HIV-stigma, depression, and social support: opportunities for improving quality of life among Dutch people living with HIV

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Background
Assessing quality of life of people living with HIV (PLHIV) enables clinicians to:
• tailor treatment and care to individual needs
• employ interventions within subgroups
• follow changes over time
• quantify the return on health care investments

Methods
HIV patients of OLVG and CZE were invited to fill out an online questionnaire. We assessed themes that encompass a comprehensive indication of quality of life among all PLHIV (independent of influencing factors such as gender, sexual orientation, and other social demographic variables):

• HIV-stigma
  - Short Stigma scale (10 items, range 1-5)
  - Subscales: Personalized stigma, Disclosure concerns, Negative self-image, Public attitudes

• Anxiety and Depression
  - Hospital Anxiety and Depression scale (HADS, 14 items, range 0-22)
  - Subscales: Anxiety and Depression

• Social Support
  - Social Support List (SSL12, 12 items, range 12-48)
  - Subscales: Everyday support, Support in Problem situations, and Esteem support

Results
A total of 170 HIV positive patients participated in the study (response rate 68%).

Table 1. Characteristics of our study population

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<thead>
<tr>
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<th>OLVG</th>
<th>CZE</th>
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<tbody>
<tr>
<td>Total population</td>
<td>3000</td>
<td>600</td>
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<tr>
<td># participants</td>
<td>127</td>
<td>43</td>
</tr>
<tr>
<td>Gender (men)</td>
<td>123</td>
<td>37</td>
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Stigma
Participants experienced moderately high stigma; 2.03 (SD = 0.53) on the total scale. HIV-status disclosure concerns were particularly high (Mean = 2.90, SD = 0.83).

Anxiety and depression
Using the clinical cut-off of 15, we identified 44 participants (26%) with potential anxiety or depressive disorder. Overall the HADS total score was 9.92 (SD = 6.99). Our participants experienced more anxiety and depression symptoms than the general Dutch population (scoring 8.4 on the HADS).

Social support
Participants experienced moderately high social support (score of 31 out of 48, SD = 7.55), which is somewhat lower compared to patients with spinal cord injuries but higher than a large Dutch elderly sample.

Figure 1. Association between the indicators.

More social support was associated with both less depression and anxiety, and less experienced stigma or vice versa. Experienced stigma was not associated with the level of anxiety and depression.

Notably, exploring the subscales, the Depression subscale of the HADS was associated with Stigma ($r = .16$), such that higher scores on depression were related to higher scores on Stigma, or vice versa. Both the Negative Self-image and Public Attitudes subscales were associated with higher HADS scores ($r = .23$ and $r = .20$ respectively). Public Attitudes were not associated with Social Support scores. The subscales of the Social Support measure showed the same pattern of associations as the total scales.

Conclusion
The quality of life of PLHIV in the Netherlands could be improved, as they still experience moderate levels of HIV-stigma, depression and anxiety, and (lack of) social support. A quarter of our patients might suffer from anxiety or depressive disorder.

Introducing interventions aimed at increasing experienced social support, and reducing stigma, and anxiety and depression could significantly improve the quality of life of PLHIV and progress could be regularly monitored via these questionnaires.