Original article

SOCIO-DEMOGRAPHIC PROFILE OF AN INTEGRATED COUNSELING AND TESTING CENTRE ATTENDEES: A CROSS SECTIONAL STUDY AT A TERTIARY CARE HOSPITAL IN GWALIOR, INDIA

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ABSTRACT

Background: Acquired immunodeficiency syndrome (AIDS) has emerged as one of the most serious public health problem in the country. Integrated counseling and testing centre's (ICTCs) are key entry points for a wide range of interventions in HIV prevention and care. So this study was conducted to find out the socio-demographic profiles, HIV serostatus and risk behavior pattern of attendees and also elucidate the reasons for their visit to centre's .

Materials and Methods: The study was conducted among clients who visited ICTC either by self referral or referred by a health care provider from Oct. 2009 to Dec. 2009. It was a cross sectional, observational study and conducted at Integrated Counseling and Testing Centre attached to Microbiology department of G.R. Medical College, Gwalior.

Results: Majority of attendees i.e. 83.2% of the attendees belonged to the age group of 15-45 years and males contributed to 64.75% of the case load in ICTC. An overall 7.06% of the ICTC attendees were HIV positive. The majority of the subjects were illiterate (35.65%). Illness was the main reason for ICTC visit of attendees. A high percentage of non response regarding the pattern of risk behavior was noted among the subjects (57.59% males and 88.37% females).

Conclusion: In absence of curable drugs and vaccine, epidemiological studies should be carried out to find out behavioral, social and demographic factors which help in interruption and control of transmission of disease.

Key words: HIV serostatus, ICTC, VCTC, Risk behavior.

INTRODUCTION

AIDS has emerged as one of most serious public health problem in the world. According to UNAIDS/WHO estimates, there are 38.6 million people living with HIV worldwide[1]. National AIDS Control Organization (NACO), supported by UNAIDS and WHO, indicate that national adult HIV prevalence in India is approximately 0.36%, which corresponds to an estimated 2 million to 3.1 million people living with HIV in the country.[2]

Spread of HIV/AIDS is estimated as a consequence of a specific behavioral pattern and has strong socioeconomic implications. Awareness generation and lifestyle changes are preventive and control measures for HIV/AIDS and for these ,epidemiology of the disease in a particular region with regard to sociodemographic profile and pattern of risk behaviour of population must

be understood. The Voluntary Counseling and Testing Centre (VCTC) is an entry point to care, which provides people with an opportunity to learn and accept their HIV serostatus in a confidential environment.[3]

The treatment options are still in the trial stage and too expensive. Drugs are made available in few selected centres in the country. ICTC for HIV is a cost effective intervention in preventing HIV transmission and it has become an integral part of HIV prevention programme

The current study is contemplated with a view to throw some light on the sociodemographic profile and risk behavior of attendees of Integrated counseling and testing centre.

METHODOLOGY

This study was conducted in G.R. Medical college , Gwalior. It is a tertiary care centre. Study was conducted to assess pattern of risk behavior among attendees of ICTC.

It was an Institution based Cross sectional Descriptive study, conducted in Integrated counseling and testing centre which is attached to Microbiology Department, where HIV testing and counseling is done. Approximately 8-12 clients per day are undergoing HIV testing in this centre.

Study subjects who visited ICTC for HIV testing during study period were included in study. In order to elicit socio-demographic profile of study subjects, a semi-structured, pretested proforma was administered to the subjects. This instrument also elicited reason for their visit to the ICTC and their risk behavior.

During the study period total 732 attendees were registered at ICTC. Socio-demographic characteristics of all the attendees were collected either by interview or information collected from records.

RESULTS

Out of 732 attendees 64.75% were males. Age group of 20-39 years accounted for 75% of the total attendees.[**Table-1**]

The distribution according to education and marital status showed that 35.65% of the clients were illiterate and 79.1% were married. Majority of attendees were Hindu (96.72%) and 47.95% belong to SC category. Most of them (53.69%) resided in rural area .

Table 1: Distribution of attendees according to age and sex

Age Group	Male (n=474)	Female (n=258)	Total (n=732)
<20 yrs	27 (5.69)	21 (8.13)	48 (6.56)
20-39 yrs	363 (76.58)	186 (72.09)	549(75)
40-59 yrs	78 (16.45)	48(18.60)	126 (17.21)
≥60 yrs	6 (1.26)	3 (1.16)	9 (1.23)

Figure in parenthesis indicate percentage

Table 2: Distribution of attendees according to socio-demographic profile

Variables	Male (n=474)	Female (n=258)	Total (n=732)
Religion			
Hindu	459(96.83)	249 (96.51)	708 (96.72)
Muslim	15(3.16)	9 (3.5)	24 (3.28)
Caste			
General	171 (36.07)	72 (27.91)	243 (33.2)
SC	213 (44.94)	138 (53.49)	351 (47.95)
ST	21 (4.43)	12 (4.65)	33 (4.51)
OBC	69(14.56)	36 (13.95)	105 (14.34)
Residence			
Rural	243 (51.26)	150 (58.14)	393 (53.69)
Urban	231(48.73)	108 (41.86)	339 (46.31)
Education			
Illiterate	144 (30.38)	117 (45.35)	261 (35.65)
Up to primary	36 (7.59)	27(10.46)	63 (8.60)
Up to middle	33 (6.96)	15 (5.81)	48 (6.56)
Up to High School	93 (19.62)	27(10.46)	120 (16.39)
Up to Higher Secondary	84(17.72)	42 (16.27)	126 (17.21)
Grad. & Post Grad.	72 (15.19)	24 (9.3)	96 (13.11)
Others*	12(2.53)	6(2.32)	18(2.46)
Occupation			
Unskilled	63 (13.29)	6 (2.32)	69 (9.42)
Semi-skilled	183 (38.61)	15 (5.81)	198 (27.05)
Skilled	84 (17.72)	0 (0)	84 (11.47)
Professional	12 (2.53)	0 (0)	12 (1.64)
Housewife	0 (0)	186 (72.09)	186 (25.41)
Clerical	69 (14.56)	0 (0)	69 (9.43)
Others**	63 (13.29)	51 (19.77)	114 (15.57)
Migratory status			
Migrant	63 (13.29)	0 (0)	63 (8.61)
Non-migrant	411 (86.71)	258 (100)	669 (91.39)
Marital Status			
Unmarried	81(17.1)	60 (23.25)	141 (19.26)
Married	393 (82.91)	186 (72.09)	579 (79.1)
Widowed/Widower	0 (0)	12 (4.65)	12 (1.64)
Socio-economic Status			
Class I	27 (5.7)	12 (4.65)	39 (5.33)
Class II	78 (16.45)	33 (12.79)	111 (15.16)
Class III	93 (19.62)	72 (27.9)	165 (22.54)
Class IV	180 (37.97)	111 (43.02)	291 (39.75)
Class V	96 (20.25)	30 (11.63)	126 (17.21)

Figure in parenthesis indicate percentage; * Others - Education - Pre school going children; ** Others - Occupation - Students, unemployed, preschool going children

Regarding occupation 36.47% clients were engaged in unskilled or semiskilled jobs .[**Table-2**] Majority of attendees i.e. 95.08 % motivated by doctors for HIV testing, and only 2.46% walked in directly; referrals from TIs were even poorer (only 2.05%).[**Table-3**] The most common reason for visiting ICTC was illness (medical or surgical: 66.39%) and 11.47 % clients had sexually transmitted disease followed by 1.64% who were visited for the confirmation of their test result.[**Table-4**] A large proportion of study subjects (57.59%males and 88.37% females) did not disclose their risk status. Of those clients who responded, 91.04% males had multiple sex partners. Among the females, 5.81% were working as a commercial sex worker. [**Table-5**]

Table 3: Distribution of attendees according to motivator for HIV testing

Motivator for HIV testing	Male (n=474)	Female (n=258)	Total (n=732)
Doctor	453 (95.57)	243 (94.19)	696 (95.08)
Self	18 (3.8)	0 (0)	18 (2.46)
NGO's	0 (0)	15 (5.81)	15 (2.05)
Friends/Relatives	3 (0.63)	0 (0)	3 (0.41)

Figure in parenthesis indicate percentage

Table 4: Distribution of attendees according to reasons for their visit to ICTC

Reasons for their visit	Male (n=474)	Female (n=258)	Total (n=732)
Medical illness	195 (41.13)	117 (45.35)	312 (42.62)
Surgical illness	129 (27.21)	45 (17.44)	174 (23.77)
STDs	51 (10.76)	33 (12.79)	84 (11.47)
DOTS	30 (6.32)	15 (5.81)	45 (6.14)
Confirmation of result	12 (2.53)	0 (0)	12 (1.64)
Spouse HIV +ve	21 (4.43)	18 (6.97)	39 (5.32)
Parents HIV +ve	15 (3.16)	6 (2.32)	21 (2.86)
Endoscopy	21 (4.43)	9 (3.48)	30 (4.09)
Refer from NGO	0 (0)	15 (5.81)	15 (2.05)

Figure in parenthesis indicate percentage

Table 5: Distribution of attendees according to risk behavior

Risk behavior	Male (n=474)	Female (n=258)	Total (n=732)
No response/History not available	273(57.6)	228(88.4)	501(68.4)
Heterosexual multiple partners	183(38.6)	3 (1.2)	186(25.4)
CSW	0 (0)	15 (5.81)	15 (2.05)
Parents HIV Positive	15 (3.16)	6 (2.32)	21 (2.86)
Blood transfusion	3 (0.63)	6 (2.32)	9 (1.23)

Figure in parenthesis indicate percentage

DISCUSSION

ICTC located in the Microbiology Department of all medical colleges. However, Integrated counseling and testing centre in other settings depend on the demand and available resources. ICTC provides counseling and testing services. So the profile of attendees who come to the centre depend upon the needs of community, HIV seroprevalence and attitude towards the disease.

This study gives an overview of profile of clients who visited ICTC.

General profile of Attendees

The prevalence of HIV seropositivity in ICTC clients in the present study was noted to be 6.97% which was slightly lower than that reported from a study conducted in district of Karnataka (9.6%) in 2007 [4] and also in district wardha (12.5%) in 2008.[5] Lower seropositivity in the present study could be due to low prevalence of HIV in state and also in rural population, and this centre mainly provides services to rural population. Difference in health seeking behaviour of community also contributed to the difference in HIV prevalence in different studies.

ajority of attendees i.e. 83.2% belonged to the sexually active age group (15-45 years). Similar findings obtained from the studies conducted at Darjeeling (92.4%) and at Udupi , Kernataka (88.7%).Theses findings emphasize that interventions should be targeted towards this vulnerable group.

The present study highlights the fact that males contributed to 64.75% of the case load in ICTC with 35.24% being the females. These figures were slightly lower than the national average of 38.4% for females. This difference in attendance rate at ICTC suggests some barriers are existed which prevent access of females to avail health services.Stigma and discrimination may also be a barrier for them. A six-year ICTC-based study showed that females were still not availing of the medical facilities as much as males.[7] Considering the national data based on information collected from sentinel surveillance sites, women are less likely to visit an antenatal clinic/testing centres if: they are older, have high parity, are illiterate, or are poor.[8] Programs for increasing female attendance in the health care centres should be carried out.

Most of the attendees belong to rural set up(53.69%).This type of distribution might be

due to rural location of the ICTC facilitating, easier access by the rural people.

The majority of the subjects were illiterate (35.65%) and 16.39% had undergone education up to the 10th standard. In the study conducted by Sharma et al at Ahmadabad, 38.5 % of the ICTC attendees had completed education up to 10th standard.[9] G. K. Joardar et al in his study found that 33.2% attendees were illiterate.[6] The difference may be due to regional demographic variation. Less number of attendees were in the higher education groups (13.11%) and it could be due to a fact that education might had some protective role.

With regard to occupation, most of the male attendees were semi-skilled(38.61%) and skilled(17.72%)workers. In skilled worker category 53.57 % attendees were truck drivers and in semi-skilled occupation 80.3% were factory workers. Most of the females were housewives (72.09%). G. K. Joardar et al in his study found that 28.6% attendees were unskilled worker and 5.87 % were driver.[6] In our study group 8.61% attendees were migrants. The long distance truck drivers and laborers are a highly mobile group in whom having multiple sex partners is quite common.

Large percentage of subjects coming to ICTC was being referred by doctors (95.08%). Only2.46 % of study subjects came to ICTC on their own without being referred by someone else, and referrals from TIs were even poorer (only 2.05%). Sharma et al in his study in Ahmedabad has found 74.6% clients were referred by doctors, and only 19.4% walked in directly; referrals from TIs were even poorer (only 6%).[9] Health seeking behaviour and attendance of clients at ICTC depend on IEC activities in particular area. So to increase attendance at ICTC ,IEC activities should be planned accordingly.

Among the reasons cited for their visit to the ICTC, illness (medical or surgical: 66.39%) was the leading cause and 11.47 % clients had sexually transmitted disease followed by 1.64% who were visited for the confirmation of their test result and 8.19% of the study subjects had the family members (spouse/parents) who were positive for HIV and 6.14% were referred from a Directly Observed Treatment Scheme (DOTS). Study conducted by Sharma et al at Ahmedabad has found that the history or presence of high risk behavior (34%) was the most common reason for visiting ICTC, while in more than half of them (59%), no reason could be find out.[9]

A large proportion of study subjects (57.59%males and 88.37% females) did not disclose their risk status. Although reason of non-disclosure could not be assessed but fear of discrimination against HIV infected individuals, which still prevails in the society, may be a reason of non disclosure of risk status and those clients who responded 91.04% males had heterosexual multiple partners. Among the females, 5.81% were working as a commercial sex worker. 1.23% clients had given history of blood transfusion. Megha in her study found that among the total subjects, 69 males (42.8%) and 80 females (90.9%) did not respond to the question on the pattern of risk behavior followed.[4] Of the subjects who responded, 91 males (98.9%) had multiple sex partners and 1 was involved in homosexual practices. Among the females, six (75.0%) were having multiple sex partners and two (25%) had a history of blood transfusion.

Study findings reveal, that increased awareness and adaptation of safe behaviour practices are only solution to combat HIV/AIDS. So planning and designing of IEC activities should be based on socio-demographic profile and risk behaviour pattern of particular area.

CONCLUSION &RECOMMENDATIONS

HIV/AIDS spread is mainly influenced by human behaviour and ignorance. Prevention is better than cure , keeping this idea in mind, Epidemiological studies should be promoted to understand the role and complex relationship of various behavioral, social and demographic factors, responsible for transmission of HIV/AIDS. By which we can sensitize these vulnerable population on various aspects of HIV/AIDS and it will help to interrupt and control the transmission of HIV/AIDS.

Limitations of study

This study was hospital based study, and results obtained from the study were influenced by catchment area of hospital setting, care seeking behaviour of population and social stigma associated with the disease. So we cannot apply results to whole population. A Community based studies are the better option to avoid this.

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REFERENCES

1. WHO/UNAIDS AIDS Epidemic Update, December 2007. Available at: www. unaids.org/en/HIV-data. Accessed on 15th september 2009.
2. 2.5 million people in India living with HIV, according to new estimates. Available at : http://www.who.int/mediacentre/news/releases/2007/pr37/en/index.html. Accessed on 9th November 2009.
3. Campbell CJ, Marum ME, Alwano-Edyegu M, et al. The role of HIV counseling and testing in the developing world. AIDS Educ Prev. 1997; 9(suppl):92-104.
4. Gupta Megha. Profile of clients tested HIV positive in a voluntary counseling and testing centre of a district hospital, Udupi. Indian J of Community Med 2009; 34, 3: 223-26.
5. Quazi SZ, Nimbarte Sanjay, Selokar Deepak, Gaidhane Abhay, Mudey Abhay, Wagh Vasant. Profile of Clients Attending an Integrated Counselling and Testing Centre at a Private Rural Tertiary Care Hospital in India. Australasian Medical J 2010;3, 6:349-52.
6. Jordar GK, Sarkar A, Chatterjee C, Bhattacharya RN,Sarkar S, Banerjee P. Profile of attendees in VCTC of North Bengal Medical College in Darjeeling district of West Bengal. Indian J of Community Medicine 2006; 31:237-40.
7. Vyas Nitya, Hooja aroj, Sinha Parul, Mathur Anuj, Singhal Anita, Vyas Leela. Prevalence of HIV/AIDS and prediction of future trends in north-west region of India: A six-year ICTC based study. Indian J Community Medicine 2009;34,3: 212-17.
8. Kumar R, Jha P, Arora P, Mony P, Bhatia P, Millson P, Dhingra N, Bhattacharya M, Remis RS, Nagelkerke N. Trends in HIV-1 in young adults in South India from 2000 to 2004: a prevalence study. The Lancet 2006;367:1164-72.
9. Sharma R. Profile of attendee for voluntary counseling and testing in the ICTC at Kesar SAL Medical College, Ahmedabad. Indian J Sex Transm Dis 2009; 30: 31-6.