

A STUDY ON THE PROFILE AND SEXUAL BEHAVIOUR OF PATIENTS IN AN ICTC CENTRE IN A DISTRICT HOSPITAL IN NORTH INDIA

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Abstract

Introduction: Integrated counseling and testing (ICTC) for HIV is a cost-effective intervention in preventing the spread of HIV transmission and is an integral part of HIV prevention program, which provides an opportunity to learn and accept the HIV status in a comfortable, convenient, and confidential manner.

Material and Methods: A retrospective study of 3600 attendees visiting the ICTC centre from April 2010 to April 2011 was undertaken. The study included 3600 attendees who came either voluntarily or referred by various department of this institute. Dominant reason for visiting ICTC was the history/presence of high risk behavior (HRB).

Results: 60% indulged in heterosexual route; other HRB including men having sex with men or MSM were 5% and injecting drug users or IDU were 15%. There were more positive among males, 21-40 years of age group, those living singly, unmarried, divorcee, widow(er) and separated. Similarly positives were more amongst illiterates, less educated and those engaged in unskilled and semi skilled jobs. Adolescent students (>14 years) accounted for one-fifth of the total positives. Direct walk in clients were more positive compared to those referred by doctors. Overall sero positivity was 4.8%; high in males, 21-40 years age, unmarried and divorcee etc.

Conclusions: Sero prevalence decreased with improvement in education and also with improvement in job nature. It was also high in those living alone compared to those staying with their family.

Key words: HIV; AIDS; sexual; behavior; high risk behavior; truckers

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Introduction

HIV was first identified in the gay community in the United States in the early 1980s, but the origin of the virus is in Africa, likely around the Democratic Republic of the Congo (former Zaire) [1]. There are large differences in HIV prevalence across the world, with Africa sustaining much higher HIV rates than elsewhere [2].

In India, about 2.47 million people are infected. As per the PSACS, the infection prevalence in Punjab is 0.11 per cent against the national figure of 0.36 per cent. The state has so far reported 17,820 HIV positive cases; AIDS cases on ART are 7,567 and reported deaths are 786 [3]. Due to easy availability of drugs and high purchasing power in the state, injection drug users (IDUs) are emerging as the major problem. The latest mapping study and surveillance data has indicated an increasing HIV positive cases in IDUs category. PSACS is focusing on IDUs through 15 targeted intervention (TI) projects. Sexual,

especially the heterosexual, transmission is the main driver of the epidemic in most of India, accounting for nearly 90% of nationwide prevalence [4]. In order to implement the desired intervention, the epidemiology of modes of transmission (HIV/AIDS) in a particular region has to be understood with regard to sociodemographic factors, level of awareness, as well as risk behavior of the population. It is so because the effective approach for the prevention and control of infection/disease is through awareness generation and lifestyle changes.

Integrated counseling and testing (ICTC) for HIV is a cost-effective intervention in preventing the spread of HIV transmission and is an integral part of HIV prevention program, which provides an opportunity to learn and accept the HIV status in a comfortable, convenient, and confidential manner [5]. Integrated counseling testing center (ICTC) network is the first interface between a person willing to get tested and the public health system. Further, it is an entry point to care.

In the NACP phase III, HIV testing facilities have been segregated in A and B categories by district and are now available at all medical colleges, district hospitals, and subdistrict hospitals (Community Health Centers). At subdistrict level, earlier ICTCs and facilities providing prevention of Parent to Child Transmission of HIV and AIDS (PPTCT) services are now remodeled as a hub to deliver integrated services to all clients. Presence of infection everywhere highlights spread from urban to rural areas; from high risk to general population via bridge population, and from permissive to conservative societies. Migration of labor, low literacy levels, gender disparities, and prevalent RTI/STI have contributed to this spread. The data generated in ICTC provides an important clue to understand the epidemiology of the disease in a particular region [6,7].

There are four subgroups of single men for each age category: those with no partners, those with casual partners, those with female sex worker partners, and those with both casual and female sex worker partners [8]. Casual partners are drawn at random from the female population, and female sex worker partners are drawn at random from the sex worker population. In parallel, married men of any age are in one of four subgroups: spouse only, spouse and casual partners, spouse and female sex worker partners or spouse, casual, and female sex worker partners. viral transmission rates from men to women are higher (by a factor of 2) than from women to men. In addition, due to the extremely short length of partnerships with female sex workers, it is assumed that the transmission rate is lower in these partnerships than in casual or spousal partnerships. Condom use differs by gender, marital status, and partnership type. There is assumed to be no condom use in spousal partnerships, and higher condom use in partnerships with female sex workers than

in other premarital or extramarital sex.

Aims

1. To find out the profile of those who come to avail the ICTC services
2. To know the profile of those found positives.
3. An additional objective was to find out sero positivity in subsamples of the attendee in terms of various socio-demographic and epidemiological characteristics.

Material and Methods

A retrospective study of 3600 attendees visiting the ICTC centre from April 2010 to April 2011 was undertaken. The epidemiological and clinical aspects of each patient were recorded in the computer and then analysed in detail. The study included 3600 attendees for a period of one year, who came either voluntarily or referred by various department of this institute. Anonymous and unlinked information was collected (as per NACO guidelines) on predesigned schedule by the counsellor who interviewed the attendees under strict confidentiality. After the pretest counseling and obtaining the consent from the attendees, blood samples were collected. As per the policy prescribed by NACO, HIV was confirmed by performing enzyme-linked immunosorbent assay (ELISA), by using two different antigens and a rapid test. The prior approval was taken from the appropriate authorities from the institute.

Results

The data was collected, tabulated and the results were analyzed (Tabs I - III).

Sr No	Age Group	Number	Percentage
1	10-20	360	10%
2	21-30	144	40%
3	31-40	108	30%
4	41-50	360	10%
5	51-60	288	8%
6	>60	72	2%
	Total	3600	100%

Table I. Age group of ICTC attendees.

Sr No	Occupation	Number	Percentage
1	Farmers	864	24%
2	Unemployed youth	966	26%
3	Manual workers	506	14%
4	Students	720	20%
5	Housewives	360	10%
6	Truck drivers	216	6%
	Total	3600	100%

Table II. Occupation of the ICTC attendees.

Sr No	Routes of Transmission	Number	Percentage
1	Heterosexual	2160	60%
2	Homosexual	180	5%
3	Blood transfusion	252	7%
4	Intravenous drug users	540	15%
5	Mother to child transmission (mct)	108	3%
6	Unknown causes	360	10%
	Total	3600	100%

Table III. The various routes of transmission.

Out of total 3600 patients, 2160 (60%) were males, 1440 (40%) females. The maximum number of patients (40%) were seen in the age group 21-30 years, followed by 30% patients in the age - group 31-40 years, 10% patients in the age - group 10-20 years, 10% patients in the age - group 41-50 years, 8% patients in the age - group 51-60 years, 2% patients were more than 60 years (Tabl. I). All subjects were adults (>15 years). Majority were married (82%), literates (72%), urbanites (56%), and natives (55%). Male: Female was 1.5:1. Regarding their occupational status, 26% were unemployed youth, 24% were farmers, 14% were manual workers (including mechanics, labourers, tailors and carpenters), 10% were housewives, 20% were students and 6 % were truck drivers (Tabl. II). Half of them came to know their HIV status from ICTC , followed by physicians (30%) and rest from RNTCP (9%), PPTCT (3%), self-referral (5%), and accidentally detected (2%). Large number informed their spouse (85%) and family (76%). Based on self-reporting, 60% clients acquired it by heterosexual and 5% by homosexual route (man having sex with man), blood transfusion was the cause in 7% cases, intravenous drug abuse was noted in 15% clients, mother to child transmission was seen in 3% of the attendees and no cause could be elicited by the counsellor in 10% cases (Tabl. III). Sexual route needs to be targeted because 21-40 years age group accounted for 70% cases. In 90% couples, the husband was the source of the infection and in 10% couples, the wife was the source of the infection. 60% patients had unprotected sexual contact while 40% patients had at least one contact protected by the usage of condom. 30% patients had premarital contact (PMC), 45% patients extramarital contact (EMC) and 25% patients had both PMC and EMC. The remaining patients denied any history of PMC or EMC. The source of contact was commercial sex workers (CSW) in 40% patients in 35% cases a known friend was the source of contact, while in 25% cases the contact was casual.

Discussion

The ICTC is an ideal point for prevention, where HIV negative individuals learn to use full array of existing services and interventions to adopt and maintain risk reduction behaviors, and HIV positive individuals use quality prevention services to adopt and sustain lifelong protective behaviors and avoid the virus transmission. ICTC services cater to those who come to the center either from referral (care providers) or direct walk in clients; some times it can be referral from the targeted interventions by NGOs running in the area [9]. So the profile of attendees depends upon the characteristics of the catchment areas and the population residing therein [10]. Many people do not know that they are/may be HIV positive and the challenge is to make these people aware to come forward for the testing and adopt a healthy lifestyle, thereafter for the access to care and treatment and help in preventing further transmission. Counselling and testing are important for prevention and control of HIV/AIDS; however, it is neither desirable nor feasible to counsel and test everyone in the general population. The subpopulations which are vulnerable or practice high risk behavior (HRB) or have high HIV prevalence shall be the target group for these services.

An alarming fact was observed in this study that the prevalence is catching up in 21-30 years of age group, indicating that AIDS still threatens the most productive segment of society in the prime of their working life [11]. It emphasizes the need of some youth specific interventions or some school or college-based

interventions whereby these people can be prepared beforehand. Education and job status showed the inverse relationship with the prevalence. In fact none of the positive was educated beyond 12th standard. It seems that overall development (reflected by better education and job opportunities) will provide some protection. As such the people who are educated or placed in better jobs (mostly go together) are more receptive to IEC and amenable to interventions. India's vulnerability to the AIDS epidemic can be attributed to pervasive poverty, huge illiteracy, less awareness, promiscuous behavior, and adverse attitude towards condom use. The route of transmission reported among HIV-positive male and female clients of ICTC is mainly heterosexual contact [12]. Therefore for behavioral change communication (BCC) and effective positive prevention, it is essential to explore HRB of each and every client. Another important bridge population is the long-route truck drivers of India; 70% of them have sexually transmitted infections and on an average they have 200 sexual encounters per year [13].

Therefore it was not surprising to find 95% PLHA truck driver in this study to have acquired the infection through heterosexual route (remaining 5% did not mention the route). Present study reinforces the need to work more intensively with this population. One-fourth clients in present study were from rural areas, which confirm that the epidemic is moving from urban to rural areas; better surveillance can explore more clients. Migration itself is not a risk factor for HIV but the circumstances in which migration occurs increases vulnerability to infection. Blood transfusion is second established route of transmission after sexual route, which has reduced but is still around 2%, much lower than present study (7%). Those who acquired it from blood route informed their spouse as well as family, while those who acquired it from sexual route did not inform to their spouse and family . Because of stigma associated with sexual route, a PLHA (infected through sexual route) finds it difficult to share HIV status with his/her spouse/family [14]. Same is not the case when it is acquired through blood route. The present study indicates that 90% of the infected males and 98% of the infected females were living with their families. The information regarding their disclosure of the test to their family members is not available and hence it is difficult to say whether such a high level of acceptance by the family, especially towards females will be maintained even after the disclosure or not.

Current study is subjected to certain limitations since it was conducted in a district hospital with a predesigned schedule, therefore, results are based on the reporting and data collection by the personnel employed in the ICTC. Information regarding socioeconomic status, substance abuse and condom use were not available in all the cases. Timely and relevant use of data to guide decision making (though challenging) is critical. Program needs to invest resources not just to gather data, but also to create and stimulate a culture that emphasizes appropriate data analysis and use at all levels. All these variables could have unmasked certain behavior pattern and given new dimension to this study. This study setting being a hospital decreased its external validity. Results observed are subjected to bias arising from rate of reporting in the counseling and testing centre. A community based study though resource intensive would have been better to avoid such bias. All four modes of transmission were associated with typical epidemiological determinants and have impact on accessibility of preventive/curative services and treatment-seeking behavior.

Also, the medical fraternity should take a stand and fight against the discrimination of sufferers, rather than ostracizing them to have a positive attitude for the HIV sufferers.

Conclusion

Prevention of HIV infection should theoretically be easier than prevention of water and air borne pathogens. HIV/AIDS is spread as much by human behavior and ignorance as by the virus. The wider clinical setting itself can provide enabling environment and reduce the stigma and discrimination. The empowerment of attendees and empathic attitude of staff at center is crucial, as clinical staff can set an example by exhibiting stigma free attitudes.

Improvement of IEC and HIV/AIDS awareness is one of the most effective strategies to control HIV/AIDS [15,16]. A successful communication program helps to promote behavioral change, in addition to increasing knowledge regarding the disease. Such programs will be more effective if conducted in local languages and using the locally derived data. At the same time, they must keep in mind the following: social norms, cultural beliefs, and sensitivities of the community. Such intensive IEC will improve the uptake of VCT services by the target population. Even if the country's epidemic does not match the severity of those in southern Africa, it is clear that HIV and AIDS will have a devastating effect on the lives of millions of Indians for many years to come. It is essential that effective action is taken to minimize this impact.

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