

Profile of the Patients Attending in ICTC, RIMS, Ranchi

Asha Kiran*, Manisha Kujur, Mithilesh Kumar, Haider S, Kashyap V and Sundaram S

Department of Community medicine, RIMS, Ranchi, Jharkhand, India

Abstract

Background: Jharkhand is a low prevalence state but it is being considered as highly vulnerable state with 7295 patients (as on Dec. 2010). 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 serostatus in a confidential environment.

Objective: To assess socio-demographic profiles, seropositivity and risk behavior pattern of client attending ICTC Rajendra Institute of Medical Sciences, Ranchi, Jharkhand. Study design: cross-sectional observational study. Setting: Integrated Counseling and Testing Centre (ICTC) in microbiology department attached to RIMS, Ranchi. All the 1463 attendees attended the ICTC between January to March 2013 were included in the study. Study variable: Age, Sex, Marital-status, Level of education, Occupation, Residence, HIV sero-status and pattern of risk behavior in relation to HIV. Statistical Analysis: Proportions.

Results: Out of 1463 ICTC attendees 6.9% were seropositive. 87.88% male and 85.71% female were seropositive belongs to the age group 15-49 yrs. 80.19% of HIV positives were married. 37.62% of HIV positives were illiterate. Among the male sero-positive 28.79% were drivers (truckers and local transport workers). 25.74% out of 101 seropositive belongs to Ranchi district in Jharkhand. 53.03% of HIV positive among male attendees were gave history of casual/non-commercial, non-regular partner.

Keywords: HIV serostatus; Integrated counseling and testing centre; Priority Targeted Interventions

Introduction

The HIV/AIDS infection is a global pandemic and a profound impact on the health and economic conditions of individuals and people living with HIV/AIDS are faced with the task of maintaining optimal health status despite an increasing insult to their immune status [1]. The number of AIDS patients is rising day by day with about 34 million people affected worldwide (at the end of 2010) [2].

From the detection this mysterious illness for the first time in 1986 at Chennai, the HIV infection has been growing very fast in India (2.4 million people affected as on 2009) [3] with Maharashtra, Tamil Nadu, Karnataka, Andhra Pradesh, Manipur and Nagaland being the high prevalence states. Jharkhand is a low prevalence state but it is being considered as highly vulnerable state with 7295 patients (as on Dec. 2010) [4]. The prevalence rate of HIV/AIDS has declined in Jharkhand from 0.31% to 0.13% which is less than the national figure of 0.31%, according to data of the UNICEF. In Jharkhand, there are 23,000 cases in which 12,000 have been identified and the rest are unaware of their status [5].

Integrated Counselling 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 serostatus in a confidential environment. Out of 64 ICTC are situated in Jharkhand state of which six are in Ranchi district.

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 particular part of specific area [6], level of awareness as well as pattern of risk behaviour of the population. Integrated counselling and testing could be considered a cost effective way of reducing HIV transmission in resource poor countries like India [7].

Aims and Objective

- To assess socio-demographic profile of client.
- To know the risk behaviour pattern of client.
- To find out the seropositivity in the attendees.

Materials and Methodology

This is the cross sectional study that was carried out in an ICTC centre, which is attached to the Microbiology department of RIMS, Ranchi, Jharkhand. More chances of HIV transmission in Ranchi is due to high population movement (between states) as well as influx of a very large number of workers and truckers [8]. As this institute is the apex hospital in this region, the information gather from the attendees of this centre may throw light on the epidemiology of HIV transmission in this area.

The study included all the 1463 registered attendees who attended the ICTC centre during first quarter (January - March) 2013 either voluntarily or being referred from various department of this institute. The various information were collected on a pre-designed schedule by the counsellor who interviewed the attendees under strict confidentiality. The socio-demographic profiles and their HIV serostatus were shown in Table 1.

As per NACO guideline after getting consent from the attendees, their blood sample was tested by Rapid test kit (first test). The serum sample showing the positive test result was subjected to a Trispot and Triline test (second test). Those sample showing positive test result in the second test were declared HIV positive, and the person showing negative test result were advised to come after one month for review. Variables used were age, sex, marital status, educational status and occupation, place of residence and pattern of risk behaviour in relation to HIV/AIDS. Analysis was done by standard statistical method using proportion and shown in Table 2.

***Corresponding author:** Asha Kiran, Assistant Professor, Department of Community medicine, Rajendra Institute of Medical Sciences, Ranchi, Jharkhand, India, Tel: +91 9431257527; E-mail: drashakiran95@gmail.com

Received March 03, 2015; Accepted April 03, 2015; Published April 07, 2015

Citation: Kiran A, Kujur M, Kumar M, Haider S, Kashyap V, et al. (2015) Profile of the Patients Attending in ICTC, RIMS, Ranchi. J Community Med Health Educ 5: 341. doi:[10.4172/21610711.1000341](https://doi.org/10.4172/21610711.1000341)

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| Age | Male Attendees | | Female Attendees | |
|---------|------------------------|------------------|-----------------------|------------------|
| | No. attendees (N=901) | Positives (N=66) | No. attendees (N=562) | Positives (N=35) |
| <14 | 130 | 1(1.51%) | 87 | 1(2.85%) |
| 15-24 | 193 | 15(22.73%) | 125 | 8(22.86%) |
| 25-34 | 206 | 23(34.85%) | 133 | 12(34.29%) |
| 35-49 | 173 | 20(30.30%) | 122 | 10(28.57%) |
| >50 | 189 | 7(10.61%) | 94 | 4(11.43%) |
| Unknown | 10 | 0 (0) | 1 | 0(0) |

A) HIV serostatus by age and sex

| Marital Status | No. attendees (N=1463) | HIV- positive (N=101) |
|--------------------|------------------------|-----------------------|
| Unmarried | 366 | 9(8.91%) |
| Married | 1048 | 81(80.19%) |
| Divorced/Widow(er) | 49 | 81(80.19%) |

B) HIV serostatus by marital status

| Level of Education | No. attendees (N=1463) | HIV- positive (N=101) |
|--------------------|------------------------|-----------------------|
| Illiterate | 536 | 38(37.62%) |
| Class I-IV | 280 | 22(21.78%) |
| Class V-X | 490 | 30(29.70%) |
| Class XI and above | 168 | 11(10.89%) |

C) HIV serostatus by level of education.

| Occupation | Male Attendees | | Female Attendees | |
|------------------------------------|-----------------------|------------------|-----------------------|-------------------|
| | No. attendees (N=901) | Positives (N=66) | No. attendees (N=562) | Positives (N=35) |
| Agricultural Laborer | 60 | 5(7.57%) | 0 | 0(0) |
| Non-agricultural Laborer | 73 | 7(10.61%) | 27 | 0(0) |
| Domestic servant | 44 | 0(0) | 10 | 0(0) |
| Skilled Worker | 60 | 4(6.06%) | 0 | 0(0) |
| Unskilled Worker | 85 | 4(6.06%) | 0 | 0(0) |
| Business | 75 | 6(9.09%) | 10 | 0(0) |
| Service (Govt./Pvt.) | 86 | 9(13.63%) | 27 | 0(0) |
| Student | 107 | 2(3.03%) | 95 | 1(2.86%) |
| Drivers | 129 | 19(28.79%) | 0 | 0(0) |
| Hotel Staff | 58 | 3(4.54%) | 0 | 0(0) |
| Landholder/Agricultural Cultivator | 75 | 4(6.06%) | 10 | 0(0) |
| Unemployed or retired | 49 | 4(6.06%) | 383 | 34 (97.14%) |

D) HIV serostatus by occupation

| Name of the Districts | No. Attendees: Positive |
|-----------------------|-------------------------|
| Ranchi | 26 (25.74%) |
| Ramgarh | 12 (11.88%) |
| Giridih | 12 (11.88%) |
| Bokaro | 10 (9.90%) |
| Hazaribagh | 4(3.96%) |
| Koderma | 6(5.94%) |
| Latehar | 5 (4.95%) |
| Dhanbad | 4(3.96%) |
| Others | 14 (13.86%) |

E) HIV serostatus by place of residence

Table 1: Socio-demographic profiles and HIV serostatus of the ICTC attendees (N=1463).

Results

In our study, participants attended the ICTC either by self-referral or following referral by a health care provider. 1463 patients were approached during the survey they were included in our study.

The proportion of direct walk-in patients in our study was 153 (10.46%). Out of 1463 attendees studied, 901 (61.58%) were male. The HIV serostatus of the attendees 101 (6.9%) out of 1463 are positive after

three test. The seropositivity was 7.32% among male and 6.23% among the female.

The distribution of the attendees by their age, sex and HIV serostatus shows that out of 66 sero-positive male, 58 (87.88%) were belong to the age group of 15-49 years. The same pattern of distribution was observed that out of 35 sero-positive female, 30 (85.71%) were belong to the age group of 15-49 years which is the productive age.

| Risk Behaviour | Male Attendees HIV positives (N=66) | Female Attendees HIV positives (N=35) |
|--|-------------------------------------|---------------------------------------|
| 1) Hetrosexual : | | |
| a) Commercial sex worker | 26(39.39%) | 0(0) |
| b) Casual/Non –commercial/non- regular partner | 35(53.03%) | 0(0) |
| c) Regular-partner/Spouse | 2(3.03%) | 32(91.43%) |
| 2) Homosexual /Or Bisexual | 0(0) | 0(0) |
| 3) Through blood/Or blood products | 2(3.03%) | 1(2.85%) |
| 4) Infected syringe | 0(0) | 0(0) |
| 5) Parent to child (for children) | 0(0) | 2(5.71%) |
| 6) Not specified/Unknown | 1(1.51%) | 0(0) |

Table 2: Pattern of risk behavior and HIV serstatus of the ICTC attendees (N=1463).

The distribution of attendees by their marital status shows that 81 (80.19%) out of 101 seropositive were married, 11 (10.89%) were separated/widow and 9 (8.91%) unmarried.

The educational level and the HIV serostatus of the attendees shows that out of 101 seropositive 38 (37.62%) were illiterate, 52 (51.48%) were educated up to class X standard and 11 (10.89%) were educated above class X. It was observed that 26 (25.74%) out of 101 seropositive belongs to Ranchi district.

The HIV serostatus of the attendees by their occupations shows that among the males majority of the HIV positive, 19 (28.79%) were drivers (truckers and local transport workers). In case of female attendees most of the seropositive 34 (97.14%) were housewives.

The pattern of risk behaviour and serostatus of the attendees shows that 35 (53.03%) of HIV positive among male attendees were gave history of casual/non-commercial, non-regular partner and 26 (39.39%) gave history of visiting commercial sex worker. The husband of 63 female (11.21%) out of 562 female attendees were HIV positive. Among 63 wives 32 (91.43%) were found HIV positive.

Discussion

ICTC services provides to those who come to the centre either from referral (care providers and NGOs) or direct walk in clients. So the profile of attendees depends upon the characteristics of the catchment areas and the population residing therein. The subpopulations which are vulnerable or practice high risk behaviour (HRB) shall be the target group for these services.

The ICTC general 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 behaviours, and HIV positive individuals use quality prevention services to adopt and sustain lifelong protective behaviours and avoid the virus transmission.

The HIV seropositivity in ICTC clients in the present study was noted to be 6.90% which is less than the overall prevalence for Gujarat (7.3%), [9] and then in the studies from South Kannada (9.6%), [10] and West Bengal (17.1%) [5]. Lower prevalence reported here may be due to the fact that this centre mainly caters to the urban population. The difference in HIV prevalence in different studies may be attributed to the difference in health seeking behaviours in different parts of the country which depends on socio-cultural milieu of the community.

According to the present study ,majority of male (87.87%) and female (85.71%) of the seropositive attendees were belong to the age group 15-49 years, as found in the studies Sinha et al. [11] 89.4% in male and 88.00% in female.

The majority of the subjects belonged to the illiterate group as found in above surveys. The educational status of sero-positive attendees

reveals that 37.62% were illiterate as 22.22% found in the studies Sinha et al. Who is illiterate or educated up to secondary level will not have adequate knowledge for protecting himself/herself from HIV/AIDS. It seems that education does provide some protection. As such the people who are well educated are more receptive to information, education and communication and amenable to interventions.

Regarding marital status of the attendees (80.19%) married were seropositive as in study of Vyas et al. [12], Gupta [10] and Jayaram et al. [13], which was again in accordance with the findings of the present study sero-positive persons as per marital status showed that 84.13% in Sinha et al.

Truck drivers constituted the highest figures (28.79%) of seropositives in the present study, which is in accordance with the findings of Sinha et al. and Mishra et al., where they found out that truck drivers who remain out of their home for most of the time indulge in sexual activities with partners other than their spouses. Similarly, 13.63% of servicemen were found sero-positive. This could be because they are away from their houses and have the chance to be engaged in extramarital sex. They can then get HIV and transfer to their wives at home and is vulnerable for a rapid spread of the infection.

Heterosexual risk behaviour was noted as the most common mode of transmission of HIV/AIDS in the present study. Unprotected heterosexual intercourse is the predominant mode of transmission of HIV in India (about 84%). It was observe that sex with non- regular partner is the “bridge population which connect high risk to low risk population. Larger the size of the bridge population, greater will be the risk of transmission in to the general population. The present study found that 92.42% in male clients undertook risky behaviour as found 69.0% male sero –positives in Rashmi et al. [14]. The observation of study also highlight that the large no. of attendees are connecting the high risk group (CSWs) with the low risk population.

Best antidote to the HIV/AIDS challenge remains increased awareness and adaptation of safe behavioural practices and the solution lies in planning and designing the IEC activities keeping in mind the specific situations of the area.

Limitations

Current study is subjected to certain limitations since it was conducted in an institute with a predesigned schedule, therefore, the result observed are subject to bias that was based on the reporting and data collection by the personnel employed in the ICTC. Information regarding socioeconomic status, substance abuse, counselling performed and condom use are not available. All these variables could have unmasked certain behaviour pattern and given new dimension to this study. A community based study though resource intensive would have been better to avoid such bias.

Conclusion

HIV cases are on decline globally and nationally in India, it is increasing in the Tribal heartland. This needs greater attention and area-specific planning including from the IEC (information education and counselling). There is a wide gap between the knowledge and practices of the people, which is the matter of real concern. There is an urgent need for the proper management of information system (MIS), which play an important role in the collection, analysis and transmission of the information to persons in places where it is required within a shorter timeframe (Garg et al. [15]). In order for our efforts to be successful, the health providers have to intermingle with increased availability and the use of ICTC services will prove to be a huge potential benefit for the society. A successful communication program helps to promote behavioural change, in addition to increasing knowledge regarding the disease [16,17]. Such intensive IEC will improve the uptake of ICTC services by the target population.

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Citation: Kiran A, Kujur M, Kumar M, Haider S, Kashyap V, et al. (2015) Profile of the Patients Attending in ICTC, RIMS, Ranchi. J Community Med Health Educ 5: 341. doi:10.4172/21610711.1000341

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