Health Inequalities and Inequities in the United States

Michal Engelman

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Population health is a field of study:

- Documents patterns and trends in health within specific places and periods in history
- Explains those patterns and trends
- Translates research into policies and interventions to improve population health

Population health statistics are measures of societal wellbeing – reflect how well society is taking care of its people.

**Health disparities reveal social inequality, and potentially, inequity.**
US life expectancy in comparative perspective: Males

FIGURE 1-5 U.S. male life expectancy at birth relative to 21 other high-income countries, 1980-2006.
NOTES: Red circles depict newborn life expectancy in the United States. Grey circles depict life expectancy values for Australia, Austria, Belgium, Canada, Denmark, Finland, France, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom, and West Germany.
SOURCE: National Research Council (2011, Figure 1-3).
FIGURE 1-6 U.S. female life expectancy at birth relative to 21 other high-income countries, 1980-2006.
NOTES: Red circles depict newborn life expectancy in the United States. Grey circles depict life expectancy values for Australia, Austria, Belgium, Canada, Denmark, Finland, France, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom, and West Germany.
SOURCE: National Research Council (2011, Figure 1-4).
Healthcare spending as percent of GDP

Note: For countries not reporting 2006 data, data from previous years is substituted.
America’s health-wealth paradox

Source: Organization for Economic Cooperation and Development (OECD)
Ranking of U.S. mortality among 17 peer countries, 2008

Source: National Research Council et al. 2013
U.S. Life Expectancy has declined for the past 2 years

American exceptionalism
Life expectancy at birth, selected OECD countries

THE WASHINGTON POST

Source: OECD, U.S. Census Bureau
Life Expectancy at birth by county, 2014

Source: Dwyer-Lindgren et al. (2017) JAMA internal Medicine
Rising mortality among middle-aged White Americans

Source: Case & Deaton (2015). *PNAS*
All-cause mortality, ages 45 - 54 for US White non-Hispanics (USW), US Hispanics (USH), and six comparison countries: France (FRA), Germany (GER), the United Kingdom (UK), Canada (CAN), Australia (AUS), and Sweden (SWE).

The increase in white deaths is concentrated among people with a high school degree or less.
Life Expectancy at age 25 by years of schooling, 2010

Life Expectancy at age 25 by years of schooling, United States 1990-2010

Drug, Alcohol, and Suicide Deaths have all Increased

U.S. Total Drug, Suicide, and Alcohol Deaths, 1999-2016

- Alcohol-Induced
- Suicide (other Cause)
- Suicide (Firearm)
- Suicide (Drug Overdose)
- Drug-Induced (Accidental or Unknown Intent)

Data: CDC Wonder Multiple Cause of Death Files; https://wonder.cdc.gov/
Chart: Shannon Monnat, smonnat@maxwell.syr.edu
Are White Americans really worst off?

Are White Americans really worst off?

### Infant Mortality by Race

#### ***US-Born Childbearing Women Ages 25 and Above***

<table>
<thead>
<tr>
<th></th>
<th># of Births</th>
<th>% of Births</th>
<th>IMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>NH-Black</td>
<td>975,539</td>
<td>13.5%</td>
<td>12.76</td>
</tr>
<tr>
<td>NH-White</td>
<td>5,768,099</td>
<td>79.9%</td>
<td>4.60</td>
</tr>
<tr>
<td>MX Amer.</td>
<td>472,195</td>
<td>6.5%</td>
<td>5.45</td>
</tr>
</tbody>
</table>

**Total**  
7,215,833  
100.0%  
5.76

Maternal Education-Specific Infant Mortality Rates & Rate Ratios by Race

<table>
<thead>
<tr>
<th></th>
<th>Black IMR</th>
<th>Black RR</th>
<th>White IMR</th>
<th>White RR</th>
<th>MX-American IMR</th>
<th>MX-American RR</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS or Less</td>
<td>14.7</td>
<td>2.19</td>
<td>6.7</td>
<td>ref</td>
<td>6.4</td>
<td>0.96</td>
</tr>
<tr>
<td>Some Coll.</td>
<td>12.2</td>
<td>1.82</td>
<td>4.8</td>
<td>0.72</td>
<td>5.3</td>
<td>0.79</td>
</tr>
<tr>
<td>College Deg.</td>
<td>9.8</td>
<td>1.46</td>
<td>3.5</td>
<td>0.52</td>
<td>3.4</td>
<td>0.51</td>
</tr>
</tbody>
</table>

Racial disparities over the full life course

Figure 2. Mortality Among Children Aged 1–19 Years, by Age and Race/Ethnicity, 2011

*Separate estimates for Asians, Native Hawaiians, and other Pacific Islanders were not available.

Black mortality disadvantage at (almost!) all ages

Population Hazards
U.S. Males 2002

hazard

age

White
Black
How should we understand racial disparities in health?

Race/ethnicity is a remarkably strong predictor of health status. Does that mean that race is a CAUSE of health disparities?

3 common – but wrong – explanations:
- Racial/genetic determinism
- Cultural/behavioral
- Socioeconomic

Racism, more than “race,” is what matters for health.
- Racial disparities reflect the biological impact of present and past histories of racial discrimination and economic deprivation.
“Evidence from the analysis of genetics (e.g., DNA) indicates that most physical variation, about 94%, lies within so-called racial groups. Conventional geographic “racial” groupings differ from one another only in about 6% of their genes.”

“Historical research has shown that the idea of “race” has always carried more meanings than mere physical differences; indeed, physical variations in the human species have no meaning except the social ones that humans put on them.”
Conclusion

Population health trends reveal tremendous long-term success. Still, longevity and health in the United States is unequally distributed by:

- Geography
- Gender
- Race/ethnicity
- Socioeconomic status (esp. education)

Why do these patterns emerge?

- Individual characteristics, personal choices and behaviors?
- Access to healthcare?
- Individual and population health is profoundly influenced and constrained by social forces.

What can we do?