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AWARENESS, ATTITUDES, AND BELIEFS OF THE GENERAL PUBLIC TOWARDS HIV/AIDS IN HYDERABAD, A CAPITAL CITY FROM SOUTH INDIA

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ABSTRACT

CONTEXT: Information is the first step in human immunodeficiency virus (HIV) prevention. Ignorance about the disease and how the virus is transmitted can generate fear and prejudice towards those who are infected. AIM: To assess the awareness, attitudes, and beliefs of the general public toward HIV/AIDS in Hyderabad, the capital city of Andhra Pradesh. SETTING AND DESIGN: A cross-sectional study conducted for a period of 2 months in 2004 on 800 individuals living in Hyderabad. MATERIALS AND METHODS: A survey was conducted with a questionnaire titled 'General Population Behavioral Surveillance Survey.' The survey used a 5-part, 65-item questionnaire eliciting information about the knowledge of HIV (10 items), modes of transmission (20 items), ways of prevention (10 items), society's attitude toward HIV (15 items), and finally evaluation of Government's measures (10 items). RESULTS: Approximately 80.63% (645/800) of the study population were sketchily aware of HIV/AIDS, but had incorrect perceptions about the mode of transmission or prevention. Despite the vigorous outreach programmes, which the government and other organizations had carried out in the city, many people had several misconceptions about HIV or about people living with HIV/AIDS. CONCLUSION: As it was observed that awareness was more among the literates, the Government and Health educators should provide tailormade education programmes for those at the lower education levels.

KEY WORDS: attitudes; awareness; intervention programmes; literacy

AIDS is spreading in India at an alarming rate, fueled by an increasingly casual attitude towards sex, coupled with a tradition of public silence and reluctance to grasp the issues. There are fears here that the number of human

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Correspondence V Lakshmi Department of Microbiology Nizam's Institute of Medical Sciences Punjagutta, Hyderabad – 500 082 India E-mail: s_talasila@hotmail.com immunodeficiency virus (HIV)/AIDS cases could rise to such an extent that India overtakes South Africa as the world's most severely affected country.^[1] In India, Andhra Pradesh has the second highest number of recorded cases of HIV. Hyderabad, the capital city of the State of Andhra Pradesh, in 2004 had recorded 34.5% HIV positive cases in the high-risk group (include homosexual or heterosexual individuals, intravenous drug users who share needles, and infants born to mothers with HIV) and 0.75% in the low-risk group.^[2] Access to therapy is important, but it is no panacea to the crisis. Even a miracle drug may not overcome the stigma and address some of the most painful parts of HIV infection – prejudice, rejection, hurt, ostracism, etc. The stigma around the disease could be attributed to cultural or religious beliefs or a lack of education. Increasing number of people are infected with growing drug abuse problems, prostitution, low levels of awareness towards the infection, etc.

Information, education, and communication (IEC) are the major steps in HIV prevention. They help in fighting fear, prejudice, and myths. Ignorance about the disease and how the virus is transmitted can generate fear and prejudice towards those who are infected. Recent studies and estimates suggest that effective preventive strategies could prevent approximately 29 million new HIV infections worldwide by 2010.

The focus on HIV brought the need to assess the awareness levels of the general population and the society's perception towards HIV/AIDS and also for the evaluation of government's measures. Earlier most of the studies taken up had concentrated on high-risk group or some single-key population such as school children/ adolescents,^{[3]-[6]} prisoners,^{[7],[8]} rural or urban population,^[9] women,^{[10],[11]} health care workers,^[12] medical entrants,^[13] drivers,^[14] etc. As very few studies were taken up to assess the awareness levels in general population, but were not from the state of Andhra Pradesh,^{[15],[16]} we took up the following study in Hyderabad, the capital city of Andhra Pradesh with the aim to assess the awareness, attitudes, and beliefs of the general public towards HIV/AIDS.

MATERIALS AND METHODS

The study was essentially a survey conducted between February 2004 and March 2004 with the questionnaire titled 'General Population Behavioral Surveillance Survey.' Hyderabad has an estimated population of 40 lakhs. As male to female ratio in Hyderabad is 1000 : 945,^[17] the sample size of 800 was distributed as 412 males and 388 females.

The age distribution of the population of Hyderabad is 35.6% below 16 years, 25.7% between 16 and 29 years, and 38.7% for 30 years or more age group. Taking into consideration that children below 14 are not included in the study, 195 males and 185 females of age group 14 to 29 years and 217 males and 203 females of >30 years age were included in the study.

Literacy rate of population in Hyderabad is 79% and illiterates are 21%. Accordingly, literacy and occupational distribution was based on the figures of the respective percentages in the population of Hyderabad.

As the sample size in each group was fixed before the survey, the target population and the places of study were selected in such a manner where people come from all the categories and are of all required age and occupational groups. For that, samples were taken from hospitals, schools, colleges, offices, factories, labor areas, and apartments/colonies located at different places in Hyderabad. Demographic profile of the study population is given in Table 1.

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Table 1: Demographic profile of the study population

| Distribution | No. of males | No. of females | Total | |
|---|--------------|----------------|----------|--|
| | 412 | 388 | 800 | |
| Age | | | | |
| 14-29 years | 195 | 185 | 380 | |
| >30 years | 217 | 203 | 220 | |
| Mean age | 31 years | 26 years | 29 years | |
| Literacy | | | | |
| Illiterates | 62 | 103 | 165 | |
| Primary education | 117 | 94 | 211 | |
| Secondary education | 118 | 94 | 212 | |
| Graduates/PG | 115 | 97 | 212 | |
| Occupation | | | | |
| Agriculture/laborers/industrial workers | 4 | 2 | 6 | |
| Service/business/unskilled workers | 195 | 37 | 232 | |
| Students | 107 | 103 | 210 | |
| Housewives/unemployed/casual laborers | 106 | 246 | 352 | |

The survey used a 5-part, 65-item questionnaire eliciting information about the knowledge of HIV (10 items), modes of transmission (20 items), ways of prevention (10 items), society's attitude towards HIV (15 items), and finally evaluation of government's measures.

The questionnaire was constructed by combining the questions or statements from the General Population Behavioral Surveillance Survey guestionnaire and the Voluntary Counseling and Testing Center (VCTC) questionnaire, both pretested and validated by the National AIDS Control Organization (NACO). Both these questionnaire were obtained from the Andhra Pradesh State AIDS control society (APSACS). The questionnaire was translated by the interviewers into the local languages, i.e., Telugu and Hindi, for those individuals who did not know English, and then back translation was done. Care was taken to see that no one missed out from answering any item. The questionnaire was pilot tested on 25-target population who were later again included in the actual study after being retested on the modified questionnaire. Anonymity and confidentiality were maintained and ethical clearance was obtained from the institute's ethical committee. Each correct answer was given one point and both incorrect answer and 'do not know' response were not given any points. Data were fed into Epi-info, analyzed, and estimates of all the key variables and the indicators were calculated. The data were evaluated by chi-square test and a *P*-value of <0.05 was considered statistically significant. Odds ratios at 95% confidence intervals were also calculated.

The data collected were analyzed where the *P* value was calculated by Mantel Haenszel method from Epi-info.

RESULTS

Our study has shown that 89.32% (368/412) of males were more aware of HIV/AIDS compared to 71.39% (277/388) of females.

The gender difference in the awareness of HIV/AIDS can be attributed to the literacy rate. Because females of Hyderabad are less literate than males,^[17] they are more ignorant of the virus. This clearly stresses the need of creating more awareness among the females.

Approximately 88.35% (561/635) of literates were aware of the infection compared to the awareness of infection in 12.73% (21/165) of persons with low literacy. Even these 12.73%, who were aware of the infection, had received their information from the television, radio, posters, from work places, or through interpersonal communication. Therefore, to make persons with low-literacy rates more aware of infection, concentration should be placed on the measures, which need no formal education.

It was seen from the survey that different occupations have different awareness levels. The highest level of 97.62% (205/210) awareness was seen in students followed by 83.62% (194/232) of people in service, business or skilled/unskilled works, and the lowest of 69.89% (246/352) was seen in housewives, cultivators, agriculture laborers, and industrial workers. One major explanation for the high awareness of students is that they have been introduced to HIV/AIDS as a school curriculum. Another reason is that they are the class of general population who are more exposed to mass media, interpersonal communication, have access to various types of study material, etc. The housewives, casual laborers, agricultural laborers who have less awareness of HIV/AIDS are the ones who are either illiterates or have not been exposed to any information. This again stresses the importance of creating awareness among the illiterates and laborers.

It was observed from the study that the 97% subjects (370/380) in the age group of 14 to 29 years were more aware of HIV compared

Table 2: Knowledge of HIV/AIDS in the general public (n = 800)

| Questions mentioned in the section 1 | P value | Odds ratio (OR) | 95% CI † range | Responses i Yes | n actual numb No | er (percentage) Do not know |
|---|---------|--------------------|-------------------|--------------------|---------------------|--------------------------------|
| Have you ever heard of HIV or AIDS | <0.001 | 17.32 | 13.41–22.36 | 645 (80.63) | 155 (19.38) | _ |
| Have you ever heard of STD | 0.230 | 1.13 | 0.92-1.38 | 412 (51.50) | 388 (48.50) | - |
| If a person has STD, is he/she more | | | | | | |
| likely to get HIV | <0.001 | 0.38 | 0.31-0.47 | 306 (38.25) | 85 (10.63) | 409 (51.13)* |
| Just by looking at a person can you say | | | | | | |
| that a person is infected with HIV/AIDS | 0.271 | 1.12 | 0.91–1.36 | 411 (51.38)* | 234 (29.25) | 155 (19.38) |
| HIV infected individual without any symptoms | | | | | | |
| looks very weak | 0.028 | 1.25 | 1.02-1.52 | 422 (52.75)* | 223 (27.88) | 155 (19.38) |
| Is it possible that an individual has HIV but | | | | | | |
| he does not know it | <0.001 | 0.02 | 0.02-0.03 | 105 (13.13) | 127 (15.88) | 568 (71.00)* |
| An individual infected with HIV infection | | | | | | |
| dies within a year or two | 0.841 | 0.98 | 0.80-1.20 | 398 (49.75)* | 236 (29.5) | 166 (20.75) |
| We can get the HIV test done on the | | | | | | |
| sample of blood | <0.001 | 6.95 | 5.55–0.71 | 580 (72.5) | 27 (3.38) | 193 (24.13) |
| HIV infected person can easily get other | | | | | | |
| diseases like TB, diarrhea | <0.001 | 51.31 | 37.65–69.99 | 98 (12.25) | 495 (61.88)* | 207 (25.88) |
| There are very few cases of HIV in | | | | | | |
| Andhra Pradesh | <0.001 | 0.10 | 0.08–0.13 | 193 (24.13)* | 215 (26.88) | 392 (49.0) |

* Responses that need special attention.

† Confidence interval.

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to 65.48% subjects (275/420) of age 30 years or more. This is mainly because 14–29 years is the age when most of the subjects are still going through their studies or have just finished their education again stressing the importance of education.

Response to section 1: knowledge of HIV/ AIDS

It is evident from Table 2 that although, overall, 80.63% (645/800) knowledge of HIV is fairly good, most people do not know anything more than the words HIV or AIDS. Approximately 50% of them do not know the relation between STD, TB, and HIV. Surprisingly, half of the people who have heard of HIV/AIDS think that people with HIV look very weak and may die within a year or two.

Response to sections 2 and 3: awareness of modes of HIV transmission and prevention

It was observed from Tables 3 and 4 that there was good awareness level toward the modes of HIV transmission and prevention but still some areas needed special attention. Even though many people were aware of the link between Blood and HIV, and between high-risk behavior and HIV, only 43.25% (346) were aware of the fact that HIV can be transmitted through breast-feeding, and only 43.5% (348) knew that IVD users could get infected with HIV. Approximately 64% (512) were unsure/ unaware of the transmission through mosquito bite. Approximately 35.25% (282) were of the idea that healthy looking HIV reactive person cannot transmit the infection to others. Only 42.63% (341) were aware of the medicines that can control the HIV infection and only 18.5% (148) knew about the HIV medicines to antenatal mothers.

Response to section 4: society's attitude towards HIV/AIDS

The extent of stigma and discrimination towards people living with HIV/AIDS (PLWHA) was found to be very high and there were many items in this section, which needed attention, as is shown in Table 5. Approximately 73.75% (590) of the respondents were ready to take care of their spouse/child, but only 18.13% (145) were willing to care for any other HIV positive family member. Almost nobody was willing to reveal the HIV status to others if he/she or other family member turns out to be reactive, which could be basically due to the fear of discrimination from society. Surprisingly, 51.13% (409) of the respondents wanted the public list of the positive people so that they can avoid them.

Section 5: knowledge of government's measures

Mass media like television, newspaper, magazines, etc., and the study material were the main sources of information of HIV for 79.75% (638) of respondents. Although 73.88% (591) were aware of the posters or hoarding about HIV, hardly few were aware of APSACS/NACO or prevention of parent to child transmission (PPCT)/VCTC programmes. The significance of red ribbon, which stands for care towards people living with HIV/AIDS, is unknown to almost all the respondents. One important point noted was that 66.38% (531) of respondents felt that Government should implement more intervention programmes.

Table 3: Awareness of HIV transmission in the general public (n = 800)

| Questions mentioned in the section 2 actual numbers (Percentage) | P value | Odds ratio (OR) | | 95% CI † range | | Responses in | |
|---|----------|-----------------|------------|----------------|--------------|--------------|--|
| actual numbers (reicentage) | | | | Yes | No | Do not know | |
| AIDS is caused by HIV | <0.001 | 0.23 | 0.18-0.28 | 258 (32.25) | 29 (3.63) | 513 (64.13)* | |
| HIV is transmitted by blood | <0.001 | 4.12 | 3.33–5.11 | 536 (67.00) | 107 (13.38) | 157 (19.63) | |
| HIV can be transmitted by sharing | | | | | | | |
| infected needles | <0.001 | 10.60 | 8.35-13.44 | 612 (76.50) | 18 (2.25) | 170 (21.25) | |
| HIV can be transmitted through unprotected | | | | | | | |
| sexual contact | <0.001 | 8.76 | 6.95–11.05 | 598 (74.75) | 11 (1.38) | 191 (23.88) | |
| HIV can be transmitted from infected mother | | | | | | | |
| to unborn child | <0.001 | 9.24 | 7.32–11.68 | 602 (75.25) | 22 (2.75) | 176 (22.00) | |
| HIV can be transmitted through blood transfusior | n <0.001 | 10.03 | 7.92-12.70 | 608 (76.00) | 9 (1.13) | 183 (22.88) | |
| HIV can be transmitted through breast feeding | | | | | | | |
| by infected mother | <0.001 | 0.58 | 0.47-0.71 | 346 (43.25)* | 251 (31.38) | 203 (25.38) | |
| HIV can be transmitted by drinking in common | | | | | | | |
| cups or glasses | <0.001 | 0.01 | 0.01-0.01 | 69 (8.63) | 576 (72.00) | 155 (19.38) | |
| Persons having STDs, are at high risk of HIV | | | | | | | |
| infection | <0.001 | 0.02 | 0.02-0.03 | 106 (13.25) | 83 (10.38) | 611 (76.38)* | |
| Like cold, HIV also is an contagious disease | <0.001 | 0.02 | 0.01-0.03 | 98 (12.25) | 548 (68.50) | 154 (19.25) | |
| You can get HIV even if you donate blood | <0.001 | 0.00 | 0.00-0.00 | 33 (4.13) | 608 (76.00) | 159 (19.88) | |
| HIV can be transmitted through mosquito bite | <0.001 | 0.32 | 0.26-0.39 | 288 (36.00)* | 160 (20.00) | 352 (44.00)* | |
| HIV can be transmitted through touching or | | | | | | | |
| shaking hands | <0.001 | 0.00 | 0.00-0.00 | 39 (4.88) | 605 (75.63) | 156 (19.50) | |
| HIV can be transmitted through living with | | | | | | | |
| HIV infected person | <0.001 | 0.00 | 0.00-0.00 | 39 (4.88) | 605 (75.63) | 156 (19.50) | |
| HIV can be transmitted through sharing | | | | | | | |
| utensils, clothes, soap, etc. | <0.001 | 0.03 | 0.02-0.04 | 117 (14.63) | 526 (65.75) | 157 (19.63) | |
| HIV is transmitted through cough | <0.001 | 0.33 | 0.27–0.41 | 293 (36.63) | 209 (26.13) | 298 (37.25) | |
| Healthy looking HIV infected person can | | | | | | | |
| transmit HIV to others | <0.001 | 0.64 | 0.53-0.79 | 356 (44.50) | 282 (35.25)* | 162 (20.25)* | |
| Once infected with HIV he has the HIV | | | | | | | |
| infection for all his life | <0.001 | 11.53 | 9.06-14.67 | 618 (77.25) | 27 (3.38) | 155 (19.38) | |
| Injecting drug users can be infected with HIV | <0.001 | 0.59 | 0.48-0.73 | 348 (43.5) | 72 (9.00) | 380 (47.50)* | |
| Can HIV be transmitted by barber and at | | | | | | | |
| hair saloons | <0.001 | 3.53 | 2.86-4.36 | 522 (65.25) | 198 (24.75) | 80 (10.00) | |

* Responses that need special attention.

† Confidence interval.

Table 4: Awareness of HIV prevention in the general public (n = 800)

| Questions mentioned in the section 3 | P value | Odds ratio (OR) | 95% Cl † range | Responses il Yes | n actual figure: No | s (percentage) Do not know |
|---|---------|--------------------|-------------------|---------------------|------------------------|-------------------------------|
| HIV can be prevented by condom use Can HIV/AIDS be prevented by having | <0.001 | 8.31 | 6.60–10.47 | 594 (74.25) | 6 (0.75) | 196 (24.5) |
| one faithful partner Can we get blood transfusions before | <0.001 | 11.70 | 9.19–14.89 | 619 (77.38) | - | 181 (22.63) |
| it gets screened | <0.001 | 0.00 | 0.00-0.00 | 17 (2.13) | 602 (75.25) | 181 (22.63) |
| There is a complete cure for HIV/AIDS | <0.001 | 0.02 | 0.01-0.02 | 96 (12.00) | 548 (68.50) | 156 (19.50) |
| Early therapy can absolutely cure HIV/AIDS | <0.001 | 0.02 | 0.01-0.02 | 96 (12.00) | 548 (68.50) | 156 (19.50) |
| Is there any vaccine for HIV/AIDS | <0.001 | 0.00 | 0.00-0.00 | 16 (2.00) | 623 (77.88) | 161 (20.13) |
| Are there any medicines to control HIV infection Can HIV/AIDS be prevented by avoiding contact with any used needles, syringes, | <0.001 | 0.55 | 0.45–0.68 | 341 (42.63) | 303 (37.88)* | 156 (19.50) |
| razor blades, etc. Are there any medicines that can be given to HIV infected mother for preventing the | <0.001 | 8.76 | 6.95–11.05 | 598 (74.75) | 46 (5.75) | 156 (19.5) |
| child from getting infected Do you think you are safe from getting | <0.001 | 0.05 | 0.04–0.07 | 148 (18.5) | 312 (39.00)* | 340 (42.50)* |
| infected with HIV | <0.001 | 13.94 | 10.89–17.86 | 631 (78.88) | 14 (1.75) | 155 (19.38) |

* Responses that need special attention.

† Confidence interval.

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Table 5: Society's Attitude towards HIV/AIDS (n = 800)

| Questions mentioned in the section 4 | P value | Odds rat (OR) | io 95% Cl † range | Responses ir Yes | n actual numbe No | rs (percentage) Do not know |
|---|---------|------------------|----------------------|---------------------|----------------------|--------------------------------|
| Is it important for you to not get infected | | | | | | |
| with HIV | <0.001 | 17.32 | 13.41–22.36 | 645 (80.63) | - | 155 (19.38) |
| Will it be important for you to not infect | | | | | | |
| others if you had HIV | <0.001 | 10.03 | 7.92–12.70 | 608 (76.00) | 35 (4.38) | 157 (19.63) |
| Will you be willing to take care of your | | | | | | |
| HIV infected spouse/child | <0.001 | 7.89 | 6.28–9.93 | 590 (73.75) | 45 (5.63) | 165 (20.63) |
| Will you be willing to take care of any other | | | | | | |
| HIV infected member | <0.001 | 0.05 | 0.04-0.06 | 145 (18.13) | 491 (61.38)* | 164 (20.50) |
| If a member of your family has HIV, would | | | | | | |
| you keep it a secret | <0.001 | 4.95 | 3.99–6.16 | 552 (69.00)* | 16 (2.00) | 232 (29.00) |
| Would you buy things from a HIV suspected | | | | | | |
| shop keeper | <0.001 | 0.38 | 0.31-0.47 | 306 (38.25) | 338 (42.25)* | 156 (19.50) |
| Should an HIV infected student be allowed | | | | | | |
| to attend to school | <0.001 | 0.40 | 0.32-0.49 | 309 (38.63) | 332 (41.5)* | 159 (19.88) |
| Do you think it is advisable for people to tell | | | | | | |
| others their HIV status | <0.001 | 0.00 | 0.00–0.00) | - | 645 (80.63)* | 155 (19.38) |
| Should HIV/AIDS be discussed on TV or | | | | | | |
| in schools | <0.001 | 13.94 | 10.89–17.86 | 631 (78.88) | 5 (0.63) | 164 (20.50) |
| Do you think the names of people with | | | | | | |
| AIDS should be made public so that people | | | | | | |
| can avoid them | <0.001 | 1.09 | 0.90-1.34 | 409 (51.13)* | 235 (29.38) | 156 (19.50) |
| Would you feel comfortable using a common | | | | | | |
| toilet with someone you knew or | | | | | | |
| suspected has HIV | <0.001 | 0.31 | 0.25-0.38 | 286 (35.75) | 348 (43.50)* | 166 (20.75) |
| Nould you feel comfortable sharing a meal | | | | | | |
| (not from the same plate) with someone that | | | | | | |
| you knew or suspected has HIV | <0.001 | 0.28 | 0.22-0.34 | 276 (34.50) | 368 (46.0) | 156 (19.50) |
| Nould you feel comfortable hugging/touching | | | | | | |
| a person whom you knew or suspected to | | | | | | |
| have HIV infection | <0.001 | 0.23 | 0.19-0.28 | 259 (32.38) | 386 (48.25)* | 155 (19.38) |
| Chances of HIV infections are more in | | | | | | |
| (a) low class, (b) equal in all, and | | | | | | |
| (c) do not know | <0.001 | - | - | (a) 261 | (b) 45 | (c) 494 |
| | | | | (32.63) | (5.63) | (61.75) |
| Should government pass the legislation of | | | | | - | - |
| getting compulsory HIV test to be done before | | | | | | |
| marriage | <0.001 | 13.33 | 10.43-17.05 | 628 (78.50)* | 17 (2.13) | 155 (19.38) |

* Responses that need special attention.

† Confidence interval.

Other responses are given in Table 6.

DISCUSSION

The Andhra Pradesh government is working very hard toward this direction by adopting good advocacy policies, by having good planning and taking great efforts. The Government, with the help of APSACS and other government or private institutes has been carrying out a vigorous campaign to educate the public on HIV, including putting up posters in public areas, distributing pamphlets, spreading information through television and newspaper advertisements, including it in the secondary school curriculum, and is using many other strategies that include talk shows, lectures, peer education, leaflets, or workshops. It has provided many support systems for those infected and affected by HIV/AIDS. It has been running the PPTCT programmes successfully. Voluntary counseling and testing centers have been set up at 107 sites all over the state (12 are in

Table 6: Knowledge of government's awareness measures (n = 800)

| Questions mentioned in the section 5 | P value | Odds ratio 95% CI ⁺ | | Responses in actual numbers (percentage) | | |
|--|---------|--------------------------------|------------|--|--------------|--------------|
| | | (OR) | range | Yes | No | Do not know |
| How have you come to know about HIV? (a) Mass media, | | | | | | |
| (b) interpersonal communication | <0.001 | - | - | (a) 638 (79.75) | (b) 7 (0.88) | 155 (19.38) |
| Do you know what folded red ribbon stands for? | <0.001 | 0.00 | 0.00-0.00 | 11 (1.38) | - | 789 (98.63)* |
| Have you heard of APSACS or NACO Do you know how 1 December is celebrated | <0.001 | 0.31 | 0.25–0.38 | 285 (35.63) | 360 (45.0)* | 155 (19.38)* |
| all over the world | <0.001 | 0.02 | 0.01-0.02 | 91 (11.38) | - | 709 (88.63)* |
| Do you watch any TV programmes on HIV/AIDS Are you aware of any APSACS/AP govt. sponsored events/shows like musical nights, | <0.001 | 0.00 | 0.00–0.00 | 31 (3.88) | 470 (58.75)* | 299 (37.38)* |
| cultural shows, etc. Have you seen any advertisements/slides | <0.001 | 0.00 | 0.00-0.01 | 49 (6.13) | 585 (73.13)* | 166 (20.75) |
| shown in mass media in the last 2 months? Do you know anything about PPTCT (prevention of mother to child transmission) or VCTC (voluntary counseling and testing | <0.001 | 0.04 | 0.03–0.05 | 126 (15.75) | 519 (64.88)* | 155 (19.38) |
| centers) programmes Have you seen any posters or information material regarding HIV/AIDS at public places | <0.001 | 0.00 | 0.00–0.01 | 51 (6.38)* | 58 (7.25) | 691 (86.38) |
| or anywhere else Do you think that govt. intervention programmes being done are enough in | <0.001 | 8.00 | 6.36–10.06 | 591 (73.88) | 54 (6.75) | 155 (19.38) |
| creating awareness about HIV | <0.001 | 0.02 | 0.02–0.03 | 103 (12.88)* | 531 (66.38) | 166 (20.75) |

* Responses that need special attention.

† Confidence interval.

Hyderabad) and their numbers have been increased year by year.

A nationwide survey, carried out in 2001 by NACO under general population behavioral surveillance survey (BSS),^[18] showed that across the country awareness of HIV is high (76.1%), quite similar to our study results. It becomes quite difficult to compare the results of our study from other study results because there is no similar kind of documented study on HIV in general population from this area.

Despite the vigorous outreach programmes the government and other organizations carried out in the city, many people had several misconceptions about the HIV-positive people.

Our study has shown that 80.63% (645/800) of the study population from Hyderabad city

was sketchily aware of HIV/AIDS but most of them had incorrect perceptions about the mode of transmission or protection [Table 2]

Only 24.13% (193/800) were aware that Andhra Pradesh has very high figures of HIV/ AIDS, an important information that the state government has to stress upon.

Despite the surveyed population's high level of HIV/AIDS knowledge, their own risk perception of potentially becoming infected with the virus is very low in almost all groups. Approximately 78.88% people thought that they were personally safe from getting infected with HIV.

Today, people with HIV/AIDS are regularly discriminated and rejected by their own loved ones. The disease is considered as a deserving punishment for immoral behavior.

Discrimination can become the hardest part of living with the HIV infection, creating a climate that is a private hell for those infected and affected. In many regions, people with HIV have been thrown out of their homes, rejected by families, turned away from jobs, and had their children expelled from schools. Stigma generally makes the disease more difficult to discuss and harder to deal with. It can spread infection through misunderstanding. Some people with HIV infection go for years without telling a soul.

The study has brought into light some of the important issues and immense and urgent efforts are needed towards making people more caring and accepting PLWHA, which can be mainly achieved through raising the levels of knowledge about HIV and its ways of transmission.

The study reported here has confronted several limitations. First, due to unwillingness of the respondents, sample size had to be limited to 800. Second, restriction in asking questions concerning sexual beliefs and behaviors as was observed in the pilot study, made us slightly change the questionnaire. Third, because of the nature of the questionnaire, the honesty of individuals' responses may be questioned.

SUMMARY

Our study has observed a significant good level of awareness towards HIV but more sustained efforts are needed to make the public fully aware of the modes of transmission and prevention of HIV/AIDS. Open discussions about HIV are still rare in Hyderabad. General awareness of HIV/AIDS-related issues must be increased in order that people will understand how to protect themselves, reduce their stigma and discrimination towards people living with HIV/AIDS because overcoming stigma and discrimination is the key to control the HIV epidemic.

Although Andhra Pradesh is suffering from the burning problem of HIV, general population of Hyderabad thinks that they are in a State that is safe with very few cases of HIV/AIDS. Many are not aware that the Andhra Pradesh is a State in India with second highest recorded number of HIV cases. Furthermore, being the capital city of Andhra Pradesh, the population of Hyderabad should be more aware of HIV and its ways of transmission and prevention when compared to other cities or rural population.

The various measures, which the government has been implementing, are either not enough to create awareness, or they are not reaching the targeted population. There is an immense need from the side of the government in taking measures, which would make the general public aware of the country's AIDS crisis. As most of the Indian population are illiterate and as it was observed from our study that awareness was more among the literates, government and health educators should provide tailor-made education programmes for those at the lower education levels. Because HIV infection is a dynamic process and could change as a function of time, more and more of similar studies targeted at general population are needed at regular intervals to test the results of the preventive measures and the efficacy of the implemented policies.

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