

Socio-demographic Characteristics of Clients Visiting Integrated Counseling and Testing Centre (ICTC) at SMS Medical College, Jaipur (Rajasthan) India

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Abstract— Human immunodeficiency virus (HIV) infection is a global pandemic and India counts for 10% of the global HIV burden and 65% of that in the South and South-East Asia. This study of clients of ICTC was carried out to know the association of HIV positivity with socio-demographic variables. Total 2412 clients have visited at ICTC of SMS Medical College, Jaipur, either voluntarily or referred by various department of this institute in ICTC in 1st quarter of 2009. They Overall HIV positivity was found 12.35% with a significant difference in voluntary and referred clients i.e. 83.59% v/s 8.36%. It was also found that HIV positivity is more in reproductive age group than extremes of ages, more in females than males, more in person who were married but presently single because of separation of spouse, divorce from spouse or death of spouse than the unmarried or married living with their spouses.

Keywords— Human immunodeficiency virus (HIV), ICTC, STI, voluntary and referred clients

1. Introduction

The human immunodeficiency virus (HIV) infection is a global pandemic and according to the acquired immunodeficiency syndrome (AIDS) epidemic update, December 2007 approximately 33.2 million people are living with HIV/AIDS worldwide.¹ The prevalence rate of HIV in adults varies in different regions from 5% in the Sub-Saharan Africa to 0.3% in Middle East.¹ It is estimated that 90% of the HIV-infected persons live in the developing countries with the estimated number of Indians being 2.7 million.² All countries in the South East Asia are deeply concerned regarding the HIV epidemic and responding their best.³ Overall prevalence of HIV in adults in India is 0.36% which accounts for 10% of the global HIV burden and 65% of that in the South and South-East Asia.⁴ Migration of labor, low literacy levels, gender disparities, and prevalent RTI/STI have contributed to this spread.⁵

An individual who is infected with the human immunodeficiency virus (HIV) will not develop the acquired immunodeficiency syndrome (AIDS) immediately. The time lag between infection and manifestation of signs and symptoms of AIDS is approximately 5–7 years. It is important that an individual who is HIV-infected is aware of his/her status as otherwise he/she could unknowingly transmit the virus to others. The only way to diagnose the presence of HIV and get timely treatment is through a simple blood test.

An integrated counseling and testing centre (ICTC) is a place where a person is counseled and tested for HIV either on his own free will or as advised by a medical provider. HIV counseling and testing services were started in India in the year 1997. There are now more than 4000 Integrated Counseling and Testing Centers (ICTCs), which are mainly located in government hospitals. Preventive and health education given at ICTCs ensure that each client is provided pre-test information/counseling, post-test counseling and follow-up counseling in a friendly atmosphere. ICTC for HIV is a cost-effective intervention in preventing the spread of HIV transmission and is an integral part of National AIDS

Control (NACO) program which counsel the person to accept the HIV status in a comfortable, convenient, and confidential manner.⁶ ICTC developed 1st in India in 1997 and is the first interface between a person willing to get tested and the public health system.⁷ In integrated management of HIV/AIDS counseling for HIV and AIDS has become a core element of a holistic approach; both pre- and post-test counseling have become standard components of prevention-oriented HIV antibody testing programs.⁸ The data generated in VCTC provides an important clue to understand the epidemiology of the disease in a particular region.⁹

2. Methodology

A cross-sectional descriptive type of observational study was carried out on 2412 clients of ICTC of SMS Medical College, Jaipur. They have visited either voluntarily or referred by various department of this institute in ICTC in 1st quarter of 2009 i.e. from 1st Jan 2009 to 31st March 2009. Information for all the attendees of the ICTC was recorded which was available from the records maintained at the ICTC regarding variables such as age, gender, marital status, education and occupational status, residence, behavioral patterns, discrimination anticipated, support expected. Counselor had collected much more information from attendees under strict confidentiality as per as per NACO guidelines on predesigned schedule. HIV was diagnosed by performing enzyme-linked immunosorbent assay (ELISA) by using two different antigens and a rapid test as recommended by the National AIDS Control Organization (NACO). At the pre- and post test counseling also some relevant data were collected. Data thus collected were compiled and analyzed with Statistical Software Primer version 6. To find out significance of difference in proportion chi-square test was used. For Significance p value equal to or less than 0.05 was considered significant.

3. Results

Present study observed that out of total 2412 client attended in study period at ICTC, 298 (12.35%) were found HIV positive i.e. HIV positivity of ICTC clients was observed 12.35% (Fig. 1). Out of these 2412 clients majority 2284 (95%) were referred very few 128 (5%) came voluntary (Fig. 2).

Fig. 1

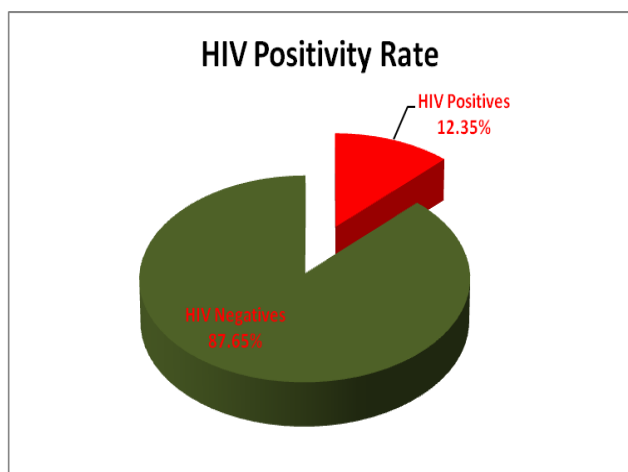
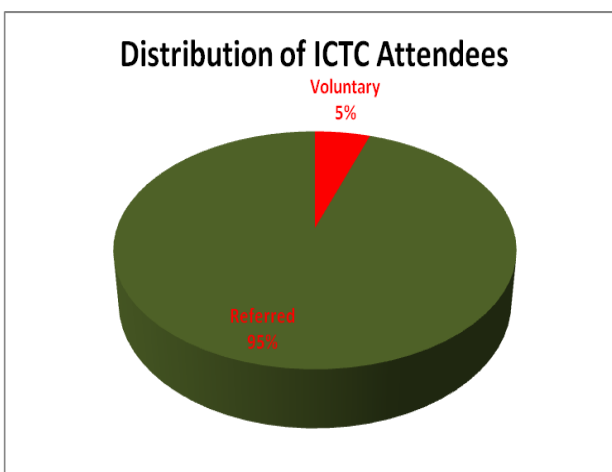


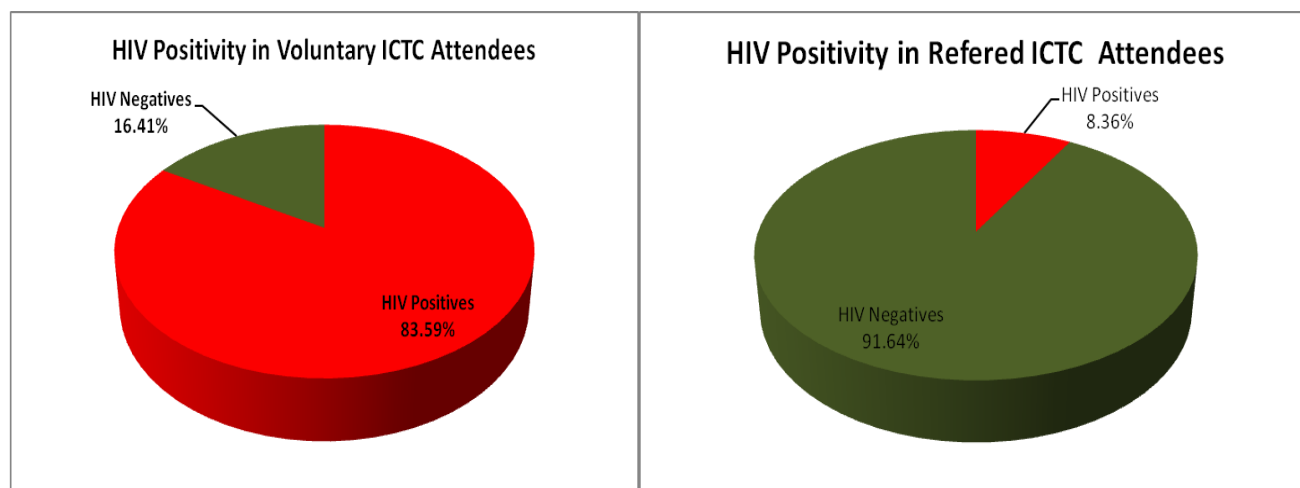
Fig. 2



Present study revealed that HIV positivity was significantly ($p < 0.001$) more in clients who came voluntary than referred i.e. 83.59% and 8.36% respectively (Fig. 3-4).

Fig. 3

Fig. 4



In this study it was observed that out of total 298 HIV positives majority 168 (56.38%) were from 15-34 years age group followed by 35-64 years. These two age groups i.e. 15-64 years constitute 278 (93.29%) of total HIV positives. When HIV positivity was revealed, it was also found significantly ($P<0.001$) more in reproductively active age groups i.e. 15-64 years than the extremes of ages. (Table 1)

As far as the other socio-demographic factors were concerned it was found in this study that although there was no significant difference in HIV positivity as per religion and residence of the client but females were having significantly higher ($P<0.001$) HIV positivity than males i.e. 17.56% and 10.10% respectively. (Table 1)

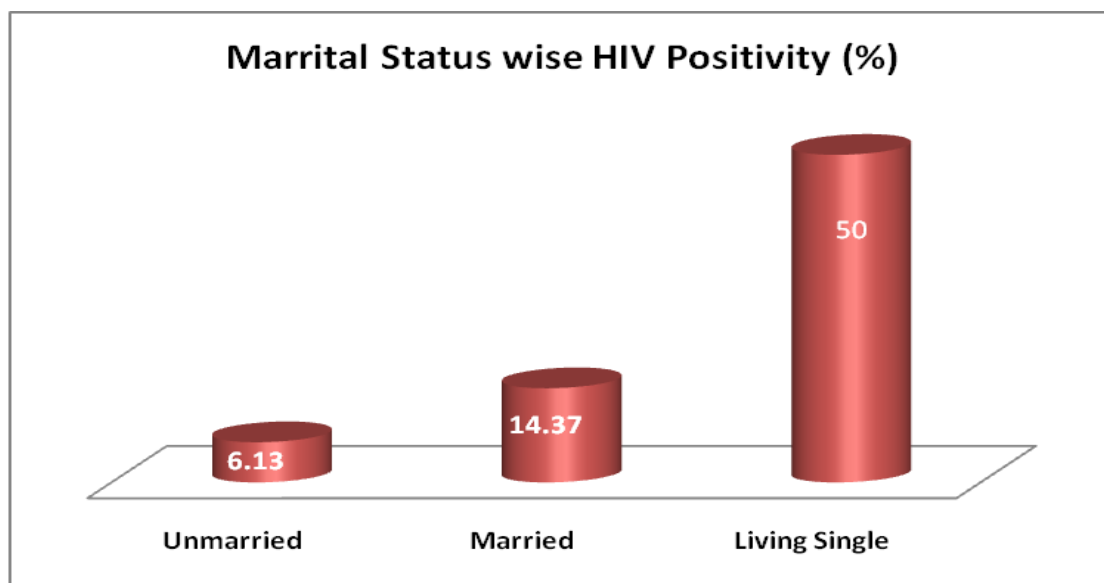
Table 1

Association of HIV Positivity with Socio-demographic factors (N=2412)

Variables		HIV Positive (N=298)	HIV Positivity (%)	Chi-square Test	P value LS
Age	<15 Years (N=308)	18	5.84	21.084 at 3 DF	$P<0.001$ S
	15-34 Years (N=1268)	168	13.25		
	35-64 years (N=770)	110	14.29		
	65 years & Above (N=67)	2	2.99		
Sex	Females (N=729)	128	17.56	25.439 at 1DF	$P<0.001$ S
	Males (N=1683)	170	10.10		
Religion	Hindus (N=2222)	284	12.78	5.057 at 2DF	$P=0.080$ NS
	Muslims (N=183)	13	7.10		
	Others (N=7)	1	14.29		
Residence	Rural (N=792)	100	12.63	0.047 at 1DF	$P=0.828$ NS
	Urban (N=1620)	198	12.22		

Present study also revealed that HIV positivity was significantly ($p<0.001$) more in clients who were living single either because of separation/divorcee /loss of spouse than that who were either unmarried or living with their spouse.(Fig. 5).

Fig. 5



Chi-square = 59.684 with 2 degrees of freedom; **P<= 0.001**

LS=S

4. Discussion:

Present study observed HIV positivity of ICTC clients 12.35%. This HIV positivity is quite high in comparison to overall prevalence of HIV in adults in India is reported by GAP India fact sheet (0.36%)⁴ and a study conducted in Gujrat (2.7%).¹⁰ It is high even to prevalence reported in the Sub-Saharan Africa (5%).¹ This difference may be because of that this present study is conducted in ICTC centre itself where the suspected or high risk persons get their investigation done. Whereas above reports were from the community surveys. This fact is supported with the other studies^{11,12} conducted at ICTC centers like Kumar A etall observed HIV seropositivity in VCTC clients 9.6% and Joardar GK etall⁹ reported 17.1% from a study conducted in a district of West Bengal.¹³

Present study also revealed that HIV positivity was significantly ($p<0.001$) more in clients who came voluntary than referred i.e. 83.59% and 8.36% respectively. Although Kallol H. Mallick etall¹³ reported that about half (40%) of client visited voluntary but almost similar to present study observations were made by others^{11,12}

It was observed in this study that HIV positivity found significantly (**P<0.001**) more in reproductively active age groups i.e. 15-64 years than the extremes of ages. It can be explain that this is the group which is sexually active. These observations were supported with observations made by Kumar A etall¹² who found 88.7% of the subjects belonged to the age group of 15–49 years (the most sexually active age group). Another author reported 92.4% in this group in their study conducted at a VCTC in Darjeeling.⁹

In the present study females were found to have significantly higher (**P<0.001**) HIV positivity than males i.e. 17.56% v/s 10.10%. In contrast to this Rashmi¹¹ who has done a study in ICTC at Ahmadabad reported HIV positivity significantly high in males than the females but HIV/AIDS in India is undergoing a feminization because females are increasingly getting infected, which is indicated by the increasing HIV prevalence in females.

Present study also revealed that HIV positivity was significantly ($p<0.001$) more in clients who were living single either because of separation/divorcee /loss of spouse than that who were either unmarried or living with their spouse. Almost similar observations were made by other authors.^{11,12,13} This can be explain that individual who have experience sex and now became single because of any reason were more prone to have HIV.

CONCLUSIONS

About one eighth of the ICTC attendees had HIV positivity. This HIV positivity is more in reproductive age group than extremes of ages, more in females than males, more in person who were married but presently single because of separation of spouse, divorce from spouse or death of spouse than the unmarried or married living with their spouses. Among all the attendees voluntary were only 5.3% who has maximum HIV positivity (83.59%). So voluntary HIV testing should be increase.

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