QUALITY OF LIFE IN HIV AND HIV-TB CO-INFECTED PATIENTS

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INTRODUCTION

- 2.3 million PLHIV (3rd rank)[1]
- 0.3 (13%) million died of HIV associated TB
- Distress is common in co-infected patients
- Poor QOL
- To improve it, important to identify the determinants
- Dearth of literature on QOL in HIV-TB co-infected patients.

AIM

- Assess and compare the QOL of HIV infected patients with and without active TB
- Identify the factors responsible for the same

REVIEW OF LITERATURE

- Cross-sectional study in Ethiopia by Deribew *et al*[2] - depression, having a source of income and family support
- Study by KH Rajeev *et al*[3] - mean score highest in psychological domain, also education, income, ART status, duration of taking ART and clinical stage
- Study conducted in Nigeria by AA Fatiregum *et al*[4], to assess the QOL in HIV patients showed that three domains (psychological health, physical health, personal beliefs) in a similar way affected the QOL

METHODOLOGY

- Study design- Cross-sectional study (2 groups)
- Study setting- ART Centers: KMC Attavar Hospital and Government Wenlock Hospital, Mangalore, Karnataka, India.
- Sample size- - $N = Z^2PQ / d^2$ =104 (Power- 80%, CI- 95%)
- Non-random sampling
- Inclusion criteria

  - >18 years

  - diagnosed 3 months prior to enrollment

- Study instruments-

  -Semi-structured questionnaire to collect clinico-demographic data,

  -WHOQOL–HIV BREF[5] to assess QOL

  -Beck's Depression Inventory[6] (BDI) to identify depression.

- Ethical committee approval was taken

DATA ANALYSIS

- SPSS version 11.0
- Mean score of items within each domain were used to calculate the domain score and multiplied by 4.
- T-test was used to compare means.
- Mean was used as a cut-off point
- For BDI marks were added and association of grade of depression with QOL was done.

RESULTS

- Out of 104 subjects, 26 (25%) were HIV-TB co-infected (group I)
- 78 (75%) were only HIV infected (Group II) of which 64 (82%)were in stage 1 & 14(18%)in stage 2
- 26 of group I were in stage 3 ($p<0.001$) and on ART.
- Whereas only 42(53.8%) of group II were on ART ($p<0.001$).

WHOQOL-HIV BREF

QOL DOMAINS	HIV/TB CO-INFECTION (N=26) MEAN (SD)	HIV WITHOUT TB (N=78) MEAN (SD)	*p*-value
Physical health	9.92 (2.03)	12.78 (2.20)	< 0.001
Psychological health	10.98 (1.78)	13.18 (2.13)	< 0.001
Social health	12.08 (2.03)	13.24 (2.28)	0.02
Environmental health	10.67 (1.76)	13.09 (2.17)	< 0.001
Level of independence	9.73 (1.51)	11.41 (2.08)	< 0.001
Spiritual health	9.77 (2.26)	12.23 (2.45)	< 0.001

BECK's DEPRESSION INVENTORY

BECK's DEPRESSION INVENTORY	HIV/TB CO-INFECTED PATIENTS (N=26) NUMBER (%)	HIV PATIENTS (N=78) NUMBER (%)
The ups and downs in life considered normal	14 (53.8%)	56 (71.8%)
Mild mood disturbances	8 (30.8%)	19 (24.4%)
Borderline clinical depression	4 (15.4%)	3 (3.8%)

CONCLUSION

- QOL in all domains is lower in HIV-TB co-infected patients.
- Highest score in social domain in both groups
- Need to formulate policies to reduce affect of opportunistic infection on QOL OF PLHIV

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