The Importance of Race and Ethnicity in Accounting for Social Risks in Medicare Value-Based Payments

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Presentation Overview

- Background
- How Race and Ethnicity Influences Health
- Remedies to Racial and Ethnic Risks
- Q & A
Seismic Impact of Shift to Value Based Care

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Introduction

• Emerging concepts on the contribution of minority status to health disparities: **Minority stress, Resilience, Epigenetics, Life course**

• Understanding the contribution of minority status to disparities is critical:
  • Parse out role of different risk factors
  • Understand underlying mechanisms
  • Target interventions, modifiable pathways
  • Inform payment and delivery models
Assessment

Goal

• Understand evidence supporting concepts, how they may work together, and policy implications

Questions

• What is the concept? How is it operationalized (mechanism of action)? Strength of evidence?
How might concepts work together?

Life Course

Minority Stress 

Epigenetics 

Resilience 

Health and Quality of Life
Minority Stress

Definition/Operationalization

• The chronic stress resulting from experiences of unfair treatment and abusive behavior related to one’s belonging to a stigmatized minority group.

• Most well-understood causes of minority stress are prejudice & discrimination, which affects health via activation of fight/flight response (increases blood pressure, cortisol), or health behavior (unhealthy drinking, eating).

Mechanism of Action

Factors that may influence pathway between discrimination and health include perception of discrimination as stressful, and coping responses that may moderate health.

Strength of Evidence

Individual studies suggest association between minority stress and health disparities, but systematic reviews did not demonstrate link.
Minority Stress

Source: https://washingtonmonthly.com/magazine/janfeb-2014/driving-while-black/
Minority Stress

Minority Stress

Source: http://www.badnewsaboutchristianity.com/gab_racism.htm
# Resilience

## Definition/Operationalization

- Generally refers to positive adaptation (doing well) despite adversity, trauma, threat, but lack of universal definition. Common concepts include:
  - Recovering or bouncing back from adversity
  - Rising above adversity
  - Adaptation/adjustment process
  - Lower incidence of mental health issues after adversity.

## Mechanism of Action

<table>
<thead>
<tr>
<th>Mechanism of Action</th>
<th>Resilience-related, protective factors include resources (social support) that facilitate resilience, or traits (optimism). Vulnerability factors (urban poverty) may moderate resilience effects.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strength of Evidence</td>
<td>Multiple studies on role of resilience in moderating disparities in vulnerable groups, but systematic reviews demonstrating link between resilience and disparities are limited.</td>
</tr>
</tbody>
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Resilience

Resilience

Epigenetics

**Definition/Operationalization**

- Study of changes in gene expression (phenotype) regulated by the epigenome: the modifiers (biological processes such as DNA methylation) that direct DNA expression.
- Modifiers can be altered by social, cultural, psychological, physical, environmental exposures.

<table>
<thead>
<tr>
<th>Mechanism of Action</th>
<th>Factors influencing epigenetic regulation include: Maternal behaviors during pregnancy, paternal health, social interaction, diet and exercise, environmental chemicals.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strength of Evidence</td>
<td>Evidence on regulation of specific genes for health outcomes (e.g., cancer), but systematic reviews/meta-analyses evidence on link between epigenetics and disparities is limited.</td>
</tr>
</tbody>
</table>
Epigenetics

Environmental exposures, stresses, diet, and lifestyle can all induce epigenetic changes that determine whether genes are turned on or off.

Source: https://harvardmagazine.com/2017/05/is-epigenetics-inherited
Epigenetics

A woman who smokes while pregnant induces epigenetic changes in three generations at once: in herself, her unborn daughter, and her daughter’s reproductive cells.

Source: https://harvardmagazine.com/2017/05/is-epigenetics-inherited
Life Course

**Definition/Operationalization**

Health is:
- Shaped over time
- Affected by multiple factors (social, cultural, physical, other)

Overarching framework to understand how experiences or exposures affect health through life.

Sub-concepts include: sensitive periods, accumulation effect, linked lives.

<table>
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<th>Mechanism of Action</th>
<th>Acknowledges importance of various factors that may interact over time to affect health.</th>
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<tbody>
<tr>
<td>Strength of Evidence</td>
<td>Compelling evidence to support life course perspective, mostly on early life socioeconomic conditions and adult health. Evidence on causal mechanism limited.</td>
</tr>
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</table>
Life Course

How might concepts work together?

Life Course

Minority Stress

Resilience

Epigenetics

Health and Quality of Life
In Sum

- Concepts relevant for understanding disparities & may work together to undergird disparities
- But all have literature gaps that we can work together to address
- Food for thought: In ignoring race and ethnicity, do we disadvantage providers serving a high-proportion of minorities? And their patients?
Policy Implications

- Consider range of factors that influence health
- Consider experiences throughout life
- Minority status may be proxy for discrimination & minority stress
- Resilience addresses traits, processes, factors that may interact & confer health advantage → Intervention opportunities
Getting into Action

✓ Collect standardized self reported race and ethnicity data for all individuals
✓ Reduce minority stress
✓ Build resilience
✓ Prevent and mitigate harms early in the life course
Questions?
Resources

- Explaining the Relationship Between Minority Group Status and Health Disparities: A Review of Selected Concepts
  Judy H. Ng, Lauren M. Ward, Madeleine Shea, Liz Hart, Paul Guerino, and Sarah Hudson Scholle, Health Equity, March 2019


- Accounting for Social Risk Factors in Medicare Payment http://nationalacademies.org/hmd/Activities/Quality/Accounting-SES-in-Medicare-Payment-Programs/Medicare-Social-Risk-Factors-Overview


- Advancing Health Equity At Every Point of Contact https://www.thinkculturalhealth.hhs.gov/
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