Multilevel Influences of Cancer Inequities at the Intersection of Rurality and Race/Ethnicity

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Intersection of Rurality Race/Ethnicity

- By most measures, rural populations comprise between ~15-20% of the U.S. population (59+ million Americans)
- 22% of rural Americans are people of color.
  - One in every 25 Americans in a rural person of color
- ~13 million Americans
- Both rurality AND race/ethnic are social constructs

Social and Physical Determinants of Health

Source: Probst et al, 2019; RMHRC Policy Briefs
# Health Concerns in Rural America

TABLE 10. Rural Americans’ Views of the Most Urgent Health Problem Currently Facing Their Communities, by Race/Ethnicity

Q32. What is the most urgent health problem currently facing your local community? [Open-Ended]

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Whites</th>
<th>African Americans</th>
<th>Latinos</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Cancer</td>
<td>12</td>
<td>2. Health care access</td>
<td>15</td>
</tr>
<tr>
<td>3. Health care access</td>
<td>10</td>
<td>3. Diabetes</td>
<td>9</td>
</tr>
</tbody>
</table>

*Drug addiction or abuse includes opioid addiction/abuse. NPR/Robert Wood Johnson Foundation/Harvard T.H. Chan School of Public Health, Life in Rural America, 6/6/18 – 8/4/18. Q32. No other issues were mentioned by more than 10% of rural Americans. N= 1300 rural adults ages 18+ (full sample).

IMPORTANT CAVEAT: Survey was conducted **prior to** the COVID-19 pandemic.

Source: RWJF/Harvard Poll
Rural and Racial/Ethnic Cancer Disparities

Age-Adjusted Cancer Mortality Rate per 100,000

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Breast Cancer Screening (Aged 50-74)</th>
<th>Cervical Cancer Screening (Aged 21-65)</th>
<th>Colorectal Cancer Screening (Aged 50-75)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Racial/Ethnic Group</td>
<td>Rural, %</td>
<td>Urban, %</td>
<td>Urban, %</td>
</tr>
<tr>
<td>Non-Hispanic White</td>
<td>75.5</td>
<td>79.5</td>
<td>71.9</td>
</tr>
<tr>
<td>Non-Hispanic Black</td>
<td>80.2</td>
<td>85.3</td>
<td>64.2</td>
</tr>
<tr>
<td>Hispanic</td>
<td>70.1</td>
<td>71.0</td>
<td>52.3</td>
</tr>
</tbody>
</table>

Access to Care

- Access to Cancer Specialists (American Indian/Alaska Native vs. white):
  - 4.94% more likely to live 60+miles from a medical oncologist
  - 3.46% more likely to live 60+ miles from a radiation oncologist
  - 14.35% more likely to live 60+miles from a surgical oncologist

Multilevel Framework

COMPONENTS:
- Warnecke’s Model for Population Health and Health Disparities
- Aday and Andersen Framework for the Study of Healthcare Utilization
- Khan’s Typology of Access
- Krieger’s Domains of Social Inequity
- Gomez’s and Colditz’s Reviews of Social and Built Environments
- Taplin’s Multilevel Influences on the Cancer Care Continuum
- NCI’s Cancer Control Continuum
- Wingo’s Framework for Cancer Surveillance
- Gee and Ford: Structural Racism and Health Inequities
- Williams, Lawrence, and Davis-Racism and Health

Implications

• Rural minoritized populations experience notable inequities in social and physical determinants, including access to healthcare services
• Rural Black and American Indian/Alaska Native populations have higher cancer mortality rates than their urban counterparts
• Rural Hispanic populations have lower cancer screening rates
• Considering the multilevel (policy and area-level) factors and historical context are key to eliminating inequities in cancer
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Thank you!
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