Background

- Impact of cigarette smoking on mortality is well-studied, with estimates of the relative mortality risks for the overall population widely available.
- However, age-specific mortality estimates for different sociodemographic groups in the U.S. are lacking.

Methods

Mortality Data: 1987–2018 National Health Interview Survey Linked Mortality Files through 2019

Outcomes: 1) Age- and gender-specific relative risks (RRs) of all-cause mortality for current smokers or recent quitters (within the last 2 years) or long-term quitters vs. never smokers by race/ethnicity & education; 2) RRs by number of cigarettes smoked per day (CPD) among current smokers or recent quitters; 3) RRs by years since quitting among long-term quitters.

Analysis: Cox proportional hazards regression models.

Results

Demographic Characteristics in Cigarette Use Groups (1987–2018 NHIS)

<table>
<thead>
<tr>
<th>Race/Ethnicity (%)</th>
<th>Education (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NH-White</td>
<td>NH-Black</td>
</tr>
<tr>
<td>Never smoker</td>
<td>67.2</td>
</tr>
<tr>
<td>Current smoker or recent quitter</td>
<td>76.2</td>
</tr>
<tr>
<td>Long-term quitter</td>
<td>81.8</td>
</tr>
</tbody>
</table>

Relative risks of all-cause mortality by age group, race/ethnicity, education

Conclusions

- Higher proportion of non-Hispanic (NH)-Black individuals in current smokers or recent quitters versus long-term quitters.
- Lower proportion of individuals with at least a college degree in current smokers/recent quitters.
- Highest all-cause mortality RRs for current smokers or recent quitters in NH-White individuals, followed by NH-Black and then Hispanic individuals.
- A positive gradient in all-cause mortality RRs for current smokers or recent quitters by educational attainment level.
- No clear pattern in all-cause mortality RRs for long-term quitters by race/ethnicity and education.

- Age-specific all-cause mortality rates associated with smoking vary considerably by sociodemographic factors.
- Smoking-related mortality RRs are lower in Hispanic and NH-Black individuals compared to NH-White individuals and increase by level of educational attainment.
- RRs from the current analysis will be incorporated into simulation models for smoking and related health outcomes.

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