

Teaching Guide

Brief Introduction to the Social Determinants of Health

2018

Purpose

The purpose of this teaching guide is to provide educators with a basic overview of social determinants of health in order to help students understand the causes of health inequities observed between groups. The guide is part of a teaching pack on “Social Determinants of Health.” Please refer to the accompanying instructor’s note for an overview of the teaching pack, the four lessons and companion materials, and learning objectives. This teaching guide is intended to serve as a reference document for those teaching the lessons; instructors may also choose to directly incorporate or draw on portions of the materials in this guide for classroom discussions, depending on learner level.

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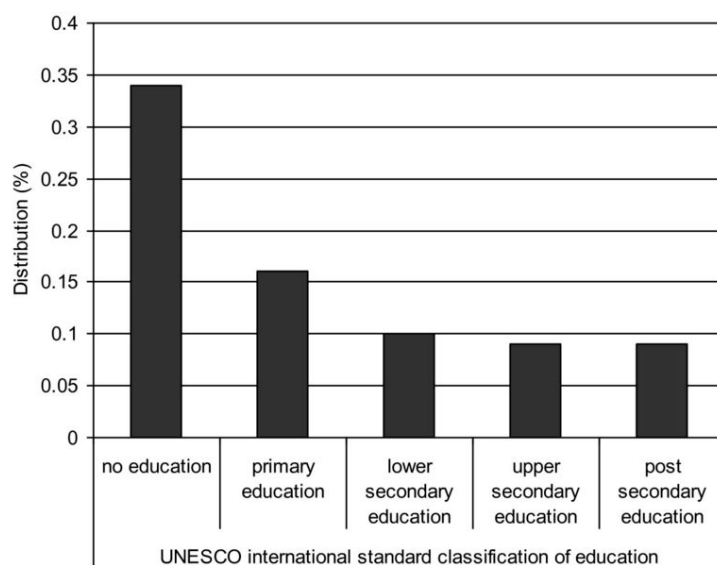
What are Social Determinants of Health?

Social determinants of health (SDH) are all of the social factors external to an individual that may not seem relevant to health, but that ultimately shape the conditions in which people live, work, and grow in ways that can both promote well-being and confer disease risk. Understanding SDH in relation to specific health outcomes both provides necessary information about the context for the conditions that predict health and disease, and can also help students understand why **health inequities** (socially produced, systematic inequalities in health between groups) exist in the population. For instance, in order to answer the question of why HIV/AIDS is more prevalent in low-income, marginalized communities, one must first understand the structural factors (i.e. political, cultural, and societal), socioeconomic conditions (i.e. social class, gender, race/ethnicity), and environmental factors (e.g. living and working conditions, neighborhood context) related to disease transmission that disproportionately impact marginalized people.

To appreciate the extent to which SDH impact global health trends, it is useful to look at some data on social gradients and levels of cause. **Social gradients in health**, illustrated in Figures 1 and 2 below, have been observed in countries around the world. A social gradient refers to the fact that socially disadvantaged people typically have worse health outcomes than those who are more advantaged. The following bar charts provide some graphical examples of how these trends manifest globally.

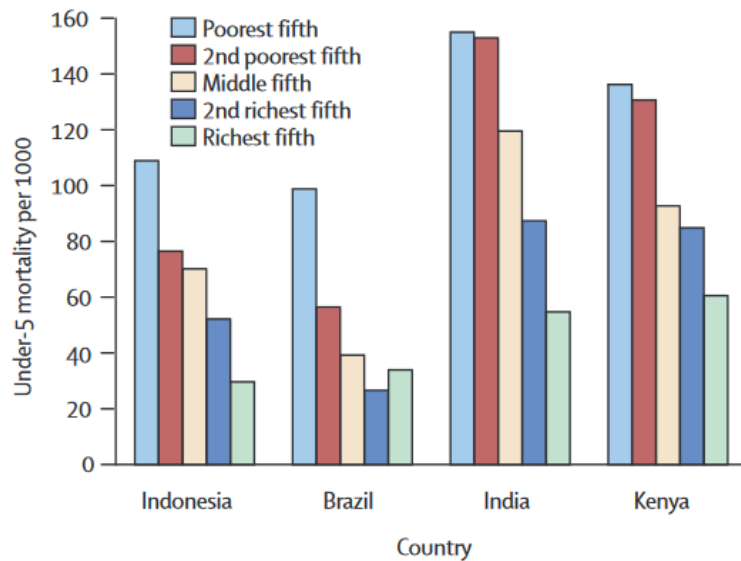
The first bar graph (Figure 1) illustrates the impact of education on a woman's risk of dying in childbirth (maternal mortality). The second bar graph (Figure 2) illustrates the relative power of household income as a social determinant of the risk that children will die before their fifth birthday (under-5 mortality).

Figure 1: The proportion of mothers who died during pregnancy in a cross-sectional analysis of data across 24 countries from the WHO Global Survey on Maternal and Perinatal Health



Source: Karlsen S et al. The Relationship Between Maternal Education and Mortality Among Women Giving Birth in Health Care Institutions: Analysis of the Cross Sectional WHO Global Survey on Maternal and Perinatal Health. BMC Public Health 2011; 11: 606. DOI: <https://doi.org/10.1186/1471-2458-11-606>.

Figure 2: Under-5 mortality rates per 1,000 livebirths by quintile of household income



Source: Marmot M. Social Determinants of Health Inequalities. The Lancet 2005; 365(9464): 1099-1104. DOI: [https://doi.org/10.1016/S0140-6736\(05\)71146-6](https://doi.org/10.1016/S0140-6736(05)71146-6). Based on data from the [USAID Demographic and Health Surveys \(DHS\)](#).

But it is not enough to simply understand health inequities. Adopting a social determinants of health lens to view a health issue also requires looking at three different levels of causes:

Level of the Cause	Description	Examples
Distal (farthest away from an individual's health status) or societal	Cultural, political, and infrastructural causes	Education, income, housing conditions, air quality, access to food and water, road safety
Intermediate	Relationships, social contexts	Community factors, including those related to work, school, family, and peer environments
Proximal (closest to an individual's health status) or individual	Behaviors, capabilities, attitudes, and direct biological threats to health	Hygiene habits, exposure to disease vectors that cause diarrhea, dengue, malaria

At the **distal level** are the wider circumstances in which people live, including broader cultural values, national or international political forces, laws or policies, or cross-cutting exposures like those related to climate, conflict, or the media. These factors are called distal because they are not directly related to the individual, but rather establish the wider context in which a person lives. At the **intermediate level** are factors related to communities, workplaces, schools, or families that define an individual's more immediate social environments. Finally, at the **proximal level** are factors directly related to individuals themselves which

impact health, including personal biology, behaviors, capabilities, or attitudes. Considering the different levels at which determinants operate can help students keep track of a complex array of contributing factors, while also highlighting potential pathways between social exposures and physical health.

Why do we care about social determinants of health? SDH are important because if we intervene and address (or work to change) determinants at the distal level, they can have a potentially greater impact on population health than simply focusing on individual behaviors, attitudes, or biological factors. For example, it is well known that poverty contributes to a greater likelihood of developing and dying from coronary heart disease. We know that this pathway operates through mechanisms that affect the limited capacity that people have, with a low income, to make healthy food choices, engage in physical activity, access preventive health care, and acquire knowledge of how to promote heart health, among other factors. If policies were put into place to alleviate poverty, the downstream health consequences could be substantially minimized in low-income communities, thereby reducing disparities. In contrast, an individual-level approach to address heart disease in low-income communities might take a different approach such as, for example, making cholesterol- and blood pressure-lowering medications easily available and affordable to those at risk. While this approach would address an immediate need, it would be both costly and have a limited reach due to resource limitations. Addressing the distal factor of poverty through policy is an inherently population-oriented strategy designed to reach large numbers of people that may be more cost efficient with more widespread substantial benefits.

Example: Anthony in Kenya

As an example of how the social determinants of health manifest in an individual's life, let's consider the story of Anthony in Kenya. Anthony is a street vendor in Mombasa, who lives in a dense, urban neighborhood. He is lucky enough to have a small apartment in a permanent housing unit for his family and himself, but his neighborhood does not have access to clean water, fresh food, or toilet facilities. Although his seven-year-old son and an eleven-year-old daughter attend school, Anthony only attended school until second grade, and his wife never attended. Because Anthony works vending on the streets during the day, he often purchases, barter for, and handles the food his family uses in meal preparations.

These social and neighborhood factors impact Anthony's day-to-day life in various ways that shape his and his family's health. Two scenarios illustrate these connections:

- **Scenario 1:** Anthony's family barely has enough income to feed itself. This prevents them from moving to a less densely populated area with more community resources. As a result, they face all of the health risks associated with living in a poorer neighborhood, including exposure to high volumes of mosquitoes that carry malaria and dengue, and a lack of access to adequate health facilities to treat diseases if family members get sick. Therefore, the social determinant of low income has hindered Anthony's family's mobility, which in turn results in increased exposure to disease agents in the environment and limited ability to receive proper health care services if necessary.
- **Scenario 2:** Due to the social circumstances in which Anthony grew up, he has limited knowledge about health and hygiene. As a result, he does not wash his hands with soap after using the toilet, and his family often gets diarrhea due to the bacterial contamination in the food he handles and cooks. Here we see that the social determinant of having limited education led Anthony to engage in unhealthy behaviors that further contribute to his family's poor health.

Social Determinants of Health Within the Broader Context of Global Health

When we think about complex public health challenges, it is easy to get lost in the vast web of causes and consequences impacting populations and individuals around the globe. With that in mind, instructors often use conceptual frameworks (or thinking tools) to break down complicated problems into its component parts when teaching public health issues. Conceptual frameworks can help students organize the many relevant factors at play (including the social determinants of health), to understand how they contribute to the health issue at hand, and brainstorm potential responses or critique existing ones. This section of the teaching guide outlines one framework that instructors might use to help students think systematically about these factors.

In order to understand any global health challenge, we must first ask ourselves two big questions:

1. **What is the problem?** How do we understand and contextualize major health issues in the population?
2. **What are the solutions?** What are the ways we can draw upon all of the tools and mechanisms in our disposal to tackle these challenges?

In order to unpack these core questions, we consider two dimensions within each. To think of this as a conceptual framework, instructors should write the following two questions on the board:

What is the problem?

What is the solution?

Allow plenty of space on the board to write in student answers to these questions. While the framework below uses boxes as an example, instructors may choose to illustrate these framework ideas using whatever graphics are most understandable to their students.

What is the problem?



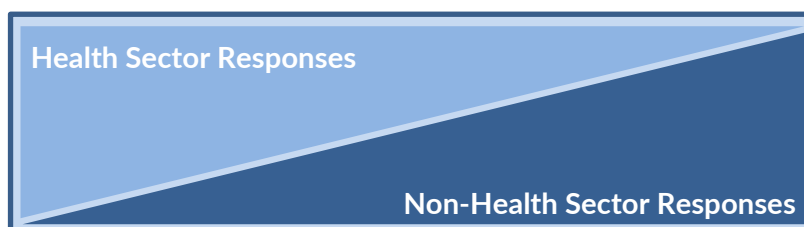
Understanding the Problem

- **Dimension 1: Health Conditions.** When thinking about the nature of any particular public health challenge, we must first *understand the health conditions we are referring to*. In other words, what are key biological or pathophysiological features of the issue that present within a person and cause them to not be healthy? To what extent does it contribute to death or impairment in the population?

How are individuals and communities impacted by it? These are all salient features that give audiences a sense of the magnitude and impact of the health issue.

- **Dimension 2: Conditions for Health (i.e. Determinants).** Next, to understand the context of our given health issue, it is critical to *identify all other factors that contribute to it*. What are the individual (e.g. behavioral, attitudinal), social, political, and economic factors that may put people at risk or protect them from illness? The social determinants of health refer to the conditions for health relating to the various environments individuals occupy (e.g. home, school, workplace, neighborhood, and society/culture, among others).

What is the solution?



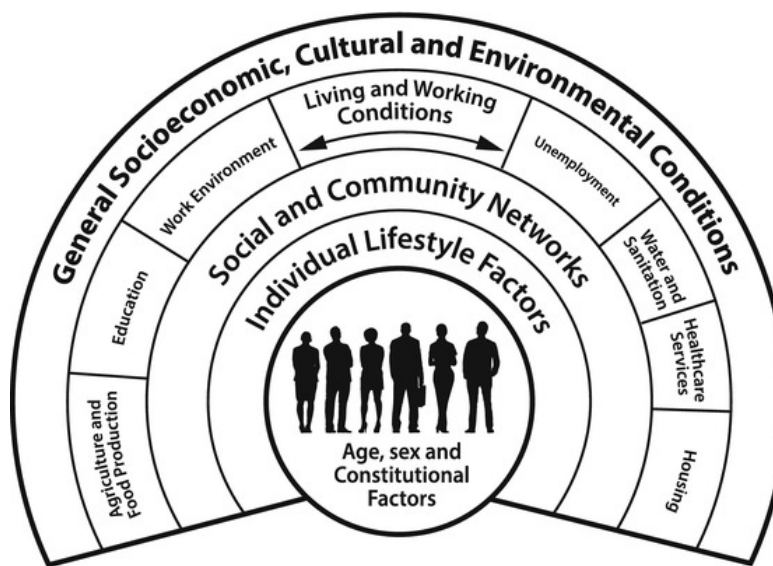
Identifying Solutions

- **Health Sector Responses:** After developing a firm understanding of the nature of a given health problem and the contextual factors influencing it, students can begin to consider potential responses to the issue at the population level. *Responses from the health sector* refer to initiatives that are carried out by people or institutions whose primary job is to improve people's health (e.g. physicians, nurses, hospitals/clinics, community health workers). Since the health sector is positioned to respond to acute and pervasive health challenges through direct outreach to individuals, these types of responses will likely not intervene directly upon the social determinants of health, but they must rather take them into account in order to be maximally effective.
- **Non-Health Sector Responses:** While the health sector is often the first line of defense in the face of major challenges to public health, various other domains of society can also act to improve health outcomes in the population. *Non-health sector responses* refer to the various ways diverse actors across other areas in society (e.g. policymakers, economists, engineers, and the education sector among many others) can work to advance health. To directly tackle social determinants of health in the population, it generally requires coordinated effort from these non-health sector actors.

Using Social Determinants of Health Frameworks

Social processes are, by their very nature, messy, complex, and difficult to understand. For example, while we may know that malaria is causally contracted through mosquito bites, or tuberculosis through contact with bacteria, there is no easy way to causally show how social exposures like poverty or low education may put someone at a greater risk for disease, since they exert their effects through multiple complicated relationships and processes. To help make sense of these pathways and diverse factors at play, we can draw on other conceptual frameworks to organize our thinking about the social determinants of a given health issue. Such conceptual frameworks are useful pedagogic tools (often presented graphically) that students can use to better understand how social processes influence health. Below, three example frameworks are provided with a brief explanation of each:

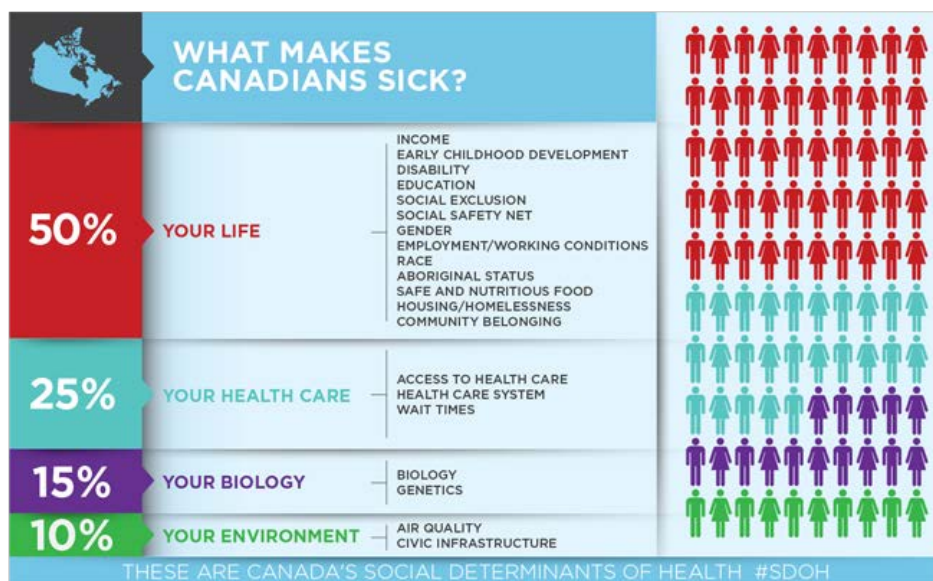
Example Framework #1



Source: Dahlgren G, Whitehead M. Policies and Strategies to Promote Social Equity in Health. Institute for Future Studies 1991.
https://openi.nlm.nih.gov/detailedresult.php?img=PMC2921286_jecho82743.f1&req=4.

Framework 1 provides a graphical depiction of the factors impacting health from the distal, societal level to proximal, individual level. At the individual level, it shows age, sex, and constitutional factors (i.e. characteristics that define an individual) as the main drivers of health. External to these inherent factors are individual lifestyle factors, including health-related behaviors and attitudes. As you move further away from the individual, you begin to see different aspects of one's social environment coming into the fray, including their social networks (e.g. family, peers, co-workers, and neighbors). External to these connections are the physical social spaces these networks operate within, which are generally defined as living and working conditions, but also include the broad social factors that shape these environments (e.g. agriculture and food production, unemployment, water and sanitation, and health care services, among others). Finally, at the most distal edge of this diagram are the general socioeconomic, cultural, and environmental conditions of a given society.

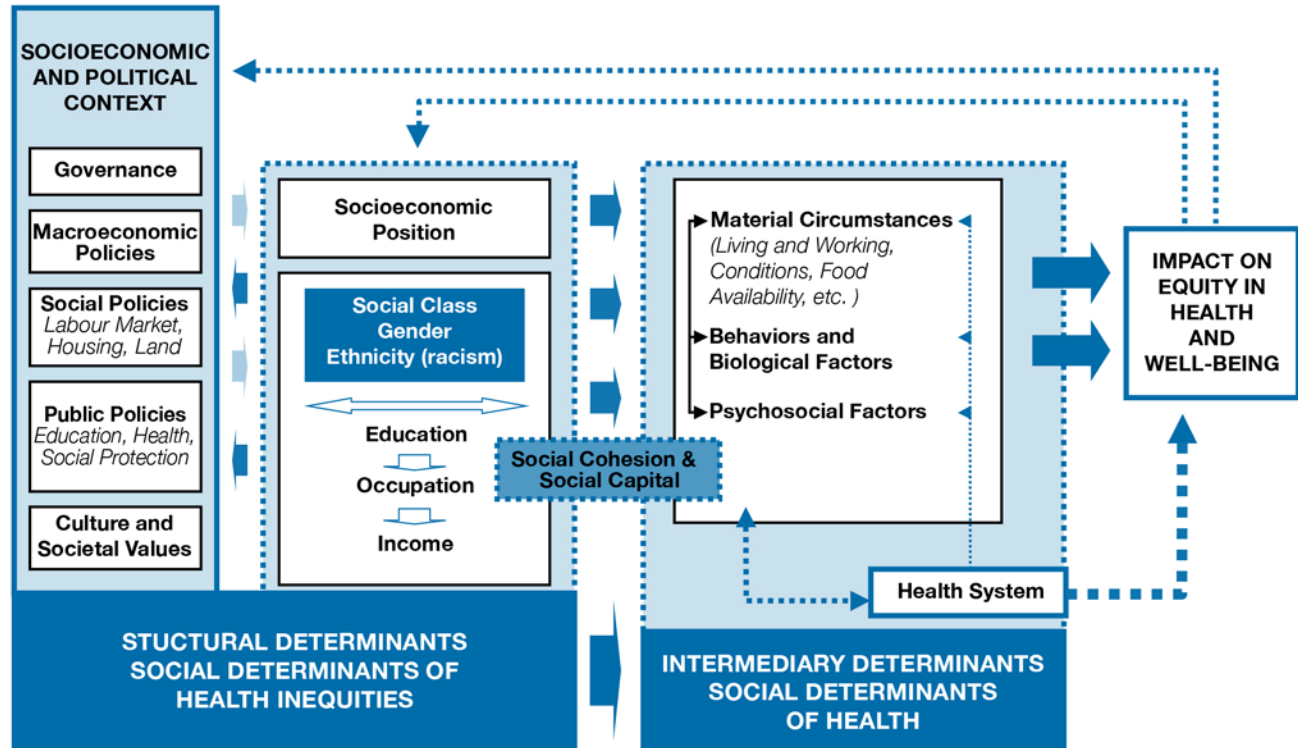
Example Framework #2



Source: Health Equity and the Social Determinants of Health. Canadian Medical Association 2017. <https://www.cma.ca/En/Pages/health-equity.aspx>.

Framework 2 is a more simplified version of the same ideas illustrated in Framework 1. This diagram breaks down the causes of disease into different categories by the extent to which they impact health. Rather than dividing factors by level, this framework organizes them in a way that may be more accessible to novice audiences or younger students. Here, 50 percent of disease is shown to be attributable to factors to aspects of an individual's life, including their income, education, race, and sense of belonging in society, while 25 percent is attributable to health care, 15 percent to biology, and 10 percent to environmental factors, like air quality and civic infrastructure.

Example Framework #3



Source: Solar O, Irwin A. A Conceptual Framework for Action on the Social Determinants of Health: Social Determinants of Health Discussion Paper 2. World Health Organization 2010.
http://www.who.int/sdhconference/resources/ConceptualframeworkforactiononSDH_eng.pdf.

Framework 3 looks across types of determinants of health to show that structural determinants influence intermediary determinants, which in turn cause a social gradient in health outcomes. It then looks within each of these types of determinants to understand their constituent processes. On the left side, the framework shows how structural determinants are composed of socioeconomic and political factors and social hierarchy factors, all of which interact with each other. On the right side, the framework shows how at the intermediate level, the health system can accentuate or mitigate the exposure and vulnerability of populations or individuals to conditions that compromise health.

Key Takeaways

The brief introductory overview offered in this teaching guide is designed to help provide educators with a few select tools they may use to guide students through the four lessons in this teaching pack. Below are some of the key takeaway points to keep in mind in any discussion of the social determinants of health:

- Understanding and addressing the root causes of health inequities that exist between advantaged and disadvantaged groups in society is a critical goal of working in global health.
- These inequities are explained by the social determinants of health, which is an umbrella term for a broad range of social factors that serve as the root causes of health and disease.
- Social determinants of health include the aspects of social environments that shape the contexts in which people live and grow, and have cascading impacts on population health both directly (e.g. by impacting individuals' biological processes) and indirectly (e.g. by influencing individuals' health-related attitudes and behaviors).
- There are numerous ways to think about the social determinants of health, and conceptual frameworks can serve as useful organizational tools to make sense of the complicated web of factors at play.
- Ensuring and improving global health is a team effort requiring action from the health sector (e.g. health care workers, ministries of health, drug companies, and international nongovernmental health organizations, among others) as well as from diverse actors in the non-health sector (e.g. urban planners, farmers, policymakers, lobbyists, multilateral institutions, and many more).