Introduction to Social Determinants of Health

E18 Week 1 EHM

By the end of this session, you will be able to:

1. **Identify** and **explain** different models of health.
2. **Define** social determinants of health
3. Give **3 reasons** why more **distal** contributors to health (e.g., social determinants of health, determinants of equity) overall have a **bigger impact** on health of individuals and populations than **proximal** causes (e.g., genetics & biology)
4. List **3 social determinants** of health at each of the following **levels**:
    a. Individual
    b. Interpersonal
    c. Community

What is Health?

Before we can start talking about **ANY** determinants of health, we first have to define what health is.

Take a moment and write down your **own definition** of health.

What is Health?

Traditionally, definitions of health have fallen into two broad categories:

1. **Biomedical definitions** - health is the absence of disease.
2. **Biopsychosocial definitions** - health is a state of complete physical, mental, emotional, and spiritual well-being.

What is Health?

"Health is the the **ability to adapt and self manage** in the face of social, physical, and emotional challenges." - Jadad and O'Grady

What are the benefits of this definition?

What are the shortcomings of this definition?

What is Health?

Find four people near you, preferably people you don’t know very well yet, and share the definitions of health you wrote down earlier.

As a group, come up with your own definition of health.

Definitions can be as long as they need to be, but make sure that everyone’s ideas are expressed and considered.

What did you come up with?

What is Health? - Our Definition of Health

We define health as…

As we move through this and other lectures, remind yourself that these theories and concepts are primarily build on **biopsychosocial** definitions of health per the 1946 WHO constitution.

Social Determinants of Health

I diagnosed "abdominal pain" when the real problem was hunger; I confused social issues with medical problems in other patients, too. I mislabeled the hopelessness of long-term unemployment as depression and the poverty that causes patients to miss pills or appointments as noncompliance. In one older patient, I mistook the inability to read for dementia. My medical training had not prepared me for this ambush of social circumstance. Real-life obstacles had an enormous impact on my patients' lives, but because I had neither the skills nor the resources for treating them, I ignored the social context of disease altogether. —Laura Gottlieb, MD, San Francisco Chronicle 8/23/101

Social Determinants of Health

Broadly speaking, the "**social determinants of health**" or **SDoH** for short, is everything in the **social world** that affects your health.

The **social world** is everything about the world that has been informed and influenced by human interaction and behavior.

This classroom, your friendship network, where you live, what you wear, the music you listen to, and so much more is influenced by the social world.

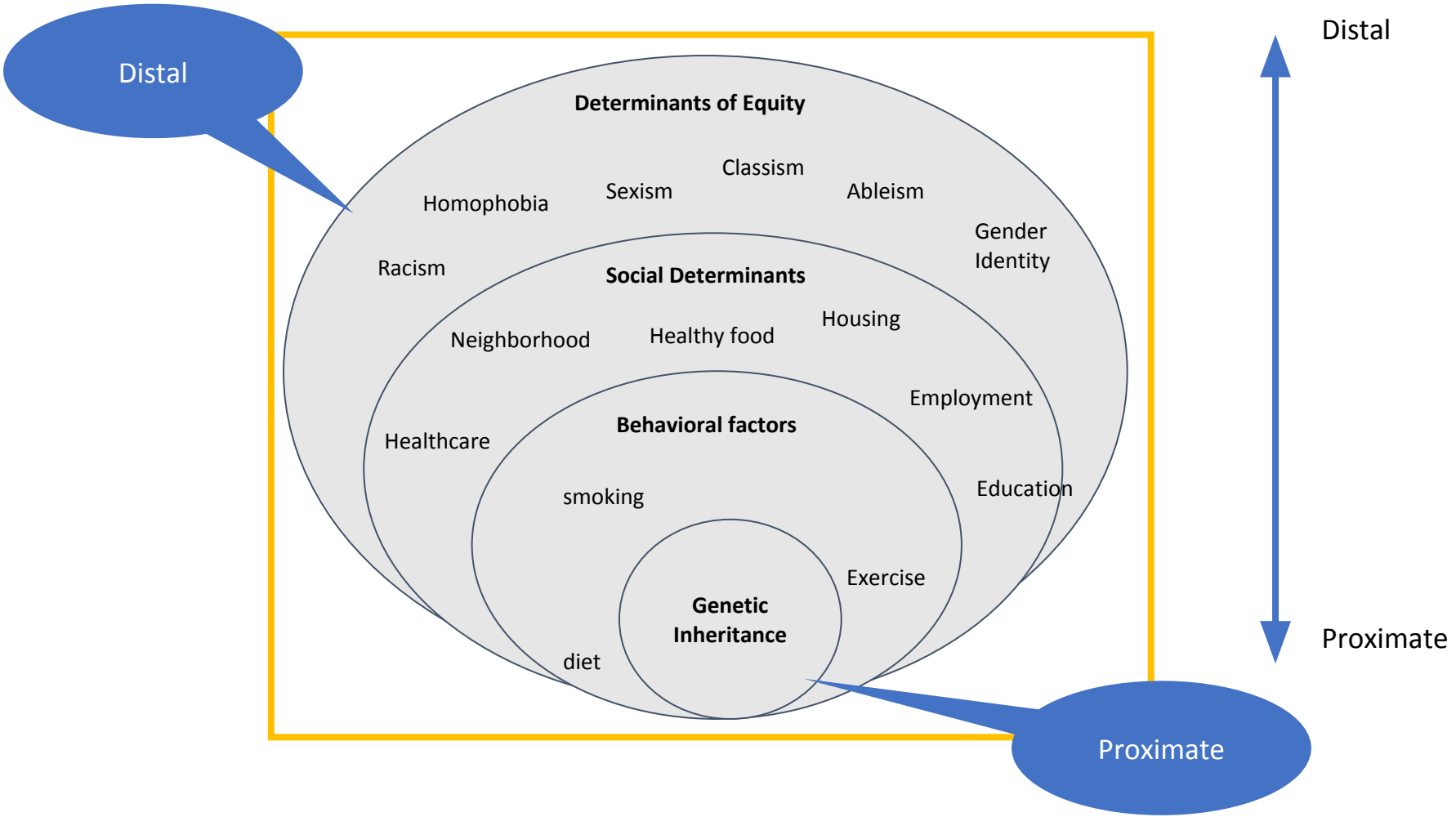
Social Determinants of Health

Social Determinants of Health

Researchers interested in SDoH tend to focus on what are known as **distal** or "**upstream**" causes of health.

Distal causes occur **further** away from the biological manifestation of disease in the causal chain.

This is in contrast to **proximate**, or "**downstream**" causes of health, that occur **closer** to the biological manifestation of disease in the causal chain.

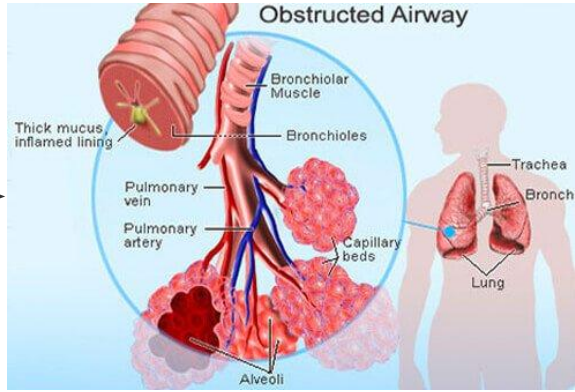

Distal
Determinants of Equity
Classism
Homophobia
Sexism
Ableism
Gender Identity
Racism
Social Determinants
Housing
Neighborhood
Healthy food
Employment
Behavioral factors
Healthcare
Education
smoking
Exercise
Genetic Inheritance
diet
Proximate
Distal
Proximate

Social Determinants of Health

Distal

Social Stressors

Access to Medication



Proximate

Social Determinants of Health

These very distal causes, things at the “outer layer” of social determinants of health models, are things that put us at “**risks of risks**”.

We can use **causal thinking** and ask “**but why?**” to identify these distal causes.

Why is John in the hospital?

Why is John in the hospital?

Because he has a bad infection in his leg.

But why does he have an infection?

Because he has a cut on his leg and it got infected.

But why does he have a cut on his leg?

Because he was playing in the junkyard next to his apartment building and there was some sharp, jagged steel there that he fell on.

But why was he playing in a junkyard?

Because his neighborhood is kind of run down. A lot of kids play there and there is no one to supervise them.

Why is John in the hospital?

But why does he live in that neighborhood?

Because his parents can't afford a nicer place to live.

But why can't his parents afford a nicer place to live?

Because his Dad is unemployed and his Mom is sick.

But why is his Dad unemployed?

Because he doesn't have much education and he can't find a job.

But why ...?

SDoH - Why we look “Upstream”

SDoH - Why we look “Upstream”

There are many reasons we look “upstream” at more distal causes of health.

Let’s use wealth inequality as a case to demonstrate the utility of looking upstream.

Wealth inequality is the unequal distribution of wealth across people and populations.

Wealth is not income! Wealth is everything you already possess (**assets**) and what you owe (**debts**). So, you can have **negative wealth**.

SDoH - Why we look “Upstream”

SDoH - Why we look “Upstream”

Clearly, there is a great deal of wealth inequality in the US.

But does it matter for health?

YES! Wealth and other measures of socioeconomic status, or social class, strongly affects:

- Where you live
- Where you go to school
- What medical care you have access to
- And…?

SDoH - Why we look “Upstream”

There are many reasons we look “upstream” at more distal causes of health:

1. Upstream factors put people at **risk of risks**.

But what about actual **health outcomes** instead of risks?...

SDoH - Why we look “Upstream”

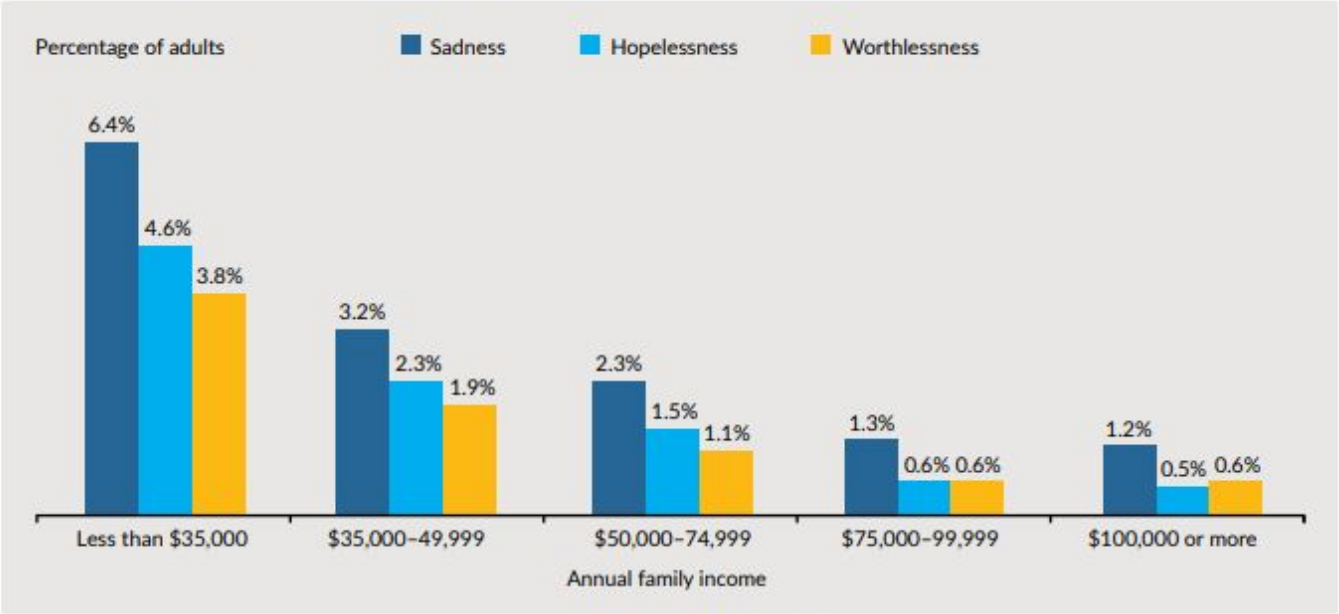
Table 1. Prevalence of Diseases, by Income, 2011 (percent of adults)

DISEASE OR ILLNESS	ANNUAL FAMILY INCOME				
	Less than $35,000	$35,000–49,999	$50,000–74,999	$75,000–99,999	$100,000 or more
Coronary heart disease	8.1	6.5	6.3	5.3	4.9
Stroke	3.9	2.5	2.3	1.8	1.6
Emphysema	3.2	2.5	1.4	1.0	0.8
Chronic bronchitis	6.3	4.0	4.4	2.2	2.4
Diabetes	11.0	10.4	8.3	5.6	5.9
Ulcers	8.7	6.7	6.5	4.7	4.4
Kidney disease	3.0	1.9	1.3	0.9	0.9
Liver disease	2.0	1.6	1.0	0.6	0.7
Chronic arthritis	33.4	30.3	27.9	27.4	24.4
Hearing trouble	17.2	16.0	16.0	16.2	12.4
Vision trouble	12.7	9.8	7.5	5.7	6.6
No teeth	11.6	7.8	5.5	4.2	4.1

Source: J. S., Schiller, J. W. Lucas, and J. A. Peregoy, "Summary Health Statistics for U.S. Adults: National Health Interview Survey, 2011." Vital and Health Statistics 10, no. 256 (2012): 1–207, tables 1, 4, 8, and 12. http://www.cdc.gov/nchs/data/series/sr_10/sr10_256.pdf.

SDoH - Why we look “Upstream”

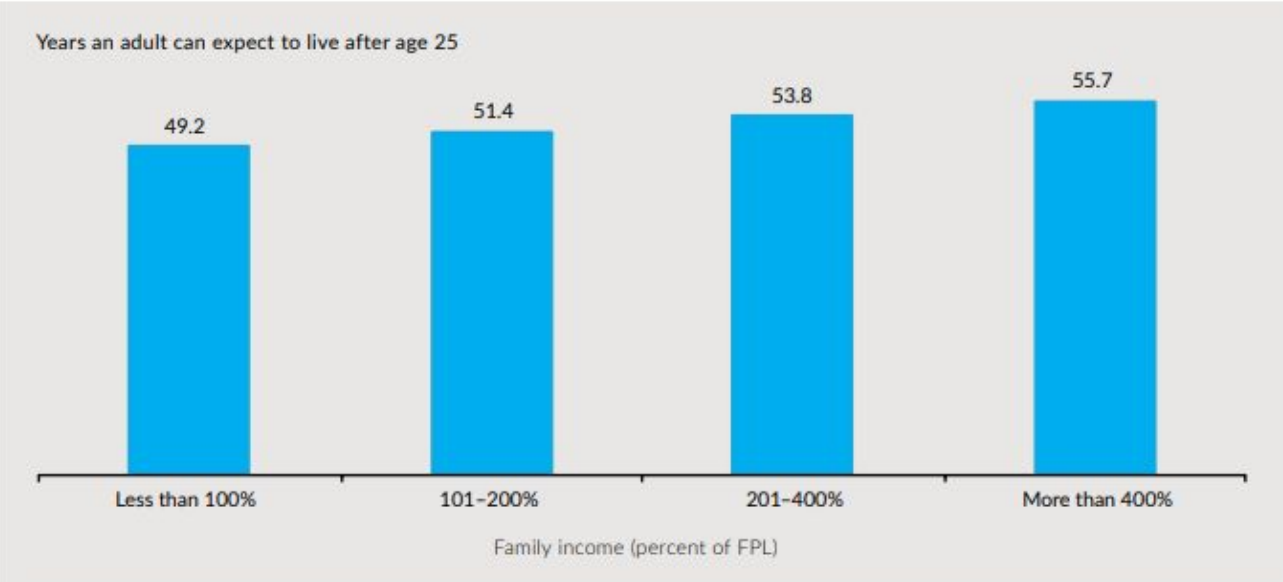
Figure 2. Feelings of Worthlessness, Hopelessness, and Sadness All or Most of the Time, by Income, 2011



Source: J. S., Schiller, J. W. Lucas, and J. A. Peregoy, "Summary Health Statistics for U.S. Adults: National Health Interview Survey, 2011." Vital and Health Statistics 10, no. 256 (2012): 1–207, table 14. http://www.cdc.gov/nchs/data/series/sr_10/sr10_256.pdf.

SDoH - Why we look “Upstream”

Figure 3. Life Expectancy, by Income, 1988–98



Source: Paula Braveman, Susan Egerter, and Colleen Barclay, "Income, Wealth and Health," Exploring the Social Determinants of Health, (Princeton, NJ: Robert Wood Johnson Foundation): 2011.

Note: FPL = federal poverty level.

SDoH - Why we look “Upstream”

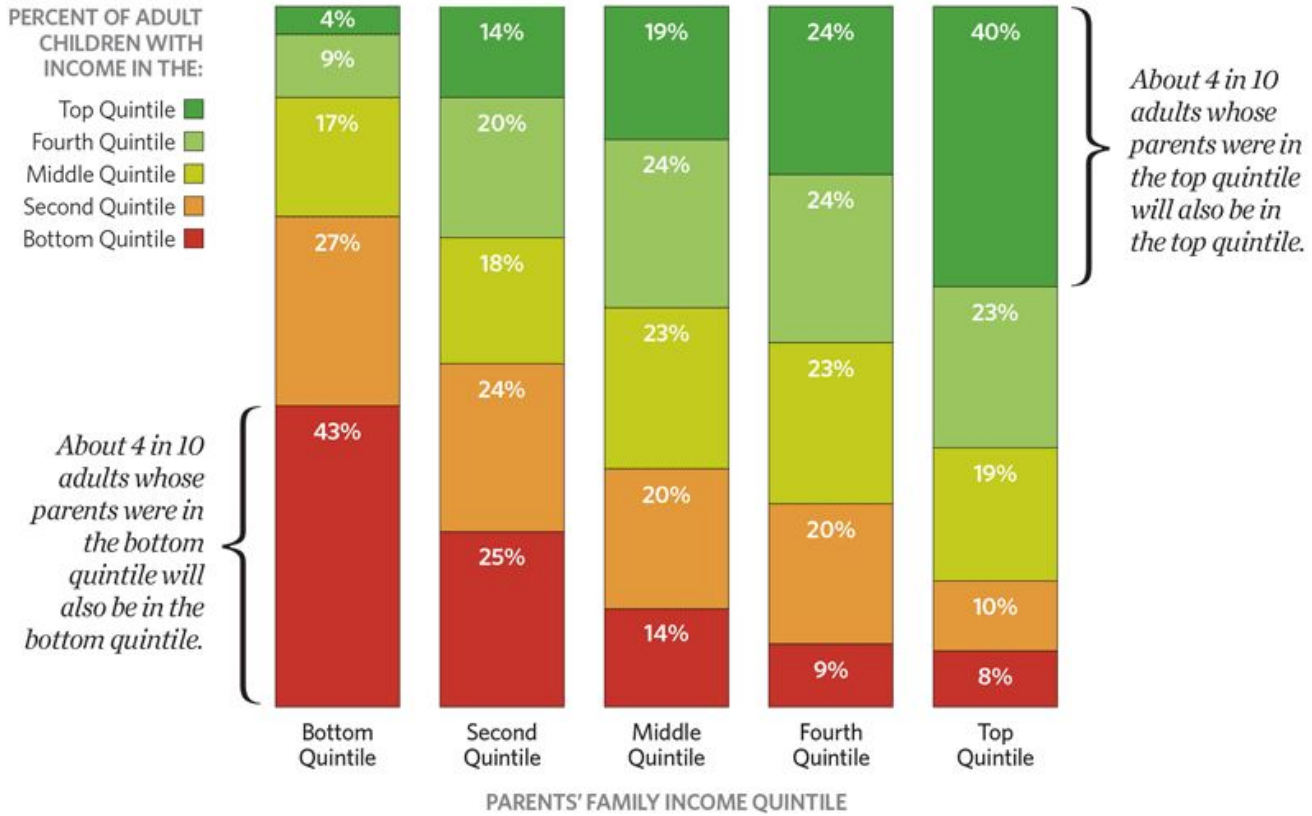
There are many reasons we look “upstream” at more distal causes of health:

1. Upstream factors put people at **risk of risks**.
2. Upstream factors affect **multiple diseases and illnesses**, even those with vastly different risk profiles.

But will these patterns persist across **time**? **Generations**?

CHART 1

Americans Raised at the Top and Bottom Are Likely to Stay There as Adults



Note: Income is adjusted for family size.

Source: Pew Charitable Trusts Economic Mobility Project, *Pursuing the American Dream: Economic Mobility Across Generations*, July 2012, Figure 3, p. 6, http://www.pewstates.org/uploadedFiles/PCS_Assets/2012/Pursuing_American_Dream.pdf (accessed May 28, 2013).

SDoH - Why we look “Upstream”

Wealth inequality is transferred across generations.

Children are likely to be exposed to the same health risks or have access to the same health resources as their parents.

Children also “**inherit**” the effects of inequality on their parent’s health.

SDoH - Why we look “Upstream”

“We carry our history in our bodies, how could we not?” - Nancy Kreiger

SDoH - Why we look “Upstream”

There are many reasons we look “upstream” at more distal causes of health:

1. Upstream factors put people at **risk of risks**.
2. Upstream factors affect **multiple diseases and illnesses**, even those with vastly different risk profiles.
3. Upstream factors **persist** and sometimes even **compound across generations**.

If we look upstream we can also develop interventions that will improve the health of **populations**, not just the health of the individuals who are sick at that specific moment.

SDoH - Why we look “Upstream”

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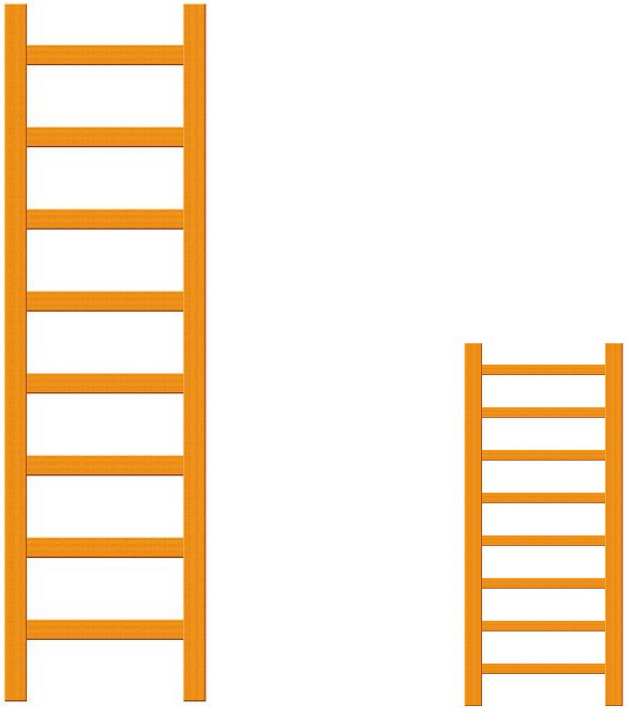

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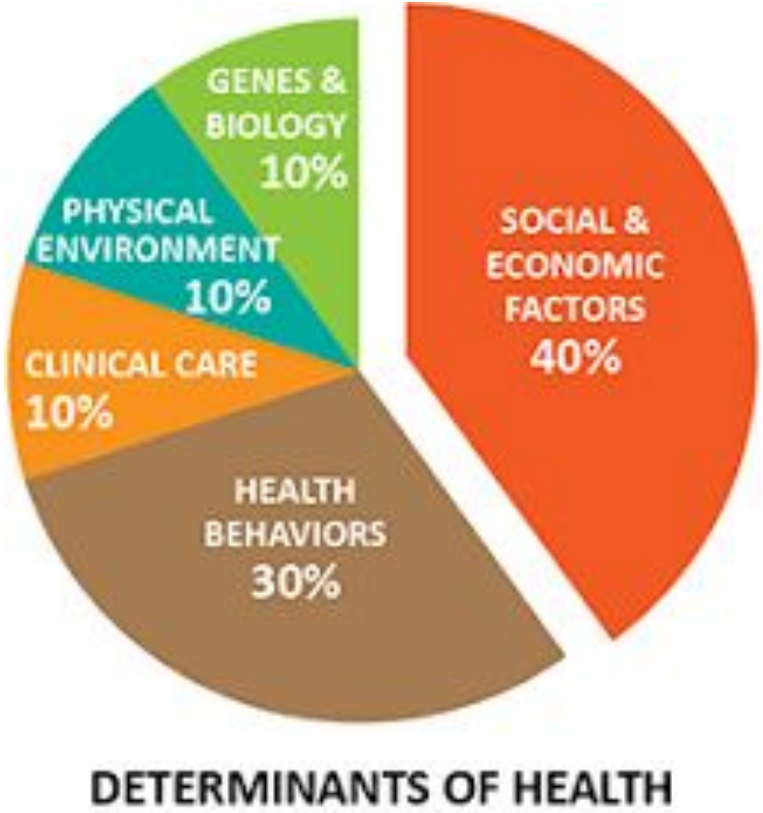


SDoH - A Place to Start

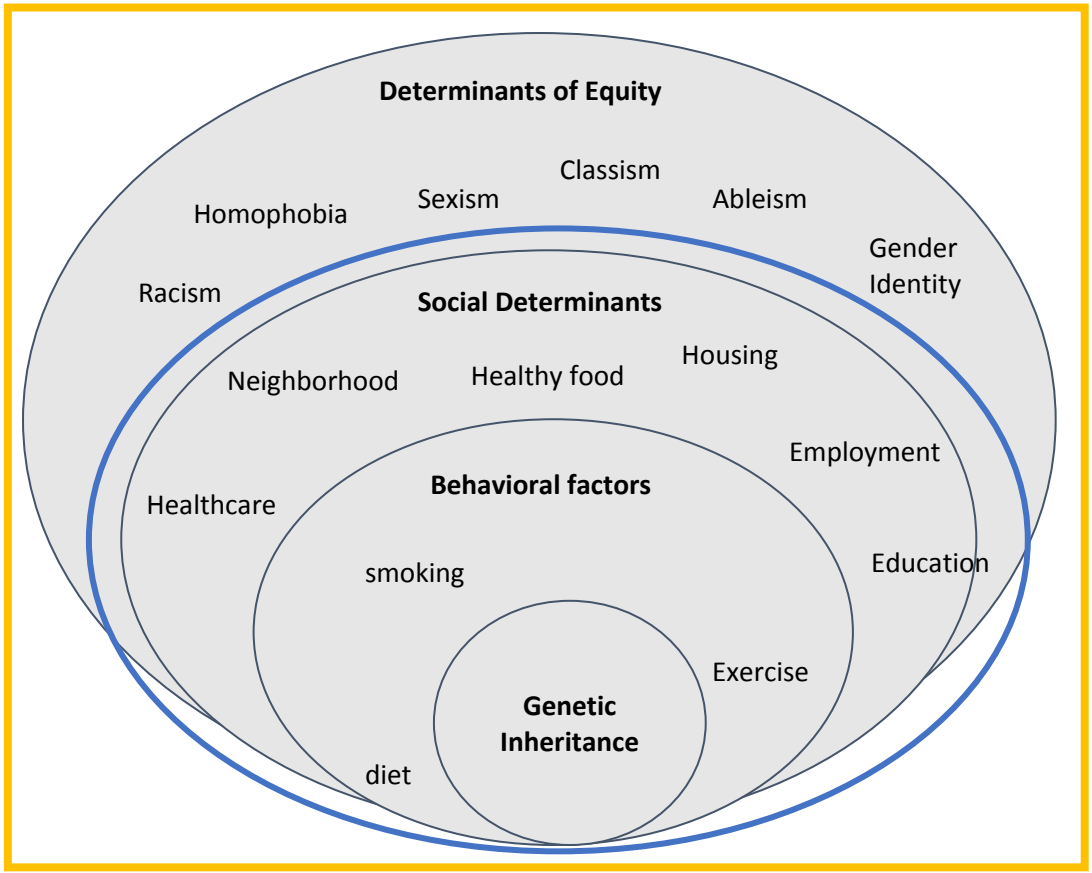
There are so many social determinants at play in the “**web of causation**” for both individual patients and for the populations they are a part of.

While you should **never assume** that the causes of disease or illness for your specific patient are the same as the **population level** causes of health disparities, being aware of these patterns and knowing what questions to ask your patients will help you achieve **structural competency**.

SDoH - A Place to Start

"**Structural competency** calls on health care providers to recognize how institutions, markets, or health care delivery systems shape presentations of symptoms, and to mobilize medical expertise and authority for the betterment of clinical and extra-clinical systems that lead to health and wealth imbalances."

Metzl JM, Petty J. Integrating and Assessing Structural Competency in an Innovative Prehealth Curriculum at Vanderbilt University. Academic Medicine. 2017;92(3):354-359. doi:10.1097/ACM.0000000000001477.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Social Determinants
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Behavioral factors
Healthcare
Education
smoking
Exercise
Genetic Inheritance
diet

SDoH - A Place to Start

Individual level social determinants:

- Social class
- Food access/security
- Educational attainment/achievement
- Health behaviors (agency and structure)
- Genetic or biological susceptibilities

SDoH - A Place to Start

Interpersonal level social determinants:

- Social networks
- Interpersonal prejudice
- Social capital
- Peer and family group norms for behavior
- Informal social control
- Household income
- Parental occupations, incomes, wealth

SDoH - A Place to Start

Community level social determinants:

- Social cohesion
- Gentrification
- Transit options
- Food Access (or lack of it)
- Natural environment

SDoH - Practice

Anna is 27 years old and arrives in your clinic because she has been experiencing regular shortness of breath and wheezing. You ask Anna if she has ever been told she has asthma and she says no. She says that she experienced similar problems when she was in college, but since she was a smoker then, the university clinic doctors told her it was likely due to smoking. She has quit smoking but she is currently unemployed since her difficulty breathing often limits her ability to work and she is currently living in a state that practices “right to work” laws which give employees like her very little protection. She also lives in a non-expansion state and doesn’t have insurance at the moment as a result. You ask Anna about her living conditions. She lives with several people in a crowded apartment near a highway. She says that the smog from the cars only makes her breathing worse. You tell Anna thank you, and proceed with the examination of her lungs. After your examination, you determine that Anna has asthma. You write Anna a prescription for an inhaler and a spacer, both of which cost about $50. As Anna is leaving, you notice her crumple up the prescription and throw it in the trash.

SDoH - What can YOU do?

There are many people like Anna, what are some ways **you** can look upstream to help break the outer strands of the spiders web?

Brainstorm on your own what you can do as:

1. A student
2. A professional
3. A person

Think about what you can do in each of these roles to help minimize health disparities. Write them down and keep them for yourselves and refer back to these personal goals as you move through EHM.