Health Disparities, Health Equity and the Social Determinants of Health: *Historical Overview, Concepts and Measurement*

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The findings and conclusions in this presentation have not been formally disseminated by the Centers for Disease Control and Prevention and should not be construed to represent any agency determination or policy.
Socioeconomic inequalities in societies structure the “life experiences of their members so that advantages and disadvantages tend to “cluster cross-sectionally and accumulate longitudinally”

Outline

- Historical Overview
- Concepts of Health Disparity/Inequality; Health Equity; SDOH
- Evolution of U.S. national policy
- Measurement
Historical Overview (1)

19th Century
- Villerme, Louis-Rene – “...improving of school and working conditions as social interventions would reduce class differences in mortality “ (1830)
- Chadwick, Edwin – Report on social class differentials in mortality risk in Liverpool, England (1842)
- Virchow, Rudolf – “Medicine is a social science” (1848).

20th Century
- *The Black Report (1980)* – 1st attempt by a national government to systematically study, understand, and explain health inequalities.
Historical Overview (2)

Causal Theories, mid 19th C – early 20th C

- **Genetic**
  - Darwinian theories of natural selection
  - Eugenics - social class an expression of genetic endowment (health, physique, mental ability); “tainted stock”.

- **Behavioral**
  - Fecklessness, ignorance, irresponsibility.

- **Environmental**
  - Material conditions of work and housing
Why is Equity in health important to the United States?

• Extensive and persistent differentials between groups
  • in health
    • Social: socioeconomic, racial/ethnic, place of birth
    • Geographic Areas - region, state, neighborhood
  • in the experience of illness
    • Onset & Burden – chronic disease, disability
    • Access to health care
  • In the conditions/circumstances that determine health status
    • Neighborhood hazards, poverty, poor housing, occupational hazards
CONCEPTS
Concepts: HEALTH DISPARITY, HEALTH INEQUALITY, HEALTH EQUITY

- “health disparity” and “health inequality”
  - disparity - United States
  - inequality – all other countries
  - Used interchangeably in literature (syn. “differences”)
- “Equity in health”
  - “…differences in health that are not only unnecessary and avoidable but, in addition, are considered unfair and unjust”

Concepts: HEALTH DISPARITY, HEALTH INEQUALITY, HEALTH EQUITY (cont’d)

• “Equity in health care”
  • “… equal access to available care for equal need, equal utilization for equal need, equal quality of care for all”

• Implications:
  • Disparities /Inequalities ≠ all generic differences
  • Disparities/Inequalities = all “unnecessary”, ”unfair”, unjust”
  • Equity = an ethical concept
    • ”…..everyone should have a **fair opportunity** to attain their full health potential; no one should be disadvantaged from achieving this potential, if it can be avoided”

For the purposes of operationalization and measurement,

- Equity = “... the absence of *systematic* disparities in health (or in the major social determinants) *between social groups* who have different levels of underlying social advantage/disadvantage”

- “*systematic*” = not random or occasional

Evolution of US National Policy on Health disparities/Inequalities and Health Equity
Evolution of U.S. National Policy
‘HEALTHY PEOPLE ‘

- **1979.** Healthy People: The Surgeon General’s Report on Health Promotion and Disease Prevention
- **1980.** Health People 1990: Promoting Health/Preventing Disease: Objectives for the Nation
- **1990** Healthy People 2000: National Health Promotion and Disease Prevention
- **2000** Healthy People 2010: Objectives for Improving Health,
- **2010** Healthy People 2020: An Opportunity to Address Societal Determinants of Health in the United States,

http://www.healthypeople.gov/hp2020
Evolution of U.S. National Policy
‘HEALTHY PEOPLE’ ~ Overarching Goals

**Healthy People, 1979**
- Reduce mortality
  - infants, children
  - adolescents
  - young adults
  - Adults
- Increase independence among older adults

**Healthy People, 2000**
- Increase years of healthy life
- Reduce *disparities* in health among different population groups
- Achieve access to preventive health services

http://www.healthypeople.gov
Evolution of U.S. National Policy
‘HEALTHY PEOPLE’ ~ Overarching Goals

**Healthy People, 2010**
- Increase quality and years of healthy life
- Eliminate health disparities

**Healthy People, 2020**
- Attain high-quality, longer lives free of preventable disease, disability, injury, and premature death
- Achieve health equity, eliminate disparities, and improve the health of all groups
- Create social and physical environments that promote good health for all
- Promote quality of life, healthy development, and healthy behaviors across all life-stages

[http://www.healthypeople.gov](http://www.healthypeople.gov)
Evolution of U.S. National Policy

- **Shift in emphasis ~**
  - Biomedical model → Socioecological model
  - Individual-level Determinants of Health → Contextual-level Determinants of Health

- **Recognition ~**
  - Achieving health requires more than just controlling disease
SOCIAL DETERMINANTS OF HEALTH
What are Social Determinants of Health?

**Social determinants of health** are the *conditions* in which people are born, grow, live, work and age.

These conditions are shaped by the distribution of money, power and resources at global, national and local levels.

The social determinants of health are mostly responsible for the *health inequities*—the *unfair* and *avoidable* differences in health status—seen within and between countries.

*World Health Organization, 2008*
Social Determinants of Health ~ Categories

- Social Environment
  - e.g., Discrimination, low educational attainment, poverty, social disorder
- Physical Environment
  - e.g., air quality, climate, buildings, spaces, transportation systems
- Health Care Systems
  - Access to care
  - Quality of care
MEASUREMENT

- Health Disparity/Inequality
- Health Equity
To Operationalize and Measure Health Equity

- To “achieve health equity” and “eliminate health disparities”
  - Focus on health-equity related assessment
  - Focus on domains that reflect social advantage/disadvantage

- To evaluate progress
  - Assess and monitor change by domains of social disadvantage
  - Most advantaged group = reference for comparison
  - Health of most advantaged group = minimal level that should be biologically possible for everyone
Measurement: Dimensions of Disparity

- A Disparity is...........
  - the *quantity* that separates a *group* from a specified reference point on a particular measure of health (rate, percentage, mean, etc)
  - evident when *quantitative measures* of health are *compared between groups* in a *domain*
  - an *indicator* of health
  - does *not* presume *causality*

- Domains (*Healthy People 2020*)
  - *race or ethnicity; sex; sexual identity; age; disability; socioeconomic status; geographic location*

*Keppel K, et al, 2005*
Measures of Social Group† Disparity

- **Simple Measures**
  - Absolute difference
  - Relative difference
  - Population Attributable Risk (PAR%)

- **Regression-based Measures**
  - Slope Index of Inequality (SII)
  - Relative Index of Inequality (RH)
  - Population PAR

† Healthy People: Goals explicitly relate to social-group differences

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(3) Keppel K, et al. 2005
Measurement

Absolute and Relative Disparity at a Single Point in Time
Absolute and Relative Race/Ethnic Disparities in Age-adjusted Prevalence of Diagnosed Diabetes, 2008

Beckles GL, et al. MMWR 2011;60(Suppl):90-3
Absolute and Relative *Education Disparities* in Age-adjusted Prevalence of Diagnosed Diabetes, 2008

Beckles GL, et al. MMWR, 2011;60(Suppl):90-3
Absolute and Relative Income Poverty Disparities in Age-adjusted Prevalence of Diagnosed Diabetes, 2008

Disparity in Prevalence

<table>
<thead>
<tr>
<th>PIR Category</th>
<th>AD Prevalence</th>
<th>RD Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIR, &lt;1</td>
<td>6.2</td>
<td>112.7</td>
</tr>
<tr>
<td>PIR, 1.0-1.9</td>
<td>4.9</td>
<td>89.1</td>
</tr>
<tr>
<td>PIR, 2.0-3.9</td>
<td>2.8</td>
<td>50.9</td>
</tr>
</tbody>
</table>

Ref. Pt.

Beckles GL, et L. MMWR 2011;60(Suppl):90-3
Measurement

*Change in Disparity Over Time*

Beckles GL, et al. MMWR 2011;60(Suppl):90-3
Education Disparities: Relative Differences and Change Over Time in Age-adjusted Prevalence of Diagnosed Diabetes, 2004 and 2008

Beckles GL, et al. MMWR 2011;60(Suppl):90-3

Beckles GL, et al. MMWR 2011;60(Suppl):90-3
References

References (cont’d)

SUMMARY

• Group differences in health status well-documented for more than 200 years

• Since 1980, increasing concern about equity in health differences i.e., avoidable, just, fair

• Goal of National Policy ‘Healthy People 2020’ = “to achieve health equity”

• Equity is an ethical concept; can only be measured indirectly as:
  • the magnitude of the absolute and relative differences in health (disparities/inequalities) between groups according to social advantage/disadvantage
  • Changes in the differences over time
“Health Disparities and the Social Determinants of Health: What’s happening at the federal level?”

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Associate Director for Minority Health & Health Equity,
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State Public Health Actions (1305)
Grantee Meeting
September 9, 2014
Minority Health in the 21st Century

- Improving minority health and eliminating health disparities require the active participation of multiple sectors who are willing to champion strategies that:
  - Address the social determinants of health
  - Remove barriers to high quality health care
  - Value a diverse public health workforce
  - Disseminate solutions
  - Ensure providers are culturally competent and socially informed
WHAT’S HAPPENING AT CDC?
Selected responses from THE OFFICE OF MINORITY HEALTH AND HEALTH EQUITY
CDC Health Disparities & Inequalities Report, 2013 (CHDIR)

CDC Health Disparities and Inequalities Report — United States, 2013

CHDIR 2013 Website
http://www.cdc.gov/minorityhealth/CHDIRReport.html

MMWR Supplement CHDIR 2013
http://www.cdc.gov/mmwr/preview/ind2013_su.html

*Developed by Center for Surveillance, Epidemiology and Laboratory Services (CSELS)/DEALS) with collaboration from across CDC.*
State of Health Equity at CDC Forums

Purpose

To convene and engage agency leaders, scientists and practitioners in the systematic examination of policies, programs, surveillance, and infrastructure needed to integrate and advance health equity across CDC programs

Organizing Framework

- Data, measurement, and surveillance
- Clarifying Essential Program Elements
- Promoting policies that support reducing health disparities and achieving health equity
- Promoting organizational structures for health equity
OMHHE is also decreasing health disparities by:

- Co-leading the HP2020 Social Determinants of Health topic area
- Contributing knowledge to health care professionals that supports access to high quality healthcare
- Collaborating with multi-cultural media outlets to ensure providers are socially and culturally informed about the communities and patients they serve
- Working with CDC programs to protect the health of populations experiencing health disparities
Pursuing health equity in communities – one example from…

THE NATIONAL CENTER FOR CHRONIC DISEASE PREVENTION AND HEALTH PROMOTION
A Practitioner’s Guide for Advancing Health Equity: Community Strategies for Preventing Chronic Disease

A resource for public health practitioners and others working to advance health equity through community health interventions. The guide focuses on policy, systems, and environmental changes designed to improve the places where people live, learn, work, and play. [ww.cdc.gov/HealthEquityGuide](http://ww.cdc.gov/HealthEquityGuide)
Organizations engage in many practices that can influence their impact on health equity. This section focuses on how to enhance your organization’s capacity to advance healthy equity through foundational skills and practices.

**Strategies include:**
- Building organizational capacity
- Engaging community members
- Developing partnerships and coalitions
- Identifying and analyzing health inequities
- Selecting, designing, and implementing strategies
- Developing effective communication efforts
- Conducting evaluations

[http://cdc.gov/healthequityguide](http://cdc.gov/healthequityguide)
Identifying and eliminating tobacco related health inequities among population groups is an important component of tobacco control efforts. This section focuses on how to design tobacco-free living strategies that address the needs of populations that have disproportionately higher rates of tobacco-use.

Strategies include:
• Comprehensive Smoke-Free Policies
• Smoke-Free Multi-Unit Housing Policies
• Point-of-Sale Strategies to Address Access and Exposure to Tobacco Products
• Tobacco Cessation Services

http://cdc.gov/healthequityguide
Residents in rural areas, low-income communities, and communities of color are most affected by limited access to healthful food and beverages, making it particularly difficult to make healthy choices. This section focuses on how to design strategies that address inequities in healthy food and beverage environments.

Strategies include:

- Community Food Retail Environment
- Healthy Food in School, Afterschool, and Early Care and Education Environments
- Healthy Restaurants and Catering Trucks
- Food Access through Land Use Planning and Policies

[http://cdc.gov/healthequityguide](http://cdc.gov/healthequityguide)
Not all communities have equal access to physical activity resources or environments that support an active lifestyle. This section focuses on how to design active living strategies that address the needs of populations experiencing health inequities, such as residents in low-income communities and communities of color.

**Strategies include:**
- Trails and Pathways to Enhance Recreation and Active Transportation
- Physical Activity in School, Afterschool, and Early Care and Education Settings
- Joint Use Agreements
- Safe and Accessible Streets for All Users
- Neighborhood Development that Connects Community Resources to Transit
- Preventing Violence

[http://cdc.gov/healthequityguide](http://cdc.gov/healthequityguide)
More leadership in addressing the social determinants of health at CDC…

THE NATIONAL CENTER FOR HIV/AIDS, VIRAL HEPATITIS, STD, AND TB PREVENTION
Education as a social determinant of health and the work of the Community Guide

THE COMMUNITY PREVENTIVE SERVICES TASK FORCE
Three educational interventions assessed for the potential to promote health equity

- Full-day kindergarten
- Out-of-school-time Academic Programs
- High School Completion Programs

Because academic achievement is linked with long-term health, and because programs reviewed are commonly implemented in racial and ethnic minority or low-income communities, they are likely to improve health equity.
WHAT’S HAPPENING AT HHS?
The Office of Disease Prevention and Health Promotion

Leadership from the Office of the Assistant Secretary for Health

U.S. Department of Health and Human Services
Healthy People 2020

The Social Determinants of Health
<table>
<thead>
<tr>
<th>A National Agenda</th>
<th>Communicates a vision for improving health and achieving health equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Set Of Measurable Objectives</td>
<td>Provides a set of specific, measurable objectives with targets to be achieved over the decade</td>
</tr>
</tbody>
</table>
Healthy People 2020

A society in which all people live long, healthy lives

Overarching Goals:

- Attain high quality, longer lives free of preventable disease, disability, injury, and premature death.
- Achieve health equity, eliminate disparities, and improve the health of all groups.
- Create social and physical environments that promote good health for all.
- Promote quality of life, healthy development and healthy behaviors across all life stages.
HP 2020 Social Determinants Of Health Topic Area

- A “place-based” approach
- Social determinants over the life course
- Prioritization of 5 key determinants and associated factors
- Each determinant interacts with the other four
- All affect the health of the individual
Contextualizing the social determinants of health for HP2020

“Place” – where people are born, live, learn, work, play, worship, and age

<table>
<thead>
<tr>
<th>Social, economic, and physical conditions of “place”</th>
<th>Patterns of social engagement, sense of security and well-being</th>
<th>Availability and quality of life-enhancing resources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>e.g. safe and affordable housing, education, public safety, healthy foods, environments free of toxins</td>
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</table>
HP 2020 Social Determinants of Health Organizing Framework: 5 Key Determinants

1. Neighborhood/Built Environment
2. Education
3. Economic Stability
4. Health and Health Care
5. Social and Community Context
HP 2020 Social Determinants of Health: Priority Issues

**Neighborhood/Built Environment:**
- Quality of housing
- Crime and violence
- Environmental conditions
- Access to healthy foods

**Education:**
- High school graduation rates
- Enrollment in higher education
- Early childhood education/development
- Language/literacy

**Economic Stability:**
- Poverty
- Employment
- Housing stability
- Food insecurity

**Health and Health Care:**
- Access to health services
- Access to primary care
- Health literacy

**Social and Community Context:**
- Social cohesion
- Perceptions of discrimination and equity
- Civic participation
- Incarceration/institutionalization
<table>
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<tr>
<th>Ways To Use Healthy People 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Integrate Healthy People 2020 into your work</strong></td>
</tr>
<tr>
<td>Integrate Healthy People 2020 into your programs, initiatives, special events, publications, and meetings</td>
</tr>
<tr>
<td><strong>Use Healthy People 2020 as a tool to engage others</strong></td>
</tr>
<tr>
<td>Engage partners at all levels of government, across sectors, and in the community – take a “Health in All Policies” approach</td>
</tr>
<tr>
<td><strong>Use Healthy People 2020 in health program planning</strong></td>
</tr>
<tr>
<td>Use Healthy People 2020 objectives and targets when planning new programs or designing program evaluations</td>
</tr>
</tbody>
</table>
Why must we address the social determinants of health?

“Improving health is too multifaceted to be left to those working in the health sector alone. Using a social determinants approach can reframe the way the public, policy makers, and the private sector think about achieving and sustaining health.” – Dr. Howard Koh
For more information

Visit [http://www.healthypeople.gov](http://www.healthypeople.gov) for up-to-date opportunities to learn, collaborate, plan, and implement strategies to reach the 2020 objectives.
Thank You For Your Time

For more information please contact Centers for Disease Control and Prevention
1600 Clifton Road NE, Atlanta, GA 30333
Telephone, 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348
E-mail: cdcinfo@cdc.gov  Web: www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.
Questions