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Profile of HIV positive clients: an ICTC record based retrospective study

Rekha Dutt*, Susmita Choudhuri, Shweta Goswami

Department of Community Medicine, ESI Medical College, Joka, Kolkata, India

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*Correspondence:
Dr. Rekha Dutt,

E-mail: rekha_dutt1971@rediffmail.com

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ABSTRACT

Background: Deaths in productive age group due to HIV/AIDS have damaging impact on families and communities, skills are lost, workforce shrinks & children's are orphaned. Our study reports the socio-demographic characteristics of HIV/ AIDS clients from one of the Integrated Counselling & Testing Centre (ICTC) situated at Amtala, West Bengal. This will give us an insight on the distribution of various epidemiological characteristics of the HIV positive clients in this region thus help in formulating strategies for effective implementation of its prevention. The objective was to study socio-demographic profile and risk behavior pattern of HIV positive clients attending ICTC.

Methods: It was an observational study cross sectional in design. Records of last eight years of HIV positive clients were accessed from ICTC centre at Amtala hospital, rural training centre, Department of community medicine, ESI PGIMSR medical college, Joka, Kolkata. Data was entered in SPSS for Windows version 20 software. Data was presented in percentages, mean with standard deviation etc.

Results: Retrospective record of 62 HIV positive clients was studied, of them 37 were males (5 pediatric cases) and 25 females (7 ANC). Excluding pediatric clients, mean age of clients was 32 years. It was observed that majority of clients were illiterate and were on daily wages. Except one male client who was homosexual rest were heterosexual. Majority of clients 71.9% males and 92% females were married, of them 45.3% males and 34.7% females were sero concordant with their spouse. Seventeen subjects were co infected with TB.

Conclusions: HIV sero prevalence rate has inverse relation with literacy level. Majority of male clients were daily wagers who act as link between high risk populations to general population i.e. their spouse, which in turn can pass on the infection to her baby. Lack of knowledge on mode of spread and preventive measures against HIV infection devastate the families making many children orphaned. There is need to carry out intense IEC activities for behavior change at grass root level.

Keywords: HIV positive, ICTC, Sociodemographic

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 carrier reservoir 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. Nearly 89% of reported cases of HIV/AIDS are occurring in sexually active and economically productive age group (15-44 yrs) in India. Deaths in this age bracket have damaging impact on families and communities, workforce shrinks and children are orphaned. Integrated counseling and testing centre (ICTC) is the key component in preventing spread

of HIV, promote behavioral changes to range of interventions in prevention and care ensuring availability of professional, client centered counseling and testing services in an easily accessible, non-discriminating environment. Integrated Counseling and Testing Centre (ICTC) is an entry point to care and support services, which provides people with an opportunity to learn and accept their HIV sero status in a confidential environment. The aim is to reduce psycho-social stress and provide the client with information and support necessary to make decisions. The data generated by ICTC may provide important clues to understand the epidemiology of the disease in a specific area, as well as pattern of risk behavior of the population. Integrated counseling and testing could be considered a cost effective way of reducing HIV transmission in resource poor countries like India. Therefore, this study is undertaken to observe the sociodemographic profile HIV seropositive clients at ICTC centre in a rural hospital in West Bengal. This study can provide significant information to understand epidemiology of HIV/AIDS in this region that would help in formulating strategies for effective implementation of its prevention.

METHODS

Study type: Retrospective, observational study

Study design: Cross sectional study.

Study area

ICTC centre at Amtala hospital, Rural training centre, Department of community medicine, ESI PGIMSR medical college, Joka, Kolkata. It is situated on Diamond Harbour Road, National Highway 12 and has been functional for last 8 years since 2009 conducting HIV tests, counselling of patients as well as maintains proper records

Study population

8 years (2009-2017 March) record based study on HIV positive clients attending ICTC Centre, Amtala Rural hospital, West Bengal.

Study instrument

Performa containing the checklist on sociodemographic characteristics of HIV positive clients including age, sex, education, occupation, marital status & parameters like TB co-infection, sexual preference, HIV status of the spouse, ART registration status etc. HIV was diagnosed by performing ELISA by two different antigens and a rapid test as recommended by NACO.

Data collection

The records of the ICTC Amtala Rural hospital are sought and accessed.

Analysis

Data was entered in SPSS for Windows version 20 software. Data was presented in percentages, mean with standard deviation etc.

Ethical issues

Ethical approval was obtained from the Institutional Ethics Committee of ESIC Medical College Joka Kolkata. Identity of the clients was not accessed.

Selection criteria

Inclusion criteria were complete record of HIV positive client. Exclusion criteria were incomplete record of HIV positive client.

RESULTS

Total 62 HIV positive clients' record was accessed out of which seven had died.

Table 1: Socio-demographic characteristics of HIV positive patients across gender (N=57).

Socio-demographic	Male (N=32)	Female
characteristics	excluding 5	(N=25)
Aga (Maan CD)	paediatric clients 37.4±10.5	31.6±9.3
Age (Mean±SD)	37.4±10.3	31.0±9.3
Living status	26 (01.2)	24 (06)
Live	26 (81.3)	24 (96)
Dead	6 (18.8)	1 (4)
Education		
Illiterate	17 (53.1)	18 (72)
Primary	15 (46.9)	6 (24)
Graduate & above	0 (0)	1 (4)
Occupation		
Daily wage earner	25 (78.1)	11 (44)
Housewife	0 (0)	11 (44)
Truckdriver	2 (6.2)	0 (0)
Agricultural	1 (3.1)	0 (0)
business	2 (6.2)	0 (0)
CSW	0 (0)	3 (12)
Student	2 (6.2)	0 (0)
Marital status		
Married	23 (71.9)	23 (92)
Unmarried	9 (28.1)	2 (8)
TB co-infection	11 (34.4)	6 (24)
ART registered	21 (65)	19 (76)
Lost to follow up in	2 (6.2)	2 (12)
ART	2 (6.3)	3 (12)
Sexual preference		
Heterosexual	31 (96.8)	25 (100)
Homosexual	1 (3.2)	0 (0)
Spousal HIV status (N=23)*		
Sero-concordant	10 (43.5)	8 (34.7)
Sero-discordant	13 (56.5)	15 (65.3)
-		

^{*}percentages among those who were married.

Five male clients belong to paediatric age group. Mean age of the paediatric cases was 3.2±1.6 years. Four of them were alive and had got ART registration done (80%). None of them were TB co-infected.

There were seven antenatal cases (ANC) with mean age of 26.1 ± 4.4 years. Majority 85.7% in ANC cases were illiterate and 71.4% of were home makers. Prevalence of TB co-infection was 28.6% among ANC cases. Among the ANC cases 78% of them were ART registered but the rest were lost to follow up. Out of 7 cases 3 were sero-discordant means their partners were not infected with HIV. Our data shows that spouse of seven clients had already died. Four cases are reported where both client as well as partner has died. Socio-demographic characteristics across gender are depicted in Table 1.

DISCUSSION

In our study, mean age of positive clients was around 32 years which is similar to the study findings where more than 90% of the study individuals belonged to the age group 15-49 years as compared to the national age distribution of 83% of NACO (2010-11) which indicates an adverse effect on economical & reproductive agegroup. This is again similar to a study finding that shows the mean age of study subjects as 33.6±8.3 years (range 17-63 years); with the predominant age group being 26-35 years.

In our study, there were 60% and 40% of males and females clients respectively, which is similar with other findings of other ICTC based study at Navi Mumbai.⁵ Another study showed prevalence of more males (66.3%) than females with male female ratio being 1.96:1.⁴⁶ The male preponderance might have been due to the fact that in the existing social scenario in India where females do not seek medical care fearing ostracism, gender bias, and loss of family support hence go unreported.

In present study, 53.1% males and 72% of female clients were illiterate. This is more compared to other study where with regard to the level of education, 54% clients were illiterate⁵. It may be inferred that higher educational levels offer knowledge of prevention against HIV and STDs. Poor literacy among females is associated with high rate of infection as there is lack of awareness about risk factors and route of HIV transmission and probably are less empowered to insist on condom use. Majority of the clients among males were daily wage earner (78.1%). Among the female cases, around 44% of them were home makers and similar per cent were daily wage earner. A study by Rekha et al also observed daily wages to be the occupation of majority (70%) of HIV positive clients.⁵ High risk groups like truck driver & commercial sex workers constituted 6.2% & 12% respectively. Similar findings had been noted where occupational profile of study individuals revealed that 10% were drivers.³ A study carried out by Sharma, in north India in 2004 revealed that 39.6% were labourers & 10.4% cases were

drivers which is lower in case of daily wage earners but closely matches with the truck drivers in the present study.⁷

In our study, 71.9% of males and 92% female cases were married which is similar to the findings where 75.5% of the study individuals were married and 15.5% widowed, 7% were unmarried.⁴ High number of married persons having HIV/AIDS was also reported by Jayrama et al (70.3%). This clearly indicates that most of the females get infection from their husbands. These labourers usually stay away from their families for long duration, get involved in promiscuous behaviour and get infected with HIV. This implies that the labourers are working as a link population and spreading the disease from high risk sex workers to general population. In females the second most affected group was homemakers (44%) who are not empowered to insist on barrier contraception and suffer from deadly disease and can transmit the infection to foetus through placenta or to infant during delivery or by breastfeeding thereby adding to the number of paediatric HIV cases. In present study seven females were pregnant and of them four were confirmed sero concordant that means they might have received infection from husband risking the new borne and possibility of baby getting orphaned is high. Our study observed that seven clients were widowed and there are four cases where both the partners have died. This epidemic has devastating effect on the socioeconomic status of families that are being destroyed and children becoming orphaned. There are 17 cases that were not registered for anti-retro viral therapy (ART); five cases were lost to follow up for ART posing potential danger of disease spread in the community.

In present study, prevalence of TB co-infection was 34.4% and 24% respectively among males & females which is similar to the findings of another author that shows Tuberculosis (38.8%) was the commonest opportunistic infection and in that, as in other studies, extra-pulmonary tuberculosis was more common than pulmonary tuberculosis (41.8% vs. 47.6%). Majority of clients were heterosexual. Only one positive cases among males was homosexual which is similar to other findings where heterosexual route was found in 95.62% and 97% of the sexually transmitted cases. 5,7

About 56% and 65% of cases among male and female group were sero-discordant respectively which is similar to the findings where 50.50% of the study individuals had sero positive spouse while in 20% of study individuals the spouse were seronegative.³ Similarly, 44.9% of males had HIV positive partners while 82.3% females had HIV positive partners in a study. This again shows a male predominance of HIV infection. This finding was more or less similar to the study conducted by Bhandarkar et al in Karimanagar wherein the spouse positivity was higher among females i.e. 49.8% as compared to males i.e. 32.9% indicating that more number of females get infected through their partners.^{6,9}

CONCLUSION

A significant number of the positive cases in our study were in the economically productive as well as in reproductive age group and majority of patients were males indicating that this disease is causing a great loss to the nation's economy. The other socio-demographic determinants found were - literacy status, occupation. Since higher literacy helps in the improvement of the socio-economic status of the individual, so just by working on improvement of literacy status we will be able to modify the other socio-demographic determinants. Also, improved literacy level will help in better understanding about the disease process, its mode of transmission, personal protective measures to be employed. This will give the empowerment of societal responsibilities at the individual level, which will help in preventing the spread of this pandemic. The commonest mode of acquiring infection was heterosexual contact, emphasizing the need to strengthen our Information education and communication (IEC) strategies to contain HIV/AIDS. Labourer which was the most common occupation found to be affected acts as a link population between high risk groups to general population and between urban to rural areas. Marital life itself becomes a risk factor for those women who get infected by their HIV positive spouse there by transmitting the disease vertically also. So, strengthening on IEC, Behaviour change communication (BCC) must be emphasised regarding awareness generation specially those high risk bridge population. Authorities must strengthen the services at every transit point for the migrant labours & truckers. Sero-discordant partners should be advised about barrier method as well as counselling for various forms of risk behaviour.

Limitation of study

This study was conducted from the record of ICTC Rural Hospital that is situated on National Highway and clients from any area can come and get the services. A community based study would have been better to avoid bias. Information on migration and condom use would have made this study more interesting.

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Institutional Ethics Committee

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