Out of sight, out of mind:

Unaddressed disparities among rural minority populations

Jan Probst, PhD
Director
South Carolina Rural Health Research Center

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Overview

- Things are getting better – from a data point of view

- More research into rural minority health remains needed
Most analyses address race, residence separately

- **Health US 2016, e.g. Table 38** (Self-reported prevalence of heart disease, cancer & stroke from NHIS):
  - Age
  - Sex
  - Sex and age
  - Race
  - Hispanic origin & race
  - Education
  - Percent of poverty level
  - Hispanic origin and race and percent of poverty level
  - Geographic region
  - Location of residence

Admittedly, major documents focus on major populations. HUS 2013 included race / urbanization analyses.

Residence is the only cross-tab that can’t be performed from public use data.
2017: The year of rural

- **CDC:**
  - 11 rural-focused MMWR Surveillance Summary reports in 2017
    - 12 if an Iowa study is included
    - 8/11 included race/ethnicity cross-tabs
  - Rural analysis workshop in December, 2017

- **AHRQ**
  - Chartbook on rural health care

- **NCI**
  - Rural Cancer Control research emphasis
- Rural effects
- Race effects
- Interactive effects ... does anyone look?
Clear residence effects and...?

Percent of working age adults delaying care, by race & residence

White
- Urban Large Central
- Urban Medium and small
- Rural Small

Black
- Urban Large Fringe
- Rural Micropolitan

Source: HUS 2013 Table 75; CDC SS6623-H
Quick comparative estimates: residence matters

Selected self-reported variables, black only, Metro counties compared to Noncore rural counties, BRFSS, selected years

Source: James et al 2017 & author's analysis
Clear interaction effect

Hazard ratio for death before age 65 among persons age 45-64 when interviewed, 1986-2000 NHIS LMF, adjusted for sex and age. Referent group = urban white.

Source: Probst et al, Health Affairs, 2011
Race/ethnicity, some residence effects

Adult immunization rates, selected races, by residence, 2005 BRFSS

Source: Bennett et al 2010
Race/ethnicity and residence effects

People who identified a hospital, emergency room, or clinic as a source of ongoing care, by residence location, stratified by race/ethnicity, 2014 (Source: AHRQ)

Drawn from AHRQ Rural Health Disparities Chartbook, 2017

Source: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey, 2014.

Note: For this measure, lower rates are better. White and Black are non-Hispanic. Hispanic includes all races.
Race, residence and time effects

Suicide rate per 100,000 population, by race/ethnicity and residence location, age 15 and over, 1999-2015

Source: AHRQ Health Disparities Report, 2017
### Definitions of rural across 11 CDC Surveillance Reports

<table>
<thead>
<tr>
<th>Geographic Unit</th>
<th>Categories</th>
<th>Number of Reports</th>
<th>With race/residence</th>
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<tr>
<td>ZIP Code Tabulation Area</td>
<td>1 urban, 3 rural</td>
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</table>
Geo analysis is complex

- Multiple levels of measurement
  - County
  - Census Tract
  - Public Use Microdata Sample
  - Care referral region

- Confusing terms
  - Metropolitan / non-metropolitan
  - Urban / rural
“Micropolitan:” the term from heck

- Greenwood, SC: 23,000 residents
- NOT a variant on metropolitan (urban) but a rural county with large town
Metropolitan

Rockville, MD: population 66,940
So, what do rural researchers want?

- Clear, consistent definitions of rural
  - Terms such as “micropolitan” are confusing

- Consistent testing for race/residence interaction effects
  - If no one looks, no one will find

- Access procedures to enhance geo-based research
Thanks!

- Our web site:
  - rhr.sph.sc.edu

- Core funding from:
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- Contact:
  - jprobst@sc.edu
The Rural Health Research Gateway provides access to all publications and projects from eight different research centers. Visit our website for more information. ruralhealthresearch.org

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Shawnda Schroeder, PhD
Principal Investigator
701-777-0787
shawnda.schroeder@med.und.edu

Center for Rural Health
University of North Dakota
501 N. Columbia Road Stop 9037
Grand Forks, ND 58202