A Path Analysis of Patient and Social-Level Factors on Health Literacy and Retention in Care Among African Americans Living with HIV

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Background
Although African Americans comprise only 12% of the United States population, African Americans represent the greatest proportion of persons diagnosed and living with HIV among all racial and ethnic groups. Retention in care refers to whether an individual attends regularly scheduled HIV appointments. Compared to White and Hispanic/Latino populations, retention in care among African Americans is five and two percent lower, respectively.

Poor retention in care is a contributor to the morbidity and mortality of HIV among African Americans and is one of the most significant predictors of antiretroviral treatment failure, elevated HIV viral load, and decreased CD4 T-cell count.

Preliminary evidence suggests that health literacy—the ability to access process and use health information—may contribute to disparities in health outcomes among African Americans living with HIV. Health literacy is 20% lower among African American adults than White adults.

Evidence is emerging regarding causal pathways linking health literacy to health outcomes among disparate populations, but no studies have examined these pathways for retention in care among racially disparate persons living with HIV.

This research adapted Paasche-Orlow and Wolf’s health literacy model to inform relationships among health literacy, retention in care, HIV clinical outcomes, and sociodemographic indicators of health literacy.1

Purpose
The purpose of this study is to utilize an adapted health literacy model to evaluate the effect of health literacy on retention in care and its subsequent effect on racial disparities and HIV clinical outcomes.

Methods

Participating Demographics (N = 620)

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>61%</td>
<td>70%</td>
<td>Very Low SES</td>
</tr>
<tr>
<td>&lt;100% Visit Adherence</td>
<td>62%</td>
<td>93%</td>
<td>Age (years)</td>
</tr>
<tr>
<td>S-TOFHLA</td>
<td>91 ± 12</td>
<td>87 ± 13</td>
<td>Cognitive Function</td>
</tr>
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The model demonstrated good fit to the data, as indicated by the following goodness-of-fit indices: RMSEA = 0.006, SRMR = 0.038, CFI = 0.998, TLI = 0.995. Coding for categorical variables are as follows: race = 0 = African American; 1 = Non-African American; visit adherence = 0 = <100% visit adherence, 1 = 100% visit adherence; viral load = 0 = not suppressed, 1 = suppressed; SES/Insurance = 0 = not low SES, 1 = low SES; 2 = very low SES

Results Continued
Non-African Americans had greater health literacy. Greater health literacy led to 100% visit adherence, which was subsequently associated with viral suppression.

Health literacy mediates the relationship between race and retention in care, as well as the effect of race and sociodemographic predictors on patient-provider interactions.

Findings suggest causal pathways between retention in care and health literacy for racially disparate HIV populations.

Implications include the need to provide individualized, patient-centered educational health resources and retention in care interventions that address patient health literacy.

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References