MEASURING ADHERENCE TO ANTIRETROVIRAL TREATMENT: CORRELATION AND CONCORDANCE BETWEEN TWO INDIRECT METHODS

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Background and Importance

- **Anti-Retroviral Treatment**
  - **Effectiveness**
  - **Safety**

One of the most important variables for achieving all the benefits

Measuring adherence

- **Direct methods:** Analysing substances in biological samples
- **Indirect methods:** Patient interviews and dispensing records

Aim and Objectives

- To describe ART adherence in people living with HIV (PLHIV)
- To analyse the correlation and the concordance between two indirect methods used to measure adherence:
  - Single Item Rating Scale answered with a Visual Analog Scale (SIRS-VAS)
  - Medication Possession Rate (MPR)

Materials and Methods

Multicenter (5 centers), observational, prospective and cross-sectional study

- Inclusion criteria: adult PLHIV on ART

SIRS-VAS:

Ask about the % of ART taken in the previous month

0%  50%  100%

MPR:

\[
\text{MPR}(\%) = \frac{\text{Days covered by the medication dispensed}}{\text{Time interval (6 months)}} \times 100
\]

Adherent or Non-adherent with different cut-off points: 95%, 90%, 85% and 80%

Results

Descriptive statistics:

- **N = 128**
- Age: 20–81 years old (x=46.9±11.7)
- 112 men, 14 women and 2 non-binary people

Correlation:

\[ r = 0.31, p<0.001 \]

Qualitative concordance

<table>
<thead>
<tr>
<th>Adherence cut-off point</th>
<th>κ</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>95%</td>
<td>0.318</td>
<td>0.000</td>
</tr>
<tr>
<td>90%</td>
<td>0.280</td>
<td>0.001</td>
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<tr>
<td>85%</td>
<td>0.127</td>
<td>0.145</td>
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<tr>
<td>80%</td>
<td>-0.030</td>
<td>0.724</td>
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Conclusion and Relevance

- The adherence to ART in our population is optimal
- The correlation between the SIRS-VAS and the MPR was only modest
- The concordance between both measures was higher for people with high adherence results

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