

PREVALENCE OF HIV INFECTION AMONG PERSONS ATTENDING INTEGRATED COUNSELING AND TESTING CENTRE, AMBAJOGAI

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ABSTRACT

Aim: Human immunodeficiency virus (HIV)/ Acquired immunodeficiency syndrome (AIDS) is increasing at an alarming rate globally. It has now become a major challenge and threat to public health. Estimating the HIV prevalence can be helpful to plan and implement preventive strategies. Hence, the study was undertaken to know the prevalence of HIV infection among persons attending Integrated Counseling and Testing Centre, Ambajogai.

Material and Method: All the persons attending ICTC of S.R.T.R. Medical College, Ambajogai were counseled over a period from September 2007 to September 2009. Blood sample were collected only from those persons who signed informed consent for HIV testing. Serum was separated and tested for HIV antibodies as per National AIDS Control Organization (NACO) guidelines. Strict confidentiality was maintained. Reports were issued only after post-test counseling.

Result: Out of the total 11380 samples tested, 1286(11.3%) samples were found to be HIV seropositive. Male to female ratio in HIV seropositive was 3.09:1. Maximum seropositivity i.e.40.82% was found in the age group of 30-39 years followed by 20-29 years age group.

Conclusion: In the present study, prevalence of HIV in persons attending ICTC was found to be 11.3%.

Key words: ICTC, prevalence, HIV antibodies

INTRODUCTION

Infections with human immunodeficiency virus (HIV) are being increasingly reported from South-East Asia.¹ Promising development has been seen in recent years in global efforts to address the AIDS epidemic, including increased access to effective treatment and prevention programmes. However, the number of people living with HIV continues to grow as does the number of deaths due to AIDS.² HIV/AIDS is spreading rapidly in India. It is estimated that in 2007, there were 2.4 million (1.8-3.2 million) people living with HIV/AIDS in India with an

estimated adult HIV prevalence of 0.34 % (0.25% - 0.43%). Out of the estimated number of people living with HIV/AIDS, 39% were females and 3.5% were children.³ It may be because of migration of population to urban areas, lack of awareness about HIV among potential high risk groups, gender disparity, social stigma associated with HIV etc. The infection can only be detected by laboratory tests as there is a long asymptomatic period and no specific symptom or sign of the disease. Hence, the study was carried out to know the prevalence of HIV

infection in person attending Integrated Counseling and Testing Centre (ICTC).

MATERIAL AND METHODS

For the prevalence of HIV, all the persons attending ICTC (Integrated Counseling and Testing Center) of our hospital were counseled as one to one counseling method. Blood samples were collected only from those persons who signed informed consent for HIV testing. Serum was separated and tested for HIV antibodies at HIV laboratory, as per National AIDS Control Organization (NACO) guidelines.⁴

First test was performed using COMBAIDS test (span diagnostic Ltd., Surat, India). Sample positive by COMBAIDS were tested by NANO HIV 1 & 2 test (Nano Biotech Pvt. Ltd., Amritsar, India) and PAREEKSHAK test (BHAT BIOTECH INDIA (P) LTD., Bangalore, India).

Sample found reactive with the three above tests (WHO strategy III) were included in this study, for calculating the prevalence of HIV.

RESULTS

This study was conducted between the period of September 2007 to September 2009.

For the prevalence of HIV, all the persons attending ICTC of our hospital during this period were counseled as one to one counseling method and tested for HIV antibodies as per NACO guidelines.

It was observed, out of 11380 samples tested, 1286(11.3%) samples were found to be HIV seropositive.

Of 1286 seropositive persons, 972(75.58%) were males while 314(24.41%) were females. Male to female ratio in HIV seropositive individuals was 3.09:1.

Table 1: Age And Sex wise Distribution Of Persons Attending ICTC Centre (Tested And Seropositive)

Age group (years)	Total no of persons tested			HIV seropositive persons undergone 3 tests		
	Male	Female	Total	Male	Female	Total
< 19	828	337	1165	96	18	114
20-29	2704	1394	4098	311	105	416
30-39	2470	1513	3983	384	141	525
40-49	1019	574	1593	146	42	188
+50	358	183	541	35	8	43
Total	7986	3414	11380	972	314	1286

Out of 1286 seropositive persons, maximum seropositivity i.e. 40.82% (525/1286) was found in the age group of 30-39 years followed by 20-29 years age group i.e. 32.34% (416/1286). In the age group of 40-49 years seropositivity was found in 14.61% (188/1286) persons. In the age group of less than 19 years seropositivity was found in 8.86% (114/1286) persons followed by 3.34% (43/1286) seropositivity in the age group of 50 years or more.

DISCUSSION

The pandemic of AIDS has become truly global in scope and has cut the continental boundaries of nationality, age, sex, race and urban - rural discretion.

In our study, we found a prevalence of 11.3% in persons attending ICTC. In different ICTCs (Integrated Counseling and Testing Centers) of Maharashtra, HIV prevalence ranges from 1.20%

to 17.37% in persons attending ICTC as per CMIS report of NACO.⁵

In the present study, prevalence of HIV infection was higher in males than females. Male to female ratio was 3.09:1. Similar male preponderance was observed by studies of Kumaraswamy N et al 1995⁶, Zaheer M.S. et al 2003⁷ and Gupta V et al 2007⁸ with male female ratio 2:1, 2.42:1 and 3.64:1 respectively.

The male preponderance observed in present study might have been due to fact that in existing milieu, females do not seek medical care fearing ostracism, loss of family support, gender bias, financial constraint, social stigma and neglect attached with the disease which decreases the number of females attending ICTC clinic. So the low number may not be the true representation of the proportion of females.

In our study, prevalence of HIV infection was highest in the age group of 30-39 years followed by 20-29 years age group. Various workers also

reported highest number of HIV positive persons in this age group (Kumaraswamy N et al 1995⁶, Kothari K et al 2001⁹ and Singh A et al 2003¹⁰).

Adults from 20-40 years age group are more susceptible for developing HIV infection and other STDs as it is the most sexually active age group.

CONCLUSION

1. In this study prevalence of HIV infection in persons attending ICTC is 11.3%
2. There is male preponderance over female, with maximum patients from sexually active age group (20-40 years age). Hence one should focus on this age group especially male group for the prevention of high rate of HIV transmission.

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