

Definitions

The National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention uses the words below to describe health equity and social determinants of health. These words are also used by the World Health Organization and the Department of Health and Human Service's *Healthy People 2020*.

Absolute Difference of Measure

A mathematical formula that measures "disparity between a group rate and a specified reference point." "The size and direction of the disparity depend on the selected reference point" [1].

Formula: Simple difference = rate of interest - rate of reference point = Ri - Rr

Cultural Competence

Culture is the blended patterns of human behavior that include "language, thoughts, communications, actions, customs, beliefs, values, and institutions of racial, ethnic, religious, or social groups." *Cultural competence* is "a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals that enables effective work in cross-cultural situations." "Competence" in the term *cultural competence* implies that an individual or organization has the capacity to function effectively "within the context of the cultural beliefs, behaviors, and needs presented by consumers and their communities." [2]

Determinants of Health

Factors that contribute to a person's current state of health. These factors may be biological, socioeconomic, psychosocial, behavioral, or social in nature. Scientists generally recognize five determinants of health of a population:

- Biology and genetics. Examples: sex and age
- Individual behavior. Examples: alcohol use, injection drug use (needles), unprotected sex, and smoking
- · Social environment. Examples: discrimination, income, and gender
- · Physical environment. Examples: where a person lives and crowding conditions
- Health services. Examples: Access to quality health care and having or not having health insurance [3,4].

Health

A state of complete physical, mental, and social well-being and not just the absence of sickness or frailty [3].

Health Disparity

A type of difference in health that is closely linked with social or economic disadvantage. Health disparities negatively affect groups of people who have systematically experienced greater social or economic obstacles to health. These obstacles stem from characteristics historically linked to discrimination or exclusion such as race or ethnicity, religion, socioeconomic status, gender, mental health, sexual orientation, or geographic location. Other characteristics include cognitive, sensory, or physical disability [4].

Health Equity

When all people have "the opportunity to 'attain their full health potential' and no one is 'disadvantaged from achieving this potential because of their social position or other socially determined circumstance" [5].

Health Inequality

Differences, variations, and disparities in the health achievements of individuals and groups of people [6].

Health Inequity

A difference or disparity in health outcomes that is systematic, avoidable, and unjust [5, 7].

Health Literacy

Whether a person can obtain, process, and understand basic health information and services that are needed to make suitable health decisions. Health literacy includes the ability to understand instructions on prescription drug bottles, appointment cards, medical education brochures, doctor's directions, and consent forms. It also includes the ability to navigate complex health care systems. Health literacy is not simply the ability to read. It requires a complex group of reading, listening, analytical, and decision-making skills and the ability to apply these skills to health situations [8].

Index of Disparity

A regression-based measure that is used by scientists and retains the inherent order of categories like education or income but incorporates the population weights of the categories. The size of each category is taken into account by placing the groups on an axis that reflects the cumulative proportion of the population represented by the ordered groups. The index of disparity can be absolute (slope referred to as Slope Index of Inequality) or relative (slope referred to as Relative Index of Inequality) [1].

Individual Risk Factors

Characteristics of a person that may explain health or behavior. Some examples include a person's age or whether a person smokes.

Poverty

When a person or group of people lack human needs because they cannot afford them. Human needs include clean water, nutrition, health care, education, clothing, and shelter. The U.S. Social Security Administration originally developed the definitions that are used to help calculate and determine poverty. Families or people with income below a certain limit are considered to be below the poverty level.

Social Determinants of Health

The complex, integrated, and overlapping social structures and economic systems that are responsible for most health inequities. These social structures and economic systems include the social environment, physical environment, health services, and structural and societal factors. Social determinants of health are shaped by the distribution of money, power, and resources throughout local communities, nations, and the world [9].

Socioeconomic Gradient in Health

This term refers to the stepwise fashion health outcomes improve as socioeconomic position improves. This gradient can be measured by a person's income, occupation, or the highest level of education he or she has [6].

Socioeconomic Position

An aggregate concept that includes both resource-based and prestige-based measures, which are linked to both childhood and adult social class position. Resource-based measures refer to material and social resources and assets, including income, wealth, and educational credentials. Terms used to describe inadequate resources include "poverty" and "deprivation." Prestige-based measures refer to a person's rank or status in a social hierarchy. Prestige-based measures are typically evaluated with reference to people's access to and consumption of goods, services, and knowledge, that are linked to their occupational prestige, income, and education level [11].

Socioeconomic Status

A composite measure that typically incorporates economic, social, and work status. Economic status is measured by income. Social status is measured by education, and work status is measured by occupation. Each status is considered an indicator. These three indicators are related but do not overlap[12].

References

1. Keppel, K., Pearcy, J., Klein, R., Measuring progress in Healthy People 2010. 2004, National Center for

Health Statistics: Hyatsville, Maryland.

2. U.S. Department of Health and Human Services, What is Cultural Competency?, Office of Minority Health (HHS), Available at http://minorityhealth.hhs.gov/templates/browse.aspx?lvl=2&lvlID=11 (http://www.cdc.gov/Other/disclaimer.html).

3. Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, N.Y., 19-22 June, 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2, p. 100) and entered into force on 7 April 1948.

4. U.S. Department of Health and Human Services, Healthy People 2020 Draft. 2009, U.S. Government

Printing Office.

5. Braveman, P.A., Monitoring equity in health and healthcare: a conceptual framework. Journal of health, population, and nutrition, 2003. **21**(3): p. 181.

6. Kawachi, I., A glossary for health inequalities. Journal of Epidemiology and Community Health, 2002.

56(9): p. 647

7. Whitehead, M. and Whitehead, The concepts and principles of equity and health. Health Promotion International, 1991. **6**(3): p. 217.

8. U.S. Department of Health and Human Services, Healthy People 2010: Understanding and Improving

Health. 2000, Government Printing Office: Washington, DC: U.S.

- 9. Commission on Social Determinants of Health (CSDH), Closing the gap in a generation: health equity through action on the social determinants of health. Final report of the Commission on Social Determinants of Health. 2008, World Health Organization: Geneva.
- 10. Jones, C., Jones CY, Perry GS, Barclay G, Jones ČA, Addressing the Social Determinants of Children's Health: A Cliff Analogy. Journal of Health Care for the Poor and Underserved, 2009. 20(4a): p. 1.
- 11. Krieger, N., D.R. Williams, and N.E. Moss, Measuring Social Class in US Public Health Research: Concepts, Methodologies, and Guidelines. Annual Review of Public Health, 1997. 18(1): p. 341-378.
- 12. Adler, N.E., Socioeconomic status and health: The challenge of the gradient. American psychologist, 1994. 49(1): p. 15.

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Frequently Asked Questions

- What are social determinants of health? (#a)
- What are determinants of health and how are they related to social determinants of health? (#b)
- Why is addressing the role of social determinants of health important? (#c)
- · How is the World Health Organization addressing social determinants of health? (#d)
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- Where can I find more information about social determinants of health? (#h)
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What are social determinants of health?

Social determinants of health are economic and social conditions that influence the health of people and communities [1]. These conditions are shaped by the amount of money, power, and resources that people have, all of which are influenced by policy choices. Social determinants of health affect factors that are related to health outcomes. Factors related to health outcomes include:

- How a person develops during the first few years of life (early childhood development)
- · How much education a persons obtains
- Being able to get and keep a job
- What kind of work a person does
- Having food or being able to get food (food security)
- Having access to health services and the quality of those services
- Housing status
- How much money a person earns
- Discrimination and social support

What are determinants of health and how are they related to social determinants of health?

Determinants of health are factors that contribute to a person's current state of health. These factors may be biological, socioeconomic, psychosocial, behavioral, or social in nature. Scientists generally recognize five determinants of health of a population [2, 3]:

- Genes and biology: for example, sex and age
- · Health behaviors: for example, alcohol use, injection drug use (needles), unprotected sex, and smoking
- · Social environment or social characteristics: for example, discrimination, income, and gender
- Physical environment or total ecology: for example, where a person lives and crowding conditions
- Health services or medical care: for example, access to quality health care and having or not having insurance

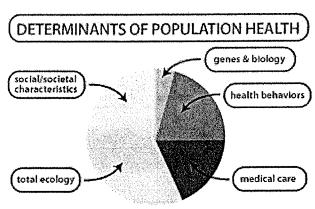


Figure 1. Estimates of how each of the five major determinants influence population health [4].

Other factors that could be included are culture, social status, and healthy child development. Figure 1 represents rough estimates of how much each of the five determinants contributes to the health of a population. Scientists do not know the precise contributions of each determinant at this time.

As the figure shows, in theory, genes, biology, and health behaviors together account for about 25% of population health. Social determinants of health represent the remaining three categories of social environment, physical environment/total ecology, and health services/medical care. These social determinants of health also interact with and influence individual behaviors as well. More specifically, social determinants of health refer to the set of factors that contribute to the social patterning of health, disease, and illness.

Why is addressing the role of social determinants of health important?

Addressing social determinants of health is a primary approach to achieving health equity. Health equity is "when everyone has the opportunity to 'attain their full health potential' and no one is 'disadvantaged from achieving this potential because of their social position or other socially determined circumstance'" [5]. Health equity has also been defined as "the absence of systematic disparities in health between and within social groups that have different levels of underlying social advantages or disadvantages—that is, different positions in a social hierarchy" [6]. Social determinants of health such as poverty, unequal access to health care, lack of education, stigma, and racism are underlying, contributing factors of health inequities. The Centers for Disease Control and Prevention (CDC) is committed to achieving improvements in people's lives by reducing health inequities. Health organizations, institutions, and education programs are encouraged to look beyond behavioral factors and address underlying factors related to social determinants of health.

How is the World Health Organization addressing social determinants of health?

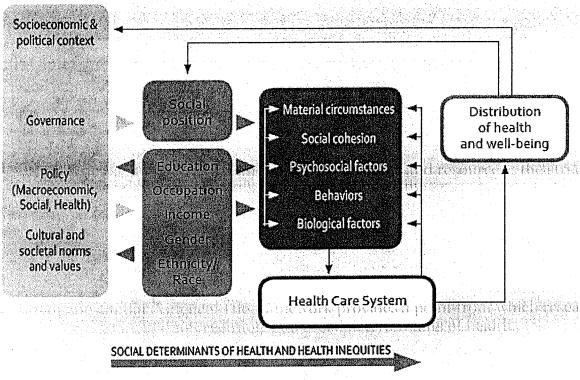
The World Health Organization (http://www.who.int/en/) & (http://www.cdc.gov/Other/disclaimer.html) (WHO) created the Commission on Social Determinants of Health (http://www.who.int/social_determinants/thecommission/en/) & (http://www.cdc.gov/Other/disclaimer.html) to address social determinants of health [1]. The Commission uses the following three principles to guide its work in eliminating health inequities for local communities and nations and throughout the world:

• Improve the conditions of daily life—the circumstances in which people are born, grow, live, work, and age.

• Tackle the inequitable distribution of power, money, and resources—the structural drivers of those conditions of daily life—globally, nationally, and locally.

• Measure the problem, evaluate action, expand the knowledge base, develop a workforce that is trained in the social determinants of health, and raise public awareness about the social determinants of health [1].

The commission created the conceptual framework below that describes relationships among individual and structural variables. The framework represents relationships among variables that are based on scientific studies or substantial evidence. The framework provides a point from which researchers can take action, such as creating targeted interventions, on social determinants of health.



Source: Amended from Solar & Irwin, 2007

Figure 2. World Health Organization's Social Determinants of Health Conceptual Framework [1]

What is CDC doing to address social determinants of health?

CDC has several initiatives related to addressing the social determinants of health. The following are examples of these activities:

• The CDC/ATSDR Minority Initiatives Coordinating Committee and a variety of officially recognized CDC-wide work groups are dedicated to improving health equity. These work groups include Health Equity, Social Determinants of Health Equity, Racism and Health, Sexual and Gender Minorities, and Health and Human Rights.

• CDC's Office of Minority Health and Health Equity (http://www.cdc.gov/minorityhealth/OMHHE.html) (proposed) aims to accelerate CDC's health impact in the U.S population. It also works to eliminate health disparities for vulnerable populations. These populations include those that are defined by race/ethnicity, socioeconomic status, geography, gender, age, disability status, risk status related to sex and gender, and other populations identified to be at-risk for health disparities. The Office of Minority Health and Health Equity (proposed) coordinates responses to executive orders from the White House

and initiatives from the <u>U.S. Department of Health and Human Services (http://www.hhs.gov/)</u> is (http://www.cdc.gov/Other/disclaimer.html). The office also supports cooperative agreements for research and professional development, reports on the health status of vulnerable populations in the United States, and initiates strategic partnerships with governments and national and regional organizations.

What are certain centers at CDC doing to address social determinants of health?

The mission of the <u>National Center for Chronic Disease Prevention and Health Promotion</u> (http://www.cdc.gov/chronicdisease/) includes a <u>strategic initiative</u>

(http://www.cdc.gov/chronicdisease/healthequity/index.htm) to address health equity through its work in chronic diseases. It accomplishes this by influencing program and policy activities, building partner capacities, and establishing tailored interventions to help eliminate health disparities. Some of the center's activities include—

- CDC, in collaboration with the National Association of Chronic Disease Directors (http://www.chronicdisease.org/) (http://www.cdc.gov/Other/disclaimer.html), convened the National Expert Panel on Social Determinants of Health Equity in May 2008 to discuss guidance on advancing equity activities. The panel concluded that CDC can play a major role in social determinants of health education, promotion, and leadership on a national and international level. It also concluded that CDC can help reform policy that targets inequitable resource distribution, which lies at the heart of many health inequities. Other recommendations and panel member perspectives can be found in the Report of the National Expert Panel on Social Determinants of Health Equity: Recommendations for Advancing Efforts to Achieve Health Equity
- CDC's Healthy Communities Program
 (http://www.cdc.gov/healthycommunitiesprogram/overview/healthequity.htm) established the Racial and
 Ethnic Health Disparities Action Institute (http://www.cdc.gov/Features/DisparitiesInstitute/) to inspire
 action and impact change in racial and ethnic health disparities at the state and local levels.
- Multiple federal agencies and more than 200 partners have collaborated to create the <u>National Diabetes Educational Program (http://www.cdc.gov/diabetes/ndep/index.htm)</u>. The program has a multitude of programmatic efforts that target racial and ethnic minorities, youth, and women. Program materials are written in culturally-relevant language for each population. These efforts include education and reducing risk as well as improving health care access and treatment outcomes.
- <u>WISEWOMAN (Well-Integrated Screening and Evaluation for Women Across the Nation)</u> (http://www.cdc.gov/wisewoman/) provides chronic disease screenings, lifestyle nterventions, and referral services to women between the ages of 40 and 64 years who have low incomes and no health insurance or not enough health insurance. The goal of the program is to reduce the risk of cardiovascular disease.

The <u>National Center for Injury Prevention and Control (http://www.cdc.gov/injury/index.html)</u> and the <u>National Center for Environmental Health (http://www.cdc.gov/nceh/)</u> have developed a number of initiatives promoting healthy homes and healthy communities, with the purpose of improving home safety, <u>the built environment (http://www.cdc.gov/healthyplaces/)</u>, public transportation, and preventing violence within the home, among youth, and between partners.

Some of the <u>National Center for HIV/AIDS</u>, <u>Viral Hepatitis</u>, <u>STD</u>, <u>and TB Prevention</u> (http://www.cdc.gov/nchhstp/) 's (NCHHSTP) health equity activities include—

• In 2008, the center held a consultation with over 100 academic, scientific, and public health experts and community leaders to discuss effective ways to address the social determinants of health of HIV,

hepatitis, sexually transmitted diseases (STDs), and tuberculosis (TB). The goal was to identify future priorities and best practices for addressing societal factors that increase risk for these diseases and to inform the center's efforts in accelerating the reduction of health inequities and the promotion of health equity. A report of this consultation was published as External Consultation Meeting Report—Addressing Social Determinants of Health: Accelerating the Prevention and Control of HÍV/AIDS, Viral Hepatitis, STD, and TB

- (http://www.cdc.gov/socialdeterminants/docs/final SDHConsultation ForWeb 061109.pdf). · In 2009, the center hosted a Corrections and Public Health Consultation. This forum was an opportunity for subject-matter experts from various sectors of the correctional system, public health, academia, and community partners to develop more effective ways to address several important issues, including health disparities in HIV, viral hepatitis, STD and TB among people who are incarcerated.
- NCHHSTP has work groups that focus on corrections, men who have sex with men, and health equity.

• Eliminating health inequities by addressing social determinants of health is one of six strategic directives for NCHHSTP and is addressed in the center's strategic plan for 2010-2015.

The center published the supplement for the July/August 2010 edition of Public Health Reports. (http://www.publichealthreports.org) & (http://www.cdc.gov/Other/disclaimer.html) The supplement presents innovations, advances, and insights regarding the role of social determinants in the spread of HIV, viral hepatitis, STDs and TB.

Microfinance for Women is a research project aimed to identify key elements to include in the development of interventions to reduce and prevent the risk of HIV and STDs. These interventions are based on microenterprise for use among unemployed or underemployed African American women in

the Southeast.

 Assessment of the Determinants of HIV Risk Factors for African American and Hispanic Women at Risk for HIV infection in the Southern United States is a cross-sectional study that uses a socioecological framework to examine the individual, psychological, sociocultural, environmental (contextual), and behavioral factors that may influence health and risk behaviors for heterosexual African American and

Hispanic women, 18-59 years of age, who are at risk for HIV infection.

· The Historically Black Colleges and Universities and Community Outreach Initiative will develop information on STDs, SDH, and health equity to be incorporated into the curricula at Charles Drew University of Medicine and Science (http://www.cdrewu.edu/) (http://www.cdc.gov/Other/disclaimer.html), Meharry Medical College (http://www.mmc.edu/) (http://www.cdc.gov/Other/disclaimer.html), Howard University School of Medicine (http://medicine.howard.edu/) & (http://www.cdc.gov/Other/disclaimer.html), and Morehouse School of Medicine (http://www.msm.edu/HomePage.aspx) & (http://www.cdc.gov/Other/disclaimer.html). Information on STDs also will be delivered to other students

at the colleges and universities and the surrounding communities of the schools.

The National Study of Determinants of Early Diagnosis, Prevention, and Treatment of TB in the African American (http://www.cdc.gov/tb/topic/populations/TBinAfricanAmericans/default.htm) community will examine data from a national sample of African Americans born in the United States to quantify time to diagnosis and treatment of TB, examine the roles of the patient, providers, laboratories, and TB programs that affect timeliness of diagnosis and treatment of African Americans, evaluate the impact timing has on transmission, and use findings to propose performance goals and indicators for TB programs to encourage faster diagnosis and treatment in this population.

How can I apply an approach that considers the social determinants of health to my work?

If your office is interested in developing work related to social determinants of health; the 2008 Consultation Meeting Report (http://www.cdc.gov/socialdeterminants/docs/final SDHConsultation ForWeb 061109.pdf) from NCHHSTP provides examples of opportunities and recommendations, for CDC and others, of future directions regarding social determinants of health in four areas:

• Public Health Policy: Provide leadership throughout CDC and align the efforts of NCHHSTP with those of the U.S. Department of Health and Human Services and WHO; convene a national agenda setting meeting; and partner with other federal agencies, nongovernmental organizations, private foundations, and philanthropic organizations that have an interest in reducing health inequities.

• Data Systems: Create relevant metrics for social determinants of health that would be monitored by subject matter experts; add social determinants of health to NCHHSTP's data collection systems; and share, link, and integrate data to the extent possible to facilitate analyses and provide an evidence base,

including identifying and using data sets and systems from other agencies.

• Agency Partnerships and Capacity Building: Enhance partnerships from both traditional and nontraditional sources to strengthen the social determinants of health effort; build capacity among partners in social determinants of health by including language in funding opportunity announcements; and launch a nationwide social marketing campaign to strengthen the relationship between CDC and populations that are at risk and to engage a broader group of partners.

• Prevention Research and Evaluation: Reframe traditional strategies and broaden targeted groups; integrate a holistic and interdisciplinary approach to conducting prevention research; and move toward participatory research that engage communities from the beginning to the end—from conceptualizing

studies through the evaluation of their impact and outcomes.

Where can I find more information about social determinants of health?

More information is available from a variety of sources, including the following publications and web sites.

Web sites

- World Health Organization: http://www.who.int/social determinants/en/
 (http://www.who.int/social determinants/en/) (http://www.cdc.gov/Other/disclaimer.html)
- National Partnership for Action to End Health Disparities: http://minorityhealth.hhs.gov/npa/ (http://www.cdc.gov/Other/disclaimer.html)
- U.S. Department of Health and Human Services Office of Minority Health: http://minorityhealth.hhs.gov/ (http://minorityhealth.hhs.gov/) (http://www.cdc.gov/Other/disclaimer.html)
- National Association of County and City Health Officials: http://www.naccho.org/topics/justice/ (http://www.naccho.org/topics/ (http://www.naccho.org/ (http://www.naccho.org/ (http://www.naccho
- The Robert Wood Johnson Foundation: http://www.rwjf.org/ (http://www.rwjf.org/) it (http://www.cdc.gov/Other/disclaimer.html)
- Healthy People 2020: http://www.healthypeople.gov/hp2020/default.asp (http://www.cdc.gov/Other/disclaimer.html)

Publications

- Equity, social determinants and public health programmes. Editors Erik Blas and Anand Sivasankara Kurup. 2010, World Health Organization: Geneva. Available at: http://whqlibdoc.who.int/publications/2010/9789241563970 eng.pdf (http://www.cdc.gov/Other/disclaimer.html)
- Commission on Social Determinants of Health (CSDH), <u>Closing the gap in a generation: health equity through action on the social determinants of health. Final report of the Commission on Social Determinants of Health (http://whqlibdoc.who.int/publications/2008/9789241563703_eng.pdf) (http://www.cdc.gov/Other/disclaimer.html)</u>. 2008, World Health Organization: Geneva.
- Hillemeier, M., Lynch, J., Harper, S., Casper, M., Data Set Directory of Social Determinants of Health at the Local Level. 2004, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services: Atlanta. Available at:

http://www.cdc.gov/dhdsp/library/data set directory/pdfs/data set directory.pdf (http://www.cdc.gov/dhdsp/library/data set directory/pdfs/data set directory.pdf)

• Brennan Ramirez LK, Baker EA, Metzler M. Promoting Health Equity: A Resource to Help Communities Address Social Determinants of Health. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2008. Available at: http://www.cdc.gov/nccdphp/dch/programs/healthycommunitiesprogram/tools/pdf/SDOH-workbook.pdf (http://www.cdc.gov/nccdphp/dch/programs/healthycommunitiesprogram/tools/pdf/SDOH-workbook.pdf)

• Hofrichter, R., Bhatia, R. (Eds.) Tackling Health Inequities through Public Health Practice: Theory to Action. 2010, Oxford University Press.

- Raphael, D., ed. Social determinants of health: Canadian perspectives. 2004, Canadian Scholars' Press Toronto.
- Marmot, M.G. and R.G. Wilkinson, *Social determinants of health*. 2nd ed. 2006, Oxford; New York: Oxford University Press. x, 366 p.

How do I contact the Office of Health Equity at CDC's NCHHSTP with other questions?

You can e-mail the Office of Health Equity at OHEinquiries@cdc.gov (mailto: OHEinquiries@cdc.gov).

References

1. Commission on Social Determinants of Health (CSDH), Closing the gap in a generation: health equity through action on the social determinants of health. Final report of the Commission on Social Determinants of Health. 2008, World Health Organization: Geneva.

2. Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, N.Y., 19-22 June, 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2, p. 100) and entered into force on 7 April 1948.

3. U.S. Department of Health and Human Services, *Healthy People 2020 Draft*. 2009, U.S. Government Printing Office.

4. Tarlov, A.R., Public Policy Frameworks for Improving Population Health. Annals of the New York Academy of Sciences, 1999. 896(SOCIOECONOMIC STATUS AND HEALTH IN INDUSTRIAL NATIONS: SOCIAL, PSYCHOLOGICAL, AND BIOLOGICAL PATHWAYS): p. 281-293.

5. Brennan Ramirez LK, B.E., Metzler M., Promoting Health Equity: A Resource to Help Communities Address Social Determinants of Health, Centers for Disease Control and Prevention, Editor. 2008, Department of Health and Human Services,: Atlanta, GA.

6. Braveman, P. and S. Gruskin, *Defining equity in health*. Journal of Epidemiology and Community Health, 2003. 57(4): p. 254-258.

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