



## Demographic and Clinical Profile of HIV Patients Accessing Care at Art Centre, Palakkad, Kerala

Krishnan Chithra R<sup>1\*</sup>, Sajeeth CI<sup>1</sup>, Sivakumar R<sup>1</sup>, Sukumaran Lekha<sup>2</sup>

1. Department of Pharmacy Practice, Grace College of Pharmacy, Palakkad, Kerala, India

2:ART Centre, District Hospital, Palakkad, Kerala, India- 678001.

### ABSTRACT

The aim of the work is to assess the socio- demographic and clinical profile of HIV/AIDS patients at antiretroviral therapy (ART) centre. The study was carried out District hospital Palakkad, Kerala, India from January to July 2014. Two hundred and sixty one HIV positive patients coming to ART centre were included in the study. A preformed questionnaire was made which included socio-demographic characteristics like age, sex, literacy status, marital status, occupation and clinical presentation. The male (49.8%) and female (50.1%) patients were almost equal in number. More number of patients was between the age group of 28-37 years constituting about 40.2%. Majority of the population was married (63.6%) and of their family members were infected (48.2%). The literacy level of most of the patients were only up to secondary school(47.1%).The most predominant route of transmission was heterosexual (81.2%). Most of the affected population was from the reproductive age group i.e., 28- 47 years which increases the economic burden and affects the overall development of the family, community and country. The education status and lack awareness about the disease is also associated with the spread of HIV infection, so health education regarding the prevention of HIV can be given with the help of video, charts and posters. Timely initiation and continuous antiretroviral therapy helps to prolong the survival, prevent opportunistic infections and also prevent the transmission of disease.

**Keywords:** HIV, AIDS, Antiretroviral Therapy, Opportunistic infection.

\*Corresponding Author Email [chithrar888@gmail.com](mailto:chithrar888@gmail.com).

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## INTRODUCTION

Human immunodeficiency virus (HIV) infection poses tremendous challenges to health globally<sup>1</sup>. HIV infection and Acquired Immuno-Deficiency Syndrome (AIDS) is threatening the survival of many nations. According to the National AIDS Control Organization [NACO] HIV prevalence in India is 0.36% and people living with HIV are around 2.47 million<sup>2</sup>.

HIV / AIDS were first recognized in 1981 amongst homosexuals in Los Angeles, New York and California. The first case of HIV/AIDS was reported in India in Tamil Nadu in 1986. Since then the virus has spread from the high-risk groups to the general population very fast<sup>3</sup>.

The Government of India has estimates that about 2.40 million Indians are living with HIV (1.93-3.04million) with the adult prevalence of 0.31% (2009). Children (<15 yrs) account for 3.5% of all infections, while 83% are in the age group 15-49 years. Of all HIV infections, 39% (930,000) are among women. The four high prevalence states of South India (Andra pradesh- 500,000, Maharashtra- 420,000, Karnataka- 250,000, Tamilnadu- 150,000) account for 55% of all HIV infections in the country<sup>4</sup>.

Though, antiretroviral therapy (ART) does not cure HIV/AIDS, but effective ART regimens inhibit the efficient replication of the HIV virus, and reduce viremia to undetectable levels. The Government of India launched the free ART programme on 1 April 2004, since then more and more patients are put on ART treatment. Early diagnosis, ART, chemoprophylaxis and treatment of opportunistic infections are important for control of HIV replication, disease progression and ultimately containment of epidemic<sup>5</sup>. The clinical course of HIV infection varies considerably from patient to patient and a regional variation in the spectrum of opportunistic infections has also been observed<sup>6</sup>. The present study was aimed to assess the demographic and clinical profile of HIV positive patients accessing care at ART centre, Palakkad.

## MATERIALS AND METHOD

### **Study site:**

The study was conducted in Ushus Antiretroviral (ART) centre, District Hospital, Palakkad, Kerala, India (January- July 2014).

### **Study population:**

HIV positive ART naive patients attending ART centre, District Hospital Palakkad, who initiated antiretroviral treatment from January 2012 and received therapy for atleast 6 months above 18 years of age.

### **Study design:**

The study is designed as a combined prospective and retrospective study. A predesigned proforma was used to obtain the clinical and demographic data. Proforma was filled up on the basis of the data obtained from the White Cards (Patient treatment record) and information about the patient from the Doctors and Counsellors.

#### **Ethics issues:**

The study was approved by institutional ethics committee – GCP/IEC/625/2014.

#### **RESULTS AND DISCUSSION**

A total of 261 patients were included in the study attending ART centre from January 2012 and received therapy for at least 6 months.

Table 1 shows the demographic profile of the patients attending ART centre Palakkad. Out of the total 261 patients, maximum 105 (40.2%) were from age group 28- 37 years followed by 98(37.5%) between 38-47 years of age. Similar findings were observed in the study conducted at Surat by Hitenkumar P Sonani et al<sup>2</sup>.

**Table 1: Demographic profile of HIV positive patients**

<b>Demographic profile</b>	<b>No. of patients (n=261)</b>	<b>Percentage</b>
<b>Age</b>		
18-27	26	9.9
28-37	105	40.2
38-47	98	37.5
48-57	29	11.1
58-67	3	1.1
<b>Gender</b>		
Male	130	49.8
Female	131	50.1
<b>Marital status</b>		
Single	22	8.4
Married	166	63.6
Widow	68	26.0
Divorced	5	1.9
<b>Education</b>		
Illiterate	19	7.2
Up to primary	91	34.8
Up to secondary	123	47.1
College	28	10.7
<b>Occupational status</b>		
Employed	205	78.5
Unemployed	56	21.4
<b>Family members infected or not</b>		
Yes	126	48.2
No	135	51.7
<b>Mode of transmission</b>		

Heterosexual	212	81.2
Homosexual	7	26.8
Blood transfusion	2	0.76
Mother to child	2	0.76
Unknown	38	14.5

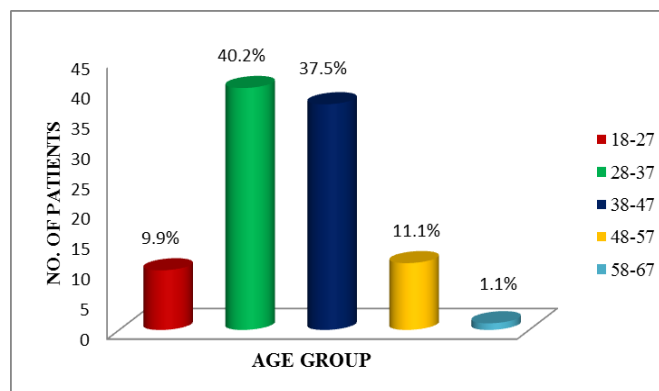
The study shows that about 50.1% were female and 49.8% were male. Most of the patients were married 63.6%, Harsh Toshniwal *et al*<sup>8</sup> in their study conducted in a tertiary hospital also had 86.7% of married population. Education status revealed that most of the patients were having below secondary education; G. K. Joardar *et al*<sup>7</sup> also interpreted the same result in a study carried out in North Bengal medical college.

The predominant mode of transmission was through unprotected heterosexual intercourse 81.2%. Similar findings were reported by Umesh S. Joge *et al* 94.39%<sup>5</sup>.

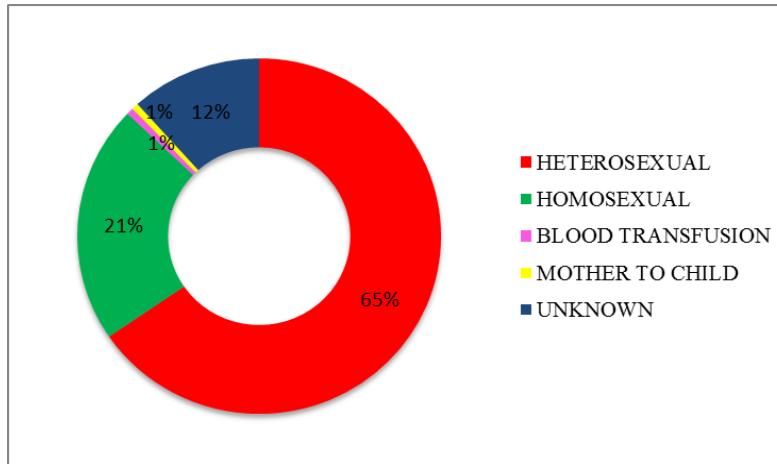
**Table 2: Clinical profile of HIV positive patients**

Clinical indicators	No. Of patients (n=261)	Percentage
<b>Who Clinical Staging Of Aids</b>		
Stage 1	127	48.6
Stage 2	85	32.5
Stage 3	80	30.6
Stage 4	16	6.1
<b>Opportunistic infection</b>		
Acute respiratory infection	125	47.8
Tuberculosis	53	20.3
Oral candidasis	75	28.7
Herpes	11	4.2
Pneumocystis pneumonia	4	1.5
Toxoplasmosis	3	1.1

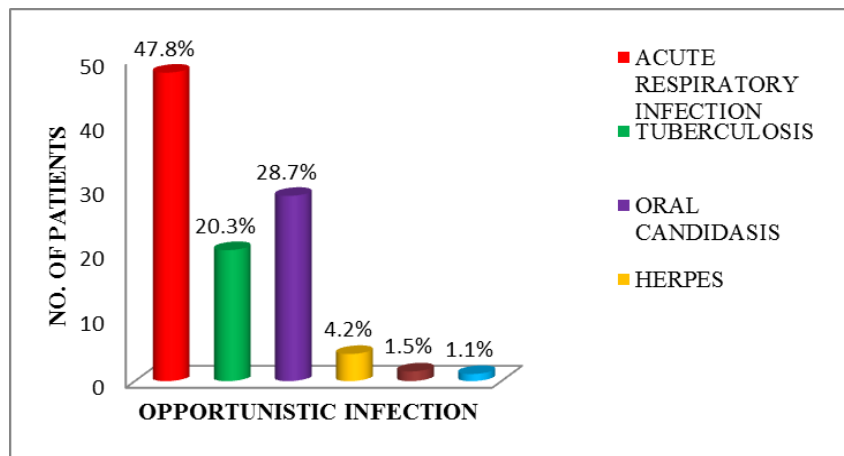
The clinical profile of the patients at the time of ART registration was depicted in table 2. About 48.6% attended the clinic at the first stage of the disease, similar findings were observed in the study by Hitenkumar P Sonani *et al*<sup>2</sup>. About 47.8% were having acute respiratory infection, followed by oral candidasis 28.7% and tuberculosis 20.3%.



**Figure 1: Age Wise Distribution**



**Figure 2: Mode of Transmission**



**Figure 3: Opportunistic Infection**

## CONCLUSION

Most of the affected population was from the reproductive age group i.e, 28- 47 years which increases the economic burden and affects the overall development of the family, community and country. Marital life itself becomes a risk factor for those women who get infected by their HIV positive spouse. . The education status and lack awareness about the disease is also associated with the spread of HIV infection, so health education regarding the prevention of HIV can be given with the help of video, charts and posters. Timely initiation and continuous antiretroviral therapy helps to prolong the survival, prevent opportunistic infections and also prevent the transmission of disease.

## REFERENCES

1. S. Rajasekaran, L. Jeyaseelan, K. Raja & Ravichandran. Demographic & clinical profile of HIV infected children accessing care at Tambaram, Chennai, India. Indian J Med Res 2009;129:42-49.

2. Hitenkumar P Sonani, Ashwinkumar M Undhad, Ghanshyambhai T Savani. Clinical and Sociodemographic profile of patients registered at ART centre, Smimer, Surat. National J Comm Med 2011;2:130-32.
3. Amballi AA, Ajibola A, Ogun SA, Ogunkolo OF, Salu LO, Oritogun K etal. Demographic pattern and haematological profile in people living with HIV/AIDS in a university teaching hospital, Sci. Res. Essays 2007; 2:315-18.
4. HIV/AIDS in India. The World Bank 2012 July 10
5. Umesh S Joge, Deepali S Deo, Rajesh N Lakde, Sonali G Choudhari, Vilas R Maikar, Harshada H Ughade. Sociodemographic and clinical profile of HIV/AIDS patients visiting to ART Centre at a rural tertiary care hospital in Maharashtra state of India. Int J Biol Med Res 2012; 3:1568-72.
6. J Chakravarty, H Mehta, A Parekh, SVS Attili, NR Agrawal, SP Singh etal. Study on clinico-epidemiological profile of HIV patients in Eastern India. J Assoc Physicians India 2006 ;54:854-57.
7. GK Joardar, A Sarkar, C Chatterjee, RN Bhattacharya, S Sarkar, P Banerjee. Profiles of attendees in the voluntary counselling and testing centre of North Bengal medical college in Darjeeling District of West Bengal. Indian J Community Med 2006; 31:237-40.
8. Harsh Toshniwal, Krunal Modi, Talsania, Manoj Shevkani, Vipul Shah, Vipul Senegal etal. Clinico-epidemiological and socio-demographic profile of HIV positive patients, visiting clinics in Ahmedabad, Gujrat, India. Int J Health Sci Res 2013 ;6:77-84.



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