

Original Research Article

A study to find the awareness level regarding prevention and control of sexually transmitted diseases among university students of Panjab university, Chandigarh, India

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ABSTRACT

Background: Sexually transmitted diseases remain a significant issue among the young people. In order to implement effective preventive measures, awareness of the comorbid conditions and causation of STDs, as well as sexual behaviour, among vulnerable young people, such as university students, must be established. The objective of the study was to assess the awareness level of students regarding prevention and control of STDs.

Methods: It was a cross-sectional study conducted at Panjab University situated in Chandigarh, India between February and August 2020. Purposive sampling was used to recruit students. Data was collected using a pre-tested, semi-structured, self-administered questionnaire. The nature of the data was quantitative and was analyzed through SPSS version 20.

Results: A total of 211 (female/male:51.7%/48.3%, mean age: 22.5 years) respondents were enrolled. The awareness regarding the safe sex practices was very high (98.1%). 99.1% respondents were aware of HIV and AIDS, 65.4% respondents who were aware of hepatitis B and 55% respondents who were aware of Gonorrhoea and Syphilis. To prevent STDs 86.3% respondents were aware of condom, 72% respondents were aware to avoid unprotected sex and 19.9% respondents knew of abstinence.

Conclusions: Condoms awareness is still lacking in students. Consequently, it puts them at a higher risk of STDs. Such data can be used to strengthen ongoing STDs prevention efforts in India aimed at reducing STDs in young adults.

Keywords: Sexually transmitted diseases, Awareness, Prevention, Students, Unprotected sex

INTRODUCTION

The diseases that can be transmitted from one person to another through sexual contact are referred to as sexually transmitted diseases (STDs). STDs can be contracted by having unprotected vaginal, anal, or oral sex with someone who has STD. But it doesn't imply that STDs can be transmitted through sex only; infections may also be transmitted through sharing needles and breastfeeding.

An STD can also be referred as sexually transmitted infection (STI) or venereal disease (VD).¹

Sexually transmitted diseases have emerged as a major health and development concern globally. It is estimated that global incidence of major bacterial and viral STDs is over 125 million cases annually.² A significant public health issue in India is STIs/RTIs. According to a community based STI/RTI prevalence study conducted

during 2002-03 by Indian council of medical research (ICMR), around 6% of the adult population in India has one or more STI/RTI, which amounts to approximately 30-35 million STI/RTI episodes per year in the country.³

As these days, people are much more inclined towards technology and digitalization (explicit description of sexual activities, web series, etc.); this has involved people in pre-marital sexual activities at a very young age. Not only this has led to sexual debut at a very unripe age but also the issue of the concern is that they are unaware to safe sex practices. Also, early initiation of sexual practices may predispose young people to STDs as their chances of having several partners before marriage increases. The need of the hour is to realize that the youth is the future of the nation and the grievance related to them must be addressed or dealt with grave concern. Sex education is not a part of our academics in schools and colleges, so students gather the information from sources like mass media, magazines, internet, etc. which cannot be considered as reliable sources. As a result, STDs are spreading at a higher rate among youth.^{4,5} So their knowledge and awareness are must to manage these problems. In this context, there is a need to assess the awareness regarding prevention and control of STDs among youth indulging in premarital sexual practices. Therefore, this study was undertaken to be conducted in University students of Panjab University, Chandigarh.

METHODS

A cross-sectional study was designed to assess the awareness level of students regarding prevention and control of STDs among Panjab University students situated in Union Territory Chandigarh, India. The data was collected through quantitative data collection instruments. For this purpose, the sample size obtained

was 400 initially but it was constricted to 211 due to COVID-19 Pandemic in March 2020.

A purposive sampling technique was employed. The study was conducted on the both North and South campus of the University from February 2020 to August 2020. The data collection was done online through a digital platform in the form of Google forms.

The distribution of the forms was independent of genders. Informed consent was taken from the participants. Initially, a pilot study (offline) was performed on 20 students of the University. After analysing the results, a modified pro forma was prepared. The students were introduced to the main objectives of the study and reassured that personal information would be kept confidential. The study used preventive measures taken by University students as the dependent variable and socio-demographic (age, sex, and marital status) and socio-economic variables as independent variables. The collected quantitative data were entered into a computer and analysed using SPSS version 20.0. During the process of analysis, frequencies and percentages of different variables were determined.

RESULTS

The total number of participants in this study was 211. Out of which 109 were female, 102 were male and nobody was transgender. Participants were divided into 3 age categories, most of them in the 21-25 age groups, with a total of 165 (56.9%). 207 (98.1%) respondents were aware of term safe sex along with their ways to practice it such as use of contraceptive (85.5%), be faithful to partner (37.7%) and abstinence (13%) (Table 1).

Table 1: Distribution of respondents according to their awareness of term safe sex and different ways to practice safe sex.

Awareness of term safe sex	N	%	Female (n=109)		Male (n=102)	
			Frequency	%	Frequency	%
Yes	207	98.1	107	98.2	100	98.0
Different ways to practice safe sex	n=207		n=107		n=100	
Uses of contraceptives like condoms	177	85.5	92	85.9	85	85.0
Be faithful to partner	77	37.2	37	34.6	40	40.0
Delay the sex (if 1, 2 and 4 is not possible)	39	18.8	20	18.7	19	19.0
Abstinence	27	13.0	15	14.0	12	12.0
Don't know	17	7.7	09	8.4	08	8.0

209 (99.1%) respondents were aware of HIV & AIDS followed by 138 (65.4%) respondents who were aware of Hepatitis B and 116 (55%) respondents who were aware of Gonorrhoea and Syphilis each, while least number of respondents 14 (6.6%) were aware about Molluscum contagiosum (Figure 1).

When respondents were asked about the things they would/wouldn't do with their new potential partner, 112 (53.1%) respondents said that it was very likely that they would discuss using a condom while having sexual intercourse while 16 (7.6%) were very unlikely to do that, 42 (19.9%) respondents were very likely to have both of them tested for HIV while 55 (26.1%) were very unlikely

to do that, 64 (30.3%) respondents were very likely to ask for monogamous relationship while 42 (19.9%) were very unlikely to do that, 109 (51.7%) respondents were very likely to insist on using a condom before having intercourse while 23 (10.9%) were very unlikely to do that (Table 2). When respondents were asked about their risk reduction perception, 135 (64%) respondents could refuse sex if they didn't have condoms followed by 58 (27.5%) who would tell a partner that they didn't want sex while 39 (18.5%) were unaware of it (Table 3).

Table 2: Distribution of respondents according to things they may/may not do with new potential sex partner.

Parameters	Very unlikely (%)	Very likely (%)
Discuss using a condom before having sexual intercourse	7.6	53.1
Ask if he/ she has used drugs intravenously (with a needle)	22.3	34.1
Try to guess if he/ she has been exposed to HIV	14.2	34.1
Have both of tests for HIV	26.1	19.9
Ask to have monogamous relationship	19.9	30.3
Take fewer precautions with someone who seems like the kind of person who would not be affected	19.9	20.9
Ask the person they have been tested for HIV	19.4	21.8
Insist on using a condom before having intercourse	10.9	51.7
Refuse sexual activity with partner who would not use a condom	10.0	34.1

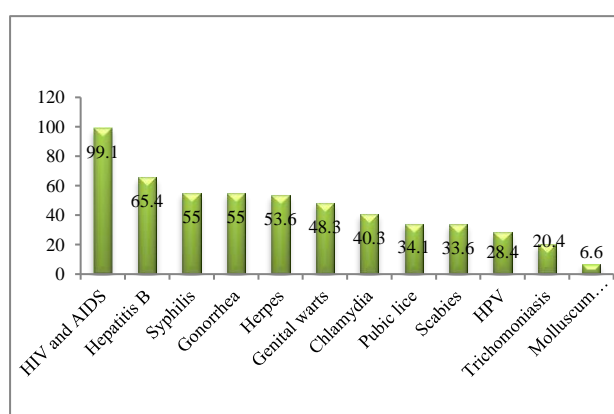


Figure 1: Awareness of respondents regarding STDs (%).

One hundred and fifty-one (71.6%) respondents specified mass media as their sources of awareness regarding preventive measures followed by 111 (52.6%) respondents specified peer group while only 38 (18%) respondents gained their information from their family members (Figure 2).

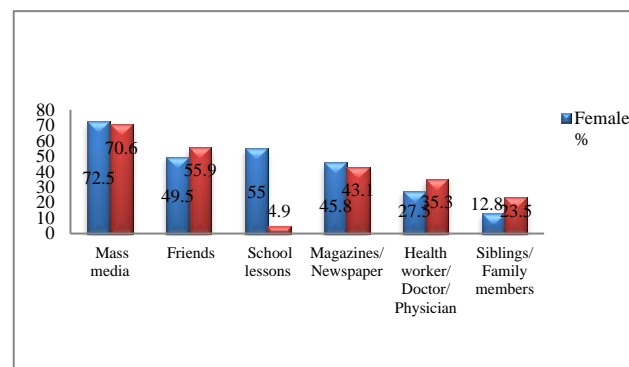


Figure 2: Sources of awareness regarding preventive measures.

DISCUSSION

Out of all the 211 respondents, 207 (98.1%) respondents were aware of term safe sex along with its ways of practices. When the study was compared to the study conducted by Chihurumnanya et al in Nigeria found only 43.9% respondents were aware of term safe sex along with its ways of practices.⁶ In our study, 62.1% respondents had practiced unsafe/unprotected sex (intercourse without condom) while the study from Nigeria reported that 29.6% respondents had unprotected sex.⁶

The study being conducted in completely different basis-cultural milieu could be the reason for differing results. When the awareness of respondents regarding STDs was analysed, 99.1% heard about HIV/AIDS, 65.4% heard about hepatitis B, 55% were aware about gonorrhoea and syphilis, 48.3% were about genital warts, 40.3% heard about chlamydia and 20.4% were aware about trichomoniasis. When this was compared with the similar kind of study conducted by Oluyemi in Nigeria, a very low number of participants were aware about gonorrhoea (64%), syphilis (22%), trichomoniasis (12%), genital warts (24%), HIV/AIDS (50%) and chlamydia (2%).⁷ In our study, the correct preventive measures reported by respondents were use of condoms (86.3%), avoid injected drugs (46.4%) and abstinence (19.9%). Again, when this was compared to the same study of Oluyemi conducted in Nigeria, the awareness regarding correct preventive measures of STDs reported were abstinence (45%), use of condoms (58%), and sterilized needles (19%) which were quite low in comparison to our study.⁷ Higher prevalence of STDs in African continent could be the reason for lower level of awareness in the Nigerian studies.

Table 3: Distribution of respondents according to their risk reduction perception.

Parameters	N	%	Female (n=109)		Male (n=102)	
			Frequency	%	Frequency	%
Can refuse sex if no condoms	136	64.4	79	72.5	57	55.9
Tell partner don't want sex	58	27.5	37	33.9	21	20.6
Can't use condom with an intimate partner	12	5.7	03	2.8	09	8.8
None of the above	16	7.6	03	2.8	13	12.7
Don't know	39	18.5	16	14.7	23	22.4

When sources of information regarding preventive measures were analysed, it was found that respondents acquired their mostly information from mass media (71.6%), friends (52.6%), school lessons (49.8%), magazines (44.5%) and doctors/health worker (31.3%). When the results were compared to the similar study conducted by Oluyemi, Muhammed in Kwara State, Nigeria, it was found that most of information was acquired from home (46%), school (94%), friends (25%), online and magazines (16%) and doctors/health workers (36%).⁷ The variation could be due to higher awareness strengthening drives involving popular media in India.

Limitations

The study design was cross-sectional so it was difficult to establish a temporal relationship. The study results cannot be generalized to the whole youth population as the target population was situated in the premises of only one University. Due to the nationwide lockdown for the containment of COVID-19, the sample size of the study was constricted.

CONCLUSION

This research highlights awareness levels regarding STDs and their awareness and control among young adults and its associations. The prevalence of young people studying in Panjab University aware of risky patterns of sexual behaviour is still not desirable. Lack of complete awareness regarding their diseases and the preventive measures, further translates into risky sexual behaviour of young adults. They are not quick to take steps to avoid or decrease the risk of STD transmission. In order to improve young people's awareness of STDs, sex education with a focus on positive attitudes and correct information to STDs should be included in the school/college curriculum.

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Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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