Research Article

A study on awareness of HIV/AIDS and attitude toward people living with HIV/AIDS among engineering college students of Nellore district, Andhra Pradesh, India

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Received: 7 March 2016
Accepted: 6 April 2016

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ABSTRACT

Background: AIDS is one among the complex health problems of today’s world, in the year 2014 there were 36.9 million people living with HIV. Since 2000, around 38.1 million people have become infected with HIV and 25.3 million people have died of AIDS-related illnesses. India has the third highest number of estimated people living with HIV in the world. Though the overall trend of HIV in India shows a declining trend, the HIV infected cases among adolescent age group in India is on the rise. The aim is to assess the knowledge regarding HIV/AIDS among engineering students and to assess the attitude of students towards people infected with HIV/AIDS.

Methods: Cross sectional study done among 500 college students from an engineering college in Nellore district from August 2015 to September 2015. The selection of study subjects was done using convenience sampling. After consenting, each participant answered a questionnaire comprising of questions pertaining to awareness and attitude of people toward PLHA.

Results: About 54% of the participants were aware that HIV can spread through body fluids such as blood, semen/vaginal fluid and breast milk and 58% knew that HIV can spread by having sex with an infected partner. About 37% of the students answered that they would not sit next to a HIV infected person on a bus and 59% of the students responded that they would divorce their spouse if they happen to know that (he/she) is infected.

Conclusions: Though the study population is aware of the disease HIV/AIDS, complete knowledge about the disease, its modes of spread and protective measures is not satisfactory. It is observed that stigmatization and tendency to discriminate people living with HIV/AIDS is still present and there is no complete acceptance of positive cases by the study subjects.

Keywords: HIV awareness, Adolescent college students, Attitude toward PLHA

INTRODUCTION

AIDS is one among the complex health problems of today’s world. In the year 2014, there were 36.9 million people living with HIV in the world. Since 2000, around 38.1 million people have become infected with HIV and 25.3 million people have died of AIDS-related illnesses. Around 2 million people became newly infected with HIV in 2014 and 1.2 million people died from AIDS-related causes worldwide.1 India has the third highest number of estimated people living with HIV in the world. According to the HIV Estimations 2012, the estimated
number of people living with HIV/AIDS in India was 20.89 lakh, with an estimated adult (15-49 age group) HIV prevalence of 0.27%. Though the overall trend of HIV in India shows a declining trend, the HIV infected cases among adolescent age group in India is on the rise.

The report 'adolescents under the radar in the Asia-Pacific AIDS Response', published by the Asia-Pacific Inter-agency task team on young key populations, which includes UNICEF and the Joint UN Programme on HIV/AIDS warned that the AIDS epidemic cannot be ended as a public health threat by 2030 without tackling the issue of adolescents.

In 2014, 220,000 adolescents aged 10-19 were estimated to be living with HIV in Asia and the Pacific. India is among the 10 countries in the region accounting for 98% of those aged 10 to 19 living with HIV. The other countries are Cambodia, China, Indonesia, Myanmar, Pakistan, Papua New Guinea, the Philippines, Thailand and Vietnam. According to an UN report this region is facing a "hidden epidemic" of HIV among adolescents. Prevalence is particularly high in large cities like Mumbai, Hanoi, Jakarta, Bangkok, Chiang Mai and other urban areas. 3

AIDS will not be halted until young people have the knowledge and capacity to avoid behaviours that put them at risk. The urgency of making young adults across the country aware of the routes of infection, methods of protection and the need to acceptance of positive cases is of extreme importance. Thus the present study was designed and conducted with an objective of assessing the knowledge of HIV among adolescent engineering college students and their attitude toward people living with HIV.

METHODS

This is a cross sectional study done among 500 engineering college students from an engineering college in Nellore district, Andhra Pradesh from August 2015 to September 2015.

The selection of study subjects was done using convenience sampling technique and data collection was done between August to September 2015 from 500 students present on concerned days from different classes.

Each subject was individually approached and an informed consent was obtained. The respondents were assured of confidentiality.

A pre-tested semi-structured questionnaire comprising questions on awareness and attitude of people toward PLHA was used. Questionnaire contained questions regarding the organism, modes of spread, modes by which they do not spread, prevention, attitude toward PLHA and acceptance of positive cases. Data were entered on and analyzed using Microsoft Excel spread sheet. Descriptive statistics were used and results were expressed as proportions.

RESULTS

Of the 500 participants, 311 participants were females (62.2%) and 189 participants (37.8%) were males. The mean age of the participants who participated in the study was 18.4±0.92.

Responses to questions were analysed under two broad categories, knowledge regarding the disease and attitude toward people living with HIV.

Most of the study subjects (84.8%) had heard about HIV/AIDS where as 15.2% of the participants had not heard of it before. About 20% of the students felt that there is no difference between HIV and AIDS and 7% did not have any idea if there is any difference between HIV and AIDS (Table 1).

About 54 % of the participants were aware that HIV can spread through body fluids such as blood, semen/vaginal fluid and breast milk.

About 58% knew that HIV can spread by having sex with an infected partner, 13.6% of the subjects were of the opinion that HIV can spread by sharing food and 23.2% of the subjects felt that HIV can spread by hugging an infected person.

About 42% of the subjects were aware that usage of condom would help prevent the spread of HIV and 26% of the subjects felt that usage of OCP would help prevent the spread of HIV.

Among the respondents 19% felt that the usage of copper T would prevent AIDS and 15% of the individuals did not have any idea about what would prevent the spread of HIV (Table 1).

Regarding the attitude toward people living with HIV about 37% of the subjects answered that they would not sit next to a HIV infected person on a bus and 59% of the students responded that they would divorce their spouse if they happen to know that (he/she) is infected.

About 32% of the students felt that they would stop going to the grocery store if they happen to know that the owner is infected and 37% answered that they would suspend an infected maid.

About 41% of the subjects felt that HIV infected children should go to a separate school and 51% felt that HIV infected people should be isolated from the society (Table 2).
### Table 1: Knowledge regarding HIV/AIDS.

| Question                                                                 | No    | %    |
|--------------------------------------------------------------------------|-------|------|
| Have you Heard of HIV/AIDS?                                              | 424   | 84.8 |
| No                                                                       | 76    | 15.2 |
| Is there any difference between HIV and AIDS?                            |       |      |
| Yes                                                                      | 356   | 71.3 |
| No                                                                       | 109   | 21.7 |
| No idea                                                                  | 35    | 7    |
| HIV can spread through body fluids such as?                              |       |      |
| Blood                                                                    | 149   | 29.8 |
| Breastmilk                                                               | 37    | 7.4  |
| Semen/vaginalfluid                                                      | 43    | 8.6  |
| All                                                                      | 271   | 54.2 |
| Knowledge regarding prevention                                           |       |      |
| Using OCP can help prevent HIV/AIDS                                      | 139   | 27.8 |
| Using Copper-T can help prevent HIV/AIDS                                  | 95    | 19   |
| Using condom can help prevent HIV/AIDS                                    | 193   | 38.6 |
| No idea                                                                  | 73    | 14.6 |
| Can HIV be transmitted from mother to child during pregnancy?            |       |      |
| Yes                                                                      | 256   | 51.2 |
| No                                                                       | 186   | 37.2 |
| No idea                                                                  | 58    | 11.6 |
| Can sharing needles among IV drug users spread HIV/AIDS?                 |       |      |
| Yes                                                                      | 285   | 57   |
| No                                                                       | 140   | 28   |
| No idea                                                                  | 75    | 15   |
| Which are the high risk groups of HIV/AIDS?                              |       |      |
| Labour migrants                                                          | 39    | 7.6  |
| Truck drivers                                                            | 56    | 11.6 |
| Commercial sex workers                                                   | 245   | 49   |
| All                                                                      | 160   | 31.7 |
| Misconceptions about HIV/AIDS                                             |       |      |
| Sharing food spreads HIV/AIDS                                             | 68    | 13.6 |
| Using public toilets spreads HIV/AIDS                                     | 58    | 11.6 |
| Hugging an infected person spreads HIV/AIDS                               | 116   | 23.2 |
| Mosquito bite can spread HIV/AIDS                                         | 178   | 35.6 |

### Table 2: Attitude toward people living with HIV/AIDS.

| Question                                                                 | No    | %    |
|--------------------------------------------------------------------------|-------|------|
| Will you sit next to a HIV infected person in bus?                       | 220   | 44   |
| No                                                                       | 280   | 56   |
| Will you suspend an infected maid?                                       |       |      |
| Yes                                                                      | 185   | 37   |
| No                                                                       | 315   | 63   |
| Will you divorce your spouse if you happen to know if he/she is infected |       |      |
| With HIV/AIDS                                                             | 295   | 59   |
| No                                                                       | 205   | 41   |
| Should HIV infected children have a separate school?                     |       |      |
| Yes                                                                      | 205   | 41   |
| No                                                                       | 295   | 59   |
| Should HIV infected people be isolated from the society?                 |       |      |
| Yes                                                                      | 251   | 50.2 |
| No                                                                       | 249   | 49.8 |
DISCUSSION

In the present study majority of study subjects had heard of HIV/AIDS. A community based cross sectional study done in Gujarat, India by Yadav BS et al among youths aged 12-24 years to find out the awareness of HIV/AIDS among rural youth reported a similar result 6. Most of the study subjects knew that HIV and AIDS are different and they both are not one and the same and their knowledge in this regard was satisfactory. A similar study done on school going adolescents by Singh A et al to test their awareness regarding HIV/AIDS in Banaskantha district of Gujarat, India reported a lesser knowledge when compared to the present study 5. The reason for a lesser knowledge when compared to our study could be due to the age as school going adolescents are younger study subjects when compared to college students.

Majority of the study subjects displayed a good knowledge regarding the mode of spread of HIV (through body fluids). A cross sectional study done among students of a pre university college at Moodbidri in the state of Karnataka, India done by Jindal S reported similar results as the present study 6. The knowledge regarding spread of HIV/AIDS among intravenous users by sharing needles was satisfactory in our study. A study done by Lal P et al among senior high school going children in Delhi also reported a similar result 3. It was observed in the present study that though the knowledge regarding the disease and prevention about HIV/AIDS is satisfactory yet some misconceptions about HIV/AIDS still exist amongst the study population. A study done by Yadav BS et al among youths aged 12-24 years to find out the awareness of HIV/AIDS among rural youth reported similar results 6.

Regarding the attitude toward people living with HIV, results of the present study shows that attitude of majority of the study subjects toward people living with HIV is discriminatory. Unwillingness to accept HIV positive cases could be due to misconceptions about the disease and not many educational programs are in place which are targeted toward adolescent and youth population. Singh A et al in their study also reported that their subjects were having a discriminatory attitude to some extent toward HIV infected people 5.

There are a few strengths and limitations of this study. Firstly, this was a study done among college students as there are only a very few studies done on HIV/AIDS awareness in this group. Secondly, the sample size was 500 which is a fairly large sample size. This is a study done in a single engineering college and hence it is not a true representative sample of all the engineering colleges in India.

CONCLUSION

Burden of HIV/AIDS in the adolescent age group is high in most of the developing countries and in India as well. In the present study, though the study population is aware of the disease HIV/AIDS, complete knowledge about the disease, its modes of spread and protective measures is not satisfactory. Several misconceptions about the disease do exist amongst the study population. It is observed that stigmatization and tendency to discriminate people living with HIV/AIDS is still present and there is no complete acceptance of positive cases by the study subjects.

Recommendations

There is a need to provide essential knowledge about HIV/AIDS to students from an early stage. Sessions on health issues, focus group discussions especially on HIV can be conducted in colleges on a regular basis. Issues on HIV/AIDS must be kept alive in the minds of the young as proper knowledge will not only protect them but also help to reduce stigma. Programs meant to create psychosocial support for PLHA should be put in place Support groups like NGO and institutions meant to take care of PLHA should be established and encouraged. Public enlightenment programs on HIV/AIDS should be instituted.

ACKNOWLEDGEMENTS

I would like to express my heartfelt gratitude to my colleague Dr.S.Sathiyanarayanan, Assistant professor, Department of Community Medicine, SRM Medical College and RC for his suggestions for the betterment of the study.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee

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