

## Dettaglio abstract

**N. pgm:** P 91

**Title:** Determinants of Quality of Life in PLWH effectively treated with ART

**Presentation type:** Poster

### Session/Topic

#### **Social science, Epidemiology and Prevention**

Social and behavioural science, marginalized groups, community aspects and community surveys

**Authors:** F. Maggiolo<sup>1</sup>, E. Di Filippo<sup>1</sup>, P. Meli<sup>2</sup>, D. Valenti<sup>3</sup>, F. Radici<sup>4</sup>, I. Mercurio<sup>5</sup>, L. Comi<sup>1</sup>

**Affiliation:** 1ASST Papa Giovanni XXIII, 2Comunità Emmaus & Caritas Bergamasca, 3Associazione FROM, 4Arcigay Bergamo Cives, 5CRI-Comitato di Bergamo, Bergamo

### Abstract

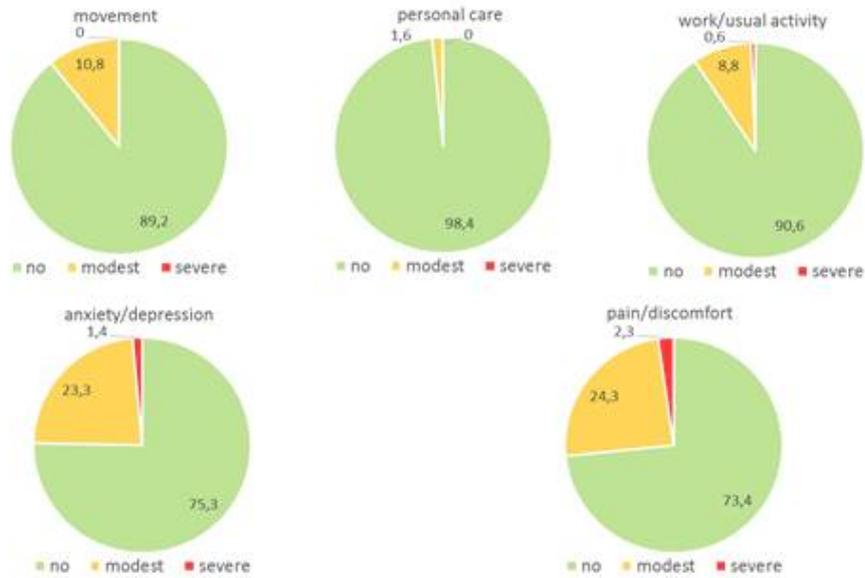
**Background:** Measuring progress towards the HIV care cascade allows to identify processes that should be improved to achieve UNAIDS 95-95-95 goal. We focused our attention on the fourth “95”: health related quality of life (HRQoL).

**Methods:** We calculated the number of PLWH using the eCDC HIV modeling tool (version 1.3.0) that estimates the size of the undiagnosed population. Data on the diagnosed and treated populations were derived from the clinical database of the only Provincial Center authorized to treat HIV infection. Virologic response to ART was defined according to the last available HIV-RNA measure. HRQoL was assessed by EuroQol 5 Dimensions (EQ-5D) patient questionnaire using EQ-5D index score responses (scale - 0.594 to 1; worst to best health status). We defined as good an HRQoL status with an index score  $>0.75$  that is no more than a modest discomfort in no more than 1 domain. A probit model was used to assess the outcome in relation to baseline variables.

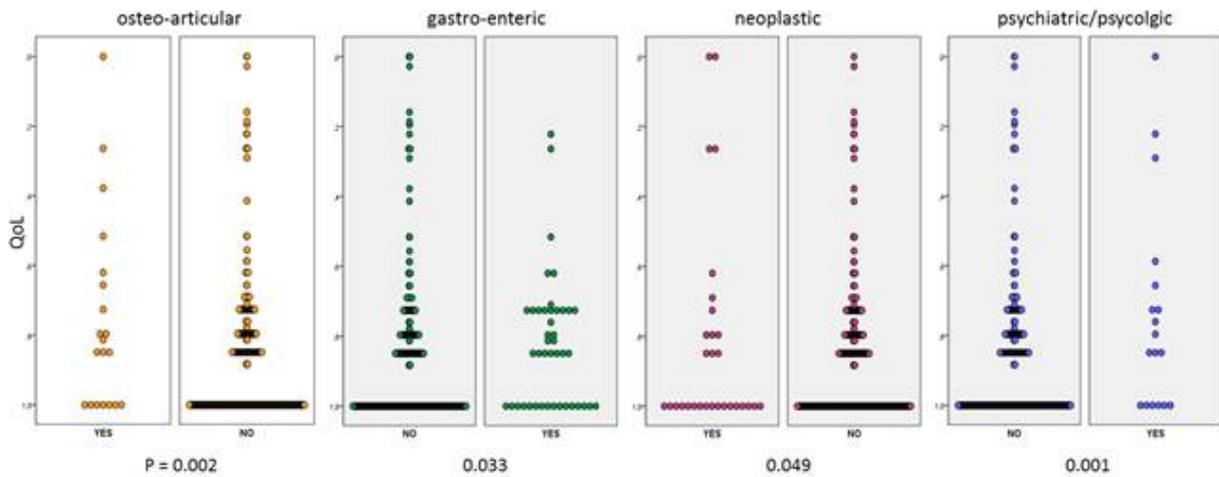
**Results:** At January 2022 the estimated number of PLWH was 3225 . All subjects on active FU (2834) were actively taking ART and 98.5% of them had their last viral load  $< 200$  copies/ml, for a final proportion of PLWH virally suppressed of 86.45% just above the 95-95-95% goal. We focused our attention on PLWH with suppressed viremia. Their mean HRQoL was 0.88 (95%CI 0.87-0.909) with 82.6% of persons indicating an index  $>0.75$  thus reaching the threshold for the UNAIDS fourth “95” goal. A severe discomfort was reported by no more than 2.3% of persons in the “usual activities”, “pain” and “anxiety/depression” domains (figure). The “pain” and “anxiety/depression” domains resulted those with the greatest negative impact on HRQoL (figure). However, 56% of people indicated a perfect HRQoL status (index 1). Some co-pathologies were specifically associated with a reduction of HRQoL: osteo-articular diseases ( $P = 0.002$ ), neurological disorders ( $P = 0.011$ ), psychiatric disorders ( $P = 0.001$ ), neoplastic diseases ( $P = 0.049$ ) and gastro-enteric diseases ( $P = 0.033$ )(figure). Having multiple co-pathologies was negatively associated to the outcome, too ( $P < 0.0001$ ). According to probit analysis, neither age, gender or any characteristic of HIV infection including last CD4 or CD8 counts, nadir of CD4, CDC category, number of ARV drugs significantly influenced HRQoL that was significantly linked only with the number of chronic co-pathologies ( $P = 0.002$ )(figure).

**Conclusions:** Reported HRQoL was completely independent from the classical tools for describing HIV infection or from the type of ARV therapy. Much more relevant was the weight of some concomitant chronic diseases especially if they could influence specific domains such as “pain/discomfort” or “anxiety/depression” which have the greatest negative impact on HRQoL. Chronic co-pathologies with potential impact on these domains should be addressed carefully.

### QoL domains & PLWH status



### Presence/absence of selected co-pathologies & QoL



Probit analysis (considered outcome = QoL > 0,75)

| Variable                        | OR           | 95% CI             | P            |
|---------------------------------|--------------|--------------------|--------------|
| age                             | 0.991        | 0.974-1.009        | 0.324        |
| gender                          | 0.938        | 0.64-1.433         | 0.767        |
| basal CD4                       | 1.000        | 0.999-1.001        | 0.898        |
| last CD4                        | 1.000        | 0.999-1.000        | 0.597        |
| last CD8                        | 1.000        | 1.000-1.001        | 0.173        |
| CDC/C3                          | 0.975        | 0.619-1.537        | 0.914        |
| number of ARV drugs             | 0.823        | 0.582-1.165        | 0.273        |
| <b>number of co-pathologies</b> | <b>0.811</b> | <b>0.708-0.929</b> | <b>0.002</b> |