

Anxiety and depression in people living With HIV/AIDS(PLHIV) and their impact on fatigue and Health related quality of life (HRQOL)

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Background

- Neuro psychiatric diseases are quite common but under diagnosed entity in PLHIV and are associated with fatigue syndromes and hence poor HRQOL(Health Related Quality of Life) specially in developing countries like India.
- We aimed to determine the prevalence and predictors of anxiety neurosis (AN) and depressive illness (DI) in people living with HIV (PLHIV) using the Hospital Anxiety and Depression Scale (HADS), and their impact on fatigue assessed by the Multidimensional Assessment of Fatigue (MAF) and HRQOL (health-related quality of life) measured by the SF-36.

Methods

- It was a cross-sectional observational study done in 200 PLHIV, on ART for at least 2years (clients) at a tertiary care centre in New Delhi, India.
- All cases with any comorbidities, organ dysfunction, endocrinopathies, hypovitaminosis-D or B12 deficiency, recent OI or any illness including COVID-19 during last 6 months were excluded

Results

- The study population included 60% males, 32% females, and 8% transgender individuals, with a mean age of 37.86±11.79 years.
- CD4 counts ranged from 250-499/μL in 58% of participants, and 34% had counts greater than 500/μL.
- The average duration of ART was 4.4±1.9 years, with undetectable viral RNA in 67% of participants

- AN and DI were diagnosed in 84% (168/200) of the cohort and fatigue in 73%(146/200)
- Age over 40 years, male sex, anemia, low CD4 counts ,elevated creatinine, longer ART duration, social stigma and detectable viral load ($p < 0.005$) were found to be significantly associated with more anxiety or depressive illness, however Socio-economic status, gender, and type of ART were not found to be associated with AN or DI.
- Fatigue was prevalent in 73% of participants and mean MAF score was found 32.47±10.39. Low CD4 counts(CD4<500cells/mm³), anemia, being married were found to be significantly associated with fatigue.
- HRQOL, averaged 67.68±20.45, with mental and emotional health subdomains more affected than physical health
- The presence of anxiety, depression, high viral load, and anemia were found to be significant predictors of fatigue and reduced HRQOL

Table 1: Association of CD4 Count and Viral Load with Anxiety, Depression and Fatigue

CD4 Count / Viral Load	Anxiety (%)	Depression (%)	Fatigue (%)
CD4 < 500(n=128/200)	78%	78%	78%
CD4 ≥ 500(n=72/200)	55%	50%	64%
Viral Load > 1000 (n=48/200)	88%	62%	88%
Viral Load ≤ 1000 (n=152/200)	64%	88%	68%

Conclusion

- Anxiety and depression are highly prevalent but underdiagnosed entity and found in approx. 80% of PLHIV, contributing to fatigue and reduced HRQOL and should be part of routine management of PLHIV.
- Routine viral load, hemoglobin, creatinine estimation checks, and biannual psychological assessments are crucial for better management of these individual.

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