

# PROFILE AND CLINICAL FEATURES OF HIV POSITIVE PATIENTS ATTENDING INTEGRATED COUNSELLING AND TESTING CENTRE IN A MEDICAL COLLEGE HOSPITAL OF HASSAN, KARNATAKA

Praveen G<sup>1</sup>, Srinivasa BS<sup>2</sup>

<sup>1</sup> Department of Community Medicine, Hassan Institute of Medical Sciences, Hassan, Karnataka, India

<sup>2</sup> Department of Paediatrics, Hassan Institute of Medical Sciences, Hassan, Karnataka, India

Correspondence to: Praveen G (drgrpraveen@gmail.com)

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## ABSTRACT

**Background:** HIV infection is a major public health problem as it has dramatically increased the global burden of disease. HIV infected patients experience a variety of clinical signs and symptoms.

**Aims & Objective:** Our objective was to study the profile of clinical features and opportunistic infections in HIV infected patients attending a tertiary care medical college hospital in Hassan, Karnataka.

**Material and Methods:** A total of 124 HIV infected patients attending the ART Centre and the ICTC of Hassan Institute of Medical Sciences, Hassan, Karnataka were enrolled in the study, after obtaining informed consent. Clinical symptoms were recorded by direct questioning. Documented opportunistic infections were noted from patient records.

**Results:** 80 (64.5%) HIV positive patients were males and 44 (35.5%) females. Mean age of the patients was 36.5 ± 6.0 years. The common symptoms were lethargy and fatigue 90 (72.5%), prolonged fever 86 (69.3%), weakness 84 (67.7%), body-ache and joint pain 84 (67.7%), loss of appetite 82 (66.1%), weight loss 80 (64.5%), cough (44.5%), chronic diarrhoea 68 (54.8%) and Nausea and Vomiting 64 (51.6%). The overall proportion of symptomatic patients was significantly higher than the number with etiologically documented opportunistic infections (41.9%). Pulmonary tuberculosis (37.9%) was the most frequently documented opportunistic infection.

**Conclusion:** Affordable high quality laboratory diagnostic facilities for the diagnosis of opportunistic infections under the public health program will help to obtain an accurate picture of the range of opportunistic infections in HIV patients in India.

**KEY-WORDS:** Integrated Counselling and Testing Centre; HIV; AIDS; Opportunistic Infection

## Introduction

HIV infection represents a major public health problem for both developing and developed countries as it has grown to pandemic proportions worldwide. India shares one tenth of the global HIV burden and an overall 65% is attributed to South and South East Asia.<sup>[1]</sup> The UNAIDS estimates that at the end of 2007, there were approximately 33 million people living with HIV/AIDS globally.<sup>[2]</sup> Currently it is estimated that about 2.5 million people are living with HIV in India.<sup>[3]</sup> It has been observed that the clinical course of HIV infection varies considerably from patient to patient and the spectrum of opportunistic infections also varies depending on the geographic regions.<sup>[4,5]</sup> The Integrated Counselling and Testing Centre (ICTC) provides information about the HIV prevention, counselling to undergo testing, it provides testing facilities

and it also links the seropositive people with treatment, care and support systems.<sup>[6]</sup> A few studies in India have documented self-reported presenting symptoms in HIV/AIDS patients.<sup>[7-12]</sup> The present study analyses the profile of clinical features and opportunistic infections in HIV infected patients attending a tertiary care medical college hospital in Hassan, Karnataka.

## Materials and Methods

This study was conducted at the ICTC of Hassan Institute of Medical Sciences (HIMS), Hassan, Karnataka from Jan 2011 to Dec 2011. It was a cross sectional, questionnaire based, observational study. ICTC centre of the hospital is well attended and provides counselling and HIV testing for persons with HIV infections. The hospital also has an active Anti-retroviral Therapy (ART) centre. 124 HIV infected patients attending

the ART centre and the ICTC were enrolled in the study between January 2011 and Dec 2011, after obtaining informed consent. The subjects were interviewed using a predesigned proforma. Current clinical symptoms were elicited by direct questioning by the interviewer. The questions were designed so that answers were obtained in a yes or no format. Questions were asked in the local language and responses recorded. Case records at the ART Centre were reviewed to obtain data for documented opportunistic infections in the subject around the interview date. Data was entered in Microsoft Excel and was analyzed using SPSS v. 13.0.

## Results

The socio-demographic characteristics of the study population are given in Table 1. 80 (64.5%) HIV positive patients were males and 44 (35.5%) were females. Mean age of the patients was  $36.5 \pm 6.0$  years. Most patients were in the age group of 20-39 years. 52 (41.9 %) patients were illiterate and only 19 (15.3 %) were graduates. Table 2 describes the clinical features and documented opportunistic infections in the study population. The commonest symptoms were lethargy and fatigue 90 (72.5%), prolonged fever 86 (69.3%), weakness 84 (67.7%), body-ache and joint pain 84 (67.7%), loss of appetite 82 (66.1%), weight loss 80 (64.5%), cough 78 (62.9%), chronic diarrhoea 68 (54.8%), Nausea and Vomiting 64 (51.6%), abdominal pain 60 (48.3%), constipation 52 (41.9%), oral lesions 48 (38.7%), skin rashes 32 (25.8%) and head ache 24 (19.3%). A total of 52 (41.9%) of the patients had documented opportunistic infections. Tuberculosis 46 (37.09%) was the most common opportunistic infection, followed by candidiasis 4 (3.22%) and TBM 2 (1.6%).

**Table-1: Socio-Demographic Characteristic of HIV Positive Patients**

Characteristics		N (%)
Gender	Male	80 (64.5)
	Female	44 (35.5)
Age in years	23-39	100 (80.6)
	40-59	20 (16.1)
	>60	02 (1.6)
Education	Illiterate	52 (41.9)
	Primary	25 (20.1)
	Secondary	28 (22.5)
	Graduate	19 (15.3)

**Table-2: Clinical Features and Documented Opportunistic Infections in HIV Positive Patients**

Symptoms	N (%)
Lethargy & fatigue	90 (72.5)
Prolonged fever	86 (69.3)
Weakness	84 (67.7)
Body ache and joint pain	84 (67.7)
Loss of appetite	82 (66.1)
Weight loss	80 (64.5)
Cough	78 (62.9)
Chronic diarrhoea	68 (54.8)
Nausea and vomiting	64 (51.6)
Abdominal pain	60 (48.3)
Constipation	52 (41.9)
Oral lesions	48 (38.7)
Skin rashes	32 (25.8)
Head ache	24 (19.3)
Opportunistic Infection	
Tuberculosis	46 (37.09)
Candidiasis	4 (3.22)
TBM	2 (1.6)

## Discussion

In the present study, the profile of clinical features and opportunistic infections in HIV positive patients attending a tertiary care medical college hospital were analyzed. The demographic profile of HIV positive patients at our centre appears to be broadly similar to that reported from other parts of the country.<sup>[10-13]</sup> Common symptoms in the present study as in other studies from India are generalized symptoms like lethargy & fatigue weakness, Prolonged fever, Weakness, body ache & joint pains and Loss of appetite were present in more than sixty percent of the patients followed by Weight loss, Cough, Chronic diarrhoea and Oral lesions.<sup>[7-12]</sup> While some of the large variety of symptoms noted may be due to the HIV infection itself or antiretroviral therapy related, they can also be due to opportunistic infections like bacterial, fungal or viral pneumonias, hepatitis, cryptococcal meningitis, toxoplasmosis, oesophageal candidiasis, extra pulmonary tuberculosis and cryptosporidial or isosporidial diarrhoea, which need to be established by laboratory testing.

Tuberculosis (37.09%) was the most common laboratory documented opportunistic infection observed in our study<sup>[4,14,15]</sup> followed by candidiasis (3.22%) and TBM (1.6%). There is considerable difference in the spectrum of opportunistic infections in AIDS patients in India compared to western countries. Kaposi's sarcoma,

lymphoma, CNS toxoplasmosis, atypical mycobacterial infection and disseminated cytomegalovirus disease, common in western literature, were not seen in this study. Similar trends are observed in other studies from other parts of India.<sup>[7-9,12,16]</sup>

The proportion of symptomatic patients in the study was higher than the proportion of patients with etiologically documented opportunistic infections 52 (41.9%). One of the reasons may be overcrowded Outpatient department (OPD) where in minor symptoms may be often ignored or patients offered symptomatic or empirical therapy with no attempt being made to document or obtain an etiological diagnosis.

## Conclusion

HIV positive patients with frequent clinical, radiological and laboratory screening for opportunistic infections are required to establish the true picture of opportunistic infections in patients. Early etiological diagnosis and treatment of opportunistic infections in symptomatic patients will help to improve quality of life of HIV patients. Capacity building of medical laboratories and radiological facilities for the diagnosis of opportunistic infections are urgently needed.

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