

# Study of Psychiatric Manifestations in HIV Positive Cases

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**Abstract:** ***Introduction:** To study the various psychiatric manifestations and their relative frequencies in HIV positive individuals. **Methods:** A total of 40 HIV positive cases coming to Bundelkhand medical college Sagar were selected and enrolled in the study, After taking informed consent, these patients were assessed clinically for the presence of various psychiatric manifestations. Three scales (mini mental scale, Zung depression scale and neuropsychiatric inventory) were used for psychological assessment of candidates and the analysis of the relative frequencies of these disorders. **Results:** showed that almost all selected candidates were suffering from mild to moderate depression. Anxiety and altered night time behavior were the other common manifestations. **Discussion:** This study demonstrates that psychiatric manifestations of varied types and frequencies are present in HIV positive cases.*

**Keywords:** informed consent, psychiatric manifestations, HIV positive cases, three scales for psychiatric assessments, minimental score, zung depression scale, neuropsychiatric inventory

## 1. Introduction

HIV was isolated and identified as RNA containing retrovirus in 1983 that infects cells of immune and central nervous system. This retrovirus infection HIV is being diagnosed now a days because of increased awareness and improved techniques. This study has been conducted to find out the frequency and the types of various psychiatric manifestations at ART Center, Bundelkhand Medical College, Sagar (M.P.)

## 2. Aims and Objectives

- 1) To find out the prevalence of various types of psychiatric disorders in HIV patients.
- 2) To find out the frequency of psychiatric manifestation in HIV positive patients.

## 3. Material and Methods

The study was conducted in ART center of Bundelkhand Medical College Sagar. Patients rights shall be protected as per Govt. rules. During the study the name and address of HIV patient will be protected and shall not be mentioned in the study.

Case group consist of 40 patients of HIV<sup>+</sup> by ELISA were seen over a period of 1 year those who are willing to give written consent taken in all patients and will go through a detailed Proforma which will include history & examination on psychological, neurological and general points. Also they will undergo psychiatric testing like MMSE, NPI and DRs. Hence frequency & type of psychiatric disorders will be found out by clinical diagnoses and DSM-IV criteria for psychiatric disorder.

## Inclusion Criteria

- 1) Those who are willing to give written consent
- 2) HIV positive adult patients ( diagnosed at ICTC center Sagar )
- 3) Patients who are on ART for atleast 3 months with no history of previous psychological illness

## Exclusion Criteria

patients who have had prior or concomitant psychiatric manifestations and taking treatment for their psychiatric illness or serious medical illness .

## Psychiatric Assessment of Cases and Control

All HIV positive patients selected for study were evaluated according to the following methods.

## History

Medical history  
Psychiatric history

## Examination

General examination  
Systemic examination  
Psychiatric examination

**The Psychiatric Assessment of the selected cases was done based on the following three scales :-**

## Minimental State Examination

The MMSE developed by M Folstein in 1975 is a screening instrument that give a brief assessment of an individual orientation to time and place, ability, short memory and arithmetic ability. The 11 - item MMSE is divided in two sections First section requires verbal responses to orientation, memory and attention questions Second section

requires reading, writing and the ability to copy a geometric figure.

#### **Zung Depression Scale**

The Zung depression scale (SDS) developed by W Zung the assessment of depression in adults. The Zung is rated on a 1 to 4 spectrum 1 = none, 4 = severe.

#### **Neuropsychiatric Inventory**

The neuropsychiatric inventory was developed in 1994 by problems in patients with dementia. The scale looks at 10 domains of behavioral disturbances ;

Delusions, Hallucinations, Dysphoria, Anxiety, Agitation/Aggression, Euphoria,

Inhibition, Irritability/Lability, Apathy, Aberrant Motor Behaviour. The inventory has two domains related to neurovegetative problems ; sleep and Appetite.

#### **Results**

The present study has been carried out in ART centre Bundelkhand Medical College and hospital to determine the frequency and types of psychiatric disorders in HIV positive patients.

In our study the frequency of psychiatric manifestations came out to be 100% (Table -1)

Depression was the predominant (70%) (Table-2) and severe depression (including suicidal tendency) was least common , leading psychiatric manifestation present in almost 100% patients selected for

study with mild present in almost 7-10% patients. Other psychiatric manifestations like anxiety (70 %), irritability (10%), agitation (15%) altered night time behavior (70%) and altered appetite (10%)

(Table-3) were also present in varying frequencies .

#### **4. Discussion**

The present study has been carried out in ART centre Bundelkhand Medical College and hospital to determine the frequency and types of psychiatric disorders in HIV positive patients. All the patients selected for study were examined for complete physical examination and their psychiatric assessment was done using three scales

- 1.) Mini mental status examination scale
- 2.) Zungs depression scale
- 3.) Neuropsychiatric inventory

Psychiatric manifestation were present in 100% of HIV positive cases which is correlated with the work of Grant(1994) and Maj M (1990)<sup>1-2</sup> who has reported that 76% of HIV positive patients had psychiatric manifestation.

In HIV positive patients anxiety is 70%. Our study correlates with the study of DEW MA(1999)<sup>3</sup> and Falustichme(1987)<sup>4</sup> who found high level of anxiety disorder in their HIV infected patient.

In HIV positive patients only 15% patients have agitation and 10% patients have irritable behaviour.<sup>5</sup>

In HIV positive patient 70% had difficulty in sleep because of tension and 20% patients have decreased appetite and weight loss due to depression.<sup>6</sup>

In HIV positive patients 15% have suicidal tendency.<sup>7-8</sup>

A study of suicidal and HIV/AIDS relationship Transkei south Africa in 1996-2000, the conclusion of this study suicidal rate have risen in parallel to the rise in mortality due to HIV/AIDS. Our study also suggestive the above study.

In our study HIV positive patients had no dementia or cognitive impairment. Henraya F. Davis, Richard and co worker<sup>9-10</sup> found higher incidence of dementia in HIV positive patient. Our study did not agree with the worker because of small sample size and short duration of study.

#### **5. Conclusion**

As observed and conclude from our study, that since Psychiatric manifestations of varied types and Frequency are present in almost all HIV Positive patients , hence routine psychiatric assessment and counselling of all patients should be done at regular intervals in all ART Centers.

#### **6. Acknowledgment**

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**Table 1:** Psychiatric Manifestation in HIV<sup>+</sup> Patients

S. No.	Psychiatric Manifestation	Patients No.	Percentage
01.	Depression	40	100%
02.	Anxiety	28	70%
03.	Agitation	6	15%
04.	Irritability	4	10%
05.	Night time behavior	28	70%
06.	Appetite behavior	8	10%
07.	Suicidal tendency	3	15%
08.	Delusion	0	0
09.	Hallucination	0	0
10.	Apathy	0	0
11.	Disinhibition	0	0
12.	Aberrant motor behavior	0	0
13.	Euphoria Dementia	0	0
14.	Dementia	0	0

The Total psychiatric manifestations in HIV positive Group = 100% of patients.

**Table 2:** Frequency of Anxiety & Depression in HIV Positive Patients

	mild	moderate	Severe
Number & Percentage of patient			
Anxiety	24(86%)	04 (14%)	00(0%)
Depression	28 ( 70% )	08 (20%)	04 (10%)

**Table 3:** Frequency of Irritability, Agitation, Altered Night Time Behaviour, Altered Appetite, Suicidal tendency In HIV Positive Patients

	Present	Not Present
Irritability	08 (20%)	32 (80%)
Agitation	06 (15%)	34 (85%)
Altered night time behaviour	28 (70%)	12(30%)
Altered appetite	34 (85%)	06 (15%)
Suicidal Tendency	03 (7.5%)	37(32.5%)