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A Study of Prevalence of Psychiatric Illnesses in Hiv PatientsAttending Tertiary Care Hospitals in Hyderabad

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ABSTRACT

AIM: To study prevalence of psychiatric illnesses in HIV patients attending tertiary carehospitals in Hyderabad

Methodology: This is a cross sectional study done during January 2018 to June 2019, in tertiary hospital Hyderabad. Convenient sampling technique was used to select study subjects. 100 HIV positive asymptomatic cases who met the inclusion criteria were taken for study. Psychiatric disorders were assessed using MINI scale.

Results: Out of the 100 patients, a total of 71% were diagnosed with psychiatric morbidity by using MINI tool. Therefore, the prevalence of psychiatric morbidity in HIV patients attending tertiary care centers in Hyderabad was 71%. 29% had no psychiatric illness. Among the patients 32% had past psychiatric illness after they havebeen diagnosed as HIV positive cases. In the study education ($p = 0.005$) was significantly associated with MDD prevalence. Lower class and upper lower class was group contained more number of cases than other classes. The present study is significantly associated with educational level. Social anxiety disorder is high in the graduates and high school groups. the disorder is low in the other groups. marital status, CD4 count, religion, partner status and child status and duration of HIV illness has no significant relation with social anxiety.

Conclusion: The study concluded that highly active antiretroviral therapy (HAART) has led to a reduction in HIV-related morbidity and mortality, and the life expectancy of HIV-positive individuals has improved significantly. It is therefore becoming more likely that clinicians will encounterpatients with psychiatric manifestations of the disease.

Keywords: HIV, Morbidity, Mortality, CD4, HAART, MINI tool

INTRODUCTION

The human immunodeficiency virus (HIV) is a lentivirus that causes HIV infection and over time acquired immunodeficiency syndrome (AIDS) . AIDS is a condition in humans in which progressive failure of the immune system allows life threatening opportunistic infections and cancers to thrive . Following initial infection, a person may not notice any symptoms or may experience a brief period of influenzalike illness.

HIV infects vital cells in the human immune system, such as helper T cells, macrophages, and dendritic cells. HIV infection leads to low levels of CD4+ T cells through a number of mechanisms. When CD4+T cell numbers decline below a critical level, cell-mediated immunity is lost, and the body becomes progressively moresusceptible to opportunistic infections, leading to the development of AIDS.

Psychiatric comorbidity in HIV ranges from minor cognitive deficits to frank psychosis. Since the early 1990s there have been efforts to document the neuropsychiatric aspects of HIV.[(2)] Psychiatric manifestations are more in HIV-affected individuals as compared to other STDs.[(3)]

Several patients who presented with acute psychosis resembling schizophrenia, acute paranoid disorder, and mania or secondary depression there is paucity of literature particularly in India in AIDS individuals, hence this study is intended to fill upthe lacuna.

A high prevalence of psychiatric disorders is reported both in physically asymptomatic and symptomatic persons.[(6)] Despite the high prevalence, psychiatric disorders in HIV patients are often under diagnosed and undertreated.

Depression is the most common psychiatric condition seen in PLWHA. Factors which could trigger depression among PLWHA are stress, difficult life events, side effects of medications, or the effects of HIV on the central nervous system. There is considerable evidence that depression and anxiety are prevalent diagnoses among those with HIV infection.[(7-8)]The most common psychiatric manifestations are depressive spectrum disorders. Emotional problems are among the most common symptoms in HIV patients with up to 98.6% prevalence.[(9)] The world parameters of Depression has received a considerable amount of attention, owing in part to its high prevalence in HIV-positive individuals, ranging

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between 5.8 and 36.0%.[5] Depression is a prevalent comorbidity in HIV infection as well as a recognized side-effect of NRTI, Protease inhibitors and NNRTIs. It may also be the first presenting symptom in an HIV case.[10] HIV infected individuals are recognized to be at high risk of suicide in the period immediately after coming to know of seropositive status, especially if they havea past psychiatric history.[11]

Mania is overrepresented in HIV infection compared to general population. A case series explored the various possible associations of HIV and mania like manic symptoms being a direct effect of the illness, effect of HAART drugs, or as a reaction to disclosure of the diagnosis.[12] Although manic episodes can occur early in the infection, it is more common in later phases of the infection, often associated with cognitive deficits and can be a presentation of HIV dementia or associated with psychosis.

Post-traumatic stress disorder (PTSD) is more prevalent among HIV-positive individuals than in the general population. The relationship between post-traumatic stress symptoms and HIV infection is complex. Post-traumatic stress symptoms may be due to factors associated with HIV infection, such as the notification process.

AIM

To study prevalence of psychiatric illnesses in HIV patients attending tertiary carehospitals in Hyderabad

OBJECTIVES:

1. To study the prevalence of psychiatric illnesses in asymptomatic HIV patients.
2. To know the prevalence of each mental disorder with respect to duration ofillness.
3. To know the prevalence of each mental disorder in child status groups.
4. To know the prevalence of each mental disorders in different educationallevels.

METHODOLOY

This is a cross sectional study done during January 2018 to june 2019, in tertiary hospital Hyderabad. Convenient sampling technique was used to select study subjects. 100 HIV positive asymptomatic cases who met the inclusion criteria were taken for study. Psychiatric disorders were assessed using MINI scale. Modified kuppuswamy scale was used to assess socio economic status. 100 asymptomatic HIV patients who don't have prior psychiatric disorders were taken into the study. Psychiatric disorders at the initial diagnosis of HIV were assessed and at the time of entry into the study were assessed. MINI scale was used to diagnose psychiatric disorders. The data was analyzed using SPSS software Version 26.

TOOLS

i. Researcher Designed Socio Demographic questionnaire
ii. MINI 7.02
iii. Modified kuppu swamy scale

Socio demographic questionnaire

A questionnaire containing socio-demographic details was administered to each studyrespondent. The socio demographic data contained in the questionnaire included information on gender, age, occupation, marital status, religion, income, level of education, HIV status of partner and children, duration of illness, latest CD4 count.

Ethical consideration

The research process began by obtaining ethical approval from the Department of Psychiatry, Osmania medical college, The procedures and the objectives of the study were explained to tertiary care centers, staff and the patients at the ICTC centers.

Inclusion Criteria:

- Age of the subject between 18-60 yrs.
- Subjects with confirmed HIV seropositivity.
- Those who have given written informed consent to participate in the study.
- Gender: male , female, transgender.
- Subjects with no other chronic physical illnesses which can confound thestudy.

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Exclusion Criteria:

- Subjects who are not willing to give consent.
- Subjects with chronic medical illnesses are excluded

OBSERVATIONS AND RESULTS

The study planned to recruit a minimum of 100 HIV Asymptomatic patients attending tertiary care centers in Hyderabad in Telangana state. Table 1 shows the demographic characteristics of adult HIV patients. The mean age in the patients was found to be 41.46years, with an age range 18 to 70 years. Table 1 is summary of the characteristics of the 100 patients. There were 48 (48%) females yielding a Male-to- Female ratio of 1.08:1. Out of the participants, 87(87%) were married, 11(11%) were unmarried and 2[2%] were separated. Twenty (20%] patients had primary level education and 13(13%) had attained high school education. The study accounted Hindus 83%, Muslims 7%, Christians 10%.

The socioeconomic status of participating patients is summarized in table 2. Sixty-two members (62%) were employed during the study period. thirty-four (34%) patients were unemployed and four (4%) were students .45 (45%) were engaged in skilled occupations and eighteen (18%) were engaged in unskilled occupations. Study constituted different classes of socioeconomic status. In them upper lower class constituted thirty-four (34%), upper middle (27%) lower middle 26(26%) twelve (12%)were of lower and one from upper class.

Table 1-Demographic characteristics of adult HIV patients

		N	**%**
PATIENT'S SEX	MALE	52	52%
	FEMALE	48	48%
MARITAL STATUS	MARRIED	87	87%
	UNMARRIED	11	11%
	SEPARATED	2	2%
FORMAL EDUCATION	ILLITERATE	24	24%
	PRIMARY	5	5%
	MIDDLE SCHOOL	15	15%
	HIGH SCHOOL	13	13%
	INTERMEDIATE	9	9%
	GRADUATION	27	27%
	POST GRADUATION	4	4%
RELIGION	HINDUS	83	83%
	MUSLIMS	7	7%
	CHRISTIANS	10	10%

Table 2: Socioeconomic characteristics of adult HIV patients

EMPLOYMENT	EMPLOYED	62	62%
	STUDENT	4	4%
	UNEMPLOYED	34	34%
OCCUPATION	SKILLED	45	45%
	STUDENT	3	3%
	UNOCCUPIED	34	34%
	UNSKILLED	18	18%
SOCIO-ECONOMIC STATUS	UPPER	1	1%
	UPPER MIDDLE	27	27%
	LOWER MIDDLE	26	26%
	UPPER LOWER	34	34%
	LOWER	12	12%

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Table 3: Duration of HIV illness (in years) and most recent CD4 count and adherenceto treatment

		n	%
DURATION OF ILLNES	LESS THAN 2YEARS	11	11%
	3-4YEARS	28	28%
	5-9YEARS	29	29%
	MORE THAN 10	32	32%
ERENCE TO HIVTREATMENT	ADHERENT	67	67%
	NONADHERENT	33	33%
CD4 COUNT	HIGH	64	64%
	LOW	13	13%
	MEDIUM	23	23%

Table 3 depicts the duration of illness, the duration of HIV illness ranged from 3 months to 25 years, with a mean duration of illness of 7.46 years. Table 4-3 shows that 32% of patients had HIV for period of more than 10 years, 29% between 5 and 9 years, 28% between 3 and 4 years. Out of the 100 patients reporting recent CD4 counts, 64% had counts more than 500 cells per mm^3 ,23% had counts between 300 and 500 cells per mm^3 13% had less than 300 cells per mm^3. Among 100 patients 67%were adherent to HIV treatment 33%were non adherent.

Table 4: Partner status of HIV patients

	Frequency	Percent
Negative	30	33.7%
Positive	59	66.29%
Total	89	100.0

Table 4 and Figure 1 depicts the partner status of HIV, In the study 89% patients were married and 11% of patients were unmarried. among 89 patients 59 (66.29%) patients spouses had HIV status positive and 30 (33.7%) patients were negative.

Figure 2 depicts HIV status of children of HIV patients, Among HIV patients 89 were married. 80(89.88%) of them had children with HIV negative status and 9(10.11%) of them had HIV positive status.Table 5 depicts social support score Among all HIV patients in the study 46% (46) of patients had high social support ,35%(35) of patients had moderate socialsupport and 19% (19) had low social support.

Table 5: SOCIAL SUPPORT SCORE AMONG HIV POSITIVE PATIENTS

	Frequency	Percent
HIGH	46	46
LOW	19	19
MODERATE	35	35

Prevalence of psychiatric morbidity in HIV

Out of the 100 patients, a total of 71% were diagnosed with psychiatric morbidity by using MINI tool. Therefore, the prevalence of psychiatric morbidity in HIV patients attending tertiary care centers in Hyderabad was 71%. 29% had no psychiatric illness. Among the patients 32% had past psychiatric illness after they have been diagnosed as HIV positive cases. Figure 3 depicts the same.

Among 71 patients with psychiatric illness 43(60.5%) were diagnosed with a single psychiatric morbidity and the 28 had at least two psychiatric co morbidities. 25.35% patients had three different psychiatric morbidities, 14.08%had two different morbidities.

Among 71 patients with psychiatric illness, table 6 depicts individual illness. Major depressive disorder with suicidal disorder with alcohol was the leading diagnosis with 15.49%, and second cause is major depressive disorder with 14.08%. alcohol use disorder 8.4%, Generalized anxiety disorder and suicidal disorder are of 7.04% each. Psychosis, Antisocial personality disorder, antisocial personality disorder with general anxiety disorder, major depressive disorder with alcohol, major depressive disorder with suicidal disorder, social anxiety disorder with suicidal disorder , antisocial personality

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disorder with general anxiety disorder with suicidal disorder , antisocial personality disorder with social anxiety disorder with suicidal disorder constitute 4.22% each. antisocial personality disorder with major depressive disorder, major depressive disorder, posttraumatic stress disorder, psychosis with suicidal disorder, general anxiety disorder with suicidal disorder with 2.81%. major depressive disorder with post-traumatic stress disorder and alcohol, major depressive disorder with suicidal disorder and alcohol constitute 1.4%.

Table 6: Psychiatric comorbidities among HIV patients

				%
No psychiatric morbidity			29	28.6
MDD			10	14.08
GAD			5	7.04
AUD			6	8.4
SUICIDAL			5	7.04
PSYCHOSIS			3	4.22
ASPD			3	4.22
ASPD	GAD		3	4.22
ASPD	MDD		2	2.81
MDD	PTSD		2	2.81
MDD	ALCOHOL		3	4.22
MDD	SUICIDAL		3	4.22
PSYCHOSIS	SUICIDAL		2	2.81
SAD	SUICIDAL		3	4.22
GAD	SUICIDAL		2	2.81
ASPD	GAD	SUICIDAL	3	4.22
ASPD	SAD	SUICIDAL	3	4.22
MDD	SUICIDAL	PTSD	11	15.49
MDD	PTSD	ALCOHOL	1	1.4
MDD	SUICIDAL	ALCOHOL	1	1.4

Major Depressive Disorder and patient characteristics:

In the study education ($p = 0.005$) was significantly associated with MDD prevalence. Lower class and upper lower class was group contained more number of cases than other classes. other characters were not significantly associated with major depressive disorder, as depicted by table 7.

Table 7: Socio-demographic characteristics of HIV patients and MDD diagnosis

		past	Yes	No	P
Employed	Employed	10	19	33	0.864
	Unemployed	4	11	19	
	Student	0	1	3	
Gender	Male	7	17	27	0.919
	Female	7	14	28	
SOCIO-ECONOMIC STATUS	LOWER	1	7	4	0.258
	LOWER MIDDLE	5	9	12	
	UPPER	0	0	1	
	UPPER LOWER	3	11	20	
	UPPER MIDDLE	5	4	18	
Education	GRADUATE	5	6	16	0.005
	HS	3	3	10	
	ILL	4	13	7	
	INTER	0	2	7	
	MS	0	7	8	
	PG	2	0	2	
	PRI	0	0	5	
Marital status	M	14	29	44	0.132
	SEP	0	1	1	
	UM	0	1	10	

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Religion	CHR	2	3	5	0.985
	HIN	11	26	46	
	MUS	1	2	4	

None of the patient's characteristics related to HIV diagnosis namely CD4 count, child and spousal HIV status or duration of HIV illness were significantly associated with MDD diagnosis (table 8).

Table 8: Patient HIV characteristics and MDD diagnosis

		past	Yes	No	P
CD 4 count	<300 cells/mm3	10	16	38	0.148
	300-500 cells/mm3	3	7	13	
	>500 cells/mm3	1	8	4	
ıild HIVstatus	Positive	3	4	4	0.15
	Negative	11	27	51	
partner status	Positive	12	19	30	0.156
	Negative	2	12	25	
HIV duration	Less than 2 y	0	4	7	0.156
	2—5	2	8	18	
	5—10	3	9	17	
	greater than 10	9	10	13	

Suicidality and patient characteristics:

In the study gender, socioeconomic status, education, marital status was significantly associated with suicidality in HIV positive patients. In the study females have low suicidality when compared males the p value being 0.000. In the study lower and upper lower social class has more suicidality than other classes. Suicidality is significantly associated with socioeconomic status with p value being 0.00. the classes with high socio-economic status has low suicidality. the study is significantly associated with educational level. suicidality is high in the illiterates and from primary schooling to high school educational groups.

Table 9: Socio-demographic characteristics of HIV and characteristics of HIV with suicidality

		Yes	No	P
Employed	Employed	16	46	0.55
	Unemployed	12	22	
	Student	1	4	
Gender	Male	15	37	0
	Female	5	35	
SOCIO-ECONOMIC STATUS	LOWER	4	7	0
	LOWERMIDDLE	9	17	
	UPPER	0	1	
	UPPERLOWER	7	27	
	UPPERMIDDLE	7	20	
Education	GRADUATE	6	21	0.005
	HS	6	7	
	ILL	7	17	
	INTER	1	8	
	MS	6	9	
	PG	0	4	
	PRI	2	3	
Marital status	M	28	59	0.05
	SEP	0	2	
	UM	0	11	
Religion	CHR	1	9	0.299

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	HIN	24	59	
	MUS	3	4	
CD 4 count	<300 cells/mm3	3	61	0.043
	300-500 cells/mm3	3	20	
	>500 cells/mm3	2	11	
Child HIV status	Positive	4	7	0.13
	Negative	24	65	
partner status	Positive	19	42	0.39
	Negative	9	30	
HIV duration	Less than 2 y	2	9	0.139
	2—5	11	17	
	5—10	8	21	
	greater than 10	7	25	

The present study is significantly associated with educational level. Social anxiety disorder is high in the graduates and high school groups. the disorder is low in the other groups. marital status, CD4 count, religion, partner status and child status and duration of HIV illnesshas no significant relation with social anxiety (Table 10).

Table 10: Patient HIV characteristics and social anxiety disorder diagnosis

		PAST	YES	NO	P
EMPLOYED	EMPLOYED	13	7	42	0.56
	UNEMPLOYED	9	2	23	
	STUDENT	0	1	3	
GENDER	MALE	9	5	34	0.914
	FEMALE	13	5	34	
SOCIO-ECONOMICSTATUS	LOWER	4	0	8	0.003
	LOWER MIDDLE	8	0	18	
	UPPER	0	0	1	
	UPPER LOWER	5	2	27	
	UPPER MIDDLE	5	8	14	
EDUCATION	GRADUATE	8	7	13	0.049
	HS	2	3	11	
	ILL	6	0	18	
	INTER	0	0	9	
	MS	6	0	9	
	PG	0	1	3	
	PRI	0	0	5	
MARITALSTATUS	M	0	8	57	0.29
	SEP	0	0	2	
	UM	0	2	9	
RELIGION	CHR	2	3	6	0.208
	HIN	20	26	57	
	MUS	0	2	5	
CD 4 COUNT	<300 CELLS/MM3	13	9	42	0.2
	300-500 CELLS/MM3	4	1	18	
	>500 CELLS/MM3	5	0	8	
HILD HIVSTATUS	POSITIVE	3	4	4	0.38
	NEGATIVE	11	27	51	
ARTNERSTATUS	POSITIVE	14	5	40	0.46
	NEGATIVE	8	5	26	

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HIV DURATION	LESS THAN 2 Y	1	2	8	0.207
	2—5	5	4	19	
	5—10	6	4	19	
	R THAN10	10	0	22	

Patient HIV characteristics and post-traumatic stress diagnosis:

In the study education, cd4 count was significantly associated with post- traumatic stress disorder in HIV positive patients. In the study illiterates and middle school groups are mostly affected with post-traumatic stress disorder than other classes. post-traumatic stress disorder is significantly associated with education levels.

Patient HIV characteristics and psychotic disorder diagnosis:

In the study gender was significantly associated with psychotic disorder in HIV positive patients. In the study females group has high psychotic disorder than male group. psychotic disorder is significantly associated gender with p value being 0.0004. psychotic disorder is not significantly associated with socioeconomic status, marital status, religion, partner status and child status and duration of HIV illness and cd4 counts (Table 11).

Table 11: Patient HIV characteristics and psychotic disorder diagnosis

		Yes	No	P
Employed	employed	4	58	0.674
	unemployed	1	33	
	student	0	4	
Gender	Male	1	52	0.0004
	Female	4	43	
-ECONOMICSTATUS	LOWER	1	11	0.584
	LOWER MIDDLE	0	26	
	UPPER	0	1	
	UPPERLOWER	3	31	
	UPPER MIDDLE	1	26	
Education	GRADUATE	1	26	0.39
	HS	0	16	
	ILL	1	23	
	INTER	0	9	
	MS	2	13	
	PG	0	4	
	PRI	1	4	
Marital status	M	4	83	0.77
	SEP	0	2	
	UM	10	1	
Religion	CHR	0	10	0.583
	HIN	5	78	
	MUS	0	7	
CD 4 count	<300 cells/mm3	3	61	0.507
	300-500 cells/mm3	2	21	
	>500 cells/mm3	0	13	
Child HIV status	Positive	0	11	0.722
	Negative	5	84	
partner status	Positive	2	59	0.32
	Negative	3	36	
HIV duration	Less than 2 y	2	9	0.109
	2--5	1	27	
	5--10	2	27	
	greater than 10	0	32	

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Patient HIV characteristics and generalized anxiety disorder diagnosis

In the study employment, socioeconomic status, education levels, CD4 count was significantly associated with generalized anxiety disorder diagnosis in HIV positive patients. In the study unemployed group and students has high prevalence of generalized anxiety disorder than employed groups. Generalized anxiety disorder is significantly associated employment status with p value being 0.01.

Patient HIV characteristics and antisocial personality disorder diagnosis:

In the study partner status is associated with antisocial personality disorder. No other factor is significantly associated with antisocial personality disorder (Table12)

Table 12: Patient HIV characteristics and antisocial personality disorder diagnosis

		YES	NO	P
EMPLOYED	EMPLOYED	4	58	0.548
	UNEMPLOYED	4	30	
	STUDENT	0	4	
GENDER	MALE	2	50	0.11
	FEMALE	6	42	
-ECONOMICSTATUS	LOWER	2	10	0.583
	LOWER MIDDLE	2	24	
	UPPER	0	1	
	UPPER LOWER	1	33	
	UPPER MIDDLE	3	24	
EDUCATION	GRADUATE	2	25	0.5
	HS	0	16	
	ILL	2	22	
	INTER	0	9	
	MS	2	13	
	PG	1	3	
	PRI	1	4	
MARITAL STATUS	M	8	79	0.522
	SEP	0	2	
	UM	0	11	
RELIGION	CHR	0	10	0.531
	HIN	7	76	
	MUS	1	6	
CD 4 COUNT	<300 CELLS/MM3	5	59	0.381
	300-500 CELLS/MM3	3	20	
	>500 CELLS/MM3	0	13	
CHILD HIV STATUS	POSITIVE	2	9	0.242
	NEGATIVE	6	83	
PARTNER STATUS	POSITIVE	8	53	0.049
	NEGATIVE	0	39	
HIV DURATION	LESS THAN 2 Y	2	9	0.173
	2—5	2	26	
	5—10	0	29	
	GREATER THAN 10	4	28	

DISCUSSION

In a study by Bradley N G et al, prevalence was found to be 50% of the study sample. Which is less than our findings the cause may be use of DSM IV instead of MINI 7.02. The prevalence estimates for psychiatric conditions in HIV-positive individuals vary greatly. There may be several reasons for this, including sampling method (e.g. use of convenience samples, such as from certain institutions or geographical areas, use of administrative data, use of remnant blood specimens, trueepidemiological samples) and other methodological considerations.

RAMANAND SATAPATHY, N. MURALI KRISHNA did a study in Vizag which show that the prevalence rate of psychiatric manifestations is 90% in HIV positive individuals and 33% in HIV negative group.[13] In current study,

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prevalence of psychiatric morbidity was fond to be 71%. This low prevalence in current study may be attributed use of MINI 7.02 instead of ICD-10.

Judith A.Cook, Jane K. Burke-Miller et.al. determined the prevalence, comorbidity, and correlates of lifetime and 12-month behavioural health disorders in a multisite cohort of 1027 women living with HIV in the United States. Most (82.6%) had one or more lifetime disorders including 34.2% with mood disorders, 61.6% with anxiety disorders, and 58.3% with substance use disorders.(14) In our current study similar findings were observed wit MDD being the most common psychiatric morbidity. But anxiety disorders were found to be having highest prevalence. This difference may be attributed to use of Composite International Diagnostic Interview for screening and the study design being a follow up study.

Pauline W. Ng'ang'a, Muthoni Mathai did study in Nairobi and Kenya in patients with HIV/AIDS attending Comprehensive Care Clinic (CCC). The mean age of participants was 37.3 years (SD 9.2) Three-quarters (75.9%) of participants were females and median duration of HIV illness was 5 years. The prevalence of psychiatric morbidity was 71.4% (95% CI 65.3–77). The leading psychiatric disorders were MDD (32.2%), PTSD (18.4%), Dysthymia (17.6%), and OCD (17.6%). Overall psychiatric morbidity was associated with low income, p = 0.035. MDD was associated with older age and female gender.(15) The above study has similar findings to that of current study MDD being the high prevalent psychiatric illness. This similarity may be attributed to selection of similar type of cases, the sample size, use of MINI as screening tool andthe study design being a cross section study at a tertiary care centre In a developing country.

In a study by Stephanie K. Y. Choi ,Eleanor Boyle, the point prevalence of depressive symptoms was estimated at 28%.Two years of follow-up, 43% had a recurrent episode.(16) The prevalence of depression in this study is less than that of current study. This difference may be due to use of Kessler psychological distress scale and the study design being a cohort study.

In a study by Shren Chetty and Kalai Naidu 56 patients had a psychotic disorder; 27 patients had a mood disorder and three patients had a cognitive disorder. Multiple diagnoses were observed in seven patients with a mood and psychotic disorder; ten patients with a psychotic and cognitive disorder and one patient with a mood and cognitive disorder. One patient had all three diagnoses.(17) The prevalence of psychosis was high in this study when compared to our study. This may be due to selection of cases in psychiatric hospital and study design being retrospective study.

In a Swiss HIV Cohort Study (SHCS) Among 4,422 participants without a history of psychiatric disorders or depression at base- line, 360 developed depression during 9,348 person-years (PY) of follow-up, resulting in an incidence rate of 3.9 per 100 PY (95% confidence interval (CI) 3.5–4.3). Cumulative prevalence of depression during follow-up was recorded for 1,937/6,756 (28.7%) participants. Incidence and cumulative prevalence were higher in injection drug users (IDU) and women.(18)This study talks about incidence and the study design is follow up study.

CONCLUSION:

Highly active antiretroviral therapy (HAART) has led to a reduction in HIV- related morbidity and mortality, and the life expectancy of HIV-positive individuals has improved significantly. It is therefore becoming more likely that clinicians will encounter patients with psychiatric manifestations of the disease. This results summarizes the evidence on prevalence and manifestations of psychiatric conditions in HIV-positive adults.

Further examination of the independent and joint effects of substance abuse and mental illness on HIV outcomes may better inform future adherence interventions among HIV-infected individuals with substance-use and mental health disorders, ultimately improving their outcomes.

Limitations of the study:

1. Small sample size, thus the observed differences in the Prevalence of psychiatric illness do not provide explanation whether they are the causes or consequences of HIV
2. This is a cross sectional study
3. Study was conducted in ICTC centers, may restrict the generalizability of the results.
4. MINI scale used in the study does not include spectrum of personality disorders. 5.Sleep disturbances and neurocognitive disorders were not included.
5. No follow up was done.
6. No comparison was done with healthy population or other disorders.

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FUTURE DIRECTIONS

There is need to screen HIV positive patients for psychiatric morbidity and integrate psychiatric services into routine care of HIV positive patients. There should be focus on early intervention campaigns to ease the burden brought about by HIV, increase productivity, adherence and eventually reduce the cost of care.

The model proposes that adverse psychological phenomenon (e.g., adjustment disorders, mood disorders and anxiety disorders) may be anticipated at key points such as discovery of seroconversion, initiation of anti-retroviral treatment, onset of physical symptoms, advance in HIV related illness stage and HIV related bereavement and that they reflect a breakdown in coping capacities in the face of HIV.

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REFERENCES

1. Dubé B, Benton T, Cruess DG, Evans DL. Neuropsychiatric manifestations of HIV infection and AIDS. Journal of Psychiatry and Neuroscience. 2005 Jul;30(4):237.
2. Thakur LC, Anand KS, Sagar RS. Neuropsychiatric and Psychological Aspects Related to Human Immuno Deficincy Virus (HIV) Infection. Indian journal of psychiatry.1992 Apr;34(2):114.
3. Satapathy R, Krishna MN, Babu AM, Vijayagopal M. A study of psychiatric manifestations of physically asymptomatic HIV-I seropositive individuals. Indian journal of psychiatry. 2000 Oct;42(4):427.
4. Chandra PS, Deepthivarma S, Jairam KR, Thomas T. Relationship of psychological morbidity and quality of life to illness-related disclosure among HIV-infected persons. Journal of Psychosomatic Research. 2003 Mar 1;54(3):199-203.
5. Knights MJ, Chatziagorakis A, Buggineni SK. HIV infection and its psychiatric manifestations: a clinical overview. BJPsych Advances. 2017 Jul;23(4):265-77
6. Agarwal AK. Strategies for primary prevention of AIDS. Indian journal of psychiatry. 1990 Jul;32(3):209.
7. Chander G, Himelhoch S, Moore RD. Substance abuse and psychiatric disorders in HIV-positive patients. Drugs. 2006 Apr 1;66(6):769-89
8. Chandra PS, Gandhi C, Satishchandra P, Kamat A, Desai A, Ravi V, Ownby RL, Subbakrishna DK, Kumar M. Quality of life in HIV subtype C infection among asymptomatic subjects and its association with CD4 counts and viral loads–a study from South India. Quality of Life Research. 2006 Dec 1;15(10):1597.
9. Wig N, Sakhuja A, Agarwal SK, Khakha DC, Mehta S, Vajpayee M. Multidimensional health status of HIV-infected outpatients at a tertiary care center in north India.
10. Banerjee S, Arya RK. Depression as the first symptom in AIDS patient. Indian journal of psychiatry. 1992 Jan;34(1):55.
11. Chandra PS, Krishna VA, Ravi V, Desai A, Puttaram S. HIV related admissions in a psychiatric hospital a five year profile. Indian journal of psychiatry. 1999 Oct;41(4):320.
12. Venugopal D, Patil PB, Gupta D, Murali N, Kar N, Sharma PS. Mania in HIV infection. Indian journal of psychiatry. 2001 Jul;43(3):242.
13. Satapathy R, Krishna MN, Babu AM, Vijayagopal M. A study of psychiatric manifestations of physically asymptomatic HIV-I seropositive individuals. Indian journal of psychiatry. 2000 Oct;42(4):427.
14. Cook JA, Burke-Miller JK, Steigman PJ, Schwartz RM, Hessol NA, Milam J, Merenstein DJ, Anastos K, Golub ET, Cohen MH. Prevalence, comorbidity, and correlates of psychiatric and substance use disorders and associations with HIV risk behaviors in a multisite cohort of women living with HIV. AIDS and Behavior. 2018 Oct1;22(10):3141-54.
15. Ng'ang'a PW, Mathai M, Obondo A. Prevalence of anxiety and depression among HIV/AIDS patients attending the comprehensive Care Centre (CCC), Kenyatta National Hospital (KNH). Kenya: University of Nairobi. 2011.
16. Choi SK, Boyle E, Cairney J, Collins EJ, Gardner S, Bacon J, Rourke SB. Prevalence, recurrence, and incidence of current depressive symptoms among people living with HIV in Ontario, Canada: results from the Ontario HIV Treatment Network Cohort Study. PloS one. 2016 Nov 1;11(11):e0165816.
17. Chetty S, Naidu K. Clinical presentation of HIV-infected patients in a psychiatric hospital in South Africa. African journal of infectious diseases. 2018;12(2):29-36.
18. Anagnostopoulos A, Ledergerber B, Jaccard R, Shaw SA, Stoeckle M, Bernasconi E, Barth J, Calmy A, Berney A, Jenewein J, Weber R. Frequency of and risk factors for depression among participants in the Swiss HIV Cohort Study (SHCS). PLoS One. 2015 Oct 22;10(10):e0140943.