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Background

- Viral suppression as a result of antiretroviral therapy (ART) reduces new HIV infections and improves health outcomes for people living with HIV.
- Reducing new HIV infections and improving health outcomes for people living with HIV are 2020 National HIV/AIDS Strategic goals.
- HIV patients’ depression may play a role in providers’ decisions to initiate ART and patients’ ability to adhere to ART and achieve viral suppression.

Objectives

- Estimate the percentage of HIV-infected adults with clinically diagnosed depression
- Examine associations between diagnosed depression and (1) ART prescription and (2) viral suppression, evaluating confounders and mediators of those associations including ART adherence

Methods

- We used interview and medical record data from the 2009–2012 cycles of the Medical Monitoring Project (MMP), which provides nationally representative estimates of behavioral and clinical characteristics of HIV-infected adults receiving HIV care in the United States.
- From 2009–2015, MMP used a 3-stage complex sampling design (states, facilities, and patients). Data were weighted for unequal selection probabilities and non-response.
- We estimated the percentage of HIV-infected adults who were diagnosed with depression, prescribed ART, and with sustained viral suppression (all viral loads in the past 12 months <200 copies/mL) by reviewing medical record data.
- We examined associations between diagnosed depression and sociodemographic and clinical characteristics with Rao Scott chi-square tests.
- We estimated adjusted prevalence ratios for viral suppression among patients prescribed ART, with and without diagnosed depression using logistic regression analysis.

Results

Table 1. Prevalence of depression, ART prescription and viral suppression among HIV-infected adults in the United States: Medical Monitoring Project, 2009–2012 (N=18,095)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Depression</th>
<th>ART Adherent</th>
<th>Viral Suppressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weighted %</td>
<td>25</td>
<td>91</td>
<td>69</td>
</tr>
<tr>
<td>95% CI</td>
<td>23.28</td>
<td>91.92</td>
<td>67.70</td>
</tr>
</tbody>
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ART prescribed within the last 12 months
Calculated among those prescribed ART
Viral load in last 12 months <200 copies/mL

1ART prescribed within the last 12 months
2Calculated among those prescribed ART
3Viral load in last 12 months <200 copies/mL

We estimated the percentages
We did not find evidence that providers were less likely to prescribe ART to patients with depression
While ART adherence was lower among patients with depression, adherence alone did not account for the lower likelihood of viral suppression among patients with depression

Conclusions

- Among patients prescribed ART, those with depression were 7% less likely to be virally suppressed
- Further exploration of reasons for lower viral suppression in adults with depression will be instrumental in achieving NHAS 2020 goals

Summary and Discussion

- We did not find evidence that providers were less likely to prescribe ART to patients with depression
- While ART adherence was lower among patients with depression, adherence alone did not account for the lower likelihood of viral suppression among patients with depression

Limitations

- Cross-sectional survey design eliminates ability to determine whether depressive episodes and imperfect ART adherence are temporally related
- ART adherence only assessed in the three days prior to interview
- Analysis does not account for unmeasured confounding in association between depression and viral suppression

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