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HEALTH DISPARITIES:
AN INTRODUCTION

Public Health Café

June 17, 2008
LEARNING OBJECTIVES FOR THIS PHC

After this public health café, you should be able to:

1. Define health and health disparities (H/HD)
2. Identify the different determinants of H/HD
3. Distinguish between macro and micro determinants of H/HD
4. Recognize some pathways leading to HD
5. Describe the importance of addressing HD
6. Identify features of effective program and policy interventions to reduce and/or health disparities
OUTLINE

- Health basics...
- Health disparities overview
  - Dimensions (the big-5)
- What do the numbers say...
- What do the people say...
- Why do HD emerge and persist?
  - Causal pathways
- Solutions (features of effective ones)

TitBits
British weekly magazine founded by George Newnes in 1881.
Tib-Bit
:a choice or pleasing bit (as of information)

scientia potentia est: Latin maxim—“for also knowledge itself is power”

Sir Francis Bacon, Meditationes Sacrae (1597)

- Information <> Science
  - Dimensions of information:
    - Structure, content, provision and dissemination
  - Positive information
    - Transparent, reliable, comprehensive, and organized
The science and art of protection, maintenance, promotion, treatment, prevention, and rehabilitation of population health through an organized, systematic, comprehensive, and transdisciplinary approaches using evidence-based practices supported by community-based participatory research in multidisciplinary collaboration and partnerships and with all stakeholders.

Not only changing individuals’ conditions diseases, but also changing conditions (contexts, composition, and settings) that influence individuals
What is public health?

http://www.whatispublichealth.org/

Reinventing Public Health???
1. Human development
2. Sustainable development
3. Economic development
4. Community development

A day, Reinventing Public Health
RELAX AND STRETCH

Public health era’s
1. Sanitary
2. Biologic
3. Lifestyle/behavior

Epidemiological Transition
1. Age of pestilence and famines
2. Age of receding pandemics
3. Man-made or degenerative diseases

Emergent diseases
- New findings
- New framings
SOME BASICS...
What is health?

Why improve population health and eliminate health disparities?

What is public health?
  - Core functions
  - Guiding philosophy
WHAT IS HEALTH?

- Medical, Holistic and Wellness approaches
- Wellness: “The extent to which an individual or group is able to realize aspirations and satisfy needs, and to change or cope with the environment. Health is a resource for everyday life, not the objective of living; it is a positive concept, emphasizing social and personal resources, as well as physical capacities.” (Health promotion: A discussion document. Copenhagen, WHO, 1984.)
- An ecological definition: “A state in which humans and other living creatures with which they interact can coexist indefinitely.” (Last JM. Dictionary of epidemiology. IEA, 1995:73)
WHAT IS HEALTH?

Dimensions of wellness

wellness.ndsu.nodak.edu/education/WELS/faq.php
WHAT IS HEALTH?

- Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. - WHO

- "fulfill society's interest in assuring conditions in which people can be healthy.” - IOM

- Quality of life or wellbeing
  - Happiness = health - Yours truly
MEASURING HEALTH?

- Some Leading Health Indicators:
  - Life expectancy and Infant mortality

- Physical Activity
- Overweight and Obesity
- Tobacco Use
- Substance Abuse
- Responsible Sexual Behavior
- Mental Health
- Injury and Violence
- Environmental Quality
- Immunization
- Access to Health Care

- HP2010
HEALTH AND MEDICAL CARE—SOME BASICS

- 1st in health expenditures
- 1st healthcare cost (OECD, 2007)

- 43rd in infant mortality
- 46th in life expectancy (CIA factbook, 2006)

- US medical care system has many good features
  - Best care if...
  - 1. Aware
  - 2. Acceptable
  - 3. Available
  - 4. Accessible
  - 5. Affordable
Notable differences in cost, quality and access

1. Race/ethnicity
2. SES (education, employment, income and wealth)
3. Geography
4. Age
5. Gender

Dimensions of health disparities
RELAX AND STRETCH

- Very low caloric expenditure
  - Increased use of exosomatic organs
    - Technology (Cybernomics) (GAT4)

- Slightly increased caloric intake
  - Low nutrition and higher caloric food at cheaper prices

- Excess calories saved—Globesity
  - More overweight and obese people than undernurished as of 2006
# Health Status OECD Countries

## Table 1. Health Status of the United States and Rank among the 29 Other OECD Member Countries.

<table>
<thead>
<tr>
<th>Health-Status Measure</th>
<th>United States</th>
<th>U.S. Rank in OECD</th>
<th>Top-Ranked Country in OECD*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infant mortality (first year of life), 2001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All races</td>
<td>6.8 deaths/1000 live births</td>
<td>25</td>
<td>Iceland (2.7 deaths/1000 live births)</td>
</tr>
<tr>
<td>Whites only</td>
<td>5.7 deaths/1000 live births</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Maternal mortality, 2001†</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All races</td>
<td>9.9 deaths/100,000 births</td>
<td>22</td>
<td>Switzerland (1.4 deaths/100,000 births)</td>
</tr>
<tr>
<td>Whites only</td>
<td>7.2 deaths/100,000 births</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Life expectancy from birth, 2003</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All women</td>
<td>80.1 yr</td>
<td>23</td>
<td>Japan (85.3 yr)</td>
</tr>
<tr>
<td>White women</td>
<td>80.5 yr</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>All men</td>
<td>74.8 yr</td>
<td>22</td>
<td>Iceland (79.7 yr)</td>
</tr>
<tr>
<td>White men</td>
<td>75.3 yr</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Life expectancy from age 65, 2003‡</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All women</td>
<td>19.8 yr</td>
<td>10</td>
<td>Japan (23.0 yr)</td>
</tr>
<tr>
<td>White women</td>
<td>19.8 yr</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>All men</td>
<td>16.8 yr</td>
<td>9</td>
<td>Iceland (18.1 yr)</td>
</tr>
<tr>
<td>White men</td>
<td>16.9 yr</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

* The number in parentheses is the value for the indicated health-status measure.
† OECD data for five countries are missing.
‡ OECD data for six countries are missing.
PROBLEMS IN US HEALTH CARE???

Mortality Amenable to Health Care, 1997–98

Deaths per 100,000 population*

France | Japan | Spain | Australia | Sweden | Italy | Canada | Netherlands | Greece | Norway
76 | 81 | 84 | 88 | 89 | 89 | 97 | 97 |

Mortality Amenable to Health Care, 2002–03

Deaths per 100,000 population*

France | Japan | Australia | Spain | Italy | Canada | Norway | Netherlands | Sweden | Greece | Austria | Germany | Finland | New Zealand | Denmark | United Kingdom | Ireland | Portugal | United States
65 | 71 | 74 | 74 | 77 | 80 | 82 | 82 | 84 | 84 | 90 | 93 | 96 | 101 | 103 | 103 | 104 | 110

### Six Nation Summary Ranks on Health System Performance

<table>
<thead>
<tr>
<th>Category</th>
<th>Aus</th>
<th>Can</th>
<th>Ger</th>
<th>Nz</th>
<th>Uk</th>
<th>Us</th>
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<tbody>
<tr>
<td>Overall Ranking</td>
<td>3.5</td>
<td>5</td>
<td>2</td>
<td>3.5</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Quality Care</td>
<td>4</td>
<td>6</td>
<td>2.5</td>
<td>2.5</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Right Care</td>
<td>5</td>
<td>6</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Safe Care</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Coordinated Care</td>
<td>3</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Patient-Centered Care</td>
<td>3</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Access</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Efficiency</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Equity</td>
<td>2</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Healthy Lives</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>4.5</td>
<td>4.5</td>
<td>6</td>
</tr>
</tbody>
</table>

Note: 1=highest ranking, 6=lowest ranking.
* Health expenditures per capita figures are adjusted for differences in cost of living. Source: OECD, 2004

Health expenditures data are from 2004 except Australia and Germany (2003). Source: Calculated by The Commonwealth Fund based on the Commonwealth Fund 2004 International Health Policy Survey, the Commonwealth Fund 2005 International Health Policy Survey of Sicker Adults, the 2006 Commonwealth Fund International Health Policy Survey of Primary Care Physicians, and the Commonwealth Fund Commission on a High Performance Health System National Scorecard.
How does the U.S.A. rank in the health Olympics? First? Second? Third?

Japan
Hong Kong
Iceland
Switzerland
Australia
Sweden
Spain
Canada
Italy
Israel
France
Norway
New Zealand
Austria
Singapore
Netherlands
Germany
Malta
United Kingdom
Cyprus
Holland
Greece
Belgium
Costa Rica
Ireland
Luxembourg
United Arab Emirates
Chile
Denmark
Korea
United States

1st Place!

Japan
Life Expectancy
82.3 years
Per capita spending on health
$2,358

Tied for 29-31st Place!

USA
Life Expectancy
77.9 years
Per capita spending on health
$7,498

We spend twice as much per person on health care.
WHY ARE SOME PEOPLE HEALTHY?

Do “we all” have the same H status?

Do “we all” have the same H outcome?

WHY ARE OTHERS NOT?
1. Flexner report
   1. Too many schools
   2. Poor standards, poor outcomes

2. Welch-Rose report
   1. Shortage of trained PHPs
   2. Poor standards, poor outcomes

Welch: Scientific Research
Rose: Practice
WHY IMPROVE HEALTH?

- National Health Agenda
  - HP2010
    - Improve quality and years of healthy life
    - Eliminate health disparities

- DHHS Secretary’s agenda

- Presidents’, congress’ agendas

- Corporations agenda
  - Sickness service industry
HOW CAN WE IMPROVE INDIVIDUAL HEALTH?

HOW CAN WE IMPROVE POPULATION HEALTH?
ALL are living longer than ever before!
Infant mortality lowest!
Quality of life better than ever!? (Chronic disease on the rise)
BUT...

GAPS PERSIST EVEN INCREASED IN SOME CASES
RELAX AND STRETCH

1. Ohmcology
2. Netomics
3. Sociomics
4. Religomics
5. Pseudohmics
6. Unknohmics
7. Nonsensohmics
8. Antiohmics
9. Proteomics
10. Genomics
11. Metabolomics
Figure 2. Numbers of U.S. Deaths from Behavioral Causes, 2000.

Among the deaths from smoking, the horizontal bar indicates the approximately 200,000 people who had mental illness or a problem with substance abuse. Adapted from Mokdad et al.12

McGinnis JM, Williams-Russo P, Knickman JR. 2002. The case for more active policy attention to health promotion. Health Affairs 21(2):78-93
DETERMINANTS OF HEALTH

- Prerequisites for Health
- The fundamental conditions and resources for health are:
  - peace,
  - shelter,
  - education,
  - food,
  - income,
  - a stable eco-system,
  - sustainable resources,
  - social justice, and equity.

Ottawa Charter for Health Promotion. First International Conference on Health Promotion. Ottawa, 21 November 1986 - WHO/HPR/HEP/95.1
1988, *Healthy public policy*
  - Adelaide, Australia

1991, *Supportive environments for health*
  - Sundsvall, Sweden

1997, *New partners for a new era - leading health promotion into the 21st Century*
  - Jakarta, Indonesia

2000, *Health promotion - bridging the equity gap*
  - Mexico City, Mexico
DETERMINANTS OF HEALTH

- Social Determinants of Health
- Whitehall Study
Social determinants
- *Air, Water and Place*, Hippocrates (400 BCE)
- *Annales d’hygiène*, Villerme (1829)
- WHO. *Social Determinants of Health: The solid facts*. 2005
  1. Social gradient
  2. Early life
  3. Work
  4. Social support
  5. Food
  6. Social exclusion
  7. Unemployment
  8. Addition
  9. Transportation
SOCIAL ECOLOGY MODEL

- Public Policy
- Community
- Organizational
- Inter-personal
- Intra-personal

McLeroy et al 1988
The social and behavioral sciences are at a crossroads in public health. Decades of behavioral research has culminated in a series of large-scale intervention trials yielding unsatisfactory results (Susser, 1995).

Glass and McAtee SSM 2006
Fig. 1. The society-behavior-biology nexus as depicted in multidimensional space. The large arrows represent the axes of time and nested hierarchical structures. The sphere of health-related behavior and action moves through time from infancy to old age. Behavior is influenced by structured contingencies within the social and physical environment and by biological phenomena. Structural contingencies (opportunities and constraints) are shown by paths ending with nodes, while biological phenomena (embodiment and expression) are shown by paths ending with arrows or nodes.
Fig. 2. Detailed view at closer range of the sphere of human behavior/action from Fig. 1. This detail nested within Fig. 1. Risk regulators, as measures of structured contingencies, produce opportunities and constraints on behavior. They also index the set of material exposures, psychosocial experiences, and information that constitute inputs to which the regulatory systems of the body must respond. Thus, risk regulators influence behavior indirectly via structured contingencies (opportunities and constraints) and through effects on biological systems inside the body (through embodiment).
LEADING ORGANIZATION: SBH

RESEARCH?

The Contributions of Behavioral and Social Sciences Research to Improving the Health of the Nation: A Prospectus for the Future

Healthier Lives Through Behavioral and Social Sciences

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
National Institutes of Health
Office of Behavioral and Social Sciences Research
Figure 1. Health as a continuum between biological and social factors across the lifespan. (Adapted from Glass & McAtee, 2006).
OVERVIEW OF HEALTH DISPARITIES?
WHAT ARE HEALTH DISPARITIES?
Semantics matter!

Disparity
- “inequality or difference as in rank, amount, quality, etc.”

Inequality
- “a difference or variation in size, amount, rank, quality, social position, etc.”

Inequity
- “lack of justice; unfairness”

CARTER-POKRAS AND BAQUET

Themes:
1. Comparison with non-minority or maj pop
2. Comparison with general pop
3. Differences among segments of pop

Best, average or population rate

Definitions become markers for policy priorities and making, and for resource allocation

Decide: What is inequitable?
CARTER-POKRAS AND BAQUET

- HP 2010, approach to measure progress
  1. Measure progress toward targets overall and for particular groups
  2. Measure disparity overall and for particular groups
  3. Explore and indicate any particular issue of concern for specific groups
WHAT IS HEALTH DISPARITY?

“differences in the incidence, prevalence, mortality, and burden of disease and other adverse health conditions that exist among specific population groups in the United States. Research on health disparities related to socioeconomic status is also encompassed in the definition.

NIH, 2000
WHAT IS HEALTH DISPARITY?

“...differences in health that “are not only unnecessary and avoidable but, in addition, are considered unfair and unjust.”

“Equity in health implies that ideally everyone should have a fair opportunity to attain their full health potential and, more pragmatically, that no one should be disadvantaged from achieving this potential, if it can be avoided”

Whitehead (1990, 1992)
WHAT IS HEALTH DISPARITY?

Full version:
A health disparity/inequality is a particular type of difference in health or in the most important influences on health that could potentially be shaped by policies; it is a difference in which disadvantaged social groups (such as the poor, racial/ethnic minorities, women, or other groups that have persistently experienced social disadvantage/discrimination) systematically experience worse health or greater health risks than more advantaged groups.

WHAT IS HEALTH DISPARITY?

Brief: Health disparities/inequalities are potentially avoidable differences in health (or in health risks that policy can influence) between groups of people who are more and less advantaged socially; these differences systematically place socially disadvantaged groups at further disadvantage on health.

WHAT IS HEALTH DISPARITY?

- Differences in quality of life generally, and in health status and outcomes particularly, across different population subgroups
  - Yours truly
 HEALTH DISPARITIES...LOOKING BACK

- Disparities predates the formation of the republic (Byrd and Clayton 2000)
- First documented by DuBios (1906)
- Key reports: Lalonde (1974)
  Black Report (1980)
  Heckler Report (1985)
- Office of Minority Health (1988) > HHS
  CDC and NIH in 1990
HEALTH DISPARITIES: MILESTONES

- Civil Rights movement and Act, 1960s
- Heckler Report, 1985
- Office of Minority Health, 1988
- Healthy People 2000
- Momentum in the 1990s
- Unequal Treatment 2003
Overarching Goals:

1. Increase the years of healthy life for Americans,

2. Reduce health disparities among Americans,

3. Achieve access to preventive services for all Americans.
HEALTH DISPARITIES: MILESTONES

- Momentum in the 1990s
  - Democratic administration
- Dr. Satcher and Pres Clinton

REACH U.S.
Racial and Ethnic Approaches to Community Health Across the U.S.
The American people are sorry -- for the loss, for the years of hurt.
You did nothing wrong, but you were grievously wronged.

I apologize and I am sorry that this apology has been so long in coming.

-- President William J. Clinton, May 16, 1997
Healthy People 2010 is a comprehensive set of DPHP objectives for the Nation to achieve over the first decade of the new century.

- **Overarching Goals:**
  1. Increase quality and years of healthy life
  2. Eliminate health disparities
Healthy People in Healthy Communities

A Systematic Approach to Health Improvement

Goals

Objectives

Determinants of Health

Policies and Interventions

Behavior

Physical Environment

Individual

Biology

Social Environment

Access to Quality Health Care

Health Status
MHHDREA (2000)
500-Day Plans to attain the 5000-Day plan
- Transform the Healthcare System
- Modernize Medicare and Medicaid
- Advance Medical Research
- Secure the Homeland
- Protect Life, Family and Human Dignity
- Improve the Human Condition Around the World
The ten principles that provide the philosophical underpinnings for his 500-Day Plan.
1. Care for the truly needy, foster self-reliance.
3. Collaboration, not polarization.
4. Solutions transcend political boundaries.
5. Markets before mandates.
6. Protect privacy.
7. Science for facts, process for priorities.
8. Reward results, not programs.
9. Change a heart, change a nation.
10. Value life.
WHAT DO THE NUMBERS SAY...
Life expectancy

**At birth**
- White female
- Black female
- White male
- Black male

**At 65 years**
- Black female
- White female
- White male
- Black male

**Year**
- 1970
- 1980
- 1990
- 2000
- 2004

SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, *Health, United States, 2007*, Figure 18. Data from the National Vital Statistics System.
DISPARITIES IN INFANT MORTALITY

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Mortality Rates per 1,000 Live Births</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>13.9</td>
</tr>
<tr>
<td>White</td>
<td>5.8</td>
</tr>
<tr>
<td>Hispanic (total)</td>
<td>5.7</td>
</tr>
<tr>
<td>Puerto Rican</td>
<td>8.1</td>
</tr>
<tr>
<td>Mexican</td>
<td>5.5</td>
</tr>
<tr>
<td>South American</td>
<td>4.9</td>
</tr>
<tr>
<td>Cuban</td>
<td>4.3</td>
</tr>
<tr>
<td>Asian (total)</td>
<td>5.1</td>
</tr>
<tr>
<td>Hawaiian</td>
<td>8.7</td>
</tr>
<tr>
<td>Filipino</td>
<td>5.9</td>
</tr>
<tr>
<td>Japanese</td>
<td>3.8</td>
</tr>
<tr>
<td>Chinese</td>
<td>3.5</td>
</tr>
<tr>
<td>American Indian/Alaskan Native</td>
<td>9.0</td>
</tr>
</tbody>
</table>

A Mom’s Education, A Baby’s Chances of Survival

Figure 1: Babies born to mothers who did not finish high school are nearly twice as likely to die before their first birthdays as babies born to college graduates.

Years of School Completed by Mother, All Ages
- 0–11 years
- 12 years
- 13–15 years
- 16 or more years
More Education, Longer Life

Figure 2a  For both men and women, more education often means longer life.* College graduates can expect to live at least five years longer than individuals who have not finished high school.

Years of School Completed
- 0–11 years
- 12 years
- 13–15 years
- 16 or more years

LIFE EXPECTANCY AT AGE 25

MEN

WOMEN

47.0
50.6
52.2
54.7

53.4
56.4
57.4
58.5
Higher Income, Longer Life

*figure 2b* Adult life expectancy* increases with increasing income. Men and women in the highest-income group can expect to live at least six and a half years longer than poor men and women.
Lower Income, Worse Health

Figure 3a Lower income is linked with worse health. Compared with adults in the highest-income group, poor adults are nearly five times as likely to be in poor or fair health.
Less Education, Worse Health

*figure 3b* Less education is linked with worse health. Compared with college graduates, adults who have not finished high school are more than four times as likely to be in poor or fair health.

![Bar chart showing percentage of adults, ages 26 years or older, with poor or fair health by educational attainment.](http://www.rwjf.org/files/research/obstaclestohealth.pdf)
Parents’ Income, A Child’s Chances for Health

Figure 5c: Children in poor families are about seven times as likely to be in poor or fair health as children in the highest-income families.
Health Varies by Income and Across Racial or Ethnic Groups

Figure 7a: Lower income generally means worse health. Racial or ethnic differences in health status are also evident: Poor or fair health is much more common among black and Hispanic adults than among white adults.

<table>
<thead>
<tr>
<th>Family Income (Percent of Federal Poverty Level)</th>
<th>Racial or Ethnic Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;100% FPL</td>
<td>Black, Non-Hispanic</td>
</tr>
<tr>
<td>100–100% FPL</td>
<td>Hispanic</td>
</tr>
<tr>
<td>200–299% FPL</td>
<td>White, Non-Hispanic</td>
</tr>
<tr>
<td>300–399% FPL</td>
<td></td>
</tr>
<tr>
<td>&gt;400% FPL</td>
<td></td>
</tr>
</tbody>
</table>

PERCENT OF ADULTS AGES ≥ 25 YEARS, WITH POOR/FAIR HEALTH
Racial or Ethnic Differences in Poverty

Figure 12: Higher proportions of black and Hispanic Americans live in poverty. These patterns are particularly striking for children.
Figure 9. Disease varies geographically. For example, higher rates of death due to heart disease are often seen in areas where fewer adults have college educations.
DIVIDED: EIGHT AMERICAS...

DIVIDED: EIGHT AMERICAS...

WHAT DO THE PEOPLE SAY...
Why So Many Americans Are Sicker and Die Younger than Others? — Kaiser Institute on Media and the Public

Why So Many Americans Are Sicker and Die Younger than Others? 2/22/2006
Robert Wood Johnson Foundation - Washington, D.C.

The Robert Wood Johnson Foundation launched a non-partisan Commission to identify and recommend practical solutions to eliminate health disparities and improve health for all Americans. RWJF also releases a new report detailing differences in health, how social factors contribute to these differences, and how they impact America’s economic strength.

Risa Lavizzo-Mourey, M.D., M.B.A.
President and CEO
Robert Wood Johnson Foundation

David Williams, M.P.H., Ph.D.
Executive Director, Robert Wood Johnson Foundation Commission to Build a Healthier America
Professor of Public Health, African and African American Studies and Sociology, Harvard University

Anna Greenberg, Ph.D.
Senior Vice President
Greenberg Quinlan Rosner Research

Bill McInturff
Partner and Co-Founder
Public Opinion Strategies

Mark McClellan
Co-Chair, Robert Wood Johnson Foundation Commission to Build a Healthier America
President & Dean, Brookings Institution
UNNATURAL CAUSES
...is inequality making us sick?

A seven-part documentary series exploring racial & socioeconomic inequalities in health.

Do we ALL have an EQUAL chance for HEALTH?

UNNATURAL CAUSES
is inequality making us sick?

THE DOCUMENTARY
- About the Series
- Watch Video Clips
- PBS Viewers Stories
- Buy the DVD/Book

ACTION CENTER
- What You Can Do
- Download Toolkit
- Connect Up!
- Calendar of Events
- National Partners

CASE STUDIES
INTERACTIVITIES
TALK TO THE EXPERTS
TELL a FRIEND

The Classroom | Press Area | Take Our Quiz | Check TV Listings | Discussion Guide | En Español

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Presented by the National Minority Consortia of Public Television
Outreach in association with the Joint Center Health Policy Institute

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RELAX AND STRETCH

Tit-Bits

- Economics
  - oiks and nemein (household management)
- Burgernomics (globesity)
- Cybernomics (technology)
- Enronconomics (corporatocracy)
- Wikinomics (mass collaboration)
WHY DO HD EMERGE AND PERSIST?
DISPARITIES EXIST AND PERSIST

Why?

- Low levels of awareness
- Low levels of support
- Individual health, individual responsibility
- However, what determines health?
- And, what causes health disparities?
DISPARITIES EXIST AND PERSIST

- Why?
- Majority still believe individual lifestyle and behavior choice is the single most important predictor of health
  - Not quite!
  - Social determinants of health...
  - Lifestyle/behavior takes place in context
  - Contextual or contingent behavior
DISPARITIES EXIST AND PERSIST

Why?

- Majority still believe individual lifestyle and behavior choice is the single most important predictor of health
  - Not quite!
  - Social determinants of health...
  - Lifestyle/behavior takes place in context
  - Contextual or contingent behavior
CAUSES OF HD

- Inequities
  - Discrimination...
- Inequalities
- Political, social and economic policies
- All the other determinants...

- Quite a bit of focus on race/ethnicity HD

SOURCE: Gomes and McGuire, 2001
R/E common variable
Use is on the rise
Uncritical and w/o definition use

Five theoretical models to explain R/E disparities
1. Racial-genetic model
2. Health-behavior model
3. Socioeconomic status model
4. Psychosocial stress model, and
5. Structural-constructivist model
<table>
<thead>
<tr>
<th>TABLE 6. White Americans’ Stereotypes</th>
<th>BLACKS</th>
<th>WHITES</th>
<th>HISPANICS</th>
<th>ASIANS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARE UNINTELLIGENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unintelligent</td>
<td>28.8</td>
<td>6.1</td>
<td>29.1</td>
<td>13.2</td>
</tr>
<tr>
<td>Neither</td>
<td>45.0</td>
<td>33.3</td>
<td>42.6</td>
<td>38.0</td>
</tr>
<tr>
<td>Intelligent</td>
<td>20.0</td>
<td>55.4</td>
<td>18.4</td>
<td>37.3</td>
</tr>
<tr>
<td>DK/NA</td>
<td>6.2</td>
<td>5.2</td>
<td>9.8</td>
<td>11.5</td>
</tr>
<tr>
<td>ARE LAZY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lazy</td>
<td>44.3</td>
<td>4.9</td>
<td>33.5</td>
<td>15.0</td>
</tr>
<tr>
<td>Neither</td>
<td>34.0</td>
<td>36.4</td>
<td>33.7</td>
<td>27.7</td>
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<tr>
<td>Hardworking</td>
<td>16.8</td>
<td>54.5</td>
<td>23.9</td>
<td>47.2</td>
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<td>4.2</td>
<td>9.0</td>
<td>10.1</td>
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<tr>
<td>PREFER WELFARE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prefer Welfare</td>
<td>56.1</td>
<td>3.7</td>
<td>41.6</td>
<td>16.3</td>
</tr>
<tr>
<td>Neither</td>
<td>26.5</td>
<td>21.5</td>
<td>30.5</td>
<td>31.6</td>
</tr>
<tr>
<td>Prefer self-support</td>
<td>12.7</td>
<td>70.5</td>
<td>18.3</td>
<td>40.6</td>
</tr>
<tr>
<td>DK/NA</td>
<td>4.7</td>
<td>4.3</td>
<td>9.7</td>
<td>11.5</td>
</tr>
<tr>
<td>ARE PRONE TO VIOLENCE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Violence prone</td>
<td>50.5</td>
<td>15.7</td>
<td>38.3</td>
<td>17.2</td>
</tr>
<tr>
<td>Neither</td>
<td>28.3</td>
<td>42.3</td>
<td>34.0</td>
<td>41.1</td>
</tr>
<tr>
<td>Not violence prone</td>
<td>15.2</td>
<td>36.6</td>
<td>17.8</td>
<td>29.6</td>
</tr>
<tr>
<td>DK/NA</td>
<td>5.9</td>
<td>5.5</td>
<td>9.8</td>
<td>12.1</td>
</tr>
</tbody>
</table>

Source: Davis and Smith 1990 as cited in Rubio, Mercedes, and David R. Williams.
HD: ...differences in morbidity and mortality

(a) understanding both long- and short-term trends in health disparities,
(b) informing causal investigations of health disparities,
(c) targeting resources for prevention and treatments to reduce disparities in specific diseases, and
(d) increasing public awareness of the existence and characteristics of health disparities.
1. HD associated with race/ethnicity and SES are widespread.

2. Disparities are modifiable and avoidable.

3. Differences in distribution across levels of SES for Blacks and Whites may account for many racial/ethnic health disparities
4. Need for more sophisticated models, structural equation modeling.

5. Identifying pathways and mechanisms by which SES and race/ethnicity affect health provides better evidence of causation and more options for interventions.

6. Multiple pathways from SES and race/ethnicity to health; one pathway is through differential exposure to chronic stress and its resulting biological toll.
WHY CARE ABOUT HD?

- Moral and Ethnical imperative...social justice
  - Economic imperative...
    - Academic achievement tied to health
    - Education attainment and its quality tied to quality of Human Capital
      - Global Comparative and competitive edge
  - Research and development
  - Innovation
  - Manufacturing
The High Economic Stakes of Health Disparities

Figure 19: If adult Americans who have not completed college experienced the lower death rates and better health status of college graduates, they would live longer and healthier lives. These improvements would translate into potential gains of $1.007 trillion annually.
WHAT DO WE DO?
ELIMINATING HEALTH DISPARITIES

- What should we focus on?
  - Building skills (coping mechanisms)
  - Policies (changing environment)
    - Structural changes in societal conditions
  - Combination thereof
- What does evidence suggest?
EVIDENCE: IMPROVEMENTS IN HEALTH

- Social gradient of health
  - Education: great indicator of health

- The Big-3
  - Working conditions
  - Living conditions
  - Diet

- How can these be changed?
  - Program and policy interventions
    - What kind of interventions?
GREAT PUBLIC HEALTH ACHIEVEMENTS

- Vaccination
- Motor vehicle safety
- Safer workplaces
- Control of infectious diseases
- Decline in deaths from coronary heart disease and stroke
- Safer, healthier food
- Healthier mothers and babies
- Family planning
- Flouridation of drinking water
- Recognition of tobacco as a hazard
EVIDENCE: IMPROVEMENTS IN HEALTH

LANDSCAPE OF INFLUENCES ON HEALTH DISPARITIES AND ARENAS FOR POLICY ACTION

### Income in the United States

<table>
<thead>
<tr>
<th>Median Household Income:</th>
<th>Median Personal Income:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median income of all households: $46,326</td>
<td>Males, age 25 or older: $39,403</td>
</tr>
<tr>
<td>Households with two income earners: $67,348</td>
<td>Females, age 25 or older: $26,507</td>
</tr>
</tbody>
</table>

### Distribution of Household Income:

<table>
<thead>
<tr>
<th>Category</th>
<th>Income Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest 20%</td>
<td>less than $18,500</td>
</tr>
<tr>
<td>Middle 20%</td>
<td>$34,738 to $55,331</td>
</tr>
<tr>
<td>Top 20%</td>
<td>more than $88,030</td>
</tr>
<tr>
<td>Top 1.5%</td>
<td>$250,000+</td>
</tr>
<tr>
<td>Top 5%</td>
<td>$157,000+</td>
</tr>
<tr>
<td>Bottom quarter</td>
<td>$22,500 or less</td>
</tr>
<tr>
<td>Middle 50%</td>
<td>$22,500 to $77,500</td>
</tr>
<tr>
<td>Top quarter</td>
<td>$77,500 or more</td>
</tr>
<tr>
<td>Bottom 5%</td>
<td>$7,500 or less</td>
</tr>
<tr>
<td>Bottom 10%</td>
<td>$10,500 or less</td>
</tr>
</tbody>
</table>

### Education and Personal Income:

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School</td>
<td>$26,505</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>$43,143</td>
</tr>
<tr>
<td>Bachelor’s degree or more</td>
<td>$49,303</td>
</tr>
<tr>
<td>Some college</td>
<td>$31,054</td>
</tr>
<tr>
<td>Masters degree</td>
<td>$52,390</td>
</tr>
<tr>
<td>Doctorate degree</td>
<td>$70,853</td>
</tr>
</tbody>
</table>

### Race and Household Income:

<table>
<thead>
<tr>
<th>Race</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian</td>
<td>$57,518</td>
</tr>
<tr>
<td>White (non-hispanic)</td>
<td>$48,977</td>
</tr>
<tr>
<td>Hispanic</td>
<td>$34,241</td>
</tr>
<tr>
<td>African American</td>
<td>$30,134</td>
</tr>
</tbody>
</table>
IT IS ALL ABOUT POLITICS

Public policy influences all aspects of our lives
Policy influences our lives...
Where we live, learn, play and die...
Harvard Opinion Research Program at the Harvard School of Public Health (HSPH) and Harris Interactive
Socialized medicine would be better...
- Republicans 30%
- Democrats 70%
- Independents 43%
ELIMINATING HEALTH DISPARITIES

- Structural changes in societal conditions
  - What form of social organization helps
    - Social justice
      - Equitable distribution of collective goods, institutional resources and life opportunities
        - Ensure development and capacities for all
      - Empowerment, democratic and transparent structures
<table>
<thead>
<tr>
<th>Conventional 10 Tips for Better Health</th>
<th>What Your Doctor Didn’t Tell You</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Don’t smoke. If you can, stop. If you can’t, cut down.</td>
<td>1. Don’t be poor. If you can, stop. If you can’t, try not to be poor for long.</td>
</tr>
<tr>
<td>2. Stay on a balanced diet with plenty of fruit and vegetables.</td>
<td>2. Live near good supermarkets and affordable fresh produce stores</td>
</tr>
<tr>
<td>3. Make sure you stay physically active and exercise at least 3 times a week.</td>
<td>3. Live in a safe leafy neighborhood with parks and green space nearby.</td>
</tr>
<tr>
<td>4. Manage stress by, for example, talking things through and taking time to slow down, or planning relaxing get-aways.</td>
<td>4. Work in a rewarding and respected job with good compensation, benefits, and control over your work.</td>
</tr>
<tr>
<td>5. If you drink alcohol, do so in moderation.</td>
<td>5. If you work, don’t lose your job or get laid off.</td>
</tr>
<tr>
<td>6. Cover up in the sun, and protect children from sunburn.</td>
<td>6. Take family vacations and all the benefits you are entitled to.</td>
</tr>
<tr>
<td>7. Make sure you practice safer sex.</td>
<td>7. Make sure you have wealthy parents.</td>
</tr>
<tr>
<td>8. Don’t forget regular check ups with your family doctor and get screenings for cancer.</td>
<td>8. Don’t live in damp, low-quality housing, next to a busy road or near a polluting factory.</td>
</tr>
<tr>
<td>9. Be safe on the roads: Follow the highway code and wear your seatbelt.</td>
<td>9. Be sure to own a car, so you don’t have to rely on under-funded public transportation.</td>
</tr>
<tr>
<td>10. Learn the first-aid ABC: airways, breathing, circulation.</td>
<td>10. Learn how to fill in the complex housing benefit application forms before you become homeless and destitute.</td>
</tr>
</tbody>
</table>

There is more to good health than lifestyle choices, genes and access to health care. Research shows that the social circumstances in which we are born, live and work—our jobs, schools, built space, transportation, even the quality of civic life—get under the skin, influencing our behaviors, access to resources, chronic stress levels, and ultimately increasing or decreasing our chances for health.
PEOPLE’S PERCEPTIONS AND PROBLEMS IN THE HEALTHCARE SYSTEM

Dhananjaya M. Arekere¹,², Charles D. Phillips², and Craig Blakely²

¹. Dept of Public Health, IU School of Medicine, Indianapolis, IN

². School of Rural Public Health, Texas A&M Health Science Center, College Station, TX
RESULTS

How often do you think our health care system treats people unfairly based on...?

Whether or not they have health insurance-

What their race/ethnic background is-
## RESULTS

### Table 2. Logistic Regression Results of Unfair Treatment

<table>
<thead>
<tr>
<th></th>
<th>Race-based</th>
<th></th>
<th>Insurance-based</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Odds Ratio</td>
<td>95% C.I. Lower</td>
<td>95% C.I. Upper</td>
<td>Odds Ratio</td>
</tr>
<tr>
<td>Gender</td>
<td>1.125</td>
<td>0.973</td>
<td>1.299</td>
<td>1.197</td>
</tr>
<tr>
<td>White Referent</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>1.484</td>
<td>1.227</td>
<td>1.795</td>
<td>0.940</td>
</tr>
<tr>
<td>Latino</td>
<td>1.207</td>
<td>0.991</td>
<td>1.471</td>
<td>0.715</td>
</tr>
<tr>
<td>Other</td>
<td>0.965</td>
<td>0.688</td>
<td>1.353</td>
<td>0.997</td>
</tr>
<tr>
<td>Age</td>
<td>1.002</td>
<td>0.997</td>
<td>1.007</td>
<td>0.992</td>
</tr>
<tr>
<td>Poor</td>
<td>0.861</td>
<td>0.738</td>
<td>1.005</td>
<td>0.626</td>
</tr>
<tr>
<td>Northeast</td>
<td>Referent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Midwest</td>
<td>0.922</td>
<td>0.704</td>
<td>1.208</td>
<td>1.174</td>
</tr>
<tr>
<td>South</td>
<td>0.849</td>
<td>0.689</td>
<td>1.046</td>
<td>0.857</td>
</tr>
<tr>
<td>West</td>
<td>0.952</td>
<td>0.757</td>
<td>1.197</td>
<td>0.995</td>
</tr>
<tr>
<td>Health Status</td>
<td>1.023</td>
<td>0.860</td>
<td>1.216</td>
<td>1.083</td>
</tr>
<tr>
<td>Health</td>
<td>Insurance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affordability</td>
<td>0.819</td>
<td>0.682</td>
<td>0.983</td>
<td>0.648</td>
</tr>
<tr>
<td>Republican</td>
<td>Referent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Democrat</td>
<td>1.529</td>
<td>1.226</td>
<td>1.908</td>
<td>1.326</td>
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<tr>
<td>Other</td>
<td>1.403</td>
<td>1.131</td>
<td>1.740</td>
<td>1.173</td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
### Table 3. Logistic Regression Results of Unfair Treatment with Insurance Status

<table>
<thead>
<tr>
<th></th>
<th>Race-based Odds Ratio</th>
<th>95% C.I.</th>
<th>Insurance-based Odds Ratio</th>
<th>95% C.I.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>1.122</td>
<td>0.971</td>
<td>1.297</td>
<td>1.194</td>
</tr>
<tr>
<td>White</td>
<td>Referent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>1.488</td>
<td>1.230</td>
<td>1.801</td>
<td>0.946</td>
</tr>
<tr>
<td>Latino</td>
<td>1.214</td>
<td>0.995</td>
<td>1.481</td>
<td>0.729</td>
</tr>
<tr>
<td>Other</td>
<td>0.964</td>
<td>0.688</td>
<td>1.352</td>
<td>1.006</td>
</tr>
<tr>
<td>Age</td>
<td>1.002</td>
<td>0.997</td>
<td>1.007</td>
<td>0.992</td>
</tr>
<tr>
<td>Poor</td>
<td>0.876</td>
<td>0.748</td>
<td>1.026</td>
<td>0.652</td>
</tr>
<tr>
<td>Northeast</td>
<td>Referent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Midwest</td>
<td>0.917</td>
<td>0.700</td>
<td>1.202</td>
<td>1.162</td>
</tr>
<tr>
<td>South</td>
<td>0.848</td>
<td>0.688</td>
<td>1.045</td>
<td>0.855</td>
</tr>
<tr>
<td>West</td>
<td>0.954</td>
<td>0.758</td>
<td>1.200</td>
<td>1.001</td>
</tr>
<tr>
<td>Health Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Insurance Affordability</td>
<td>1.021</td>
<td>0.858</td>
<td>1.215</td>
<td>1.097</td>
</tr>
<tr>
<td>Republican</td>
<td>Referent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Democrat</td>
<td>1.521</td>
<td>1.218</td>
<td>1.898</td>
<td>1.324</td>
</tr>
<tr>
<td>Other</td>
<td>1.396</td>
<td>1.125</td>
<td>1.732</td>
<td>1.184</td>
</tr>
<tr>
<td>Insured</td>
<td>0.952</td>
<td>0.786</td>
<td>1.154</td>
<td>0.798</td>
</tr>
<tr>
<td>Constant</td>
<td>0.928</td>
<td></td>
<td></td>
<td>3.539</td>
</tr>
</tbody>
</table>
PARTISANSHIP, DIVERSITY AND OUTCOME IN HEALTH POLICYMAKING

Communicating for Change
5/13/2008

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TEXAS CONGRESSPERSONS

Index of Labor and NAACP Scores
Index of Money, AAUW and Hispanic Scores
NONWHITE TEXAS CONGRESSPERSONS

Index of Environmental and NAACP Scores
NONWHITE TEXAS CONGRESSPERSONS

Index of Educational and Hispanic Scores

[AAUW Index • Diversity (VAP) • Hispanic Score]
A LITTLE ABOUT ME

Tit-Bits

- Make a difference—help create conditions that can improve population health
- Facilitator in the classroom and community
- Providing information > knowledge > empowerment > affecting and effecting change [social change and policy change]
- Diversity Change Agent
- Not just a Diversity Champion
- Strong sense of social justice because I understand the limits of markets and individuals
MOTTO...

- Improve well-being
  - Make a difference

- Research, teaching and service that focuses on health and its determinants that underscore the different dimensions of and the interface between people, property, power, and progress

- In memory of my mentors
  - Late Woodrow Jones Jr.
INTERESTS

- Health disparities
- Health policy
- Social determinants of health
- Rural health
- International health
- Obesity
IT'S A GOOD THING THIS CHILDHOOD OBESITY IS LEVELING OFF... HE CAN'T REACH HIS CONTROLLER...
THINGS YOU CAN DO TO BE HEALTHY

Most text from Dennis Raphael
Graphics and a few text additions by
Tom Tai-Seale and Sara Craig
1. DON'T BE POOR.
If you can, stop.

If you can't, try not to be poor for long.
2. Don't have poor parents. Try to have parents like these.
3. **Own a car.**

Preferably a nice one.
4. Don't work in a stressful, low paid manual job.
5. Don't live in low quality housing.
6. Take foreign holidays and sunbathe.
Practice not losing your job and don't become unemployed.
Take up all the benefits you are entitled to, if you are unemployed, retired or sick or disabled.
Don't live next to a busy major road or near a polluting factory.
Learn how to fill in the complex housing benefit/asylum application forms before you become homeless and destitute.
OF COURSE, IF YOU CAN’T DO THESE THINGS...

Good luck!
THANK YOU

arekere@iupui.edu