

**ORIGINAL ARTICLE**

## PROFILE OF ATTENDEES IN THE ANTI RETROVIRAL THERAPY CENTRE IN MEDICAL COLLEGE IN JABALPUR, INDIA

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### ABSTRACT

**Background:** Acquired Immune Deficiency Syndrome (AIDS) has piled enormous tension all over the world in recent times due to its diverting phenomenon. Recent estimates of more than 2.5 million infected HIV cases in India contribute largest number in the world.

**Objective:** To assess the socio-demographic profile of HIV /AIDS patients attending the ART centre in Medical College; to study the trend of the mode of transmission among HIV/AIDS patient in the ART centre and to assess the risk behavior pattern among HIV/ AIDS patient in the ART center.

**Material and Methods:** During the study period of August 2008 to July 2009, data was collected by every alternate day visit in order to take at least 50% of ART attendees in our study. Interview was taken by using predesigned, pretested questionnaire.

**Result:** Out of 250 cases observed 169 were males and 81 were females. Maximum 98% of ART attendees had sex with heterosexual partners reveals that these people acquired this disease through heterosexual mode & 1.6% from homosexual mode and 0.4% attendees got infected by both heterosexual & homosexual modes.

**Conclusion:** People have begun using ART center services, which reflect a change in their attitude toward HIV. The study provides us a clue to formulate an effective approach to educate people as well as the health personnel who are thought of as one of the sources of discrimination.

**Keywords:** profile, anti retroviral therapy, AIDS

### INTRODUCTION

The epidemic of Human Immunodeficiency Virus (HIV) infection that causes Acquired Immuno-Deficiency Syndrome (AIDS) has emerged as a serious public health problem in many parts of the world.<sup>1</sup> The Govt. of INDIA launched the free ART programme on 1 April 2004 starting with tertiary level, Govt. Hospital in the six high prevalence state viz. A.P, Karnataka, Maharashtra, T.N, Manipur and Nagaland . The public health approach for scaling of ART aims to provide care and treatment to as many people as possible while working towards universal access to care and treatment<sup>2</sup>. The year "2007 AIDS Epidemic

Update" for the first time reported a decrease in the prevalence of HIV. It estimates 32.2 millions (range 30.6-36.1 million) HIV infected people living in the World. This is 16% less than 2006 estimate of 39.5 million (33.4-46.0million)<sup>3</sup>. India on 04th July 2008 estimated that 2.5 million Indians are currently living with HIV<sup>4</sup>. Now, it is important to know the profile of attendees in the ART center in order to get a clear picture of the problems and suggest preventive measures in this region. Secondly, since its inception not a single study has been carried down related with Profile of attendees in the ART Centre in N.S.C.B. Medical college hospital Jabalpur this study was planned.

The importance of Jabalpur is evident by fact that it lies at the inter-section of N.H.07 and 12 leading to influx of vary large number of truckers and helpers. Due to the above mentioned reason number of HIV positive cases are increasing in this region and thus the number of patient on ART in ART center of N.S.C.B. Medical college hospital Jabalpur.

### OBJECTIVE

- 1) To assess the socio-demographic profile of HIV/AIDS patients attending the ART centre in NSCB Medical College Hospital Jabalpur.
- 2) To study the trend of the mode of transmission among HIV/AIDS patient in the ART centre.
- 3) To assess the risk behavior pattern among HIV/ AIDS patient in the ART center.

### MATERIAL AND METHOD

It's a Cross Sectional (Observational) study which was conducted at ART center, Department of Medicine, N.S.C.B. Medical College, Jabalpur during August 2008 to July 2009. During this period data was collected every alternate day. Visit was done in order to take at least 50% of ART attendees in our study. Age, sex, marital status, level of education, Socio-economic status, occupation, place of residence, pattern of risk behavior was taken as study variables. Interview was taken on Predesigned and Pretested Questionnaire. Modified Prasad's Socio-Economic Classification was used in this study and was corrected for the duration of the study by applying relevant correction factor (based on All India Consumer Price Index for agricultural and rural workers relevant for that particular study period).

### RESULT AND DISCUSSION

Out of 250 attendees, 67.6% were male and 32.4% were female. Among male, maximum were in age group of 36-45 years i.e. 27.2%, followed by 26-35 years of age group (25.6%). Among female maximum were found in age group of 26- 35 years (14.8%) followed by 36-45 years i.e. 10% and then by 15-25 years of age group i.e. 5.6%. Overall, maximum ART attendees were found in 26-45 years of age group (77.6%). S. Jayarama et al also found in

their study that 67.53% seropositive attendees were male and of them maximum were of age group between their 20-49 years<sup>5</sup>.

**Table 1: Distribution of ART attendees according to their Age/Sex and Marital Status (n=250)**

	Male(%)	Female(%)	Total (%)
<b>Age Groups</b>			
15 – 25	17 (6.8)	14 (5.6)	31 (12.4)
26 – 35	64(25.6)	37 (14.8)	101 (40.4)
36 – 45	68 (27.2)	25 (10)	93 (37.2)
46 – 55	18 (7.2)	05 (02)	23 (9.2)
> 55	02 (0.8)	00 (00)	02 (0.8)
<b>Marital Status</b>			
Married	135 (54)	49 (19.6)	184 (73.6)
Unmarried	26 (10.4)	04 (1.6)	30 (12)
Widowed/ Widower	08 (3.2)	26 (10.4)	34 (13.6)
Divorced	00 (00)	02 (0.8)	02 (0.8)
<b>Total</b>	<b>169(67.6)</b>	<b>81 (32.4)</b>	<b>250 (100)</b>

The distribution of ART attendees as per marital status reveals that married peoples constituted 73.6% and of those 54% were males and 19.6% females. Widowed and widower constituted 13.6% and of those 3.2% were males and 10.4% were females followed by unmarried peoples who were 12% and of those 10.4% were males and 1.6% were females.

J.K. Jordar et al found in their study that 51.3% Sero-positive attendees in ICTC Darjeeling were married and 48.6% unmarried among males and same pattern was observed among females i.e. 88.23% seropositive being married and 11.77% unmarried<sup>8</sup>.

It was observed during the years 2008 to 2009 that maximum 86.8% attendees of ART center were Hindus followed by Muslim i.e. 5.6%, Jain (5.2%), Sikh (1.6%) and Christian (0.8%). In Madhya Pradesh as per census 2001, 93% of the population are Hindus, 5% Muslims, 3% Christians and 0.3% Sikhs. Total population is 60,348,023 including Hindu population of 55,004,675. In Jabalpur total population is 2,167,469 out of this 1,134,870 are males and 1,032,599 are females.

Education profile of ART center attendees reveals that Higher Secondary educated groups constitute 22.8%, followed by Primary Education group i.e. 18.8%, High School (16.8%) and Graduation (14.4%).

**Table 2: Distribution according to Demographic Profile of ART centre attendees**

Religion	No. (n=250) (%)
Hindu	217 (86.8)
Muslim	14 (5.6)
Jain	13 (5.2)
Sikh	04 (1.6)
Christian	02 (0.8)
<b>Education</b>	
Illiterate	34 (13.6)
Primary	47 (18.8)
Middle	34 (13.6)
High school	42 (16.8)
Higher secondary	57 (22.8)
Graduation	36 (14.4)
<b>Occupation</b>	
Agriculture	31 (12.4)
Truck driver	40 (16)
Factory worker	14 (5.6)
Military worker	00 (00)
Labourer	49 (19.6)
Govt/private service	39 (15.6)
Housewife	46 (18.4)
Shopkeeper/business men	31 (12.4)
Other	00 (00)

Occupational profile of ART center attendees reveals varied distribution. Laborers constitute 19.6%, House wife (18.4%), Trucks drivers (16%), Services class (15.6%), Agriculture and Shopkeeper/Businessmen (12.4).

**Table 3: Distribution of cases according to their Socioeconomic Status**

Socioeconomic status	No (n=250) (%)
Upper High (>10000)	00 (00)
High (5000-9999)	30 (12)
Upper Middle (3000-4999)	71 (28.4)
Lower Middle (1500-2999)	105 (42)
Poor (500-1499)	44 (17.6)
Very Poor (<500)	00 (00)

Out of 250 attendees, 42% ART attendees belong to Lower Middle Class followed by Upper Middle Class i.e. 28.4%, Poor Class (17.6%) and High Class (12%). None were by found in Upper High Class. C.M. Singh et al observed that all the positive participants were of low socioeconomic status<sup>7</sup>.

**Table 4: Pattern of risk behavior of ART centre attendees (n=250)**

Route of transmission	No. (%)
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Migrant	114 (45.6)
Blood Transfusion received	13 (5.2)

**Sexual Partner In Life**

1	99 (39.6)
2-3	98 (39.2)
4-5	39 (15.6)
>5	14 (5.6)
Having Sexual Relation With Sex Worker	90 (36)

**Type Of Sexual Relation**

Heterosexual	245 (98)
Homosexual	04 (1.6)
Both	01 (0.4)
History STD	101 (40.4)

Out of 250, 54.4% were non-migrants and 45.6% were migrants. J.K. Chakravarty et al found in their study that 71.5% were migrant population went to Mumbai, a metropolitan city in the western coast of the country (6).

Out of 250, 5.2% had history of blood transfusion while 94.8% had no history of blood transfusion.

39.6% ART attendees had 1 sexual partner and 60.4% had multiple sexual partners. So, we can conclude that having multiple sex partners put a person more at risk to acquire HIV infection. We can also say that 60.4% cases had risky sexual behavior because of multiple sex partners.

Out of 250, 36% ART attendees had sexual relation with sex worker. Having sex with sex workers increases the vulnerability of individuals to acquire HIV infection. Interventional programmes like making availability of condoms can reduce risk of having HIV infections among clients.

Table shows that maximum 98% of ART attendees had sex with heterosexual partners reveals that these people acquired this disease through heterosexual mode & 1.6% from homosexual mode and 0.4% attendees got infected by both heterosexual & homosexual modes.

Table shows that 40.4% ART attendees had past history of STDs which is gateway for HIV infection & major risk factor.

**CONCLUSION**

The city of Jabalpur and its surrounding district with both rural and urban areas have large number of laborers and truck drivers who are highly vulnerable to the rapid spread of

HIV/AIDS because of the geographical location of Jabalpur city.

Intense IEC activities including involvement of electronic media, involvement of religious heads etc. should be done to promote behavioral change for the better living of HIV sufferers. The medical fraternity should take a stand and fight against the discrimination of sufferers, rather than ostracizing them to have a positive attitude for HIV sufferers.

We can conclude that married women are more vulnerable to acquire HIV infection from their husbands compare to those who are unmarried. Interventional programmes like making availability of condom can reduce the risk of having HIV infections among clients.

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