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Research Article

Socio-demographic Profile of HIV Seropositive Clients Attending Integrated Counselling and Testing Center's of Sullia Taluk, Karnataka

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Abstract: HIV/AIDS affects mainly the economically productive age group thus impeding the social and economic development of the country. Under the National AIDS Control Programme, Integrated Counselling and Testing Centers (ICTC) were established to provide preventive services to the population. The data from ICTC can guide in identifying various risk groups for priority targeted interventions to reduce HIV transmission in the community. The objectives were to study the sociodemographic profile and the risk behaviour patterns of clients diagnosed as HIV positive in all ICTC center's of Sullia Taluk. All the clients attending the ICTC's located in Sullia Taluk, Karnataka formed the sampling frame. Data pertaining to them were collected after obtaining permission from the in-charge medical officers of the ICTC centers. Of the 4652 clients of ICTC, 17 (0.36%) were seropositive for HIV. 76.47% were males, 26.53% were females, 94.11% belonged to 25-49 years age group, 94.11% were married, and 88.24% were literate. Majority (58.82%) of them are labourers from agricultural background and belonged to Class III Socioeconomic status. Unprotected heterosexual intercourse was the major mode of transmission. HIV TB co-infection was seen in 11.76%. In males and females who are positive; the HIV seropositivity in their spouse was 23.07% and 50% respectively. People have begun using ICTC services, which reflects a change in their attitude towards HIV. These findings help us to identify various risk groups and focus our attention on them for priority targeted interventions.
Keywords: Human Immunodeficiency Virus (HIV), Integrated Counselling and Testing Centers (ICTC), National AIDS Control Programme (NACP).

INTRODUCTION

The Human Immunodeficiency Virus (HIV) infection is a global pandemic [1] and is no longer just a public health issue in India but one of the most serious socio economic and developmental concerns as it affects the sexually active and economically productive age group predominantly [2].

The 2009 reports of UNAIDS estimated that 33.4 million people are living with HIV/AIDS [3]. The total number of PLHIV in India is estimated at around 20.9 lakhs in 2011. The three high prevalence states of South India (Andhra Pradesh, Karnataka, and Tamil Nadu) and Maharashtra account for 53% of all HIV infected population in the country [4].

The most important impact of various interventions under NACP is demonstrated by an overall reduction of 57% in estimated annual new HIV infections and 76% reduction in high prevalence states of India [4].

Karnataka has a prevalence of 0.63% as of 2009 [5]. A number of factors contribute to Karnataka's vulnerability to HIV epidemic, one being its demographic and economic ties with neighbouring states of Maharashtra, Tamil Nadu and Andhra Pradesh which have a well established and further growing epidemic of HIV/AIDS. Certain other factors like migration, poverty and economic pressures are also worth mentioning [1].

The epidemiology and clinical presentation of this disease varies greatly from country to country and from region to region in same country and even from patient to patient. Thus for planning targeted interventions, it is essential to know the epidemiological pattern of the disease in a particular area. Keeping this

in mind, it was planned to study the profile of HIV/AIDS patients attending all Integrated Counselling and Testing Centers (ICTC) of Sullia Taluk, Dakshina Kannada district of Karnataka, India.

MATERIALS AND METHODS

The study was conducted between March 2013 and May 2014 as a record based cross sectional study at all three ICTC centers located within Sullia Taluk of Dakshina Kannada district, Karnataka which included one ICTC centre at a Rural Private Medical College, one at Community Health Center, Sullia and the other at a Primary Health Center, Bellare belonging to Sullia taluk. Data from January 2013 to January 2014 was collected.

Permission from Institutional ethical committee and from all in charge medical officers of ICTC was obtained.

The study included all ICTC attendees of which sociodemographic characteristics such as age, sex, literacy rate, marital status, occupation, socio economic status and clinical presentation of all HIV positive individuals were only retained for this study.

The NACO (National AIDS Control Organisation) guidelines for diagnosis of HIV were followed in all ICTC centers. None of the HIV positives were excluded from the study.

The data was then entered in Microsoft Excel 2007, analysed and expressed in percentage.

RESULTS

Out of the 4652 individuals who availed ICTC services in all 3 ICTC centers of Sullia Taluk, 2561 (55.05%) were males and 2091 (44.94%) were females as seen in Table 1.

Table 1: Sociodemographic characteristics of the study subjects

Variables	Male (%)	Female (%)
Total ICTC attendees	2561 (55.05%)	2091 (44.94%)
Characteristics of HIV positives	13 (76.47%)	4 (23.52%)
Age groups (Years)		
<14 years	0 (0%)	0 (0%)
15-24 years	0 (0%)	0 (0%)
25-34 years	2 (15.38%)	3 (75%)
35-49 years	10 (76.92%)	1 (25%)
≥50 years	1 (7.69%)	0 (0%)
Education		
Illiterate/ Non formal education	1 (7.69%)	1 (25%)
Primary	9 (69.23%)	3 (75%)
Secondary	3 (23.07%)	0 (0%)
College & Above	0 (0%)	0 (0%)
Occupation		
Daily Labourer	7 (53.84%)	3 (75%)
Farmer	2 (15.38%)	0 (0%)
Driver	1 (7.69%)	0 (0%)
Business	3 (23.07%)	0 (0%)
Professional	0 (0%)	0 (0%)
House wife	-	1 (25%)
Marital Status		
Unmarried	1 (7.69%)	0 (0%)
Married	12 (92.30%)	3 (75%)
Widowed	0 (0%)	1 (25%)
Divorced/Separated	0 (0%)	0 (0%)
Socio Economic Status		
I (5113 & Above)	2 (15.38%)	0 (0%)
II (2557 -5112)	4 (30.76%)	1 (25%)
III (1533 – 2556)	7 (53.84%)	3 (75%)
IV & V (1532 & Below)	0 (0%)	0 (0%)

Among the 4652 beneficiaries, 17 of them were tested to be HIV positive, of which 13 were males and 4 were females. Thus the prevalence of HIV positivity among those who availed ICTC services was calculated to be 0.36.

A majority of the positive cases of HIV (94.11 %) belonged to 15-49 years with only 5.8 % belonging to more than 50 years of age group. None of them belonged to less than 14 years of age group. Majority of them, i.e., 15(88.23%) belonged to Hindu religion. The distribution according to marital status showed that 12 males (92.30 %) and 4 females (100 %) were married of which 25% of females were either widowed, separated or divorced. Only 1 male (7.69%) was unmarried. The literacy rate among the males and females were 92.30 % and 75 % respectively. Most of the males (53.84%) and females (75%) were occupied as daily labourers.

In 5 (29.41%) of the HIV positives, both the partners were found to be positive as showed in Table 2.

Table 2: HIV status of spouse

Patient	Positive spouse	Negative spouse	Unknown	Total
Male	3 (23.07%)	8 (61.53%)	2 (15.38%)	13
Female	2 (50%)	2 (50%)	0 (0%)	4

In majority (94.11%) of the HIV positives, the mode of transmission was heterosexual relationship with multiple partners as seen in Table 3. 5.88% of the study subjects deferred from responding to questions on sexual behaviours.

Table 3: Route of transmission

Route of transmission	Male	Female
Heterosexual	12 (92.30%)	4 (100%)
Blood transfusion	0 (0%)	0 (0%)
Homosexual	0 (0%)	0 (0%)
Unknown	1 (7.69%)	0 (0%)
Total	13	4

Two (11%) of the positive subjects were referred from RNTCP centers who were positive for pulmonary tuberculosis also as seen in Table 4. Thus, in this study, the proportion of individuals with HIV TB co-infection was 11.76%.

Table 4: HIV TB Co-infection

HIV Positive Patients	Total	Co-infection
Male	13	1 (7.69%)
Female	4	1 (25%)

Out of the total ICTC beneficiaries, 698 (15%) of the individuals visited ICTC voluntarily and 3864 (85%) were referred by doctors or other organisations. The most common reason for ICTC visit by the beneficiaries was quoted to be some medical illness.

Two (11.76%) of the HIV positives, were scared that they would be discriminated by their family members at the time of treatment or once they knew about their HIV status. Two (11.76%) felt that they would be separated from their spouse.

DISCUSSION

The present study revealed that the HIV/AIDS affects predominantly (94.11%) the economically productive class of the family and society such as 15-49 years of age group. Similarly higher prevalence in this age group was observed in previous studies in India [1, 6, 7]. This is in contrast to a study done in Thailand, which revealed that women aged less than 16 years had a higher prevalence [8].

The pattern of exposure in those who responded to questions on sexual activity revealed that 12 males (92%) and 4 females (100%) had multiple sexual partners which is slightly different from a study conducted by Gupta [9] where 98.9% of males and 75% of females had multiple sexual partners. Transmission by other means such as blood transfusion, vertical transmission and intravenous drug abuse were not observed.

Heterosexual route was the most common mode of transmission as seen in Table 3. This finding is similar to a study conducted by Chakravarthy *et al*. [10]. People with high risk and spouse of affected couple need to be educated regarding all levels of prevention of HIV. Patients who are already HIV positive should be taught regarding the importance of antiretroviral treatment that it not only prolongs the life but is also effective in cutting down the transmission of the disease and decreasing the viral load.

Only about 6 % of patients did not disclose their sexual behaviour. This is in contrast to a study done at Udupi which reported non disclosure rate to be 59.8% [1]. This revealed that the clients were comfortable enough in revealing such sensitive issues to the counsellors. This can be attributed to the strengthened skills of the counsellors. Still some patients were fear of punishments that they might suffer if the society is aware of their positive status.

Of the married women who were HIV positive, 25% were either separated, divorced or widowed which was different from a study conducted by Gupta [9] where 44% of the them were in this category which is quite high. Negative HIV status was observed in 71% of spouses of HIV positive individuals. This gives us a direction to immediately target those whose spouse is HIV negative to interrupt transmission of HIV. HIV serostatus of 11.76% spouses was unknown and they have to be motivated for HIV testing.

It was observed that the prevalence of HIV among those who had higher education is either negligible or nil. This is in agreement with the findings of the previous studies [1, 7]. Hence it can be said that some protection against HIV can be offered with higher education which makes one aware of the alarming situation around. Sex education can be included in the secondary school curriculum. It can help in raising the awareness regarding HIV in young people and also enhance safe sexual practices.

The present study showed that the prevalence of HIV was more among the daily labourers from agricultural background. So there is a need to work more intensively with this population.

Only 11.76 % of people believed that they would be discriminated by their family members. The reason for large number of people to believe they would not be discriminated may be because of the knowledge and awareness regarding the disease among the family members is good. This can be attributed to the media and health care personnel's efforts.

CONCLUSION

Prevalence of HIV among ICTC attendees during January 2013 to January 2014 was 0.36. Prevalence of HIV was very high among sexually active, men, Hindu population, who are either illiterate or studied till primary school and working as daily labourers in agricultural background and married. Higher education was found to be a protective factor for HIV, as education can enhance the use of condoms. Health education regarding HIV/AIDS should be included in secondary schools. HIV negative spouse will be the target group for priority targeted interventions to reduce the chance of HIV transmission. This will also reduce the chances of mother to child transmission of HIV.

Couples, in whom both are HIV positive, should be motivated to use condoms. This will help them to avoid pregnancy and will also protect them from rapid progression of disease by reducing the viral load.

Limitations of study

The present study is a record based study for one year in ICTCs of Sullia. It is exposed to many limitations like the way of asking questions, by counsellor while collecting the data. Further, data collection is based upon oral questionnaire method and so all answers given by the ICTC attendees were relied on. Another limitation of the study is that since it is a record based study, the data might not actually represent the disease burden of the whole community.

Implications of the study

This study helps us to understand the socio demographic profile and risk behaviour of HIV positive clients in Sullia taluk. This will be useful for policy makers to take appropriate interventions for prevention and control.

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