

No association of cART and HIV-related parameters with health-related quality of life (HR-QoL) of PLWH: insights from a multidimensional screening

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BACKGROUND

Progress in HIV treatment has improved PLWH **life expectancy** and **infection management**. However, PLWH still face more health challenges, including **somatic and psychological symptoms**, such as **anxiety, depression, and cognitive decline** [1,2]

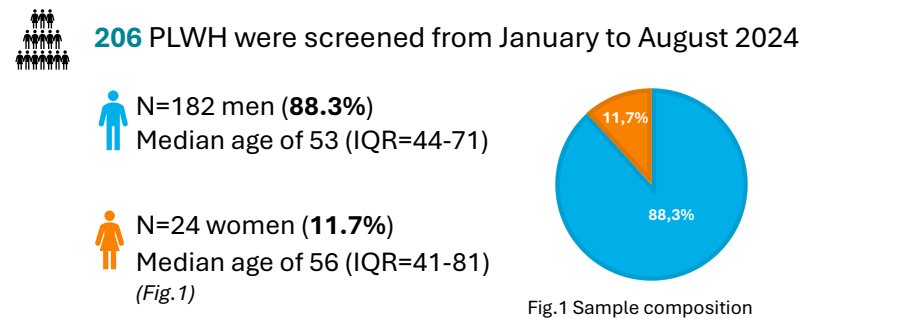
AIM

This study aims to identify early signs of health vulnerability (physical and psychological symptoms) through a comprehensive **screening procedure for PLWH**. The early detection of these symptoms may help optimize and improve **PLWH retention in care**

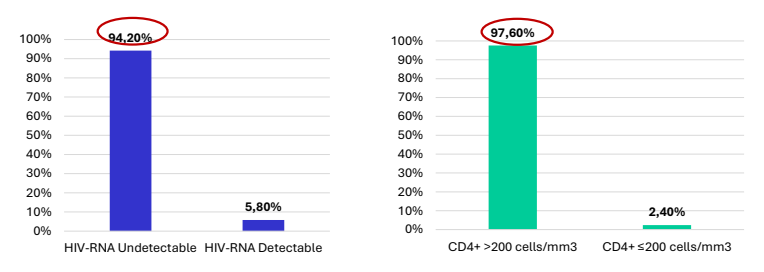
STATISTICAL ANALYSIS

A **binary regression analysis** was conducted to identify factors associated with outcomes assessed through the screening, adjusting for **clinical values, polypharmacy, current ART regimen and number of ART classes** experienced

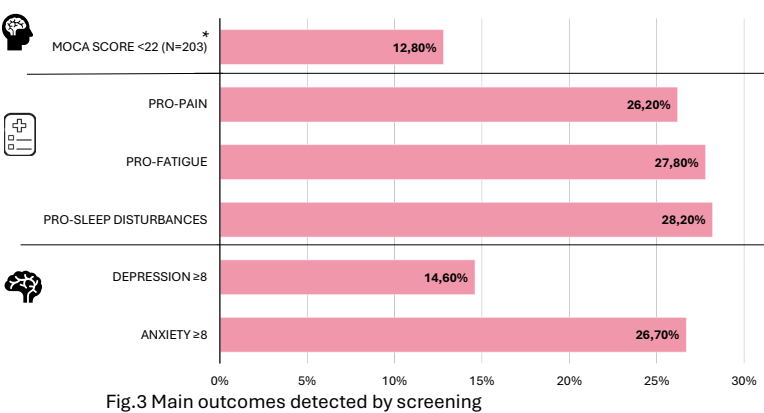
RESULTS



All participants were **on cART** and almost all of them had **undetectable HIV-RNA** (94.2%) and **CD4+ counts >200 cells/mm3** (97.6%) (Fig.2)



12.80% had a **MoCA** score below the Italian normative sample average of 22/30 [5,6]. Almost 30% of patients reported the following PRO symptoms at significant intensity. Percentages are shown in Fig.3



- Higher educational level** was protective for cognitive decline [Adjusted Odds Ratio (AOR) =0.14; 95%CI=0.05-0.42] (Fig. 4)
- Female gender** was positively associated with pain [AOR=3.23; 95%CI=1.24-8.39] (Fig. 4)
- Manager-level employment** was protective for depression [AOR=0.25; 95%CI=0.07-0.89] (Fig. 4)

CONCLUSIONS

Despite the great improvement of ART tolerability and the long-term-associated stability of disease, the relevant proportion of PLWH with psychological and cognitive issues highlights the need for further investigations and specific interventions for these conditions

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MATERIALS AND METHODS

Consecutive PLWH on ART attending the HIV/AIDS Unit of the San Gallicano Dermatological Institute (Rome, Italy) underwent the following **screening procedure** during routine access:

- The Hospital Anxiety and Depression Scale (**HADS**) [3] to measure **emotional vulnerability**
- The Patient Reported Outcomes measure (**PROm**) [4] to detect **physical symptoms**
- The Italian version of Montreal Cognitive Assessment (**MoCA**) [5, 6] to assess **cognitive functions**

- Polypharmacy** was protective for cognitive decline [AOR=3.23; 95%CI=1.24-8.39] (Fig.5)
 - Comorbidities** were positively associated with pain [AOR=2.17; 95%CI=1.06-4.47] (Fig.5)
 - Depression** was positively associated with fatigue [AOR=3.48; 95%CI=1.22-10.00] and MoCA score under 22/30 [AOR=3.61; 95%CI=1.04-12.53] (Fig 6)
 - Anxiety** predicted pain [AOR=3.69; 95%CI=1.82-7.47], fatigue [AOR=3.70; 95%CI=1.63-8.40], sleep [AOR=5.68; 95%CI=2.88-11.23] and sexual disorders [AOR=3.90; 95%CI=1.92-7.96] (Fig 6)
- No associations between covariates, current ART and clinical, immunological, or virological parameters such as nadir or current CD4+ count, HIV RNA and clinical stage emerged

