, its prevalence rate varies from 2 to 25% <sup>[3]</sup>.

Sex education includes information regarding human sexual behaviour, sexually transmitted diseases (STDs), HIV/AIDS and other aspects of human sexuality such as body image <sup>[4]</sup>. Adolescence is a fascinating period of life that makes the transition from being a dependent child to becoming an independently functioning adult <sup>[5]</sup>. Providing adolescents with proper sex education will minimize their risks and hence the prevalence of sexually transmitted diseases and will in turn help to control the problems of HIV/AIDS, teenage pregnancy.

As majority adolescents in slum areas have illiterate, ignorant family backgrounds, they may be misguided by the information from peers & media. Right guidance regarding reproductive health may not be available for such adolescents and they may not utilize the available health facilities despite having queries on such a topic.

Educational intervention programs can help in creating and promoting awareness among the youth and women. A study by Dongre et al. (2006) showed significant improvement in personal hygiene of students and concluded that the school health education programs with active involvement of school teacher lead to improvement in personal hygiene in school children and reduction in related morbidities <sup>[6]</sup>. Twenty-two international studies were done in various developing countries which showed sufficiently strong evidence that these interventions reduces risk behaviour <sup>[7]</sup>.

Keeping above background in mind, an intervention study in adolescents of slum area, including awareness programs in the form of workshops and lectures was deliberately planned, by which we could identify their thrust areas and give proper emphasis on them to provide solutions.

## MATERIAL AND METHODS

**Study design:** An intervention type of study.

**Study area:** Urban slum area in Ahmednagar, Maharashtra, India.

**Study participants:** Adolescents in the age group of 15 – 19 years.

**Study duration:** April 2014 to September 2014.

**Inclusion Criteria:** 1) Adolescents living in the slum area, belonging to the age group 15 -19 years. 2) Subjects ready to participate in the study.

**Exclusion Criteria:** 1) Adolescents who were not willing to participate in the study. 2) Adolescents from the age group 10-14 years.

**Sampling technique:** Simple random sampling technique was used to select urban slum from amongst 8 slums and the participants from the study area. Sample size: 132 adolescents (44 boys and 88girls).

**Ethical approval:** The study was initiated after the approval was taken from the institutional ethical committee of Medical College.

**Data collection:** Informed consent was obtained from the participants /parents (for minors) and confidentiality regarding personal information of the participant was maintained. Data collection was done with the help of structured questionnaire prepared by literature search <sup>[3],[8]</sup>.*NOTE: A female attendant accompanied while collecting the data from the girls.*

The questionnaire had questions testing the knowledge of participants regarding puberty, reproductive health, sexuality, physical and mental changes and sexually transmitted diseases. Few questions were open ended and a few close ended.. The questionnaire was translated in the local language (Marathi). Response of adolescents was recorded in writing format by giving 1 copy of questionnaire to each subject. A sensitization workshop was organized as a part of the intervention, after collection of data that is after the pre-test. This workshop was held separately for boys and girls. The various methods used for health education were informative pamphlets, lectures, group discussions, CD's and posters regarding various aspects of reproductive health, role plays were taken separately for boys and girls. Need regarding various aspects of sexuality was identified, thrust areas were noted and accordingly the solutions were given in the workshop. Immediately after this, same questionnaire was given to the participants' for post test and data was statistically analyzed to see the effect of intervention on the subjects.

**Statistical analysis of the data:** Data was compiled and put up in an excel sheet. It was then analyzed using percentage, proportion and appropriate tests of significance were used.

## RESULTS

Sociodemographic distribution: Age distribution of data is shown in **Fig 1**. Out of the total (n=132), 67% (88) were males and 33% (44) were females.

Knowledge of reproductive health: Only 41 (31.06%) adolescents out of 132 had discussed sexuality/reproductive health some time with someone earlier in their life. Those who wrote the answer as “yes”, they discussed the subject with friends (39.02%), parents (12.2%), doctor/health counsellor (14.63%), elder brother / sister (19.51%). Knowledge of adolescents in the study regarding signs of puberty is depicted in **table 1**. Age of onset of puberty was known to 10.6% of adolescents before intervention while it improved to 77.27% after the intervention. 39.4% of adolescents had knowledge regarding “Legal age of marriage in India” which improved significantly to 92.42% after the intervention. Only 17.42% of adolescents knew the safe minimum age of the pregnancy, which improved significantly to 74.24% after the intervention.

Knowledge regarding contraception: 40.15% knew about the places where contraception was available before intervention which increased to 93.18% after the intervention. Only 3 (2.72%) adolescents out of the total sample were able to enlist the names of various contraceptives in the pretest while in the post test, 31 (23.48%) of the adolescents were able to do it correctly. 70.5% of males thought that a same condom can be used more than once before intervention while after intervention 96% of males answered that, a same condom cannot be used twice.

Knowledge regarding hazards of teenage pregnancy is shown in **table 2**. Knowledge of adolescents regarding hazards of unsafe sex is displayed in **table 3**. In post test 67% of adolescents were able to write all 4 modes of transmission of HIV/AIDS. Only 20.5% boys had information regarding masturbation before intervention while 79.54% had knowledge post intervention. Only (48.86%) females wrote that someone (any source) earlier discussed with them about menses before menarche while 45(51.14%) wrote that nobody had discussed with them regarding menses earlier. Those who had discussed the subject wrote mother (81%) as a source mostly followed by siblings (7%) and friends (7%) and others (5%). Type of material used during menses by girls is depicted in **Fig 2**.

**Table 1: Knowledge of adolescents in the study regarding signs of puberty :(n=132)**

	Pre test	Post test	Total
<b>Correct</b>	01(0.75%)	63(47.73%)	64
<b>Incorrect</b>	131(99.2%)	69(52.27%)	200
<b>Total</b>	132	132	
p < 0.001, Significant.			

**Table 2: knowledge regarding hazards of teenage pregnancy(n=132)**

	Pre-test	Post-test	Total
<b>Correct(options1,2,3)</b>	51(38.63%)	118(89.4%)	169
<b>Don't know(option4)</b>	81(61.36%)	14(10.6%)	95
<b>Total</b>	132	132	
p < 0.001, Significant.			

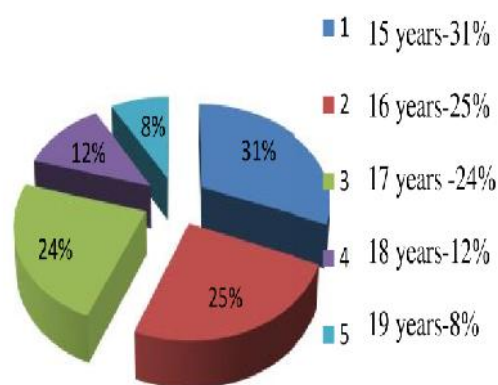
**Table 3: Knowledge of adolescents regarding “Hazards of unsafe sex”: (n=132)**

	Pre-test	Post-test	Total
<b>Correct answers</b>	44(33.33%)	118(89.4%)	162
<b>Don't know</b>	88(66.66%)	14(10.6%)	102
<b>total</b>	132	132	
P < 0.001, Significant			

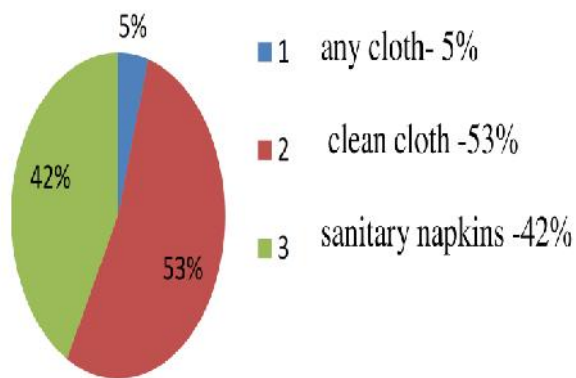
**Table 4: Response of adolescents to necessity of sexual education: table showing unmet need of sexual education: (n=132)**

	Pre-test	Post-test	total
<b>YES</b>	78(59.1%)	124(93.93%)	202
<b>NO</b>	54(40.9%)	08(6.06%)	62
<b>total</b>	132	132	
p < 0.001 Significant			

**Fig 1: Age distribution of data (n=132):**



**Fig 2: Showing type of material used during menses by girls**



Unmet need of reproductive education and its value in prevention: Response of adolescents to necessity of reproductive education is mentioned in **table 4**. Providing reproductive health education will help in preventing Sexually transmitted diseases, Unwanted pregnancy, Physical & psychological problems in puberty was the response of 130 (98.5%) of the total adolescents in the study. The preferred sources of Information for reproductive education were: school teachers (48%), health workers and doctors (36%), parents and siblings (7%), media (6%), magazines and other sources (3%).

## DISCUSSION

In our study, most of the adolescents 69.94% had no access to information regarding sex education. Majority of them wrote 'friends' (39.02%) and 'siblings' (19.51%) as prominent sources through which they got to know information about this subject. In a similar intervention study done in rural sector, 217 adolescents were involved, 69.58% gave 'friends' as source of information<sup>[9]</sup> In a similar study done in the slums of Mumbai, 5.66% of the students had no access to information regarding sex education<sup>[10]</sup>.

In our study, 67% of the adolescents were able to enlist all the modes of transmission of HIV/AIDS after the intervention. The NACO reported that about 30% of the boys (15-19 years old) know how the HIV virus is transmitted, with slight variations between urban and rural boys. An ICMR study stated that about one-half of the adolescents were not aware of condoms and were confused about the various modes of HIV/AIDS transmission.

In our study, only 0.75% of adolescents gave correct answers about signs of puberty in males and females before intervention which significantly rose to

47.73%. This indicates clear lack of knowledge regarding puberty. It should be noted that legal age of marriage which is a basic important aspect was not known to many adolescents before intervention. In a Study by Singh.D<sup>[11]</sup>, it is noted that the slum adolescents profoundly lack appropriate and adequate knowledge of sexuality related matters. 3.7% only could correctly answer about puberty. Merely 12 percent of slum adolescents knew that Nightfall and genital development are the initial features of pubertal changes among males and 88 per cent had no knowledge of these changes that taken place in their body.

In our study, 38.63% of the adolescents only correctly knew the hazards of teenage pregnancy in present study which significantly rose to 89.4% after intervention. Thus, emphasizing on health education of girls would be a successful strategy for delaying marriage of girls and consequently preventing adolescent pregnancy<sup>[12]</sup>.

Our study shows that females also lacked adequate knowledge regarding various aspects of reproductive health but they were relatively more informed than males. 48.86% of females had already discussed about menses with some source before onset of menses. Prominent source was mother for 81% of them. An ICMR study concluded that most girls had not been informed about menarche and other pubertal changes prior to its onset.

In our study, the unmet need of reproductive education is clearly noted as even before intervention 59% adolescents agreed to the necessity of obtaining the knowledge. 94% adolescents felt the need of such education during and after intervention. Preferred sources of information as noted in the study are school teachers (48%), health worker/doctor (36%). In a study by Singh D, the findings suggest that these slum adolescents need an intensive education regarding 'how and what physical changes' take place when an individual pass through adolescent period. Similarly, poor baseline knowledge and increase in knowledge after intervention has been observed in other studies<sup>[13,14]</sup>. In a study by Shubhagna Sharma et al, the intervention regarding reproductive and child health showed a significant effect in the knowledge levels of girls as seen by t-test value of 7.924 at 1 percent level of significance<sup>[15]</sup>. In a study by Padhyegurjar Mansi et.al, need of sex education in school curriculum was perceived by 94.72 % of the

students even before intervention. After the sessions on sex education, this increased significantly to 97.36 % and preferred sources of knowledge of sex education , a large majority of 83.02 % students preferred doctors to impart sex education, followed by teachers (40%) and television (30.19%).

## CONCLUSIONS

The present study was done in the urban slum area. The prominent sources of information were friends for most of the adolescents. The study concludes that the slum adolescents profoundly lack appropriate and adequate knowledge of sexuality or sexuality related matters. Regarding pubertal changes, the girls had better knowledge as compared to boys. Knowledge of adolescents regarding puberty and regarding of the hazards of teenage pregnancy rose significantly after intervention program. Before intervention workshop, unmet need of reproductive health education was noted among adolescents and felt need increased in the post test. Most of the adolescents want school teachers as the source of reproductive health education.

Advantages of this study were: we could bring forth the unmet need of sex education in urban slums areas that we selected. We could give them intervention workshop which would help them in their past and future unanswered questions regarding this topic.

**Limitations:** Due to time constraint we could not include all the subtopics about sexual health while providing intervention program.

**Recommendations borne out of this study:** Timely assessment of adolescents' health and development needs by similar type of studies will help to find aspects like unmet need of reproductive health education in this age group. Sex education incorporated in the school/college curriculum is the need of the hour that can help to fill up the gaps by updating their knowledge. Involvement of parents in reproductive education: Educating the parents and conducting education programs to increase awareness of reproductive health can be another important task which will help in turn in giving proper information to adolescents. Involvement of NGOs to a much greater extent: Informational and educational activities through NGOs can be accelerated to enhance knowledge of adolescents. PHC's can take lead role to cover this neglected aspect by properly

utilizing medical and paramedical workers and strengthening of the public health care system at all levels, to deliver RCH services. Thus, empowering adolescents to take care of their own health as well as protect themselves from possible health problems like unwanted pregnancies, risk of STDs in their future life will be important and should be done by implementing the recommendations.

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