

# **ORIGINAL ARTICLE**

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# A COMPARATIVE STUDY OF KNOWLEDGE AND ATTITUDE REGARDING HIV/AIDS AMONG MALE AND FEMALE ADOLESCENTS OF URBAN SLUMS OF AGRA

Umesh K Verma<sup>1</sup>, Deoki Nandan<sup>2</sup>, Ved P Shrotriya<sup>3</sup>

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#### Author's Affiliation:

<sup>1</sup>Assistant Professor, Department of Community Medicine, GMC, Ambedkar Nagar, UP; <sup>2</sup>Ex-Professor & Head Department of Community Medicine, SNMC, Agra, UP; <sup>3</sup>Ex Principal & Dean, SRMS-IMS, Bareilly, UP

### Correspondence:

Dr. Umesh Kumar Verma E mail: drumesh26@gmail.com

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# **ABSTRACT**

**Background:** India estimates third highest number of HIV infections in the world, with about 2.4 million people currently living with HIV/AIDS. Adolescents often face a significant barrier to get the information, education and services required. Discussing reproductive and sexual matter freely is still a taboo in our society. The study was conducted to find out the awareness about HIV/AIDS among adolescents of Agra city.

**Methods:** The study was performed among adolescents of 13-19 years age group residing in randomly selected urban slums of Agra city. Personal in depth interview of adolescent's boys and girls was conducted using a structured questionnaire.

**Results**: Source of knowledge about HIV/AIDS among majority of adodescents (85%) was electronic media. Majority (74%) of adolescents said that unsafe sexual contact was the main mode of transmission and majority (78.41%) had reported that safe sex with use of condom was the main mode of prevention the attitude towards AIDS patient majority (75.66%) reported sympathy. The majority (74%) of adolescents were agreed to introduce HIV topic in course curriculum, and (63%) adolescents were willing of HIV test before marriage.

**Conclusion**: Knowledge on modes of transmission and prevention of HIV/AIDS is poor among adolescents of Agra. The reproductive health education should be a part of curriculum in all schools. Public awareness programme should be directed to society.

Key words: Adolescents, HIV/AIDS, Knowledge, Attitude

#### INTRODUCTION

The acquired immunodeficiency syndrome (AIDS) is one of the most dreaded entities that modern medicine has ever had to tackle. Young people are among the most vulnerable to HIV infection, and they also account for a large proportion of infected persons. UNAIDS considers youth and young people a high priority area and so as the young people have been identified as a current priority area in the UNAIDS secretariat. Although this focus is mainly directed at youth, not adolescents alone, adolescents comprise a large section of the target group.

Young people are especially vulnerable to infection as sexual activity begins in adolescence. Majority of studies from across the globe have established that the vast majority of young people have no idea how HIV/AIDS is transmitted or how to protect themselves from the disease. <sup>2</sup> When equipped with knowledge and skills, young people can however play a strong role in the response to the epidemic. The spread of HIV/AIDS relies primarily on private human behaviour, even if individuals everywhere had the full benefit of measures to reduce vulnerability and full access to the tools and skill to prevent transmission, it is illusory to think that all the

spread would stop. 1 However two decades of experience show that behavioural prevention can make a serious dent in the rate of new infection and change the course of the epidemic<sup>2</sup>. The HIV programme's major goal is to reach young people through the world campaign. The young people are open to behaviour change that stays for life. Adolescents are potential resources for changing attitudes and behaviour towards AIDS, i.e. they are not just targets but actors in the campaign against HIV/AIDS.<sup>3</sup> Adolescent are distinct as they may not understand the physical and emotional changes that are happening to them. They are especially susceptible to peer pressure and need for approval and opt to engage in risk taking behaviour or may fail to understand the possible consequences of their action. Adolescents' 10-19 byears of age accounting for nearly 23% of the population of India are exposed to the risk of being victims of HIV/AIDS.4

It goes without saying that HIV/AIDS is as much about social phenomena as it is about biological and medical concerns. In view of which the present study is an attempt to understand social phenomena i.e. awareness and attitude of HIV/AIDS correlates among adolescents. With this background this study was conducted to study the awareness and attitude about HIV/AIDS among adolescents of Agra city.

#### MATERIAL AND METHODS

The study was conducted from June 2004 to July 2005. It was approved by institutional ethical committee of SN Medical College Agra. The informed written consent was taken from all study partici-

The study was performed on adolescent boys and girls of 13-19 years age group residing in randomly selected urban slums of Agra city, attached to Department of Social and Preventive Medicine, S. N. Medical College Agra. The slums attached to urban health centre (Jattu bazaar, Anand Nagar, and Shiv Nagar) were taken up for the study purpose. Random sampling technique was adopted for selecting the areas.

Simple Random sampling technique was adopted for selection of adolescents for achieving the desired sample size. The information was collected by personal in depth interview of Adolescents boys and girls in predesigned, pretested questionnaire and appropriate statistical test was applied. The sample size for study was calculated by applying the formula  $n=4PQ/L^2$ .

Where n = no. Of sample, P is the prevalence, Q=100- P and L is permissible error. P = Prior prevalence of awareness recorded among rural woman of U.P. i.e. 27.6%. as reported by NACO was taken 5. On this basis sample size came out to be 263. 5. It was thus decided to include 300 adolescents. Data was analysed using Microsoft Exel and SPSS windows and relevant statistical tests were applied

#### **RESULTS**

The study was conducted on 300 adolescents of which 150 males and 150 females. The 264 study participants have knowledge about HIV/AIDS, 247 have knowledge regarding modes of transmission and 176 have knowledge regarding modes of pre-

Among the 264 adolescents, majority of adolescents 84.85% reported that the source of knowledge was electronic media. Next important source of knowledge was print media.

About two thirds of participants were aware that HIV/AIDS is transmitted by sexual contact, whereas only 31.9% have knowledge that infected needle and syringes can trasmit the disease.

Table 1: Source of knowledge of HIV/AIDS

Varibales	Male (%)	Female (%)	Total (%)
Sources of knowledge	n <sub>1</sub> =138	n <sub>2</sub> =126	n=264
Electronic media (T.V./Radio)	121 (87.68)	103 (81.74)	224 (84.85)
Print media (News paper, magazine, books)	35 (25.26)	29 (23.01)	64 (24.24)
Social circle	32 (23.18)	27 (21.43)	59 (22.35)
Modes of Transmission	n <sub>1</sub> =129	n <sub>2</sub> =118	n=247
Sexual contact	102 (79.1)	81 (68.64)	183 (74)
Infected needle& Syringe	32 (24.81)	47 (39.83)	79 (31.98)
Infected blood Transfusion	70 (54.26)	58 (49.15)	128 (51.82)
Modes of prevention	n <sub>1</sub> =96	n <sub>2</sub> =80	n=176
Safe sex(Use of condom)	81 (84.38)	57 (71.25)	138 (78.41)
One faithful life partner	38 (39.58)	32 (40.00)	70 (39.77)
New/ boiled needle& syringes	48 (50.0)	38 (47.50)	86 (48.86)
Tested blood	40 (41.67)	28 (35.0)	68 (38.64)

Figure in parenthesis indicate percentage

Table2: Attitude of adolescents towards the HIV/AIDS patient

Attitude	Male	Female	Total (n=300) (%)	P value
	$(n_1=150)$ (%)	$(n_2=150)$ (%)		
Will have sympathy	124 (82.67)	103 (68.67)	227 (75.66)	0.005
Allows to read in the same class	80 (53.33)	84 (56.0)	164 (54.67)	0.643
Allow to live in the family	70 (46.67)	65 (43.33)	135 (45.0)	0.554
Allow to use daily routine thing	57 (38.0)	49 (32.67)	106 (35.33)	0.643
HIV test before the marriage	109 (72.67)	81 (54.0)	190 (63.33)	< 0.001)
Assurance of new/ sterilized syringe, needles	129 (86.0)	76 (50.66)	205 (68.33)	0.064)

Table3: Attitude of adolescents towards HIV topic and high-risk behaviour

Opinion	Male (n=150)	Female (n=150)	Total (n=300)	P value
Agreed for introduction of HIV topic	<b>131</b> (87.33)	91 (60.67)	222 (74)	<.001
Sexual contact with friend before marriage can be made	14 (9.33)	6 (4.0)	20 (6.67)	0.064
Sexual contact can be made with a person having multiple sex	(12 (8.0)	3 (2.0)	15 (5.0)	0.017
partner				

Figure in parenthesis indicate percentage

About various modes of prevention 74.41% adolescents opined safe sex (use of condom), whereas only 38.64% adolescents said tested blood as a mode of prevention. Regarding boiled/ new needle and syringes 48.86% said yes, while one faithful life partner was reported by 39.77%.

The table 2 shows that out of total 300, adolescents regarding the attitude about AIDS patient majority (75.66%) of adolescents, reported to have sympathy. Majority (54.67%) of adolescents agreed to read with HIV/AIDS cases.

Majority of adolescents (55.0%), said that they would **not** allow the HIV patient to live in the family. Majority of adolescents (64.67%) said that they would **not** allow to use their daily routine things by the HIV patients.

Regarding the test of HIV before the marriage, 63.33% said yes, Regarding the injectables, before taking injection confirmation of new/sterilized needle and syringe, majority of adolescents 68% reported yes.

Table 3 shows that overall 74% adolescents in which 87.33% of males, 60.67% of females were agreed for the introduction of HIV topic in the course curriculum (p<.001). Regarding the attitude towards sexual contact before marriage the majority 93.33% adolescents said no.

Regarding the multipartner sexuality the majority of adolescents 95.0% reported no, out of which majority were 98% females and 92% males. The difference between male and female was found statistically significant (p<.017).

#### **DISCUSSION**

In the present study among the 264 adolescents, majority 84.85% of adolescents reported that the source of knowledge was electronic media (Television) in

which 87.68% were males and 81.74% were females. Next important source of knowledge was print media in 25.36% males, and 23.01% females.

Lal P et al (2005) conducted study of awareness among senior secondary school children 2592 in Delhi reported approximately similar findings as 79.6% students mentioned the television and radio were the main source of information<sup>6</sup>. Similar finding were observed by Amalraj Edwin<sup>7</sup> and Poddar et al, <sup>8</sup> this is comparable to Delhi study where majority of the students had heard about HIV/AIDS fron television and radio.

Regarding modes of transmission majority 74% participants were aware that HIV/AIDS is transmitted by sexual contact, Sunder M. et al. (1997) reported finding similar to present study, as 81 percent of respondent in his study were aware about sexual contact as a route of transmission of disease. Malleshappa et al (2008) reported similar findings that 69.2% participants aware that disease was transmitted by unsafe sex.

Shailesh J. Kore <sup>11</sup>(2002) reported higher level of knowledge among college going adolescents, as 59.2 percent were aware about homosexual route of transmission. The reason for difference in the level of awareness may be attributed to the difference in the educational level.

In the present study it was found that 31.98% respondents in which 24.81% male and 39.83% female adolescents reported that use of infected needle and syringe could transmit the disease. The higher findings were reported by Agarwal Kamal (1995),<sup>12</sup> and Agarwal A. K. (1996) <sup>13</sup> in their studies as 40.4 percent, 42 percent of respondent respectively were aware of it.

About various modes of prevention 74.41% adolescents in which 84.38% of males and 71.25% of females opined safe sex (use of condom), Srivastava

A et al (2011) <sup>14</sup> also reported similar findings as 78.6% respondents had knowledge about condom as means of protection. Francis P T et <sup>15</sup> al also observed that 79% students thought that use of condom decreases the risk of getting AIDS. Sunder M et al <sup>16</sup> conducted a survey in 7 urban colleges and found that 59% of females indicating that HIV transmission could be prevented by using condom. The 38.64% adolescents in which 41.67% of males and 35.0% of females said tested blood as a mode of prevention. Regarding one faithful life partner was reported by 39.77% in which 35.58% males and 40% females. Srivastava A et al (2011)<sup>14</sup> also reported similar findings as 59.5% respondents had knowledge about this mean of prevention.

In the present study 39.77% adolescents in which 39.58% male and 40% of female said that having one faithful sex partner could prevent transmission of disease. Almost similar finding were reported by Shailesh J. Kore (2002) <sup>11</sup> and Patil Sharmila et al. (2001) <sup>17</sup> as 42.25 percent and 37.5 percent of the respondents respectively said that having one faithful partner could prevent disease

Out of total 300, adolescents exploring regarding the attitude, majority (75.66%) of adolescents, reported yes, out of which 54.63% were males and 45.37% females, they will have sympathy towards HIV positive. The difference was found statistically significant (p<. 05).

The majority (75.66%) of adolescents agreed to read with HIV/AIDS patient, out of which 48.78% males and 51.22% females. The difference was not statistically significant (p>.05).Lal et al. (2000) <sup>18</sup> in his study over students of Kerala reported that 10 percent of students recommended isolation of the patient. This lower level of negative attitude than the present study could be attributed to the higher educational status of study population.

## **CONCLUSION**

The adolescents had sympathetic attitude towards people living with HIV/AIDS. The reproductive health education should be a part of curriculum in all schools. There should be classroom based education programme on HIV/AIDS and STDs and the class teacher should be properly trained for educating the students effectively in transmission and modes of prevention methods of HIV/AIDS

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