

Knowledge, attitude, and practices regarding human immunodeficiency virus/acquired immune deficiency syndrome among higher secondary school teachers in Goa

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ABSTRACT

Background: The vulnerability of young people to human immunodeficiency virus (HIV)/acquired immune deficiency syndrome (AIDS) is a major public health issue in India. While many factors contribute to this increased vulnerability, lack of knowledge is one of the leading issues. It is of utmost importance that the teachers involved in educating the students are adequately trained to clear any misconceptions that may be prevalent among them. **Objectives:** The objective of the study was to assess the knowledge regarding HIV/AIDS and attitude toward people living with HIV (PLHIV)/AIDS among higher secondary school teachers in Goa. **Materials and Methods:** A total of 165 teachers teaching various streams of Class XI and Class XII were interviewed using a self-administered, semi-structured questionnaire to obtain details regarding personal characteristics and their knowledge, attitude, and practices regarding HIV/AIDS. **Results:** Of the 165 teachers, 78 (47.3%) were male and 87 (52.7%) were female. As much as 45 (22.3%) of the teachers felt that HIV and AIDS are the same. About 158 (95.8%) said that HIV/AIDS does not spread by casual contact and by living or working together with a person with HIV. However, 24 (14.5%) teachers believed that HIV/AIDS spreads by mosquito/insect bite. On inquiry about the attitude toward PLHIV/AIDS, 127 (77%) of the teachers would not hesitate in sitting next to a person with HIV/AIDS, whereas 54 (32.7%) would not share food with a person with HIV/AIDS. **Conclusions:** The level of knowledge regarding HIV/AIDS transmission and prevention among higher secondary school teachers is satisfactory. However, some misconceptions about HIV/AIDS transmission as well as discriminatory attitudes were observed among these teachers that call for concern and must be addressed promptly.


KEY WORDS: Human Immunodeficiency Virus; Acquired Immune Deficiency Syndrome; Knowledge; Attitudes and Practices; Teachers

INTRODUCTION

In India, there were 21 lakh people living with human immunodeficiency virus (HIV) in the year 2016. The people in the age group of 15–29 years comprise almost

25% of the country's population. However, they account for 31% of the total acquired immune deficiency syndrome (AIDS) burden.^[1] Thus, the vulnerability of young people to HIV/AIDS is a major public health issue in India. While many factors contribute to this increased vulnerability, lack of knowledge is one of the leading issues. Although AIDS-related deaths have declined over the past 15 years, adolescents living with HIV and particularly those who were born with HIV still struggle with treatment adherence.

Young people play an essential role in demand creation, linkages to care and uptake of services for HIV and sexual and reproductive health and rights. They are the backbone of

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community-based demand creation which enhances the overall response to HIV and benefits the young people themselves.^[2]

Studies have showed a direct relationship between teachers' knowledge of HIV/AIDS and positive or supportive attitudes toward HIV/AIDS.^[3] To improve the level of knowledge and reduce misconceptions among students regarding HIV/AIDS, it is necessary to reach the majority of the students before they make major life choices.^[4] For this, it is utmost important that the teachers involved in educating the students are adequately trained in educating the students regarding HIV/AIDS and to clear any misconceptions that may be prevalent among the students. Furthermore, all schools are required to train some of their teachers in the national HIV/AIDS education training, and they, in turn, share this information and awareness with the adolescents in schools. The current study was undertaken to assess the knowledge regarding HIV/AIDS and attitude toward people living with HIV (PLHIV)/AIDS among higher secondary teachers in Goa with the aim to make necessary recommendations for planning HIV/AIDS training programs for the teachers.

MATERIALS AND METHODS

The present school-based cross-sectional study was conducted in various higher secondary schools across Goa. A total of 165 teachers teaching various streams of Class XI and Class XII were interviewed using a self-administered, semi-structured questionnaire to obtain details regarding personal characteristics and their knowledge, attitude, and practices (KAP) regarding HIV/AIDS. The study was conducted over a period of 2 months (March 2019–April 2019). Institutional Ethics Committee (IEC) approval was obtained prior to the commencement of the study. Informed written consent was obtained from respective school principals before interviewing the teachers.

The sampling method used was purposive sampling as all the teachers of the randomly selected schools who were available at the time of visit were included in the study. Strict confidentiality of their responses was assured before their interview. Teachers who did not give consent and those who were not available at the time of the visit were excluded from the study.

Data were entered and analyzed using IBM Statistical Package for the Social Sciences (SPSS) version 22. Ethical approval was obtained from the IEC prior to commencement of the study.

RESULTS

Of the 165 teachers, 78 (47.3%) were male and 87 (52.7%) were female. Table 1 shows the knowledge of the higher secondary teachers regarding HIV/AIDS. All the teachers

Table 1: Knowledge of higher secondary teachers regarding HIV/AIDS

Knowledge	n	Percentage
Aware about HIV/AIDS	165	100
Full form of AIDS	140	84.8
Full form of HIV	107	64.8
AIDS and HIV are not the same	45	22.3
People with HIV/AIDS do not always have signs and symptoms	90	54.5
HIV/AIDS is caused by a virus	142	86.1
HIV/AIDS cannot be cured	58	35.2
HIV/AIDS can be treated	134	81.2
No vaccine available for HIV/AIDS	83	50.3
Does not spread by casual contact and by living/working together	158	95.8
Does not spread by mosquito/insect bite	131	79.4
Use of condom during sexual intercourse prevents HIV/AIDS	150	90.9

HIV: Human immunodeficiency virus, AIDS: Acquired immune deficiency syndrome

interviewed were aware of the terms HIV and AIDS. A high proportion of the teachers, i.e., 140 (84.8%) knew the correct full form of AIDS, whereas 107 (64.8%) of the teachers were aware of the full form of HIV. As much as 45 (22.3%) of the teachers were not aware that HIV infection is not the same as AIDS. When the teachers were asked if patients with HIV infection always have signs or symptoms, majority, i.e., 90 (54.5%) responded correctly, whereas the rest, i.e., 75 (45.5%) were either incorrect or unaware.

A high number of teachers, i.e., 142 (86.1%) knew that HIV/AIDS is caused by a virus. Only a small number of teachers, i.e., 58 (35.2%) knew that HIV/AIDS cannot be cured, whereas 134 (81.2%) knew that HIV/AIDS can be treated. When inquired about HIV vaccine, 83 (50.3%) said that there is no vaccine available against HIV/AIDS, whereas 42 (25.5%) said that they did not know about vaccine against HIV/AIDS.

A majority of the teachers, i.e., 158 (95.8%) said that HIV/AIDS does not spread by casual contact and by living or working together with a patient with HIV. However, 24 (14.5%) believed that HIV/AIDS spreads by mosquito/insect bite, whereas 10 (6%) did not have any knowledge regarding spread of HIV/AIDS by mosquito/insect bite. A majority, i.e., 150 (90.9%) said that the use of condom during sexual intercourse is effective in prevention of HIV/AIDS.

Table 2 shows the attitudes and practices of the higher secondary teachers regarding HIV/AIDS. Of all the teachers interviewed, 30 (18.2%) of them knew at least one person living with HIV/AIDS. On inquiry about attitude toward

PLHIV/AIDS, 127 (77%) of the teachers would not hesitate in sitting next to a person with HIV/AIDS, whereas 54 (32.7%) would not share food with a person with HIV/AIDS. Only 113 (68.5%) of the teachers felt that people with HIV/AIDS did not deserve to get infected with HIV, whereas 52 (31.5%) either felt they deserved it or did not respond to the same.

On inquiry about health education about HIV/AIDS, only 112 (67.9%) of the teachers received health education or training with regards to HIV/AIDS. Of these, only 25 (22.3%) were informed about the link between HIV and reproductive tract infections.

Table 3 shows sources of information regarding HIV/AIDS among the teachers interviewed. It is seen that the most common source of information was newspaper reported by 86 (52.1%) of the teachers, followed by social media reported by 83 (50.3%) of the teachers. The least common source of information was nurse reported by only 5 (3%) of the teachers.

DISCUSSION

KAP studies are useful tools prior to any intervention to assess the extent to which individuals or communities are ready to adopt risk-free behaviors. To summarize, of the 165 teachers, 78 (47.3%) were male and 87 (52.7%) were female. As much as 45 (22.3%) of the teachers felt that HIV and AIDS

are same. About 158 (95.8%) said that HIV/AIDS does not spread by casual contact and by living or working together with a person with HIV. However, 24 (14.5%) believed that HIV/AIDS spreads by mosquito/insect bite. On inquiry about attitude toward PLHIV/AIDS, 127 (77%) of the teachers would not hesitate in sitting next to a person with HIV/AIDS, whereas 54 (32.7%) would not share food with a person with HIV/AIDS.

In the present study, all the teachers (100%) had heard about HIV/AIDS. A significant proportion of teachers (84.8%) were aware of the full form of AIDS, whereas 64.8% knew the full form of HIV. In order to educate the students, it is vital that the teachers themselves are aware of the basic information regarding HIV/AIDS. In our study, only 22.3% of the teachers were aware that HIV and AIDS are not the same. A study done by Trivedi^[5] in India revealed that 15% of the study participants felt that HIV and AIDS are one and the same. About a third of the teachers (35.2%) thought that there exists a cure for HIV/AIDS. In contrast, in a similar study among trainee teachers in Karnataka by Agrawal *et al.*^[6] revealed that 6.3% of the teachers felt that there is a cure for HIV/AIDS. The poor knowledge regarding cure for HIV/AIDS may be due to the lack of curriculum on HIV/AIDS in the training program for teachers in India. A few of the teachers (54.5%) were aware that PLHIV/AIDS do not always have signs and symptoms of the illness, whereas only about half the teachers (50.4%) were aware that no vaccine is currently available for HV/AIDS. In contrast, study done by Nur^[7] among school teachers in Turkey reported that 70.4% of these teachers knew that HIV/AIDS does not usually show signs and symptoms of the illness, whereas very few teachers (12.6%) believed that there exists a vaccine for prevention of HIV/AIDS. Such a finding may also be due to inadequate training of teachers regarding HIV/AIDS. Another study done in Karnataka by Agrawal *et al.*^[6] reported that 14% of the teachers thought that there is a vaccine to prevent HIV/AIDS. On inquiry about prevention, a significant number of teachers (90.9%) correctly said that condom use during sexual intercourse prevents transmission of HIV/AIDS. A study by CK Nubed and Akoachere^[8] in Cameroon showed a similar finding. In the present study, majority (95.8%) correctly responded to modes of transmission and said that HIV/AIDS does not spread by casual contact and by living/working together with people with HIV/AIDS. This may be due to the extensive IEC activities conducted by our government in terms of short movies and advertisements regarding HIV/AIDS. This finding is also similar to a study done by Kumar *et al.*^[9] among school teachers in Rajasthan and Lohmann *et al.*^[10] in Belize, Central America. A majority of the teachers (86.1%) knew that HIV/AIDS is caused by a virus. A significant number (79.4%) knew that HIV does not spread by mosquito/insect bite. A similar finding is reported by Mazloomi and Baghianimoghadam^[11] in a similar study done among school teachers in Yazd, Iran. A good number of teachers (90.9%) were aware that condom use during

Table 2: Attitudes and practice regarding HIV/AIDS among higher secondary teachers

Attitudes and practices	n	Percentage
Know at least one person living with HIV/AIDS	30	18.2
Hesitate in sitting next to a person with HIV/AIDS	38	23.0
Would not share food with a person with HIV/AIDS	54	32.7
PLHIV/AIDS do not deserve to get infected with HIV	113	68.5

HIV: Human immunodeficiency virus, AIDS: Acquired immune deficiency syndrome, PLHIV: People living with HIV

Table 3: Sources of information regarding HIV/AIDS among higher secondary teachers

Source of information	n	Percentage
Newspaper	86	52.1
Social media	83	50.3
Magazines	52	31.5
Colleagues	36	21.8
Doctor	26	15.8
NGO	23	13.9
Health worker	22	13.3
Nurse	5	3.0

sexual intercourse prevents HIV/AIDS. A study done in Chatterjee *et al.*^[12] in North Calcutta showed that only 16.2% of the teachers had clear knowledge regarding transmission and prevention. A good number (23%) of teachers said that they would hesitate in sitting next to a person with HIV/AIDS. In a similar study done by Nur^[7] among Turkish school teachers, it was seen that 40.1% of the teachers would not sit next to a person with HIV/AIDS. Only 32% of the teachers said that they would not share food with person living with HIV/AIDS. A study done by Nur^[7] in Turkey revealed that 22.2% of the teachers believed that sharing a meal with a person with HIV/AIDS can spread the infection. The difference in study findings may be due to a more discriminatory attitude of people toward PLHIV/AIDS that adds to the stigma associated with it. Furthermore, a good number of teachers (68.5%) felt that PLHIV/AIDS does not deserve to get infected with HIV. In contrast, a study done by Nubed and Akoachere^[8] in Cameroon showed that about half of the respondents had negative attitude toward PLHIV/AIDS. Discriminatory attitudes toward PLHIV/AIDS are an obstacle for the efficient implementation of awareness programs and voluntary testing and counseling for HIV. Thus, sustained education of young people on HIV/AIDS is crucial to the elimination of discriminatory attitudes toward PLHIV. In our study, the most common source of information was newspaper (52.1%), followed by social media (50.3%). A study done by Mazloomi and Baghianimoghadam^[11] in Yazd, Iran, among school teachers reported that radio and television were the common source of information regarding HIV/AIDS. This is probably because of the recent increase in the use of Internet and social media among younger people.

Since no such study was done in the state of Goa, this study helps gauge the level of knowledge of the higher secondary school teachers in Goa regarding HIV/AIDS and their attitude toward PLHIV/AIDS. The study had a few limitations apart from its cross-sectional design. The study did not have an appropriate sampling method as only those teachers who were available at the time of the school visit were included in the study. Furthermore, the study included a few randomly selected and easily accessible schools from the state of Goa. Hence, the teachers included in the study may not truly represent the study population.

CONCLUSIONS

The level of knowledge regarding HIV/AIDS transmission and prevention among higher secondary school teachers is satisfactory. However, some misconceptions about HIV/AIDS transmission as well as discriminatory attitudes were observed among these teachers that call for concern and must be addressed promptly. Appropriate health education should

be reinforced in order to correct the misconceptions prevalent among the teachers and to encourage positive attitudes toward PLHIV/AIDS.

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