



## Original Research Article

## A study of HIV/AIDS awareness among the ICTC clients in a tertiary care center

Yashaswini M K<sup>1,\*</sup>, Archana Rao K<sup>1</sup>, Sangeetha S<sup>1</sup><sup>1</sup>Dept. of Microbiology, Raja Rajeswari Medical College and Hospital, Karnataka, India

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## ABSTRACT

**Background:** HIV/AIDS poses a significant and one of the most genuine general well-being challenges. For HIV anticipation in the Indian scenario, the main plausible and financially savvy approach that can be adapted is proper training about HIV/AIDS and its various aspects. The present study was embraced to survey the degree of information and awareness about HIV/AIDS among clients attending ICTC facility in our hospital.

**Materials and Methods:** A total of 200 clients, of age >18yrs, attending the ICTC for HIV testing were studied over a period of 3 months. A questionnaire was prepared in regards to the methods of transmission, preventive techniques, mentality towards patient living with HIV/ AIDS and the source of HIV/ AIDS. The response of clients to the questionnaire was recorded.

**Results:** Among 200 participants, 97% were aware that unprotected sex is a mode of HIV transmission and 64% were aware that infected blood transfusion, use of unsterile needles and syringes contribute to other modes of HIV transmission. It was also noted that uneducated clients had a false perception that HIV can be transmitted by drinking water from same glass and by mosquito bite and this was statistically significant compared to educated individuals. The main source of acquiring positive information among the clients regarding HIV was observed to be television (32.5%).

**Conclusion:** Stigma among the general public was mostly due to fear of contracting the illness. There is a requirement for more noteworthy endeavours toward making data with respect to HIV/AIDS accessible to all. The level of awareness regarding HIV/AIDS needs to be elevated among the public.

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## 1. Introduction

Human Immunodeficiency Virus (HIV) /Acquired Immunodeficiency Syndrome (AIDS) is a major and one of the most serious public health challenges in today's world. Since the beginning of the epidemic, 76 million people have been infected with the HIV virus and about 33 million people have died of HIV/AIDS. All inclusive, 38.0 million [31.6–44.5 million] individuals were living with HIV towards the end of 2019. An estimated 0.7% [0.6-0.9%] of adults, aged 15–49 years, are living with HIV worldwide, in spite of the fact that the weight of the scourge keeps on changing impressively among nations and areas.

The WHO African locale stays most seriously influenced, with about 1 in each 25 grown-ups (3.7%) living with HIV and representing more than 66% of the individuals living with HIV worldwide.<sup>1</sup>

India has the third largest HIV epidemic in the world, with 2.1 million (Approx. 1.54%) people living with HIV.<sup>2,3</sup> India's pestilence is concentrated among key influenced populaces, including sex labourers and men who engage in sexual relations with men. The National AIDS Control Programme has made particular efforts to reach these two high-risk groups with HIV interventions. In contrast to the neighbouring nations, India has gained great ground in diminishing new HIV infections considerably since 2001. Despite the fact that the HIV incidence in India is low, the large population makes the country more vulnerable

\* Corresponding author.

E-mail address: [dryashumk@gmail.com](mailto:dryashumk@gmail.com) (Yashaswini M K).

to HIV.<sup>4</sup> In addition, few different variables add to this weakness including low levels of education, poverty, early age of sexual debut, limited access to health services especially in rural settings, inadequate information about modes of HIV transmission, and misconceptions and myths revolving around HIV/AIDS.<sup>5</sup>

Among these, a major barrier in the battle against HIV/AIDS has been an inadequate and incorrect data that further perpetuates various forms of social stigmas and discriminations against HIV infected patients. Low degrees of training would likewise leave the population ignorant of the HIV risk reduction strategies. Another matter of concern is the changing essence of HIV pandemic in India. The epidemic has crossed the conventional boundaries of the traditional high-risk groups where it initially started and has now percolated into the general population.<sup>6</sup> Without a doubt, India has risen as the new focal point of this global epidemic.

A two-way approach has been utilized to restrain the lamentable outcomes of this epidemic. The first strategy is advancing HIV mindfulness and information among the population through media as well as through voluntary counselling and testing (VCT) facilities so as to enable the people to ensure themselves by embracing safe sexual practices and other vital precautionary steps. The second approach is expanded and simple openness to antiretroviral treatment to decrease the mortality due to HIV/AIDS.<sup>7</sup>

In the current scenario, especially in the developing world, the need of the hour is to spread among everybody correct, precise, and complete information about HIV/AIDS transmission modes, risk factors, preventive measures, and available remedial choices. In this context, education has often been described as a “social vaccine” with information, education, and communication (IEC) being viewed as the key tools of HIV prevention.

A number of studies have attempted to investigate peoples’ perception about HIV/AIDS. The present study was undertaken to assess the extent of knowledge about HIV/AIDS among clients attending Integrated Counselling and Testing Centre (ICTC) facility in our hospital and to correlate their levels of awareness with education.

## 2. Materials and Methods

A total of 200 clients, with age of 18 years and above, attending the ICTC for HIV testing were included in the study. The study was conducted over a period of 3 months from 1<sup>st</sup> Jan 2020 to 31<sup>st</sup> March 2020. Institutional ethical committee approval was obtained for conduction of the study. Written consent was taken from participants after explaining the primary purpose of the study.

The data was gathered utilizing a semi structured pre-tested questionnaire. The questionnaire was prepared to assess their knowledge about the modes of transmission, preventive strategies, attitude towards patient living with

HIV/ AIDS and the source of HIV/ AIDS information that was delivered to the clients in the local language prior to pre-test counselling. In case of illiterate clients, the questions were read in their local language by the investigator and the responses was recorded. Insights about age, sex, instruction, occupation and conjugal status were additionally gathered. Only close-ended questions were provided in the questionnaire, the answers to which were recorded as yes/no/I do not know. Only those who have heard of HIV/AIDS were questioned for data collection.

The degree of awareness of clients with respect to methods of HIV transmission was decided by their capacity to accurately recognize the four principal ways by which HIV infection can spread. By fusing deluding inquiries in the questionnaire, an attempt was made to explore and identify the misconceptions that exist among Indian population pertaining to modes of HIV transmission. In the subsequent questions, the participants’ observation with respect to accessibility of conceivable treatment choices and their insight about preventive measures/practices of HIV/AIDS were assessed.

For data analysis of responses to the questions concerning modes of transmission, treatment, and prevention of HIV/AIDS, participants with an “I do not know” reaction were additionally viewed as ignorant about the concerned angle similar to the members with a “No” reaction. For analysing the responses to the panel of questions dealing with misconceptions, “No” reaction to all the inquiries were ordered as having “no misconception” while those with a “Yes” reaction to even one of the inquiries were classified as having “misconception”.

Information evaluation was carried out using the Epi Data programming, and Chi-square test with the level of significance P set at < 0.05 which was considered as statistically significant.

## 3. Results

Among 200 clients included in the study, 51 clients (25.5%) were 19–29 years, 96 clients (48%) were 30–39 years, 42 clients (21%) were 40–49 years and 11 clients (5.5%) were more than 50 years of age. Majority of the participants were aged between 30 and 39 years. Out of 200 clients, 128 clients (64%) were male and 72 clients (36%) were female. The demographic data with age wise distribution is shown in Table 1.

Out of all the participants, 77.5% were married while 16.5% were unmarried and 6% were divorced. Also, 86 clients (43%) were illiterate, 33 (16.5%) were educated up to secondary school level, and only 41 (20.5%) had an education level of college and above. Majority of the clients i.e 82 (41%) were in businessmen/businesswomen, around 60 (30%) clients were unemployed men or housewives, 30 (15%) were students and 22 (11%) were professionals. The socio demographic profile of the study population is

summarised in Table 2.

Of the 200 study participants who were interviewed, 194 clients (97%) could identify unprotected sex as the mode of HIV transmission, about 117 clients (58.5%) were aware of sharing of infected needles as the mode of transmission, 139 clients (69.5%) had knowledge regarding blood transfusion as other mode of HIV transmission. Around 148 clients (74%) knew about direct HIV transmission from infected mother to the foetus (Table 4).

On correlating knowledge about principal modes of HIV transmission with their education levels, we observed that awareness about unsafe sex and blood transfusion as a possible mode was significantly higher among both educated and uneducated. A statistically significant ( $P < 0.05$ ) association with education levels was noted for knowledge on sharing of infected needles and mother to child transfer as HIV transmission mode.

On exploring the extent of misconceptions about HIV transmission, all (100%) were aware that HIV was not transmitted by hugging or handshaking. Around 163 (81.5%) and 157 (78.5%) of the clients agreed that it cannot be transmitted by sharing the glass of water and with mosquito bite respectively.

109 (96%) of educated clients agreed to mosquito bite as one of the modes of HIV transmission while 13 (15%) of uneducated individuals had a false perception that it can be by mosquito bite which was statistically significant ( $P < .05$ ). A total of 33 clients (16.5%) out of 200 responded "yes" to the misconceptions regarding HIV transmission.

Around 166 clients (83%) were aware of use of condom as a preventive intervention. All (100%) participants understood the role of loyalty to a single sexual partner and 144 (72%) of them said that use of sterile disposable needles and syringes is essential as precautionary measures to protect themselves from contracting HIV/AIDS. Around 102 (51%) of clients believed that AIDS is curable. Among 123 of those who responded, 96 clients (78.1%) were aware that an Anti- AIDS vaccine is not currently available for prevention of the syndrome.

A statistically significant ( $P < 0.05$ ) correlation was established between education level of the study participants and their awareness on avoiding use of infected needles as preventive measure for HIV infection. Interestingly, among the educated clients, 70 (81%) of them said that AIDS is curable against only 37% uneducated clients and this difference was also statistically significant ( $P < .05$ ).

Regarding attitude of the clients towards people living with HIV/AIDS (PLWHA), 127 (63.5%) of them said PLWHA are threat to society, 147 (73.5%) felt sympathetic to PLWHA, 136 (68%) told they would stop shopping from a store if the owner is HIV positive, 132 (66%) told they would dismiss their maid if she is HIV positive, 123 (61.5%) said they would hesitate to sit next to an HIV positive person and 97 (48.5%) said HIV positive people should not be

allowed to attend social functions. 43.5% of participants were not willing to get HIV tested.

Around 72% of educated clients considered PLWHA are threat to society and would hesitate to sit next to an HIV positive person as opposed to 86% of uneducated clients, and this difference was statistically significant ( $P < .05$ ). About 60% of uneducated clients said positive people should not be allowed to attend social functions versus 20% of educated clients, which was statistically significant ( $P < .05$ ).

Regarding acquiring information about HIV/AIDS, television was the main source of information for 65 (32.5%), friends for 52 (26%), and radio for 36 (18%) clients. A conversation or discussion within family and books was the least reported source of information (3% and 2.5% respectively) (Table 4).

**Table 1:** Age and sex wise distribution of study subjects

Age	Male	Female
19-29	36	15
30-39	55	41
40-49	30	12
≥50	7	4
Total	128	72

**Table 2:** Demographic details of study population

Demographic variable	Number	Percentage
<b>Marital status</b>		
Single	33	16.5
Married	155	77.5
Divorced	12	6
<b>Occupation</b>		
Government service	6	3
Business	82	41
Student	30	15
Housewife	56	28
Professional	22	11
Others / unemployed	4	2
<b>Education</b>		
Illiterate	86	43
Secondary or below	40	20
Higher secondary	33	16.5
Graduates	25	12.5
Postgraduates	16	8

#### 4. Discussion

This study was conducted among a total of 200 clients, who attended the ICTC for HIV testing in our hospital. Among the participants, 97% were aware of sexual contact as a mode of transmission of HIV/AIDS. A greater part of the respondents who had caught wind of HIV/AIDS had a decent information about HIV transmission modes. Nearly 18% of participants were still unaware of risk of HIV

**Table 3:** Knowledge and awareness about HIV/AIDS

Response	Uneducated(n=86)			Educated(n=114)			Total		
	Yes	No	DNK	Yes	No	DNK	Yes	No	DNK
<b>Knowledge regarding mode of transmission of HIV</b>									
Unprotected sex	80	0	6	114	0	0	194	0	6
Sharing of infected needles	43	28	15	74	29	11	117	57	26
Blood transfusion	55	18	13	84	22	8	139	40	21
Mother-to-child	42	20	24	106	0	8	148	20	32
Drinking from same Glass	15	49	22	0	114	0	15	163	22
Casual Contact: Hugging/ Handshake	0	86	0	0	114	0	0	200	0
Mosquito bite	13	48	25	5	109	0	18	157	25
<b>Knowledge about prevention and treatment</b>									
Condom usage	58	0	28	108	0	6	166	0	34
Avoid using infected needles	50	23	13	94	12	8	144	35	21
Being faithful to one sexual partner	86	0	0	114	0	0	200	0	0
AIDS is Curable	32	26	28	70	36	8	102	62	36
Anti-AIDS Vaccine	15	20	51	12	76	26	27	96	77
<b>Attitude of the general public toward people living with HIV/AIDS (PLWHA)</b>									
PLWHA are threat to society	45	41	0	82	32	0	127	73	0
Feel sympathetic to PLWHA	72	14	0	75	39	0	147	53	0
Stop shopping from a store if the owner is HIV positive	54	32	0	82	32	0	136	64	0
Dismiss HIV positive maid	59	27	0	73	41	0	132	68	0
Hesitate to sit next to an HIV positive person	25	61	0	98	16	0	103	77	0
Willing to get tested for HIV	44	42	0	69	45	0	123	87	0
HIV positive can be allowed to attend social functions	45	52	29	52	22	0	97	74	29

DNK= Do not know

**Table 4:** Sources from which they received HIV/AIDS information

	Number	%
Television	65	32.5
Internet	12	6
Radio	36	18
Newspapers	16	8
Friends	52	26
Books	5	2.5
Health personnel	8	4
Parents	6	3

transmission from infected needles. When educated about HIV/AIDS an immediate connection to the mindfulness levels of the respondents was observed during the study. Uneducated subjects had little knowledge about HIV/AIDS and showed less inclination to learn more about it. Additionally, the attention to certain aspects of HIV transmission, for example, spread by sharing of infected needles and mother to child transmission was also fundamentally lower in them. On exploring the extent of misconceptions about HIV transmission, all (100%) were aware that HIV was not transmitted by hugging or handshaking which suggested a very good awareness level among the educated population.

It was observed during the study that the knowledge on misconceptions regarding HIV transmission was relatively good among the respondents who were interviewed. But there was a statistically significant difference among the uneducated than educated regarding the misconceptions, being greater among the uneducated participants. However, even when a person rightly knows that one will not get infected by a mere touch, the natural instinct of fear for one's safety still rules over the correct knowledge they have. Our findings in this study are consistent with other studies conducted in the past where misconceptions were reportedly more among the respondents who were illiterate.<sup>8,9</sup> Understanding how HIV is not transmitted is important for preventing stigma against individuals with HIV and AIDS.

Knowledge on preventive measures was well appreciated among the study group. Interestingly, there was a statistically significant difference between the educated and uneducated groups in terms of belief that AIDS is curable. This could be due to lot of homeopathic medications news circulating among the population through media and other modes.<sup>10</sup>

The attitude of participants towards HIV/AIDS affected individuals was also analysed in our study and it was found that 61.5% has hesitation to sit next to an HIV positive person and 48.5% of the clients felt necessity to isolate the infected individuals. Around 43.5% of participants were not willing to get HIV tested, even among the educated. This could be attributed to the fear of being outcast from society on the occasion of being proved HIV positive.<sup>10,11</sup>

Broad communications (TV, radio and newspapers) trailed by companions or friend bunch were the fundamental wellsprings of data for the respondents in our investigation.<sup>12</sup> Numerous different investigations additionally featured the essential job that broad communications have played in making HIV mindfulness among Indian populace.<sup>13,14</sup> In the present study it was observed that discussion in family is a less common source of information about HIV and other sexual issues in Indian population, which was similar to another study conducted in Raigad district.<sup>15</sup>

The results of our study further back up the fact that the preservationist climate of the Indian culture with its social limitations and customs forestalls free and open conversation about HIV/ AIDS inside family. Thus, proper training can help to expand openness to data as well as empowers better understanding and translation of the instructive material. A number of innovative awareness programmes are being implemented in India, where NACO is taking charge to run a multimedia HIV campaign to increase HIV testing among young people. NACO also broadcasts phone-in and panel discussions on issues relating to HIV on regional radio networks. Several shows relating to HIV are also being organized by folk troupes in remote villages to reach people in places with no television or radio.<sup>10</sup>

Our study highlights the importance of ICTC and its role which not only helps to provide information to people about HIV/AIDS but also performs HIV/AIDS tests among them. Thus more efforts should be put in increasing awareness of ICTC among people so that population gets benefitted from the same. The consequences of ignorance of HIV status could prove dreadful resulting in increased risk of HIV spread. More people should be educated about ICTC as well as HIV/AIDS through advertisements, pamphlets in the regional languages, incorporation of ICTC in the school curriculum, etc. This can be further aided by efforts to increase literacy rate as education eradicates irrational thinking and provided rational outlook towards any disease and the affected patients.

## 5. Conclusion

Awareness, knowledge, and attitude of the population towards HIV and HIV affected people, requires a shift and these issues must be routed to guarantee preventive measures in population. Stigma among the general public was mostly due to fear of contracting the illness. The society needs a reinforced awareness program to eliminate prevalent deception and expand mindfulness regarding HIV. There is a requirement for more noteworthy endeavours towards making data with respect to HIV/AIDS, accessible to all.<sup>16</sup>

## 6. Source of Funding

None.

## 7. Conflict of Interest

The author declares no conflict of interest.

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### Author biography

**Yashaswini M K**, Assistant Professor

**Archana Rao K**, Assistant Professor

**Sangeetha S**, Professor and Head

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