Disparities in Comorbid Conditions among Black and White HIV/AIDS Patients in the United States National Hospital Discharge Survey (NHDS)
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Methods

Data Source:
- Data were extracted from the 1996-2005 National Hospital Discharge Survey (NHDS).

Inclusion criteria:
- Hospital discharges with ICD-9 codes for HIV/AIDS.

Exclusion criteria:
- Age <18 years and those who left against medical advice.

Methods:
We extracted data from the 1996-2005 NHDS. ICD-9-CM codes were used to identify HIV/AIDS, HCV, substance abuse, and OI. Patients <18 years of age and those who left against medical advice were excluded. Data included patient age, gender, race, insurance status, source of admission, LOS, and discharge status. Chi-square and Wilcoxon Rank Sum tests were used to compare characteristics between races. Multivariable regression models were used to ascertain the impact of race on health outcomes. Patient discharge weights were incorporated into the dataset to provide national estimates across the US.

Results (Continued)

Table 1. Selected Hospital Discharge Demographics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Blacks</th>
<th>Whites</th>
<th>p-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median age (yrs), (25th-75th percentile)</td>
<td>41 (35-47)</td>
<td>41 (35-47)</td>
<td>0.2</td>
</tr>
<tr>
<td>Males – No. (%)</td>
<td>9,847 (70)</td>
<td>7,270 (61)</td>
<td></td>
</tr>
<tr>
<td>Substance abuse – No. (%)</td>
<td>3,202 (23)</td>
<td>2,040 (17)</td>
<td></td>
</tr>
<tr>
<td>HCV coinfection – No. (%)</td>
<td>5,540 (39)</td>
<td>3,970 (33)</td>
<td></td>
</tr>
</tbody>
</table>

Background

Hepatitis C Virus (HCV), substance abuse, and opportunistic infections (OI) are all comorbidities associated with poor health outcomes among HIV/AIDS patients. Some ethnic minorities, including blacks, are believed to have higher rates of these comorbid conditions and therefore; it is unclear if patient race is an independent predictor of hospital mortality or length of stay (LOS) when these comorbidities are considered.

Hepatitis C Virus (HCV), substance abuse, and opportunistic infections (OI) are associated with poor health outcomes among HIV/AIDS patients. Some ethnic minorities, including blacks, are believed to have higher rates of these comorbid conditions and therefore; it is unclear if patient race is an independent predictor of hospital mortality or length of stay (LOS) when these comorbidities are considered.

Conclusions:
Black HIV/AIDS patients admitted to U.S. hospitals have higher rates of opportunistic infection, cocaine use, stay longer and are more likely to die during hospitalization as compared to whites. However, blacks have lower rates of HCV/HCV coinfection and alcohol use.

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