



Knowledge and Attitude on Sexually Transmitted Infections among Young Adults in Kerala

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Abstract

Background: Sexually Transmitted Infections (STI's) and HIV mainly affects sexually active adolescents and young people. Young adults aged 15-29 years, account for 32% of AIDS cases reported in India and the number of young women living with HIV/AIDS is twice that of young men. The aim of the study was to evaluate students' knowledge, perceptions and attitudes towards STIs.

Methods: A cross sectional study was carried out in two northern districts of Kerala, South India to investigate the perception, knowledge and attitude of graduate students towards sexually transmitted Infections (STIs) and HIV/AIDS. The self-administered questionnaire was completed by 1640 male and female students from eight arts and science colleges.

Results: More than one third of students in this study have no accurate understanding about the signs and symptoms of STIs other than HIV/AIDS. About 12.4% of respondents considered HIV/AIDS could be cured, 49% felt that condoms should not be available to youth.

Conclusion: Though controversial, there is an immense need to implement gender-based reproductive education regarding STIs, HIV and contraceptives in educational institutions in India.

Keywords: Sexually transmitted infections, Students, Young adult, Kerala.

Introduction

Adolescents (10-19) and young adults (15-24) are the age groups at the greatest risk for acquiring sexually transmitted infections (STI) and 3 million become infected each year¹. Globally, 40 percent of all new human immunodeficiency virus (HIV) infections occur among 15-24 year olds and it is estimated that 7000 are infected each day. WHO states that 333 million new cases of curable STIs

occur worldwide each year, with the highest rates among 20-24 years followed by 15- 19 age group.² RTIs are a significant public health problem as they cause widespread morbidity and mortality in men and women, especially of reproductive age³ These RTI/STIs constitute a huge health and economic burden for developing countries and account for 17 per cent of economic losses because of ill health. Young adults aged

15–29 years, account for 32% of AIDS cases reported in India and the number of young women living with HIV/AIDS is twice that of young men⁴. Causes of the increased rates of STIs/HIV in young people are complex. However, the main reasons include biological factors, risky sexual behaviour patterns (early initiation of sex, premarital sex, bisexual orientation and multiple sexual partners), transmission dynamics and treatment seeking behaviour⁵. In India, STIs rank third among the major communicable diseases and approximately 12-25 % of all STI cases were among teenage boys. Over 35percent of all reported AIDS cases in India occur among those in the age group of 15-24⁶.

The awareness level of adolescents and youth is much lower when it comes to knowledge of prevention and transmission of HIV. DLHS-4⁷ also shows that, in Kerala knowledge on RTI/STI among women in all the districts in Kerala has fallen from the DLHS-3 to DLHS-4. There is growing evidence of increased premarital sexual activities among young people. While generalisation is difficult, studies indicate that between 20 percent and 30 percent of young men and up to 10 percent of young women have premarital sexual experiences. Women, have a higher incidence of STIs than men because of their greater biological susceptibility⁸. With an increasing number of people living with HIV/AIDS, India is categorised as a highly vulnerable country for the disease.⁹ the present dearth of STI education in India is a major concern, particularly in educational institutions. Information about behaviour, attitudes, and knowledge through regular surveys is essential to better understand the dynamics of the STI epidemic. This information is also important in assessing changes over time as a result of prevention efforts. The aim of the present study is to evaluate the knowledge, perceptions and attitudes among young graduate students towards sexually transmitted infections including HIV/AIDS.

Methods

A cross sectional survey was carried out in eight rural and urban arts and science college in covering two districts of northern Kerala, South India. Permission to conduct the survey was granted in accordance with the requirements of the Education Department governing the colleges involved. The sample survey was conducted in 1640 students consisting of 809 boys and 831 girls from eight colleges, four each from rural and urban. Only unmarried males and females in the age group of 18-24, who were willing to participate, were included in the study. Trained social workers distributed the questionnaire in Malayalam, regional language to the students and remained in the classroom during survey completion. As the survey contained sensitive issues, to avoid confounding through discussion amongst participants, data was collected on the same day from each college on the spot. At the beginning of each session, an information statement was readout to students outlining the aim of the survey. In order to promote accuracy in response, students were assured anonymity and were free to refuse to complete the questionnaire or any particular question(s). Students were instructed to put their completed questionnaire into the envelopes provided and seal it. All data was entered and analysed using SPSS to ensure accuracy.

Results

The total number of young students who attended the study was 1640, of which 801 were from Kannur district and 839 from Malappuram and 49.4 percent were males and 50.6 percent were females. The age of the respondents ranged from 18 to 22 years, but majority of the respondents (80.2%) were of 18 years. 54 percent of the students were Hindus. The Muslims and Christian were 27.4 percent and 18.6 percent respectively. Table 1 shows the socio economic and demographic backgrounds of the students.

Table 1 Distribution of respondents by their socio- economic and demographic characteristics

Socio Economic and Demographic Characteristics of Respondents		Respondents	
		No	%
Age	18	1315	80.2
	19	306	18.7
	20	6	0.4
	21	12	0.7
	22	1	0.06
Sex	Male	809	49.3
	Female	831	50.7
Religion	Hindu	885	54.0
	Muslims	449	27.4
	Christian	306	18.7
Caste	Backward Caste	963	58.7
	Forward Caste	604	37.0
	Scheduled Caste	70	4.3
Socio Economic Status	Low	640	39.0
	Medium	767	46.8
	High	233	14.2
Family	Nuclear	1075	65.5
	Extended Nuclear	423	25.8
	Joint Family	142	8.7
Area of Residence	Rural	991	60.4
	Urban	649	39.6
Course of study	Arts & Commerce	822	50.1
	Science	818	49.9
Mother's education	Primary	62	3.8
	Secondary	697	42.5
	Higher Secondary	658	40.1
	Degree and above	223	13.6
Father's education	Primary	64	3.9
	Secondary	623	38.0
	Higher Secondary	648	39.5
	Degree and above	305	18.6
Exposure to media	Yes	1536	93.7
	No	104	6.3
Participation in SRH program	Yes	59	3.6

The respondents' knowledge on sexually transmitted diseases was very poor. All the participants were aware of HIV/AIDS, but majority of them were not aware of other STI/RTI like gonorrhoea, syphilis, etc. 30.67 percent students knew about Hepatitis -B. Only 17.86 percent of them had heard of the diseases gonorrhoea and 15.48 percent of syphilis and 14.20 percent knew about genital warts. Regarding signs of the reproductive tract infections and sexually transmitted infections, 22.62 percent of respondents knew that burning pain or itching in penis/vagina was the sign of RTI/STI. Discharge from penis/vagina (28.17%),

abnormal vaginal bleeding (13.23%), loss of weight (11.70%), swelling (10.97%) painful urination (8.65%) and sores on penis/vagina (7.68%), were reported as other signs of sexually transmitted diseases. 8.65 percent of the respondents were not aware of any one of the signs. In order to check the level of awareness on infections a person can get through sexual intercourse, six diseases transmitted through sexual relations were included. All the respondents agreed that AIDS was transmitted through sexual intercourse. 17.55 percent males and 18.17 percent females had knowledge about gonorrhoea, which is transmitted through sexual relations. 15.82 percent males and 15.16 percent females knew about syphilis. 26.45 percent males and 29.84 percent females agreed that discharges of blood from genitals are a sign of STI. 24.90 percent females and 20.27 percent males said that burning pain or itching in penis or vagina was a sign of sexually transmitted infections. They knew that loss of weight (11.70 %), sores on genitals(7.98%), painful urination (8.65%) and swelling (10.97%) were the symptoms of STI. 10.22 percent females and 5.69 percent males noted that sores on penis or vagina was a sign of STI.12.1 percent males and 5.29 percent females knew that painful urination was a sign of STI. 36.9 percent students stressed the need to take medicines for RTI/STI. 53.65 percent of them said that most of the sexually transmitted infections will be cured without taking medicine and 9.45 percent did not know anything about it.

All the respondents of the study said that, sexual relations were one of the modes of transmissions of AIDS. The male members in the study said that, sharing syringes, blood transfusion and mother to child during delivery were the other ways through which a person can get AIDS. 36.34 percent males and 14.56 percent females were of the opinion that by sharing syringes and unclean equipments a person can get AIDS. Blood transfusion was another way to get AIDS, observed by 13.84 percent young male adults and 10.70 percent females. 38.56 percent males and

35.86 percent females said that mother to child during delivery was a mode of transmission of AIDS. More than half (62.19 percent) respondents rightly reported that AIDS was not a curable disease. But 12.4 percent students participated in the study believed that AIDS can be cured and 25.41 percent students was ignorant of these things. 32.43 percent respondents stated that a person with AIDS look emaciated or unhealthy in some way. 26.33 percent students had no idea about it and 41.24 percent gave wrong answer. More than half of the young adults (53.65%) had wrong notion on sexually transmitted diseases. 51.66 percent males and 55.59 percent females had wrong idea that, most sexually transmitted infections cure without taking medicine. Only very limited number of students reported that mosquito bites or bites of other insects (2.56%) and casual contact with infected persons (1.70%) were the ways through which person get AIDS, which were misconceptions.

595 respondents (36.25%) viewed that premarital sex was a common thing among males. 43.20 percent females and 29.17 percent males thought premarital sex as an unhealthy attitude. 1059 (64.58 %) young adults had an attitude that men had more sexual desire than women. 72.68 percent males and 56.68 percent females had such an attitude. 64.27 percent viewed that in general, it was women's duty to respond to men's sexual desire. 65.64 percent males and 62.94 percent female had such an attitude. 16.83 percent students viewed that the man who did not have sexual intercourse before marriage was not masculine. 25.85 percent of the respondents expressed the attitude that, sexual contact is the only way of expression of their love towards opposite sex. 29.04 percent males and 22.74 percent females had such an attitude. 57.56 percent of the participants viewed it improper to share the views of how genitals could be kept clean and hygienic.

718 (43.78%) respondents agreed that, using condoms with a new partner was a sensible idea. 39.06 percent males and 48.37 percent females

agreed to this attitude. 24.69 percent respondents had a negative idea that using condom was not necessary if one knew ones partner. 26.11 percent females and 23.23 percent had shared such an attitude. 33.84 percent young adult's viewed that the use of condom would diminish sexual enjoyment. 39.43 percent males and 28.39 percent females had such an attitude. 597 (36.40%) young adults felt embarrassment in asking for condom at family planning centres or drug stores. 6.84 percent males and 23.23 percent females had such an attitude. Majority (73.04%) of young adults had a positive attitude that condoms should be used with prostitutes. 72.43 percent males and 73.64 percent females had such attitude.

50.18 percent young adults' attitude was that, unmarried young people should not have friendship with opposite sex. 56.78 percent females and 40.66 percent males had such an attitude. 49.63 percent young adults believed that, homosexuality among men is a common practice. 51.42 percent males and 47.89 percent girls supported this statement. 62.07 percent felt that masturbation promotes mental and emotional abnormality. 76.14 percent male and 48.37 percent female had such an attitude. 43.53 percent favoured extra marital sexual relation. 24.47 percent females and 62.09 percent males agree with this attitude.

48.78 percent students considered that sex education gave young people the idea to begin sex earlier. 55.83 females and 40.66 males had such an attitude. But 48.35 percent agreed to the view that sex education should be given only at home. 39.43 percent males and 28.29 percent females had such an attitude. 68.65 percent were of the view that sex education is a sin and that is goes against one's religious beliefs.

Discussion

The study aimed to elicit knowledge, perception and attitudes of young adults regarding important issues such as STIs including HIV and RTIs. The results of the present study show that among the adolescents and young adult's awareness about

HIV/AIDS is substantially higher than that of RTI/STI, which agrees with many studies in India. The study indicated poor knowledge among girls on STIs other than HIV/AIDS. 36.34 percent of male student and 14.56 percent females in the present study had no accurate understanding about the signs and symptoms of STIs. According to the District Health and Facility survey (2012-2013), Kerala, 34.8 percent adolescent girls in the age group of 15-19 years reported that they had heard about STI/RTI, but 70.5 percent of the same group have heard about HIV/AIDS. Similar findings were reported by other studies as well.^{6, 10} few studies conducted in India reported RTIs among adolescent girls and lack of awareness regarding the same.^{11,12}

In the present study, knowledge regarding RTIs was very poor among graduate students as compared to a study carried out by Agarwal et al¹³ which reported that 57.4 percent girls aged 17-19 years had heard of RTIs. Vyas et al.,¹² reported that around 56 percent adolescent girls could name at least two RTIs and symptoms were known to 8.4 percent of them. In another study done by Jain¹⁴ et al. among urban adolescent girls in Meerut, it was reported that 31.8 percent had heard of RTIs. These observations reflect lack of awareness among adolescent girls regarding RTIs in India. Therefore, there is an urgent need to impart knowledge regarding RTIs.

The findings of this study indicate that students have good awareness about the modes of HIV transmission and prevention. Conversely, in a study conducted by the ICMR students in rural areas of 14 states, only 13 percent of adolescent knew that multiple sex partners increased the risk of HIV infection.¹⁶ 32.6 percent believed that persons with HIV/AIDS could be detected by their physical appearance. In a similar study conducted by Aggarwal et al¹³, in Haryana, 57 percent believed that persons with HIV/AIDS could be identified by their physical appearance. These results are of concern as it is very important to have knowledge that a healthy looking person can transmit HIV/AIDS. This is of concern as

evidence shows that people with HIV may remain asymptomatic for several months or years before developing AIDS but still transmit the infection¹⁷. Interestingly, in the present survey, almost 36.25 percent of the students had agreed that there was nothing wrong to have sexual relationship with unmarried boys and girls if they agreed each other. This observation is reflected in the increasing incidence of premarital sex in India. 12.4 percent of respondents in this study also considered AIDS could be cured. Other surveys within India show similar finding.¹⁸ 38.81 percent males and 30.20 percent females rightfully accepted the statement that, condom is an effective way of protecting against AIDS/STI. Young sexually active people need to be aware of the risk of STIs and they should know the proper use of condoms to prevent STIs transmission. The widespread availability of condoms is an essential STIs control strategy.¹⁹ McManus et., al²⁰ reported in their study that 22 percent of adolescent girls were not aware that people who always used condoms could be protected from STIs. It is very important for young adolescent girls to be aware of the risk of STIs and also that condoms can prevent spread of STIs. A study conducted by Vyas et a.,el¹⁴ among college going adolescent girls reported that the majority 80 percent and 76 percent were aware about unprotected sexual intercourse and about vertical transmission while 42 percent and 41 percent were aware about infected needles and blood transfusion respectively to be the main modes of HIV/AIDS transmission.

Furthermore, young adults and adolescents were reluctant to seek advice at health facilities because of legitimate concerns about privacy, providers' attitude, and the narrow focus on reproductive health. Lacking accessibility to reproductive services has resulted in adolescents and young adults seeking care from other providers (traditional healers, staff in illegal clinics, etc.) who are not regulated and supervised by the government and who may put adolescents at risk of harmful practices.

Education forms a very important platform for adolescents and young adults to enable them to take decisions about their sexual health in future. The above analysis insists evidence-based sex education must be a major strategy in educational programme, with user friendly resources ready available to students. In a study done for cost effective methods for prevention of spreading of HIV/AIDS and other STIs in developing countries, it was reported that mass media campaigns, treatment of STIs and school-based interventions can yield health gains and are effective interventions²¹

Conclusion and Recommendations

STI epidemic is a 'silent killer' and still poses a serious challenge to societies around the world, including India. The HIV pandemic has become a youth epidemic, which poses huge barriers for many youth. In the face of AIDS, many young people have learned to change their behaviour. Every year, increasing numbers of young people are infected with HIV and other STIs. Adolescents and young adults fall to this high risk. Health education on STI among adolescents is very crucial in preventing the STIs/HIV and Educational institutions have a vial role in this regard. A number of studies, including the current study identify lacunae in the STI/HIV knowledge and reflected low levels of awareness among adolescents and young adults. It is important to provide health education to adolescents and young adults about safer sex so that they can safeguard themselves from STIs. It is also essential to provide information about signs and symptoms of STIs which will alert them to seek timely medical attention as and when needed. The present strategy of STIs health education in India is not effective tosu up, it may be said that there is an urgent need for implementation of appropriate gender-based, culturally sensitive health education curriculum in educational institutions to cope with the increasing vulnerability of young adults, especially girls, towards STIs/HIV in India. The primary health

centres should be equipped for community level education and health care. Though efforts are currently being made to increase awareness among adolescents regarding STIs including HIV/AIDS and RTIs, the study has identified lack of knowledge regarding STIs and RTIs. It is therefore necessary to educate adolescents.

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