

# Knowledge and Attitude of School Going Adolescent Girls towards HIV and STDs

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## Research Article

**Abstract: Background:** Adolescent constitutes over 23% of the population in India. This period is very crucial since these are the formative years in the life of an individual. This is also an impressionable period of life and also the period of preparation for undertaking greater responsibilities including healthy responsible parenthood. **Objective:** To assess knowledge and attitude towards HIV and STDs among school going adolescent girls. **Material and methods:** present study was a cross-sectional observational study carried out during 2010-2011. Simple random sampling was done and sample size calculated by formula  $4pq/L^2$ . Calculated sample size was approximately 700. One urban and one rural school were selected randomly. 350 girls each from rural and urban school were selected. Pre-structured and pre-tested proforma incorporating relevant information was used to collect the data. Statistical analysis was done by using appropriate statistical test. **Results:** 34.28% girls have knowledge about HIV and STDs. 26.57% have knowledge about routes of transmission. Awareness about HIV and STDs prevention was present in 10.85% girls. When premarital testing of blood for prevention of HIV was asked more than half (55.42%) did not reply the question while 21.71% replied that premarital testing of HIV should be done. Favorable attitude towards sex education was present in 25.14% girls while 47.72% think that 13-15 yrs is right age for sex education. **Conclusion:** Adolescent girl need extensive and supportive education programme to improve their awareness and thus reproductive health status.

**Keywords:** Adolescent, HIV and STDs

## Introduction

The term "adolescence" has been defined as including those aged between 10 -19 years. True adolescence, however, being the period of physical, psychological and social maturing from childhood to adulthood.<sup>1</sup> Adolescent constitute over 23% of the population in India. Adolescence refers more broadly to the phase of human development encompassing the transition from childhood to adulthood. This period is very crucial since these are the formative years in the life of an individual. This is also an impressionable period of life and also the period of preparation for undertaking greater responsibilities including healthy responsible parenthood. Future of a society depends on adolescents and they form a great human resource for society.<sup>2</sup> The commitment of the national government to the reproductive health approach

forged at the International Conference on Population and Development (ICPD) in 1994 has reshaped the family welfare programme into a broad-based Reproductive and Child Health (RCH) Services Program in India. Policymakers and planners have now realized that the adolescent population group has specific health and developmental needs. There is a growing understanding that adolescence is a bridge between childhood and adulthood. The newer focus on RCH also has been invigorated by the continuing realization of the importance of women's health; it is now widely accepted that if the health of women is to be improved, the health of adolescents must be given high priority in Indian policy and programme development and implementation<sup>3</sup>. Youth are vulnerable to sexually transmitted infections, including Human Immunodeficiency Virus, and account for 31% of AIDS burden in the country (Source: NACO, 2007). Many adolescent boys and girls are sexually active but lack information and skill for Self- protection.

## Objective

To assess knowledge and attitude towards HIV and STDs among school going adolescent girls.

## Material and Methods

**1. Study population:** The adolescent school going girls were selected according to WHO criteria for adolescent's i.e. 10 to 19 years. Adolescent constitute about 23% of total population<sup>2</sup>. Sample size was calculated by using formula  $4pq/L^2$  where  $p=23\%$ ,  $q=77\%$  and  $L=$  allowable error taken was 10%. Calculated sample size was approximately 700<sup>4</sup>.

The study was carried out on girls belonging from 5<sup>th</sup> to 10<sup>th</sup> standard, as they belong to adolescent age group. The rural and urban schools having teaching up to 10<sup>th</sup> standard were included in the study. Schools were selected randomly. Thus 350 girls rural and 350 girls from urban have been included in the present study.

**2. Study period:** Present study was carried out in year 2010-2011.

**3. Type of study:** The present study was a Cross sectional Observational study.

**4. Method:** The study was carried out using a proforma incorporating relevant aspects of the study. A pilot study was undertaken for 50 girls each from urban and rural schools of this region. Proforma was pre-tested on 50 students each from urban and rural area. It was modified with necessary changes.

The data was collected after taking permission from Headmaster of the school. Adolescent girls were explained about purpose of study and assured for confidentiality. Verbal consent was obtained from the girls. Analysis was done using appropriate statistical test.

#### Results:

Out of 700 adolescent school girls 350 each were from urban and rural area. The distribution of total 700 adolescent girls according to age showed that the maximum number of girls ie. 138 (19.71%) were of the age 13 years followed by 116 (16.57%) in each 11 and 12 years, 113 (16.14%) of 14 years, 96 (13.71%) of 15 years, 71(10.14%) of 10 years of age, 40 (05.71%) in 16 years, 6 (0.86%) of 17 years and 4 (0.58%) girls were of 18 years of age. The more number of girls of 13 years of age corresponds to 8<sup>th</sup> standard. Out of 350 urban school girls 77 (22%) were of 13 years of age followed by 65 (18.57%) of 14 years, 61 (17.42%) of 11 years, 57 (16.28%) of 12 years, 48 (13.71%) girls of 15 years, 33 (9.42%) of 10 years, 8 (2.29%) of 16 years and 1 (0.29%) of 18 years of age. Out of 350 rural girls 61(17.43%) girls were of 13 years of age followed by 59 (16.86%) of 12 years, 55 (15.71%) of 11 years, 48 (13.71%) of 14 and 15 years each, 32 (09.14%) girls of 16 years, 6 (1.72%) of 17 years and 3 (0.86%) of 18 years of age.

**Table 1:** Distribution of adolescent school girls according to Age

Age in years	Urban (n=350)		Rural (n=350)		Total(n=700)	
	No.	%	No.	%	No.	%
10	33	9.42	38	10.86	71	10.14
11	61	17.42	55	15.71	116	16.57
12	57	16.28	59	16.86	116	16.57
13	77	22.00	61	17.43	138	19.71
14	65	18.57	48	13.71	113	16.14
15	48	13.71	48	13.71	96	13.71
16	08	02.29	32	9.14	40	05.71
17	-	-	06	01.72	06	00.86
18	01	00.29	03	00.86	04	00.58
Total	350	100	350	100	700	100

**Table 2:** Knowledge and attitude towards HIV and STDs among adolescent school girls

Knowledge and attitude towards HIV and STDs	Urban		Rural		Total	
	No.	%	No.	%	No.	%
Knowledge about HIV and STDs	128	36.57	112	32.00	240	34.28
Knowledge about routes of HIV and	98	28.00	88	25.14	186	26.57

STD transmission						
Awareness about prevention of HIV transmission	78	22.28	60	17.14	76	10.85
Awareness about prevention of STDs	48	13.71	28	08.00	76	10.85

As adolescent girls are future citizens, it is essential to know the knowledge and awareness regarding HIV and STDs. Regarding HIV/AIDS, it seems that India's epidemic shifts from the highest risk group to bridge population and then to general population. As adolescent girls are future citizens of nation therefore they should have knowledge regarding HIV/AIDS. Knowledge about HIV and STDs was seen in 240 (34.28%) girls. 186 (26.57%) girls knows the routes of HIV and STDs transmission and only 76 (10.85%) girls were aware about prevention of HIV transmission. Knowledge about HIV/STD was seen in 128 (36.57%) urban and 112 (32.00%) rural girls. Knowledge about routes of HIV and STDs transmission was seen in 98 (28.00%) urban and 88 (25.14%) rural girls. Awareness regarding prevention of HIV transmission was present in 78 (22.28%) urban and 60 (17.14%) rural girls. Awareness regarding prevention of STDs was seen in only 76 (10.85%) girls.

**Table 3:** Distribution of adolescent school girls according to perception about pre-marital testing of HIV

Perception about pre-marital testing of HIV	Urban		Rural		Total	
	No.	%	No.	%	No.	%
yes	86	24.57	66	18.85	152	21.71
no	74	21.14	86	24.57	160	22.85
don't know	190	54.28	198	56.57	388	55.42
Total	350	100	350	100	700	100

As we know AIDS is acquired mainly through heterosexual contact, therefore every single act of unprotected intercourse with an HIV infected person exposes the uninfected partner to the risk of infection. When premarital testing of blood for prevention of HIV was asked more than half (55.42%) did not reply the question while 21.71% replied that premarital testing of HIV should be done. 160 (22.85) girls think that there is no need to do premarital testing of HIV.

**Table 4:** Attitude of adolescent school girls towards sex education

Attitude towards sex education	Urban		Rural		Total	
	No.	%	No.	%	No.	%
Favorable	98	28.00	78	22.28	176	25.14
Not Favorable	152	43.42	150	42.85	302	43.14
Don't reply	100	28.57	122	34.84	222	31.71
Total	350	100	350	100	700	100
<b>Right age for sex education</b>						
10-12 yrs	08	08.16	02	02.56	10	05.68
13-15 yrs	58	59.18	26	33.33	84	47.72
16-18 yrs	32	32.65	50	64.14	82	46.59
Total	98	100	78	100	176	100

Unfortunately, the special needs of adolescents are rarely addressed by the educational, health, and family welfare programs in India. In order to intensify the focus on STI prevention among young people, in June 2005, the Government of India announced the National Adolescent Education Program (AEP), while the main focus of the program was on HIV/ AIDS prevention, it also covered sexual reproductive health issues, gender and life skills. When attitude of adolescent school girls towards sex education was studied, it was found that, only 176 (25.14%) girls wanted sex education i.e. they have favorable attitude towards sex education. 302 (43.14%) don't want sex education while 222 (31.71%) did not reply. Out of 176 girls, who want sex education, 84 (47.72%) wanted it to start at 13-15 yrs followed by 82 (46.59%) at 16-18 years and only 10 (05.68%) wanted it at 10-12 yrs. Most of urban girls 58 (59.18%) wanted sex education at 13-15 yrs while most of the rural girls 50 (64.14%) wanted it at 16-18 yrs.

## Discussion

The present study was carried out to assess the knowledge and attitude of school going adolescent girls. Adolescent (between the ages of 10-19 yrs) is a transition period in life, when an individual is no longer a child but not yet an adult. It is important to note that adolescent is not a homogenous group, their needs vary according to gender, stage of development, life circumstances and socio-economic conditions<sup>5</sup>. Lack of understanding about particular needs of Indian adolescents, especially adolescent girls persists in India and in the wider global community. The Indian context calls for a focus on adolescent girls due to their general vulnerability, inaccessibility to basic health care and education, unmet sexual and reproductive health needs and rights and age old transitions and misconceptions that have seen this cohort marginalized. Knowledge about HIV and STDs was seen in 34.28% girls while **Alexandra McManus et al (2008)**<sup>6</sup> found that only one third of students had knowledge about HIV. **Gash Basir et al (2003)**<sup>7</sup> reported 24% girls having knowledge regarding HIV. In present study, knowledge about routes of HIV and STDs transmission was to 26.57% girls. Nearly similar finding was found by **Gash Basir et al (2003)**<sup>7</sup> (23.00%). Awareness about prevention of HIV transmission was present in 10.85% girls while more awareness was found by **Gash Basir et al (2003)**<sup>7</sup> (20.5%). Study of **PV Kotecha et al**<sup>8</sup> shows that, 50% woman aware about prevention of HIV. In present study, favorable attitude towards sex education was given by 25.14% girls. **Sarita Agrawal et al**<sup>9</sup> study shows 90.4% student want sex education in school. Out of them 52.8% want it at 13-15 yrs and 41.2% want it at 16-18 yrs.

## Conclusion

The present study assesses the knowledge and attitude of school going adolescent girls. In present study, 34.28%

know about HIV and STDs and 26.57% know about routes of HIV and STDs transmission. Awareness about prevention of HIV and STDs was present in 10.85% girls. When perception about premarital testing of HIV was studied, only 21.71% girls think that there is need for pre-marital testing of HIV. When attitude of adolescent school girls towards sex education was studied, it was found that, only 25.14% wanted sex education and 47.72% wanted it at 13-15 yrs and 46.59% wanted it at 16-18 yrs. There is an immense need for implementation of appropriate gender-based, culturally sensitive sex education curriculum in schools to cope up with the increasing vulnerability of young adults especially girls, towards STI/HIV in India. Standardized programmes across all levels of secondary schools in India will allow young people to make informed choices about protecting themselves from STI/HIV if or when they decide to become sexually active.

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## References

1. Park K., Park's Text Book of Preventive and Social Medicine, M/S Banasridas Bhanot Publishers, Jabalpur, 21<sup>th</sup> edition January 2011.
2. J. Kishor, National Health programmes of India, Century Publications, New Delhi, 9<sup>th</sup> edition, 2011.
3. S.D.Gupta. Adolescent Reproductive Health In India, Status, Policies, Programs and policies. Indian Institute Of Health Management Research Jaipur, India; 2003.
4. Mahajan B. K.: "Methods in Biostatistics", CBS Publication, New Delhi, 8th Edition, 2010.
5. Anuradha Panda Report. Adolescent Girls in India. Advocating for the Rights of Children Worldwide Trust; 2007
6. Alexandra McManus, Lipi Dhar. Study of Knowledge, Perception and Attitude of Adolescent Girls towards STI/HIV, Safer Sex and Sex Education: A cross Sectional Survey of Urban Adolescent School Girls in South Delhi, India. BMC Womens Health 2008; 8: 12.
7. Gaash Basir, Ahmad Muzaffar, Kasur Rehana, Basir Shabnam. Knowledge, Attitude and Belief on HIV/AIDS Among The female Senior Secondary Student in Shrinagar District of Kashmir. Perspectives and Issues 2003; 26(3): 101-109.
8. Pv kotecha, Sangita patel. Measuring knowledge about HIV among youth: baseline survey for urban slums of Vadodara; Ind J of STD; 2008; 29(2): 68-72
9. Sarita Agrawal, Alfiya Fatma, C M Singh. A Study of Knowledge and Attitude of Adolescent Girls Towards Reproductive Health and Related Problems. Indian J. Prev. Soci. Med. 2007; 38(2).