Global Health Research

```
  library(tidyverse)
```

```
-- Attaching packages --------------------------------------- tidyverse 1.3.1 --

v ggplot2 3.3.5     v purrr   0.3.4
v tibble  3.1.6     v dplyr   1.0.8
v tidyr   1.2.0     v stringr 1.4.0
v readr   2.1.2     v forcats 0.5.1

Warning: package 'tidyr' was built under R version 4.0.5

Warning: package 'readr' was built under R version 4.0.5

Warning: package 'dplyr' was built under R version 4.0.5

-- Conflicts ------------------------------------------ tidyverse_conflicts() --
x dplyr::filter() masks stats::filter()
x dplyr::lag()    masks stats::lag()
```

```
  library(knitr)
  library(kableExtra)
```

```
Attaching package: 'kableExtra'

The following object is masked from 'package:dplyr':

    group_rows
```

What is Global Health?

New York County Courthouse, Lower Manhattan, New York City, circa 2009

Judge presiding over jury selection: And what do you do, Mr. Green?

Me: Global health research.

Judge:

Me: I study access to mental health services.

Judge: So health policy then?

Me: No, mostly intervention research.

Judge: Globally.

Me: No, not quite.

Judge: What is global health, Mr. Green?

Me: Well, you see…*rambles*…

Judge: Thank you, Mr. Green. You are dismissed.

I've had this conversation hundreds of times since that court appearance. Now when asked, I say something like, "global health takes a global perspective on public health problems," drawing inspiration from @skolnik2019. In the wake of the pandemic, I find that people nod along at this framing. It makes sense to them. Thanks, COVID-19!

Go any deeper below the ontological surface, however, and you'll find that there is not a consensus definition of global health [@merson:2018]. We'll adopt this one from @koplan:2009:

> **Global health is an area for study, research, and practice that places a priority on improving health and achieving equity in health for all people worldwide.** Global health emphasizes transnational health issues, determinants, and solutions; involves many disciplines within and beyond the health sciences and

> promotes interdisciplinary collaboration; and is a synthesis of population-based prevention with individual-level clinical care.

Take note of two key elements of their definition:

1. it includes scholars, researchers, and practitioners working across disciplinary boundaries; and
2. it goes beyond simply improving health to include the goal of achieving health equity.

To expand on the first point, this definition reflects the reality that global health challenges are complex, so the search for solutions must span disciplines. In the study of malaria, for example, you can read about the spread of the disease (epidemiology), the impact of illness on future productivity (economics), the merits of free or subsidized bed nets (public policy), mosquito habitats (ecology), the efficacy of vaccines to prevent the disease (medicine and statistics), rapid diagnostic tests (biomedical engineering), and the adoption and use of bed nets (psychology), just to name a few areas of inquiry.

The second point is that global health is action-oriented, seeking to achieve health equity for all people worldwide. The WHO [-@who:2021] defines **equity** as follows:

> Equity is the absence of unfair, avoidable or remediable differences among groups of people, whether those groups are defined socially, economically, demographically, or geographically or by other dimensions of inequality (e.g. sex, gender, ethnicity, disability, or sexual orientation). Health is a fundamental human right. Health equity is achieved when everyone can attain their full potential for health and well-being.

Put another way, health inequities are unfair and unjust differences in healthcare access or health outcomes that can be prevented or fixed. Health inequities are structural, often resulting from decisions we make about who gets access to resources.

The consequence of inequity is often inequality. For instance, inequitable access to healthcare services can lead to unequal

health outcomes—**health inequalities**—between groups. Differences in health status are also referred to as **health disparities**.

The COVID-19 pandemic has given us many examples of health inequities and disparities. For instance, data compiled by the website *Health Inequities Tracker*, visualized in Figure **??**, show that through at least August 2021, Hispanics and Latinos in the United States were over-represented in COVID-19 hospitalizations, while non-Hispanic Whites were substantially under-represented [@het].

```
knitr::include_graphics("images/figures/disparity.png")
```

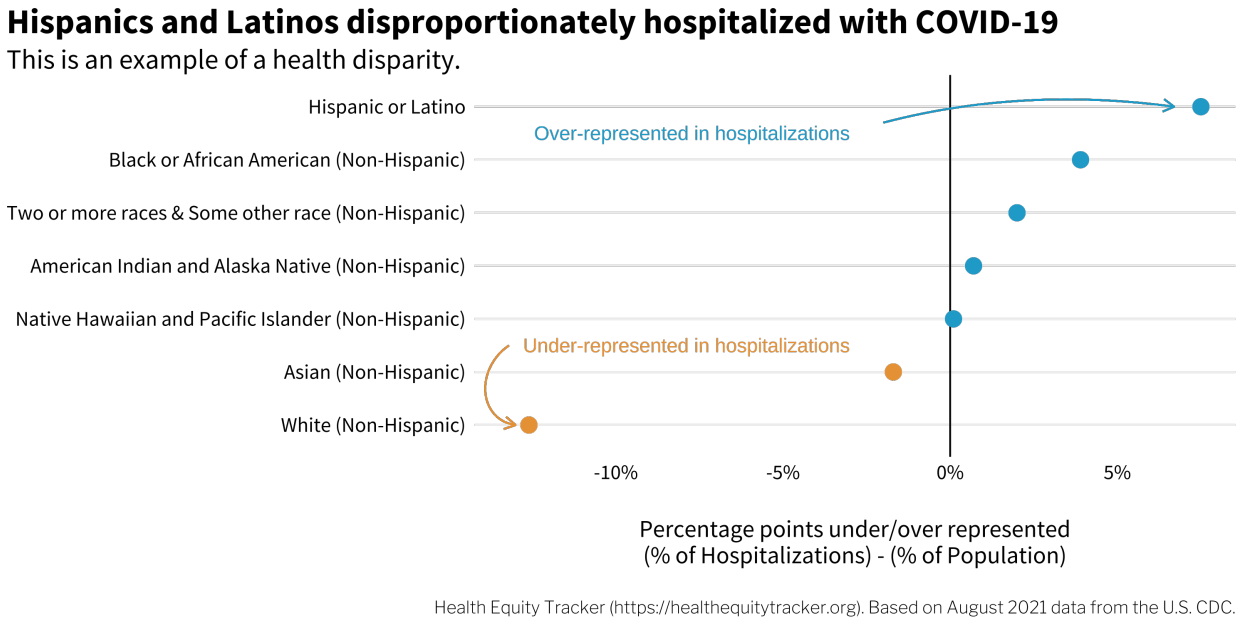

Figure 1: COVID-19 health disparities.

@macias:2020 point to several factors that might help to explain why Latinos and Hispanics were disproportionately affected by COVID-19:

- Higher rates of co-morbid health conditions
- More likely to be underinsured or uninsured