

HIV+

# Federal University of Bahia



# Edgard Santos Federal University Hospital, Salvador, Bahia, Brazil ART improves most domains of HRQoL by both, SF-36 and HATQoL scales

Liliane Lins\*, Ana Paula Ledo, Estela Luz, Brenda Soares Dutra, Indira Rodriguez Prieto, Carlos Brites

# Introduction

- Depression
- **Psychological problems**
- Social stigma
- Social-economical disparities

Health-related quality of life (HRQoL)

longitudinal Few studies have evaluated the effect of antiretroviral therapy on the quality of life of HIV+ patients

# Obiective

#### To evaluate the quality of life in HIV patients before and after one year of antiretroviral therapy (ART)

#### Methods

### **Prospective cohort study;** N= 91 HIV+ treatment-naïve-patients



#### **Assessments:**

- Demographics, socioeconomic status, clinical history, HIV-1 RNA plasma viral load and CD4/CD8 cells count
- Dependent t-tests were used to compare differences between levels of HRQoL before and after one year of ART
- Multiple regression technique was used to analyze the relationship between covariables and HRQoL

#### Results

Figure 1- SF-36v2 Physical and Mental Component Summaries

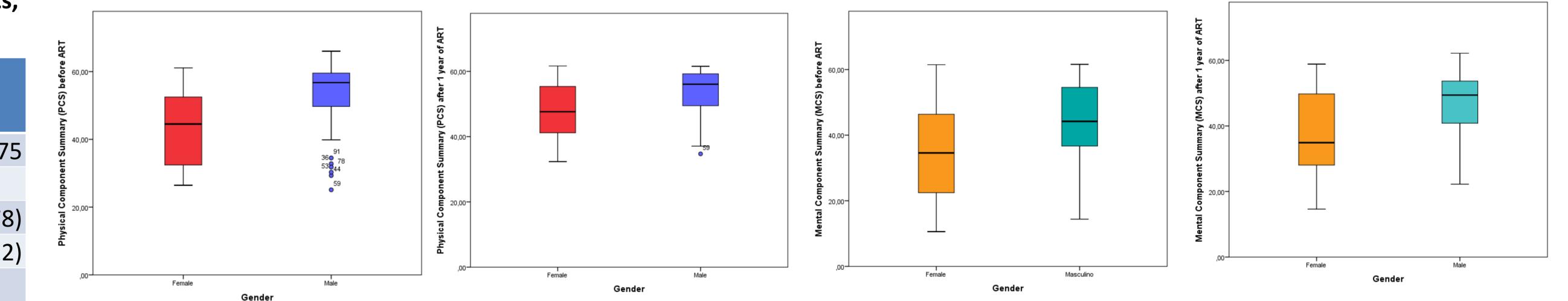


Table 2- SF-36v2 Means and Standard Deviations of Health-Related Quality of Life in 91 HIV+ patients, before and after one year of ART

Health-related Quality life Domains	Before ART	After 1 year of ART	<b>P*</b>
Physical Functioning (PF)	49.29±11.02	51.42±8.87	0.0001
General Health (GH)	47.46±10.58	51.77±10.27	0.0001
Social Functioning (SF)	43.63±11.98	49.90±8.43	0.0001
Mental Health (MH)	43.35±13.40	47.27±12.11	0.0001

Table 3- HAT-QoL Means and Standard Deviations of Health-Related Quality of Life in 91 HIV+ patients, before and after one year of ART

Refore ART

Table Demographic clinical and 1. characteristics of the 91 HIV+ patients, Salvador, Bahia, 2018

Demographic and clinical				
characteristics				
Age, mean ± SD	35,33±10,75			
Gender N (%)				
Male	71 (78)			
Female	20 (22)			
Years of education (%)				
< 8 years	19 (20.9)			
≥8 years	72 (79.1)			
Ethnicity N (%)				
Caucasian	19 (20.9)			
Mulatto	55 (60.4)			
Black	17 (18.7)			
Monthly income* N (%)				
<minimal th="" wage<=""><th>41 (45.1)</th></minimal>	41 (45.1)			
≥Minimal wage	50 (54.9)			
Stable relationship N (%)				
Yes	18 (19.8)			
No	73 (80.2)			
Comorbidities/Charlson N				
No	67 (73.6)			
Mild	24 (18.7)			
Moderate	6 (6.6)			
Severe	1 (1.1)			
Body mass index (kg/m2)				
Underweight < 18.5 kg/m <sup>2</sup>	7 (7.7)			
Normal weight.=18.5 e 25 kg/m <sup>2</sup>	57 (62.6)			
Overweight ≥25 e <30 kg/m²	21 (23.1)			
Obesity ≥ 30 kg/m <sup>2</sup>	6(6.6)			

After 1 year of ART

	Delute Ant	AILEI I YEAI UI ANI	
<b>Overall Function</b>	58.79±27.21	71.07±23.21	0,0001
Life Satisfaction	53.09±29.17	68.20±29.04	0,0001
Disclosure worries	28.30±25.95	13.35±21.19	0,0001
Sexual function	59.20±36.89	79.26±33.34	0,0001

Age (P=0.002; P=0.045), sex (P=0.019; P=0.029), and having a stable relationship (P=0.010; P=0.022) were associated with the variation in BP and GH, respectively, in the multiple regression analyses; sex (P=0.001), and having a stable relationship (P=0.040) were good predictors of the Mental Component Summary. Sex (P=0.038) and age (P=0.001) predicted the Physical Component Summary. Physical Function and Overall Function showed the only strong correlation between the two scales domains (r=.73). SF-36 Cronbach's Alpha was 0.77. and HAT-**QoL Cronbach's Alpha was 0.90.** 

### Conclusions

HAT-Ool Domains

Art improved HRQoL scores after one year of use. HATQoL and SF-36 are good tools for evaluation of HRQoL in HIV patients, but they measure different aspects. Use of both scales is recommended for an accurate evaluation of HRQoL in HIV patients.

#### References

1- Cooper V, Clatworthy J, Harding R, Whetham J; Emerge Consortium. Measuring quality of life among people living with HIV: a systematic review of reviews. Health Qual Life Outcomes. 2017;15(1):220.

2- Miners A, Phillips A, Kreif N, Rodger A, Speakman A, Fisher M et al. Health-related quality-of-life of people with HIV in the era of combination antiretroviral treatment: a cross-sectional comparison with the general population. Lancet HIV. 2014;1(1):32–40.

3- Shahriar J, Delate T, Hays RD, Coons SJ. Commentary on using the SF-36 or MOS-HIV in studies of persons with HIV disease. Health Qual Life Outcomes. 2003; 1:25.

4- Holmes WC, Shea JA. A new HIV/AIDS-targeted quality of life (HAT-QoL) instrument: development, reliability, and validity. Med Care. 1998;36(2):138-54.