

Profile of HIV Positive Attendees at Integrated Counseling and Testing Centre of A Teaching Institution in West Bengal

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Abstract

Introduction : HIV/AIDS has turned out into global pandemic. There were approximately 36.7 million people worldwide living with HIV/AIDS at the end of 2016. Of these, 2.1 million were children (<15 years old). An estimated 1.8 million individuals worldwide became newly infected with HIV in 2016 i.e. about 5,000 new infections per day. Integrated Counseling and Testing Centre (ICTC) data can guide in identifying the various risk groups for priority targeted interventions to reduce the burden of HIV transmission in the community.

Objective: To study the risk behaviors and socio-demographic characteristics of attendees who tested HIV positive. **Methodology :** A record based retrospective study was conducted on the 117 attendees who tested HIV positive at the ICTC between July 2017 to June 2018. For record analysis Chi-square and other tests were employed using SPSS software package. **Results :** Out of 117 HIV positive attendees, 65 (55.56%) were males and 52 (44.44%) were females. Maximum were in the age group of 15-49 years. Prevalence of HIV was high among married, illiterate, housewives, semi-skilled workers and those whose spouse was HIV positive. Among the positives 46.15% of males and 13.46% of females reported promiscuous behavior. **Conclusions :** though the above findings helped to identify various risk groups a prospective study including a higher number of HIV positive subjects and indepth analysis of various aspects of promiscuous behavior would give better understanding for focusing priority targeted interventions.

Key Words : HIV, ICTC, HIV positive, HIV serostatus

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I. Introduction

There are 36.7 million people in the world, living with HIV and 2.1 million are newly infected with HIV in 2015. Although India is a country with low HIV prevalence however it has still been accounted to be the third largest number of people living with HIV/AIDS which can prove to be a potential risk for the spread of this infection if preventive strategies are not implemented. As per estimates of 2015, there are 2.1 million people living with HIV/AIDS in India with an adult prevalence of 0.26 percent. Recognized as an emerging disease in the early 1980s, HIV/AIDS has evolved from a mysterious illness to a global pandemic which has infected tens of millions people in less than 20 years.¹ Deaths in this age bracket have damaging impact on families and communities, workforce shrinks and children are orphaned.²

Estimated adult HIV prevalence in 2011 at West Bengal was 0.22%; number of PLHA were 1.34 lakh; number of new infections were 7289; and number of HIV-related death were 13310. There was a total of 258 ICTC in West Bengal; of which 256 were standalone ICTC; 26 were F-ICTC and 4 were PPP model ICTC. As per WBSACS data Total number of clients tested till 30th September 2015 were 53,28,763 including; and total HIV positives were 65,478.³

Till date, no vaccine is available to prevent HIV; available treatment can only prolong life to some extent and complete cure is not possible. Thus the only way to tackle the HIV/AIDS pandemic is taking adequate preventive steps. So if we study the epidemiology of HIV, then we can use the collected data in a better way to take proper preventive steps to reduce the incidence of HIV.

Efforts are on to reduce this seemingly dangerous pandemic. Prevention by awareness is the only answer. Counseling is the corner stone of these efforts. Both pre and post test counseling have become the standard component of prevention oriented HIV antibody testing programmes.⁴

The ICTC data is important to throw light on the epidemiological profile of HIV positive individuals. This will help not only to identify the various risk groups but also give direction for priority targeted intervention to reduce HIV transmission in the community.

With this background, present study has been undertaken with the objectives to study risk behavior and socio-demographic characteristics of attendees who tested HIV positive.

II. Materials and Methods

The present study was conducted by analyzing the records of the attendees who tested positive for HIV at the ICTC of an Integrated Counseling and Testing Centre of A Teaching Institution in West Bengal. The study included all 117 clients who tested HIV positive and who attended the centre between July 2017 to June 2018. They attended voluntarily or were referred from various departments of this Institute. Anonymous information was collected on a pre-designed schedule by interviewing the subjects. The variables studied were age, sex, marital status, level of education, occupation, place of residence, HIV serostatus of spouse and pattern of risk behavior. Following the guidelines of National AIDS Control Organization (NACO), the counselor of the ICTC interviewed the attendees under strict confidentiality.

After pre test counseling and valid consent from the attendees, their blood samples were collected by laboratory technician under direct supervision of the counselor. HIV was diagnosed by performing ELISA using two different antigens and a rapid test as recommended by NACO. Proportions were used to interpret the results.

III. Results

During the study period i. e. July 2017 to June 2018, a total of 3291 clients attended the ICTC. Out of them 117 (3.55 %) tested positive for HIV. These 117 attendees were included in the study.

82 (55.46%) were males and 65 (44.44%) were females. 80.00% of males and 80.77% of females belonged to the age group of 15-49 years. While only 6 males (9.23%) and 3 females (5.77%) were below the age of <15 years. Majority of males (78.46%) and females (76.92%) were married. Only 9 (13.85%) males and 3 (5.77%) females were unmarried. Literacy rate was higher among males (63.08%) compared to females (53.85%). Only 24.62% of males and 23.08% of females were educated above Xth Standard. Majority of females (43.2%) were housewives. Among males 44.62% were involved in the semi-skilled occupation. Maximum attendees were from urban areas (Table 1).

Regarding HIV serostatus of the spouse, majority spouse of both males and females were positive for HIV and this proportion was more among males (42.86%) than females (34.69%). Most of these HIV positive spouses were actually husband and wife. Serostatus of 30.48% spouse was unknown (Table 2).

46.15% of males and 13.46% of females reported promiscuous behavior. Only one (1.54%) male reported the homosexual behavior. 86.54% of females and 52.31% of males did not respond to the risk behavior question. (Table 3)

IV. Discussion

The prevalence of HIV amongst the ICTC attendees in the present study was 3.55%. This is lower than that reported by other authors who also conducted similar studies for a time period of 6-12 months (9.6%, 16.14% and 29%).^{5,6,7} This low prevalence in our study can be attributed to the differences in geographic locations and risk behavior of people in these areas. R O Valdiserri et al⁴ reported prevalence of 4.3% in his study. The case load shared by males (55.46%) in ICTC is more than that of females (44.44%). Similar findings were reported by other author also (male 64.7 and female 35.34%).⁵ This clearly reflects the unawareness, negligence, social inhibition and low illiteracy among females which restricts them from utilizing health services. Shyness and feeling of insecurity due to gender discrimination could be other strong reason. Present study as well as other studies agreed that the prevalence of HIV is highest among sexually active age group i. e. 15-49 years.^{5,6} The prevalence is almost similar for males (80%) and females (80.77%) in these age groups.

We observed that prevalence of HIV is low among males (24.62%) as well as females (23.08%) who have educated more than XIth standard and above. Other studies also agree with this finding (i.e. in males 28% and 7.9% and in females 13.6% and 5.18% respectively).^{5,6} Hence we can say that some protection against HIV can be offered by higher education which makes one aware about the alarming situation around and modes of prevention. Present study shows that prevalence of HIV is more among housewives (24.66%) and semi-skilled workers (males 44.62% and females 44.23%). A. Kumar et al reported similar finding (house wife 34.2% and semi skilled worker male 49.7% and female 19.3%).⁵ G. K. Joardar et al reported similar findings for housewives but for males they found that the prevalence was common among unskilled and business

occupation.⁶ Higher prevalence among housewives is an alarming situation which is likely to increase HIV transmission.

We found that HIV prevalence is more among urban residents (male 66.15 and female 63.46%) than rural residents (male 33.85% and female 36.54%). These findings indicate that for transmission of HIV urbanization may be determining factors for increased risk. HIV was common among those whose spouse was positive for HIV than a HIV negative spouse. This is an important finding of the study and gives us direction to immediately target those whose spouse is HIV negative to interrupt transmission of HIV. HIV serostatus of 30.48% spouses was unknown and here we have to motivate them for HIV testing so that we will be close to the actual picture of HIV which will help to interrupt transmission of HIV.

When the risk behavior question was asked majority of females (86.54%) not responded. Similar finding was reported by A. Kumar et al.⁵ While G. K. Joardar et al⁶ reported a very low rate of non response both among male and females. This may be due to the differences in the educational levels, interview techniques, trust in the centre etc. All the studies^{5, 6, 8} agreed that the promiscuous behavior / heterosexual multiple partners is the commonest risk behavior reported.

The present study is conducted in the ICTC and is a record based study for duration of only 12 months. Hence it has many limitations like way of asking questions by counselor while collecting the data and as data collection based upon oral questionnaire method and answers given by attendees were relied upon.

V. Conclusion and Recommendations

Prevalence of HIV among attendees during July 2017 to June 2018 was 3.55%. This can be definitely considered to be a matter of great concern and hence HIV awareness campaigns needs to be exaggerated. Prevalence of HIV was very high among sexually active age group. Hence when conducting sessions of HIV awareness in the community, it should be kept in mind that 15-49 years age group must attend the sessions. Higher education was found to be a protective factor for HIV, as education can help enhance the condom use rate. Hence people should be motivated to have higher education and health education regarding HIV/AIDS should be included in the Secondary schools. HIV prevalence was high among those whose spouse was HIV positive. Hence HIV negative spouse of HIV positive person becomes the target group for priority targeted interventions to reduce the chances of HIV transmission. Using condom would help them to avoid pregnancy thus will reduce the chances of mother to child transmission. Promiscuous behavior pattern should be explained in details so that the proper control measures should be taken.

VI. Tables

Table 1: Socio-demographic characteristics of the study subjects

Factors	Male (N= 65)		Female (N = 52)	
	No.	%	No.	%
Age Group (years)				
<15	6	9.23	3	5.77
15-49	52	80.00	42	80.77
≥ 50	7	10.77	7	13.46
Marital Status				
Married	51	78.46	40	76.92
Unmarried	9	13.85	3	5.77
Others*	5	7.69	9	17.31
Literacy Status				
Illiterate	24	36.92	24	46.15
Class I – IV	13	20.00	7	13.46
Class V – X	12	18.46	9	17.31
Class XI & above	16	24.62	12	23.08
Occupation				
Unskilled	32	49.23	13	25.00
Semi-skilled	29	44.62	23	44.23
Others [#]	4	6.15	16	30.77
Place of Residence				
Urban	43	66.15	33	63.46
Rural	22	33.85	19	36.54

Others* include separated, widowed & divorced.

Others[#] include housewives, students & unemployed.

Table 2: Distribution of study subjects according to HIV serostatus of their spouse

HIV Serostatus of Spouse	Male (N= 56)		Female (N = 49)	
	No.	%	No.	%
Positive	24	42.86	17	34.69
Negative	19	33.93	13	26.53
Unknown	13	23.21	19	38.78

Table 3: Pattern of Risk behavior among study subjects

Risk Behaviour	Male (N= 65)		Female (N = 52)	
	No.	%	No.	%
Promiscuity	30	46.15	7	13.46
Homosexuality	1	1.54	0	0.00
No Response	34	52.31	45	86.54

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