

An analysis of human immunodeficiency virus/acquired immune deficiency syndrome-related awareness among masses

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ABSTRACT

Background: Prevention is better than cure. This age-old phrase holds very true in the case of human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS). So, adequate HIV and AIDS related education for young people is considered as an important prevention strategy. The main aim of the study was to analyze the awareness regarding HIV/AIDS among masses. The other objectives were to review and analyze the existing awareness campaigns regarding the need for establishment of new awareness campaigns.

Methods: The study was conducted among a total of 80 subjects through a questionnaire comprising of questions about HIV/AIDS.

Results: It was observed that the awareness among subjects with the non-scientific educational background was less than those with the scientific educational background. The analysis of attempted questionnaires showed that the knowledge of Indian subjects lacked considerably in certain basic areas related to HIV/AIDS. This indicates that the awareness measures and strategies running in India are ineffective and inadequate. Furthermore, it was observed that counseling by teachers, friends, and parents/families in Indians was lesser than that of subjects from the USA.

Conclusion: Lack of awareness among masses has pointed toward the need to promote more awareness campaigns. It has been concluded that there is a need of providing comprehensive and detailed information regarding the preventive measures to masses, especially young people not only through educational institutions but also through families and friends.

Keywords: Acquired immune deficiency syndrome, Human immunodeficiency virus, Preventive measures, Questionnaire

INTRODUCTION

Acquired immune deficiency syndrome (AIDS) was first recognized in 1981. It has attained a pandemic status over time and is considered as a global crisis. Majority of the cases are reported from the developing countries and as per a rough estimate, 1 out of 100 sexually active adults worldwide is infected with human immunodeficiency virus (HIV). According to the World Health Organization (WHO) reports, there has been an alarming rise in the incidence of AIDS cases in South-East Asia including Thailand, Indonesia and the Indian sub-continent. The epicenter of the disease, in India, lies in the states of Maharashtra and Tamil Nadu, which collectively constitute

about half of all HIV-positive cases (mostly contracted sexually), while the state of Manipur in the North-East accounts for 8% of all cases (mostly among intravenous drug abusers).¹

HIV is a retrovirus that infects the CD4 cells, i.e., Helper T-cells of the host, thereby leading to a depression in the normal immune response of the body. This decrease in immunity allows various opportunistic microbes to invade the host and cause infections or other complications like Kaposi's sarcoma.² Despite many developments in the field of antiretroviral therapy, AIDS still remains invariably lethal. The antiretroviral (ARVs) drugs aim at maximal suppression of virus replication, thereby improving life

quality and increasing life expectancy of the infected patients. However, the ARVs cannot cure the patients completely.³ So, adequate HIV and AIDS related education for young people is considered as an important prevention strategy. Many government/non-government organizations like WHO, Visual AIDS and its “red ribbon” project, National AIDS Control Organization (NACO), Avert, etc., are working actively at national/international levels to create awareness regarding HIV/AIDS.⁴⁻⁷ Analysis of the awareness of HIV/AIDS among the masses is important for determining the effectiveness of previously existing and current awareness programs, as well as the need for interventions.⁸ So, with this background the present study was conducted so as to analyze the awareness about HIV/AIDS among masses and to determine the loopholes in the awareness campaigns currently in action.

METHODS

Study population

The study was conducted among a total of 80 subjects chosen at random. Of the 80 respondents, 45 were males and 35 were females. Mostly subjects were of North Indian origin and some were from flushing, New York (USA). The distribution of respondents with non-scientific educational background and scientific educational background was even, i.e., 50% of each category. A written consent was obtained from all the participating subjects after explaining to them in detail the aim of the study, extent of their involvement, and the freedom of choice in participation.

Data collection

To analyze the awareness regarding HIV/AIDS among masses, a questionnaire was designed which comprised of questions related to basic and essential knowledge about HIV/AIDS. The questionnaire comprised of 17 yes/no type questions, 3 short descriptive type questions, and 5 multiple choice questions. The questionnaires were distributed among the chosen subjects/population.

Data analysis

The responses of the subjects to each question were analyzed on the basis of sex, educational background, ethnicity/country of residence, and in general. The responses were analyzed further, so as to determine the perception of masses regarding the modes of HIV transmission.

RESULTS

General awareness

Overall, 95% subjects had heard about HIV, however, only 65% could differentiate between AIDS and HIV. The major source of awareness regarding HIV/AIDS was the counseling done by the teachers (70%). Only 38.75% had heard about

NACO. Other sources of information were counseling and discussion with friends, parents, and families. 16.25% believed that AIDS is not fatal and 38.75% believed that ARV drugs can cure AIDS. 25% thought that HIV can spread through mosquito bite and 3% considered it justified to outcast HIV/AIDS patients from jobs or education systems, etc. 91.25% subjects said that they insist the personnel at salons to change the blades of razors and only 13.75% admitted that they share filers, razors, etc., with friends or family members. 81.25% subjects claimed that they check every time whether the doctors use sterilized syringes. However, only 13.75% had got themselves tested for HIV. 18.75% subjects claimed that they asked/received a blood report pertaining to HIV after blood donation, while 58.75% had never donated blood. In response to questions asked to check the specific information, 88.75% knew the full form of HIV and 56.25% were aware regarding its origin from monkeys. 62.50% knew that the count of T-helper cells decreases in AIDS and 30% knew that zidovudine is an ARV drug (Table 1).

Awareness on the basis of sex

Both the sexes had an almost same level of awareness. However, as compared to females only 20% males were counseled for HIV/AIDS by parents/family and 28.89% felt hesitant/awkward when talking about HIV/AIDS.

Awareness on the basis of educational background

It was observed that as compared to the subjects with the scientific educational background, only 90% of the subjects with non-science educational background had heard about HIV. Even subjects with the scientific educational background (62.5%) believed that being HIV-positive means that the person has AIDS. Surprisingly, 17.5% of subjects with scientific background considered mosquito bite as a mode of transmission. 20% of subjects with scientific education believed that AIDS is not fatal and 32.5% believed that ARV drugs can cure AIDS. While in case of subjects with non-scientific education, the percentage was 12.5% and 45%, respectively. 85% subjects with non-scientific education and 97.5% subjects with scientific education mentioned that they insist the personnel at salons to change the blades of razors. 25% of subjects with non-scientific education and 2.5% of subjects with scientific education said that they share filers, razors, etc., with friends or family members. 12.5% of non-scientific background and 65% of the subjects with scientific background claimed that they know something about NACO.

Awareness on the basis of ethnicity

As compared to American subjects, only 94.20% Indian subjects had heard about HIV. Furthermore, it was observed that in case of American subjects counseling done by the teachers, friends, parents, and families played a much significant role in spreading awareness as compared to Indian subjects. As compared to Americans (14.28%), Indians (23.18%) are more hesitant/awkward, when talking about HIV/

Table 1: Awareness pattern among the subjects regarding HIV/AIDS (expressed as percentage).

Particulars	General (%)	Sex (%)		Educational background (%)		Ethnicity (%)	
		Male	Female	Non-Scientific	Scientific	Non-Indians (Americans)	Indians
Have heard about HIV	95	97.78	91.42	90	100	100	94.20
Think that being HIV positive is same as having AIDS	65	68.89	60	62.50	67.50	14.28	68.11
Have been counseled for HIV/AIDS by teachers	70	68.89	71.42	67.50	72.50	100	65.21
Have been counseled for HIV/AIDS by friends	58.75	57.78	60	52.50	65	71.42	56.52
Have been counseled for HIV/AIDS by parents/family	28.75	20	40	32.50	25	42.85	27.53
Feel hesitant/awkward when talking about HIV/AIDS	22.50	28.89	14.28	32.50	12.50	14.28	23.18
Think that AIDS is not fatal	16.25	20	11.42	12.50	20	14.28	15.94
Think that ARV drugs can cure AIDS	38.75	31.11	48.57	45	32.50	28.57	42.02
Think that HIV can be spread through mosquito bite	25	40	5.71	32.50	17.50	14.28	27.53
Insist personnel at salons to change the blades of razors	91.25	93.33	88.57	85	97.50	100	91.30
Share razors, filers, etc., with friends or family	13.75	20	5.71	25	2.50	0	15.90
Ever got tested for HIV	13.75	11.11	17.14	15	12.50	42.85	11.59
Check if doctors use sterilized syringes, every time	81.25	82.22	80	72.50	90	85.71	79.71
Know about NACO	38.75	33.33	45.70	12.50	65	0	40.57
Know someone suffering from HIV/AIDS	21.25	11.11	34.28	12.50	30	42.85	20.28
Consider it just to outcast sufferers of HIV/AIDS	3.75	4.44	2.85	2.50	5	0	4.34
Received a blood report pertaining to HIV after blood donation/never donated blood	18.75/ 58.75	26.66/ 53.33	8.57/ 65.71	10/70	27.50/ 47.50	0/100	18.84/ 56.52
Know that zidovudine is an ARV drug	30	22.22	40	32.50	52.50	28.57	31.88
Know that AIDS is not curable	45	46.67	42.85	30	60	71.42	40.57
Know the full form of HIV	88.75	88.89	88.57	77.50	100	100	86.95
Know that HIV originated from monkeys	56.25	55.55	57.14	27.50	85	42.85	56.52
Know that the count of T-helper cells decreases in AIDS	62.50	60	65.71	70	72.50	85.71	62.31

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

AIDS. 100% American subjects claimed that they insist the personnel at salons to change the blades of razors and none of them shared filers, razors, etc., with friends or family members. In comparison with Indian subjects (11.59%), more American subjects (42.85%) had got themselves tested for HIV.

DISCUSSION

Analysis of these questionnaires indicated that American subjects had more awareness regarding HIV/AIDS and they took better/proper precautionary measures as compared to Indian subjects. They were made aware through multiple sources including parents/families while Indian subjects felt hesitant regarding these discussions. Indian subjects lagged in general awareness and even those from scientific background had not much awareness regarding NACO or other awareness/preventive programs.

Surprisingly, subjects with scientific background had some misconceptions (Table 2, Figures 1 and 2) and were lenient regarding precautionary measures.

It was found out that counseling by teachers, friends, parents/family regarding HIV/AIDS in Indians was lesser than that of American subjects. Similarly, it was observed that the awareness related to HIV/AIDS among subjects with non-scientific educational background was less than the subjects with the scientific educational background. On the basis of the present study, it was concluded that the awareness measures running in India are not effective enough as the knowledge of Indian subjects lacked considerably on some basic areas related to HIV/AIDS. So, there is a need to promote more awareness campaigns and to begin the counseling of children/students through parents, families or friends about the disease or the preventive

Table 2: Awareness among masses about transmission and prevention of HIV infection in general (expressed as percentage).

Particulars	Percentage
Ways in which HIV can spread	
Unprotected sex	68.75
Contaminated blood transfusion	16.25
From infected mother to fetus/neonate	6.25
Contaminated needles/syringes	53.75
Contaminated razors/blades	13.75
Contaminated body fluids	5
Ways in which HIV does not spread	
Shaking hands with infected persons	41.25
Hugging infected persons	16.25
Through water/air/droplet infection	6.25
Sharing utensils/food/room with infected persons	40
Sharing bed/room/clothes with infected persons	17.50
Mosquito bite	36.25
Kissing infected persons	11.25
Sharing toilets with infected persons	1.25
Prevention of HIV transmission	
Using condoms	62.50
Screening of blood and/or blood products before transfusion	13.75
Sexual abstinence	2.50
Being loyal to partner	16.25
Insisting on using new blades at salons	11.25
Insisting on using new needles/syringes	32.50
Educating the people/creating awareness	13.75

HIV: Human immunodeficiency virus

measures. There is also a very strong need to do away with the hesitation which some people encounter while talking about HIV/AIDS. There is no permanent cure for the disease as of now, therefore, it becomes of the utmost importance that the people should be educated and made aware about the disease as well as the preventive measures, at all levels.

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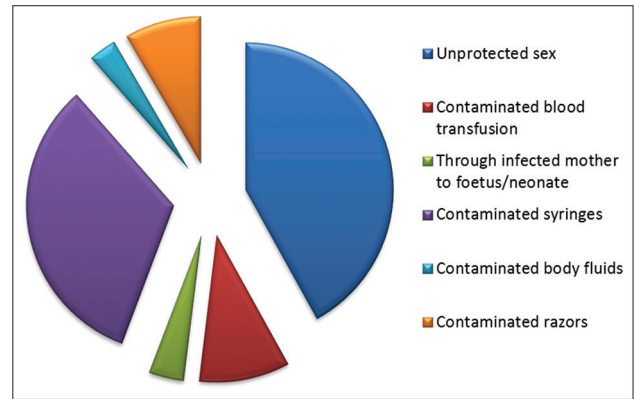


Figure 1: Distribution of ways of HIV transmission, as perceived by the masses (all percentages out of a sample size of 80).

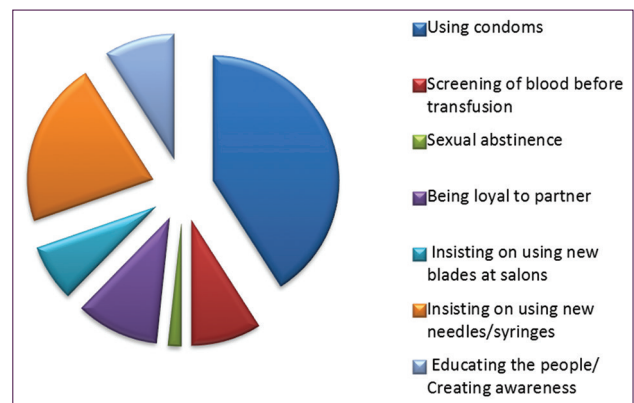


Figure 2: Distribution of preventive measures against human immunodeficiency virus infection, as perceived by the masses (all percentages out of a sample size of 80).

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