

# Randomized questionnaire based cross-sectional research study on awareness of sexually transmitted diseases amongst the general population between those who completed their high school education and those who have not

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## Abstract

**Introduction:** Sexually transmitted diseases (STDs) are a very important health challenge for adolescents. Educational level, especially sex education in school, prevents the adolescents falling prey to these diseases. **Objective:** To compare the awareness of STDs among general population with below and above high school qualification. **Materials and Methods:** A simple randomized, cross-sectional, questionnaire based study on the awareness of STDs on out-patients and in-patients of Saveetha Medical College and Hospital of 6 months duration was conducted. About 150 subjects participated in the study. **Results:** About 77.8% of those who completed schooling had good awareness of STDs. Statistical analysis had shown the formal education to high school level is statistically significant  $P = 0.0068$  ( $P < 0.05$ ) in people falling prey to the STDs. **Conclusion:** The initiation of formal education about sex education at the school level can improve the present status and lead to better prevention of STDs.

**Key words:** Adolescents, condoms, high school, sex education, sexually transmitted diseases

## INTRODUCTION

Sexually transmitted diseases (STDs) are a very important health challenge for adolescents. Many national and international governmental and non-governmental health agencies are running programs to reduce the incidence of these diseases. We can provide an insight to the reproductive and sexual health needs of adolescents by assessing their knowledge, attitude, and practice about these diseases.

The stage of life during which individuals reach sexual maturity is known as adolescence. It is the

period of transition from childhood to adulthood. Young adolescents constitute an equally large amount of those infected with STDs. “Teenagers not aware about STDs”, says about 10–15 teenagers seek treatment for STDs every month – TOI, Bangalore.

Over the period 1985–1996, a general decrease of gonorrhoea, syphilis, and chlamydia infections was noted in developed countries, both in the general population and among adolescents. From

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the mid-1990s however, increases in the diagnoses of STDs, in particular syphilis, gonorrhoea, and chlamydia have been reported in several European countries, especially among teenagers 16–19 years old.<sup>[1]</sup>

The declining age of first sexual intercourse has been preferred as one possible explanation for the increase in numbers of STDs. According to data from different European countries, the average age of first sexual intercourse has decreased over the last three decades, with increasing proportions of adolescents reporting sexual activity before the age of 16 years.

The reluctance of adolescents to use condoms is another possible explanation for the increase in STDs. Some surveys of adolescents have reported that condoms were found to be difficult to use by the sexually inexperienced, detract from sensual pleasure and also embarrassing to suggest. Furthermore, many adolescents do not perceive themselves to be at risk of contracting an STD.<sup>[2]</sup>

A study was conducted by Samkange-Zeeb *et al.*<sup>[3]</sup> to determine the awareness and knowledge of school-going adolescents in Europe of STDs, not only concerning HIV/AIDS, but also other STDs such as chlamydia, gonorrhoea, syphilis, human papillomavirus, and herpes simplex virus. Where possible we will identify differences in awareness and knowledge by key demographic variables such as age and gender, and how awareness has changed over time.

### Aim

To compare the awareness of STDs among general population with below and above high school qualification.

## MATERIALS AND METHODS

A simple randomized, cross-sectional study of 6 months duration was conducted on the awareness of STDs on out-patients and in-patients of Saveetha Medical College and Hospital. Written informed consent was obtained from the study subjects. About 150 subjects participated in this study.

In this study, inclusion criteria were people aged between 14 and 40 years available at the time of data collection and who were willing to participate in this study.

Exclusion criteria were people unwilling for the study, age group below 14 years and above 40 years and students undergoing courses in medical colleges.

Questionnaire method was used to assess the prevalence and knowledge regarding awareness about STDs [Questionnaire 1]. The questionnaire included sociodemographic details, and details based on awareness about STDs and contraceptive devices.

## RESULTS

About 150 subjects (males 63 females 87) participated in our study. Their age distribution was as follows - <18 years 2 persons, 18–30 years of age group constituted about 113, 31–40 years were about 20 subjects, and above 40 years were 15 [Figure 1]. In this, 77.8% male participants had good awareness and 22.2% had poor awareness about STDs. In females, 64.4% had good awareness and 35.6% had poor awareness about STDs [Figure 2]. Among the participants the age group 18-30 had the highest awareness (73.9%) while age group >40 yrs had the lowest awareness (46.7%) [Figure 3].

Out of those who had good awareness 73.3% had completed their schooling while 26.7% had not completed their school studies.

### Questionnaire 1

Question	Yes	No	Do not know
1. Have you heard about STDs?			
2. Do you know if any special groups are more often affected with STDs than others?			
3. Can you by looking at a person see if he/she is affected with STDs?			
4. Do any of your relatives or friends have STDs?			
5. Have you had any STDs?			
6. Would you want to know if you have any kind of STDs?			
7. Do you think you are entitled to know if your partner has/had any kind of STDs?			
8. If you get any STDs, do you think your partner is entitled to know?			
9. Is it common in the neighborhood you live in that people pay or are paid to have sex?			
10. Do you think that education about STDs should be taught in school?			
11. Are there any ways to protect yourself against STDs?			
12. Have you seen a condom?			
13. Do you know how to use a condom?			
14. Do you think that condoms are 100% protective from STDs?			
15. Who do you think has the biggest responsibility to make sure a condom is used during sexual intercourse?			
16. Are there medicines/treatments available to cure STDs?			
17. Would you like to learn more about STDs?			

STDs=Sexually transmitted diseases

In our study, it was observed that out of 150 participants, 77.8% of people who had completed schooling were aware about STDs and 54.9% of people who had not completed schooling were aware about STDs [Figure 4]. Out of 105 participants, who had good awareness about STDs, 77 (73.3%) had completed schooling while 28 (26.7%) had not completed their schooling as depicted in Table 1.

Out of 150 participants, only 1 participant had visited an STD clinic, and 45% of participants were willing to know more about STDs.

Statistical analysis of this study shows statically significant  $P = 0.0068$  ( $P < 0.05$ ). The Chi-squared value = 7.334 with 1 degree of freedom (with Yates correction).

### DISCUSSION

“Venereal disease is the most formidable enemy of the human race; an enemy entrenched behind the strongest human passions and deepest social prejudice.”

-Sir William Osler<sup>[4]</sup>

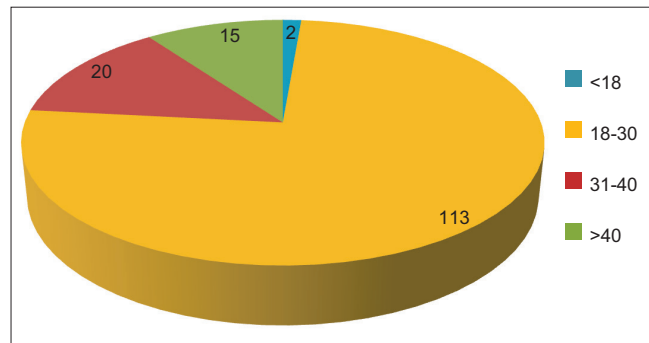


Figure 1: Age distribution

As Sir William Osler said, the STDs were the most formidable enemy of the human race. Knowing the enemy better will provide a great strength to win him. On this basis, a study was conducted to know the awareness about STDs among general population and also to know whether the effect of their educational status would help in his or her awareness of STDs. Though, approach to STD patients are very well taught,<sup>[5-8]</sup> the variations in their prevalence, transmission, morbidity, and sexual behavior make them difficult to be studied epidemiologically.<sup>[9]</sup>

The WHO estimate shows more than 333 million new cases occur with four common STDs (chlamydia, syphilis, gonorrhoea and trichomoniasis) each year.<sup>[10,11]</sup> Now-a-days there are at least 30 conditions

Table 1: Awareness and education levels

Participants	Good awareness	Poor awareness	Total
Completed schooling	77	22	99
Not completed	28	23	51
Total	105	45	150

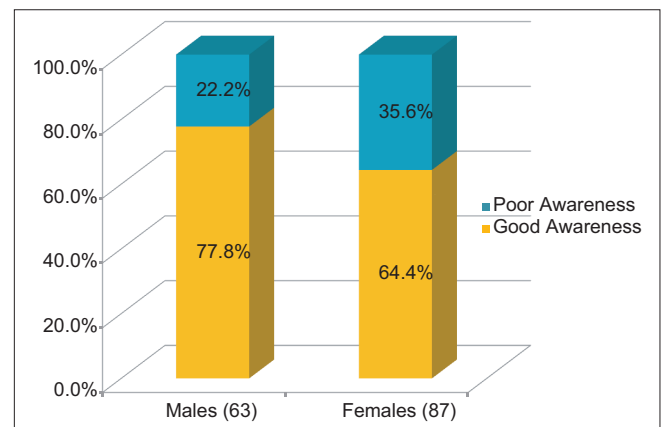


Figure 2: Sex-wise distribution

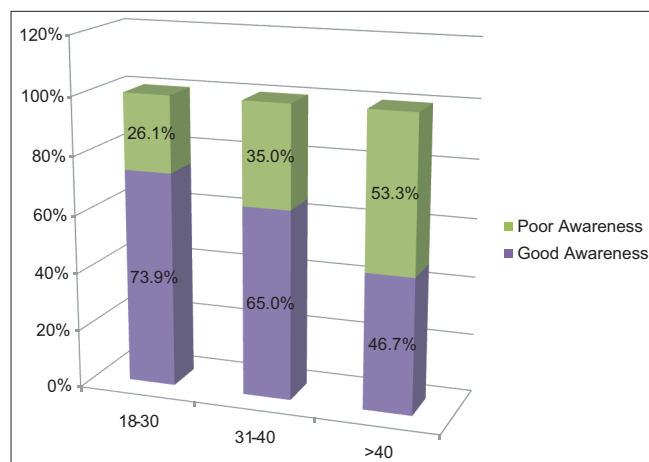


Figure 3: Age-wise results

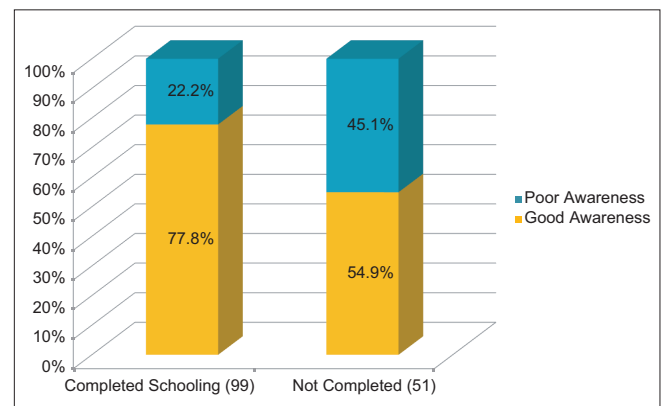


Figure 4: Completed schooling versus not completed schooling

transmissible through sexual contact.<sup>[12,13]</sup> Reproductive tract infections are extremely common in females.<sup>[14]</sup>

From this study, we have concluded that the awareness about STDs is significantly higher among those who have completed schooling than those who have not completed schooling.

Hence, it is evident that educational status has good influence on the awareness of STDs.

Though 77.8% of those who completed schooling had good awareness of STDs, the initiation of formal education about STDs at the school level can improve the present status and lead to better prevention of STDs.

## CONCLUSION

From this study, it is understood that the education level plays a major role in the awareness of STDs. By this we recommend that not only education to all, even sex education to be imparted to all for better prevention of STDs.

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## Conflicts of interest

There are no conflicts of interest.

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