



GLOBAL HEALTH STARTER KIT FOR DENTAL EDUCATION

Module 4: Social Determinants and Risks

Authors:

Brittany Seymour, DDS, MPH
Assistant Professor
Oral Health Policy and Epidemiology
Office of Global and Community Health
Harvard School of Dental Medicine

Jennifer Kasper, MD, MPH
Assistant Professor
Department of Social Medicine
Harvard Medical School
Chair, Global and Community Health Committee
HMS Scholars in Medicine

Karen Sokal-Gutierrez MD, MPH
Clinical Professor
Pediatrics
UC Berkeley-UCSF Joint
Medical Program





Competencies:

1.2.1. Identify and describe common risk factors of oral diseases.

1.2.2. Identify and describe common (social) determinants of oral disease.

2.1.2. Understand and apply health promotion and risk reduction strategies (such as health eating, cessation of tobacco, and reduction of harmful alcohol use).

2.1.5. Identify patient populations at increased risk for oral diseases and ensure regular attendance through oral health professionals.

2.2.3. Identify barriers to access and use of health and oral health services (e.g., affordability, lack of insurance or providers, cultural and geographic issues); facilitate solutions to overcome them.

2.3.1. Advocate for relevant strategies to prevent and reduce risk factors based on an advocacy strategy to identify, mobilize, and connect relevant stakeholders/actors.



Learning Objectives

By the end of this module, students should be able to do the following:

- Define the social determinants of health
- Describe the social gradient in health
- Explain the concept of the 'bottom billion,' their indicators and characteristics
- Define the Biomedical Model and Sociocultural Model for health and discuss the advantages and disadvantages of each



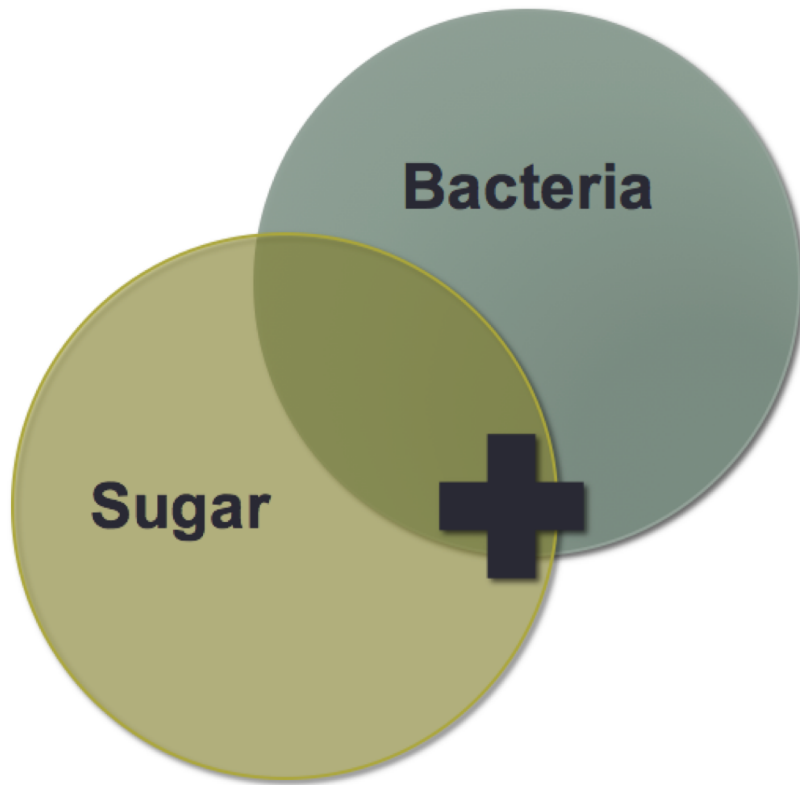
What causes a cavity?



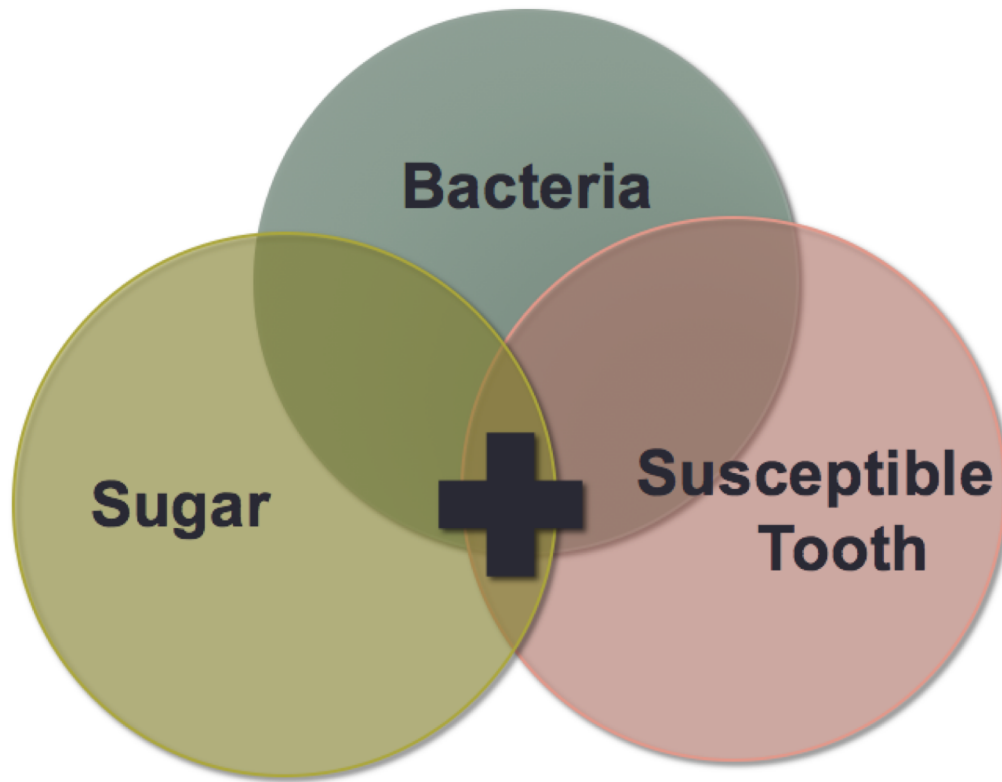
What causes a cavity?



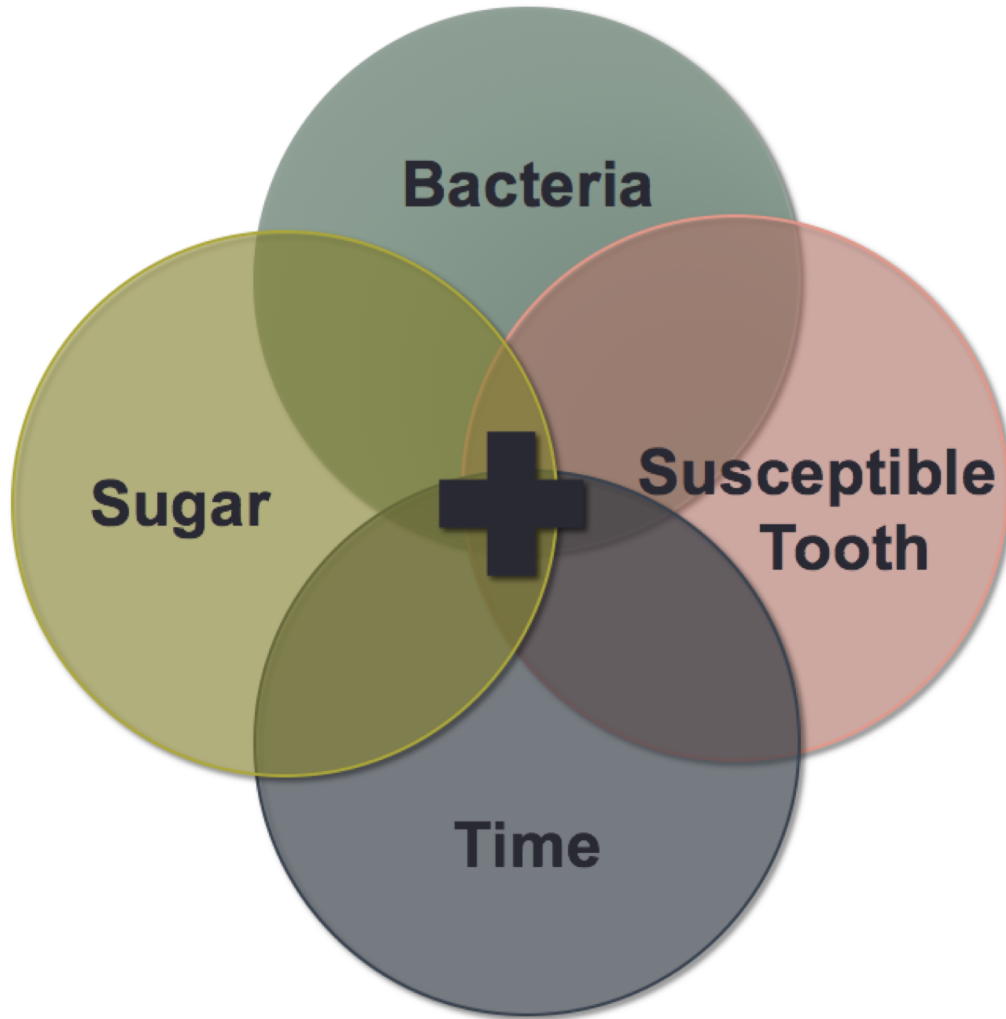
What causes a cavity?



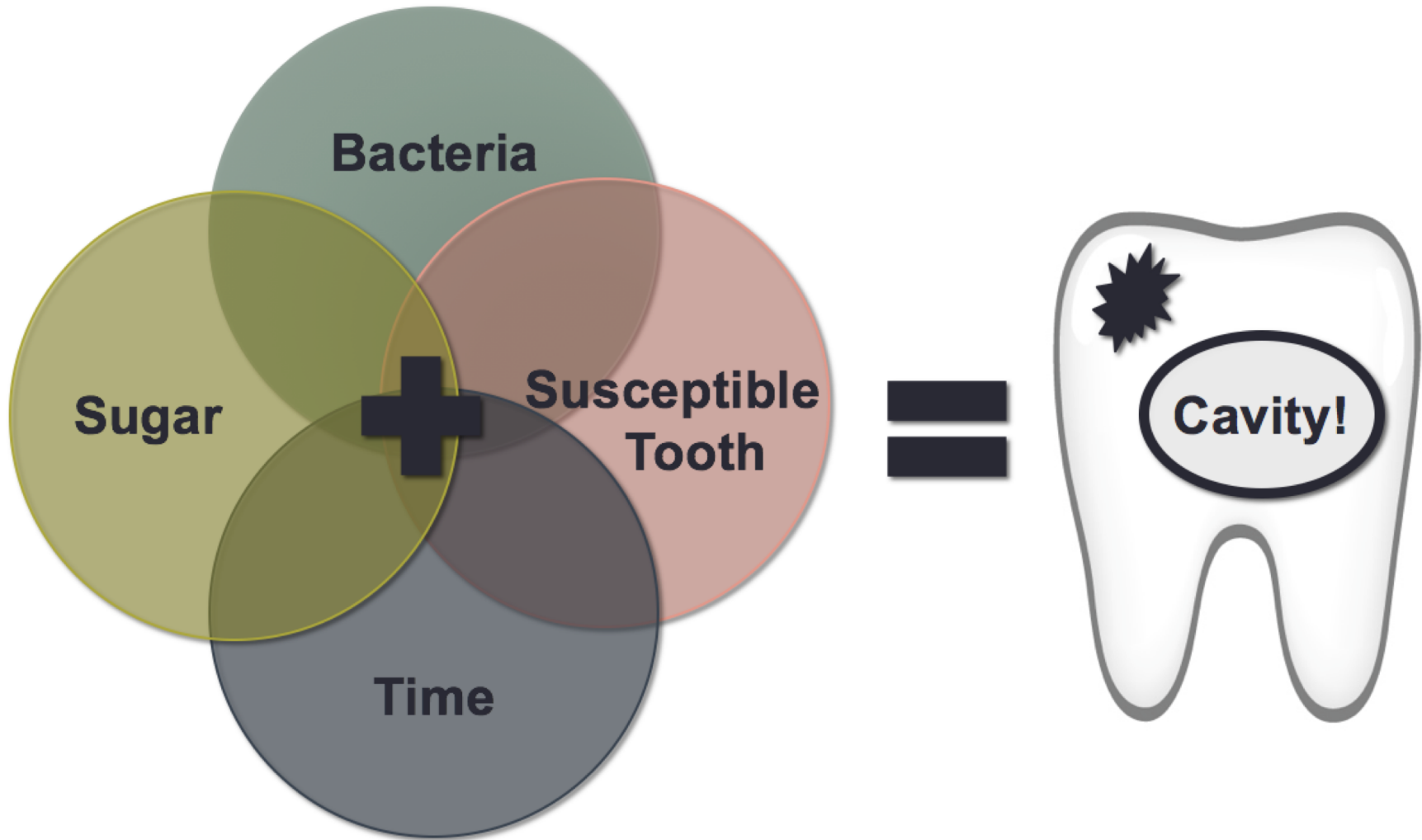
What causes a cavity?



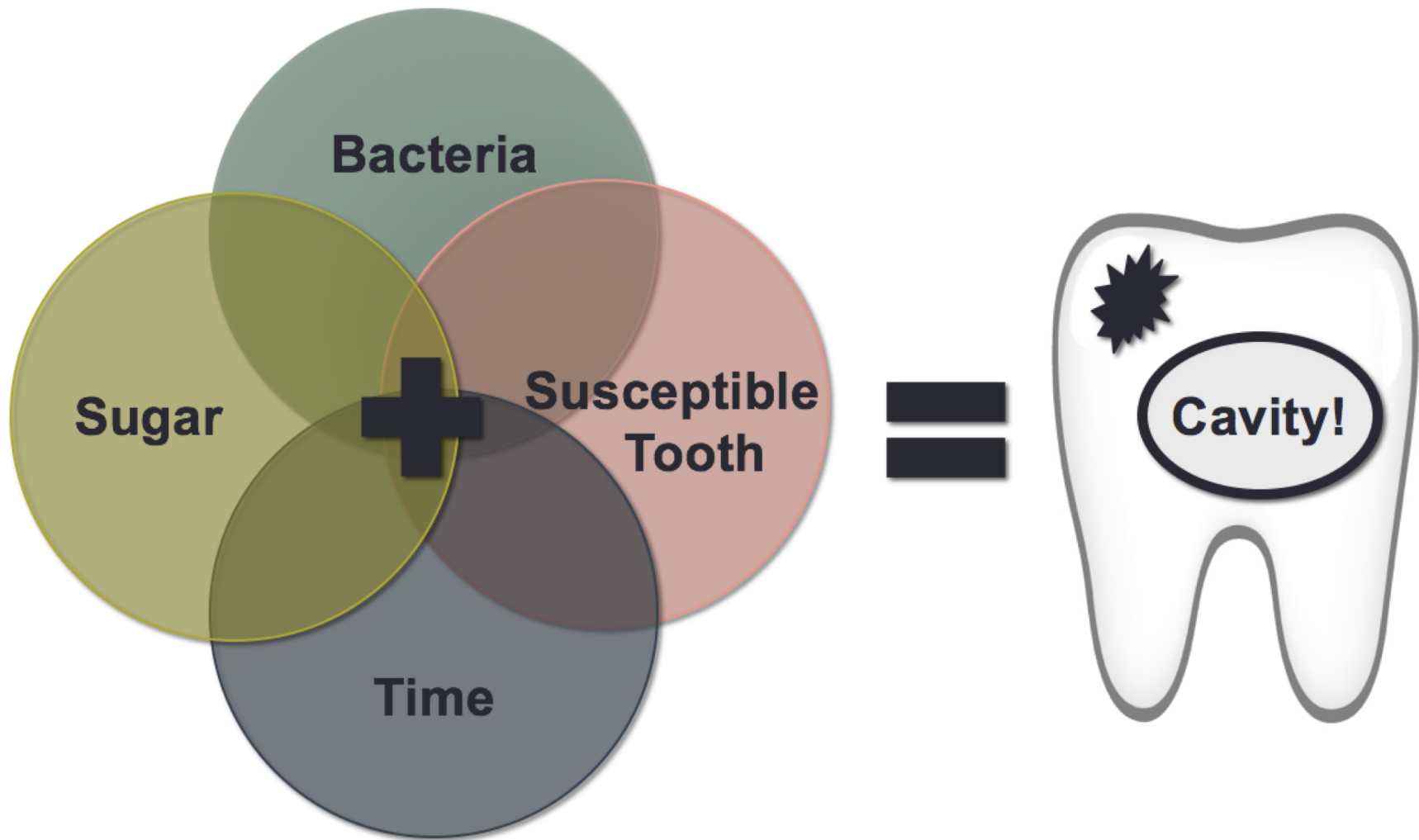
What causes a cavity?



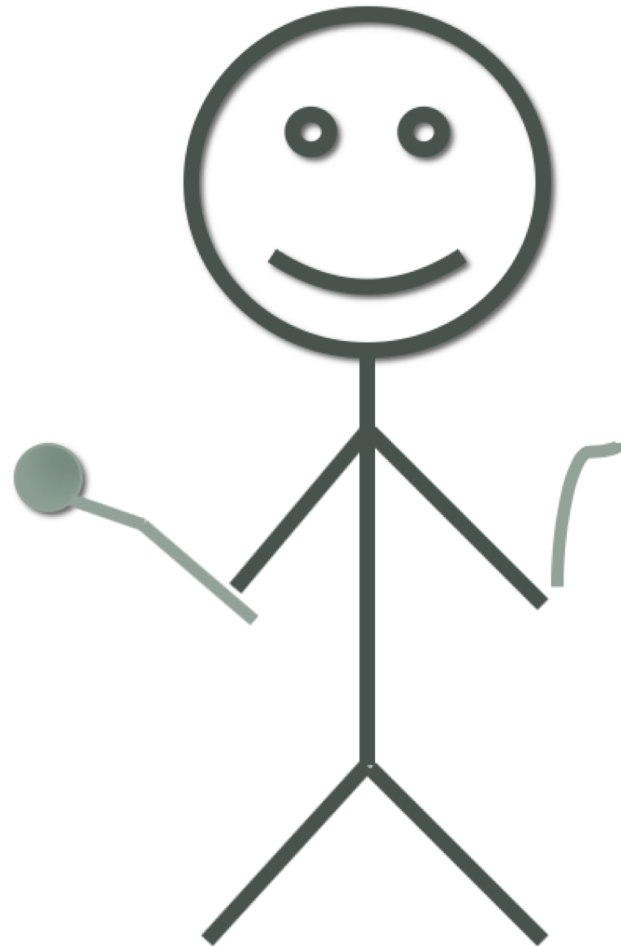
What causes a cavity?



What is a susceptible tooth?



Meet Dr. Tooth



Warm-Up: Meet Joe



But there's a problem...





The Social Determinants of Health

Income and resource distribution

Physical environment and housing

Access to health services

Education

Employment and working conditions

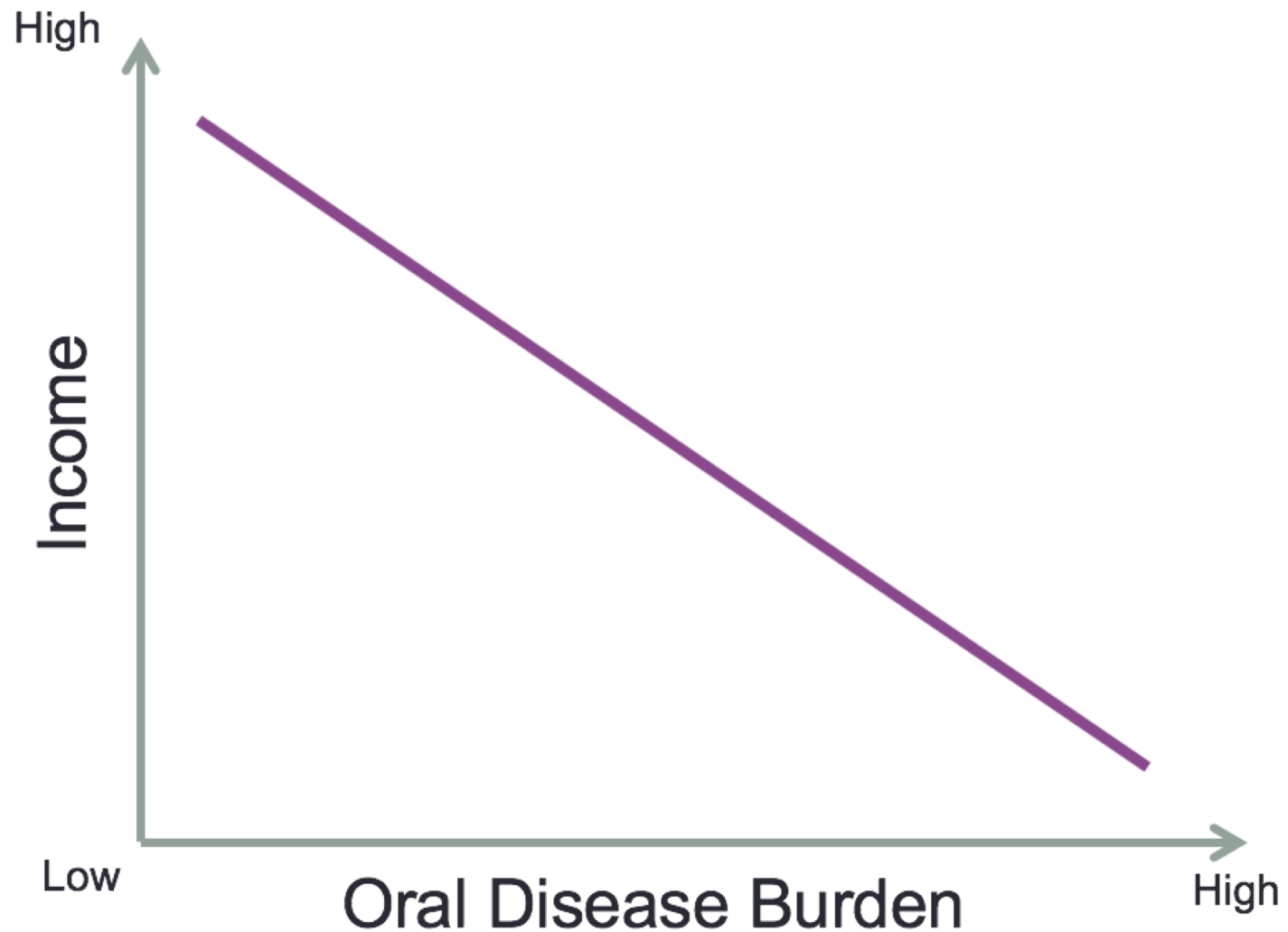
Food insecurity

Social inclusion and support

Race, gender, age, culture

...more

The Social Gradient





The Bottom Billion

Average life expectancy: 50 yrs. (vs. 67)

Proportion of children who die before their 1st birthday is 14% (vs. 4%)

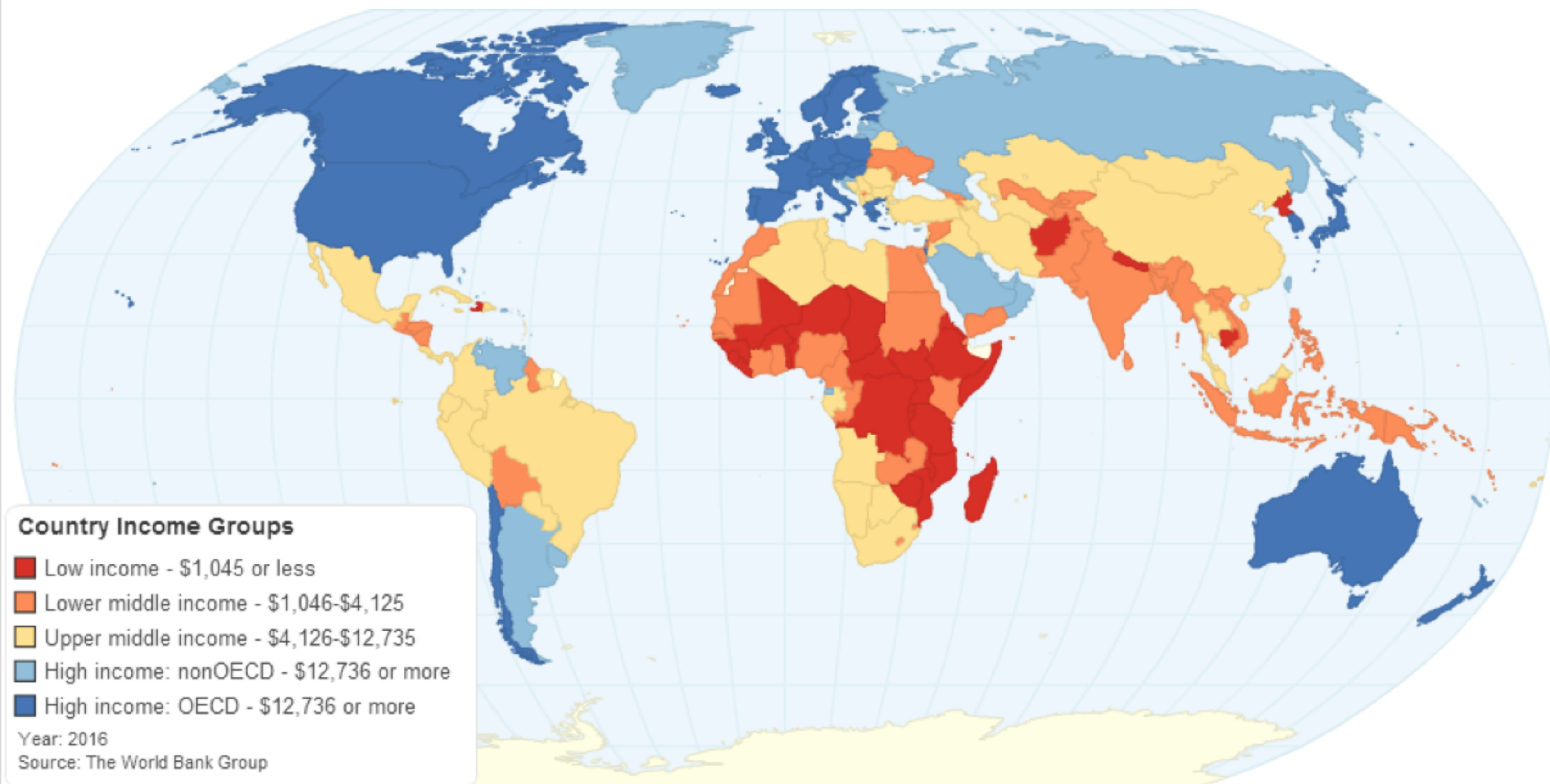
Proportion of children with symptoms of chronic malnutrition is 36% (vs. 20%)

Small countries (58 countries with combined populations smaller than India or China)

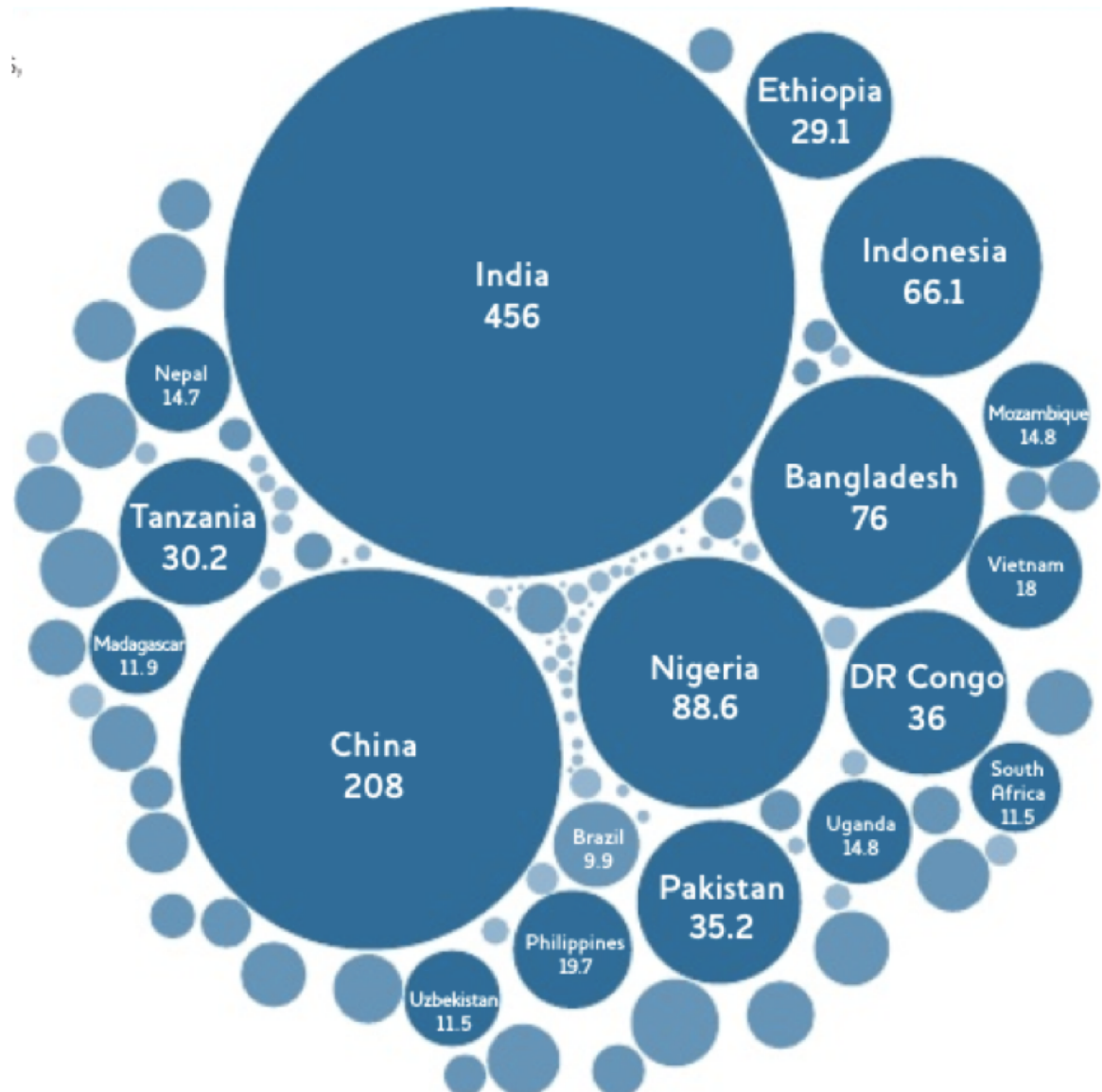


The Bottom Billion: Previously

Who were they? (Africa +)



The New Bottom Billion



(in millions)

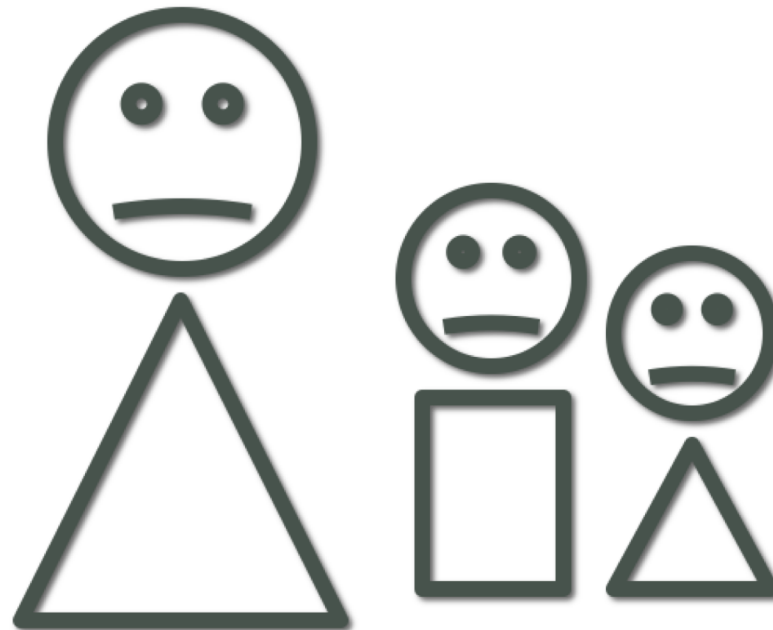


The New Bottom Billion

A renewed focus on PEOPLE instead of LOCATIONS

The New Bottom Billion

And many of those PEOPLE are women and children





Global Goals for Women and Children

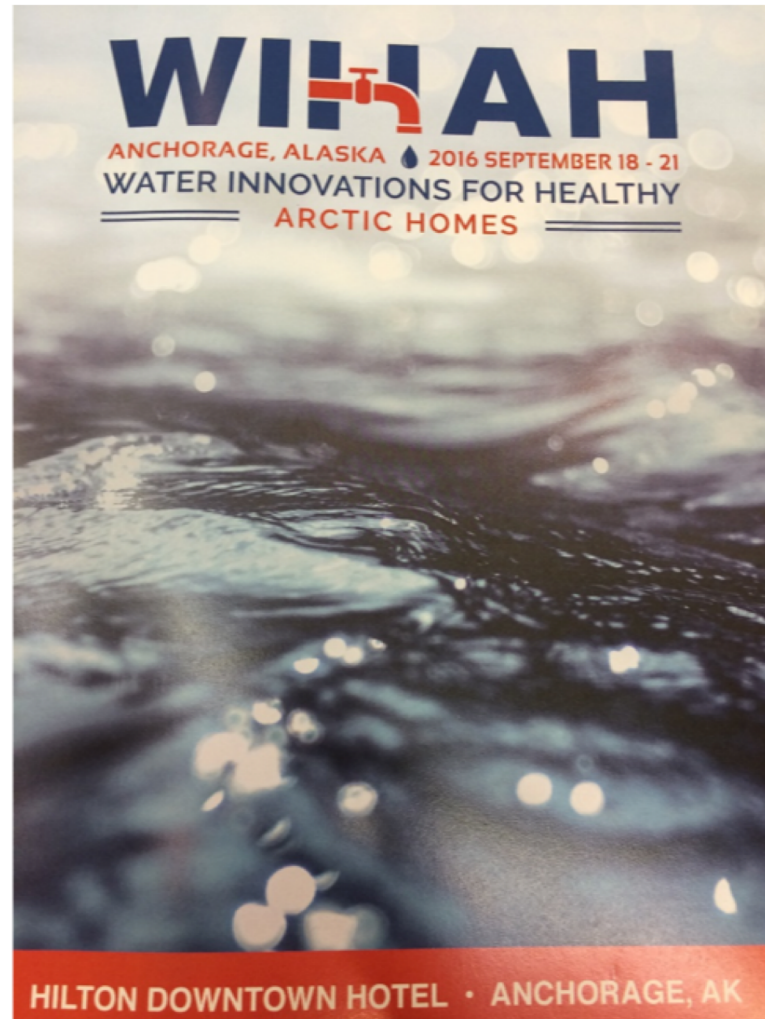




Example: Climate Change

- Women farmers account for up to 80% of all food production in developing countries
- 90% of the female labor force in many African countries are engaged in agricultural work
- Natural disasters, climate change, and other environmental insults negatively impact women in greater numbers
 - Food insecurity
 - Land rights
 - Migration
 - Access to resources (water)
 - Loss of income (drought and harvest)

Example: Climate Change





Example: Child marriage

- Child marriage is a worldwide problem
- From 2000-2010, 38 U.S. states allowed children under the age of 18 to marry; the minors were primarily girls, some as young as 12
- Of those who were girls, most male partners were older than 18; some had age gaps of 13 years or more
- In total, its estimated that nearly 250,000 children were married in that time period in the United States



“The Girl Effect”



Other vulnerable populations:

- Geriatric and aging, over 65
- Special needs
- LGBTQ
- Others...



More research, more data is needed



When you were a child...

- What did your family believe about taking care of you when you were sick?
 - Foods that you ate when sick?
 - Causes of fever? Treatment for the flu?
 - How did you know when you were sick enough to stay home from school?
 - How did your family feel about taking you to the doctor?

Models for Health

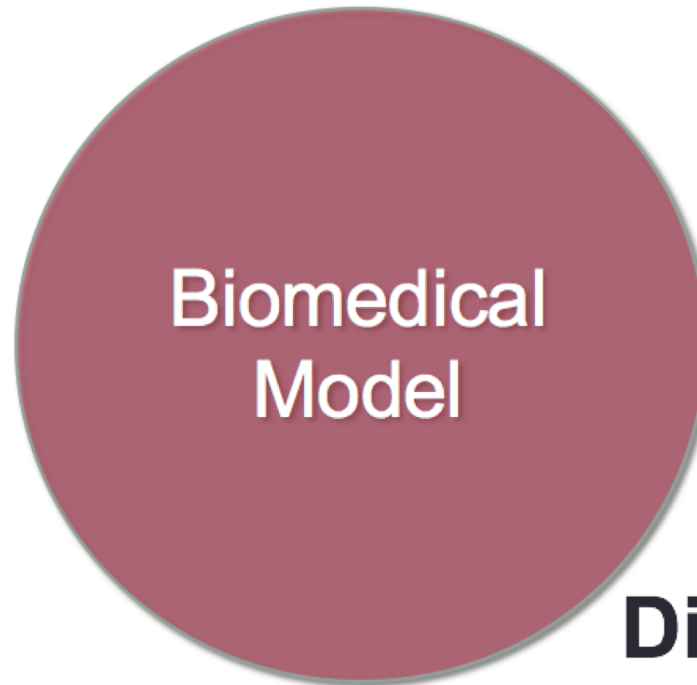
A large, solid maroon circle with a thin grey border, centered on the slide. Inside the circle, the words 'Biomedical Model' are written in white, sans-serif font, stacked vertically.

Biomedical
Model

Models for Health

Advantages:

- Evidence-based
- Demonstrated success
- Universal



Disadvantages:

- Not specific to context
- Lack of receptivity
- Doesn't account for behavior or culture



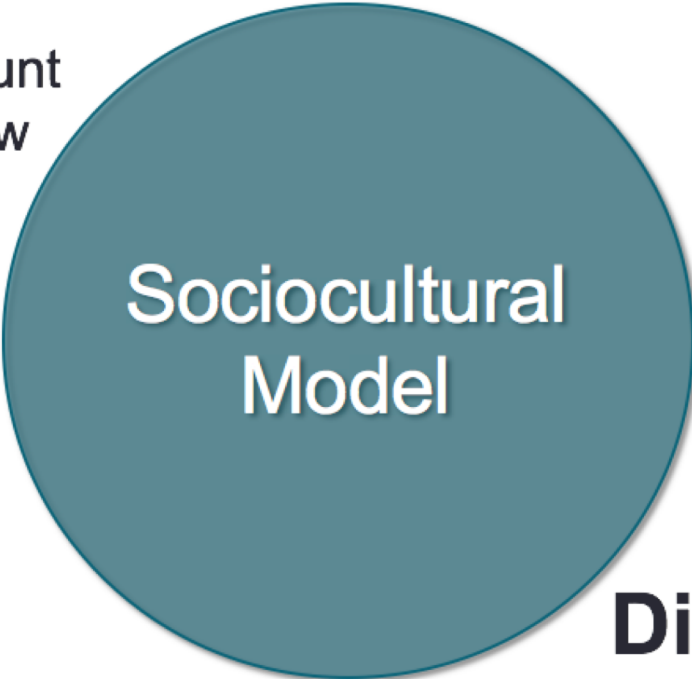
Models for Health

Sociocultural
Model

Models for Health

Advantages:

- Takes culture into account
- Applies how people view their own health
- Allows for social and environmental factors

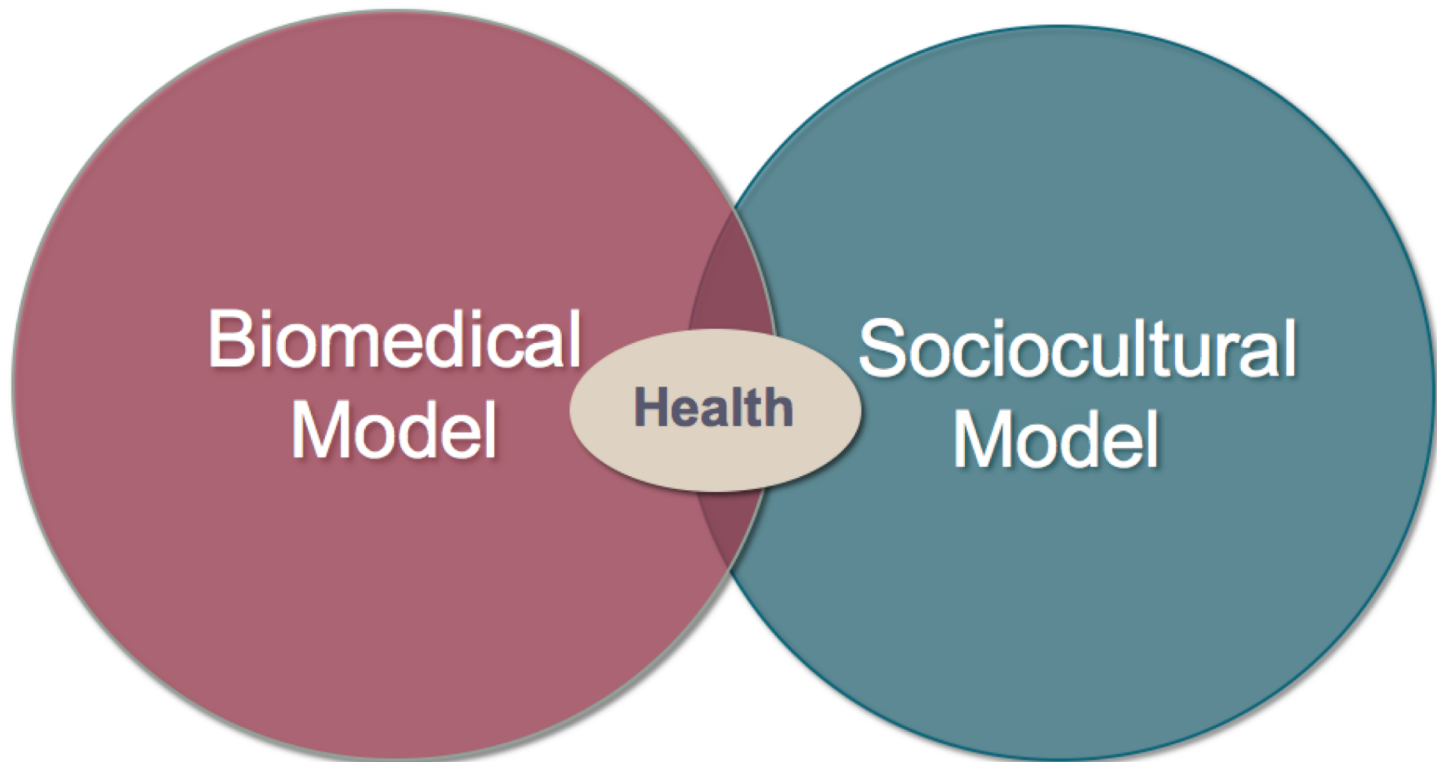


Sociocultural
Model

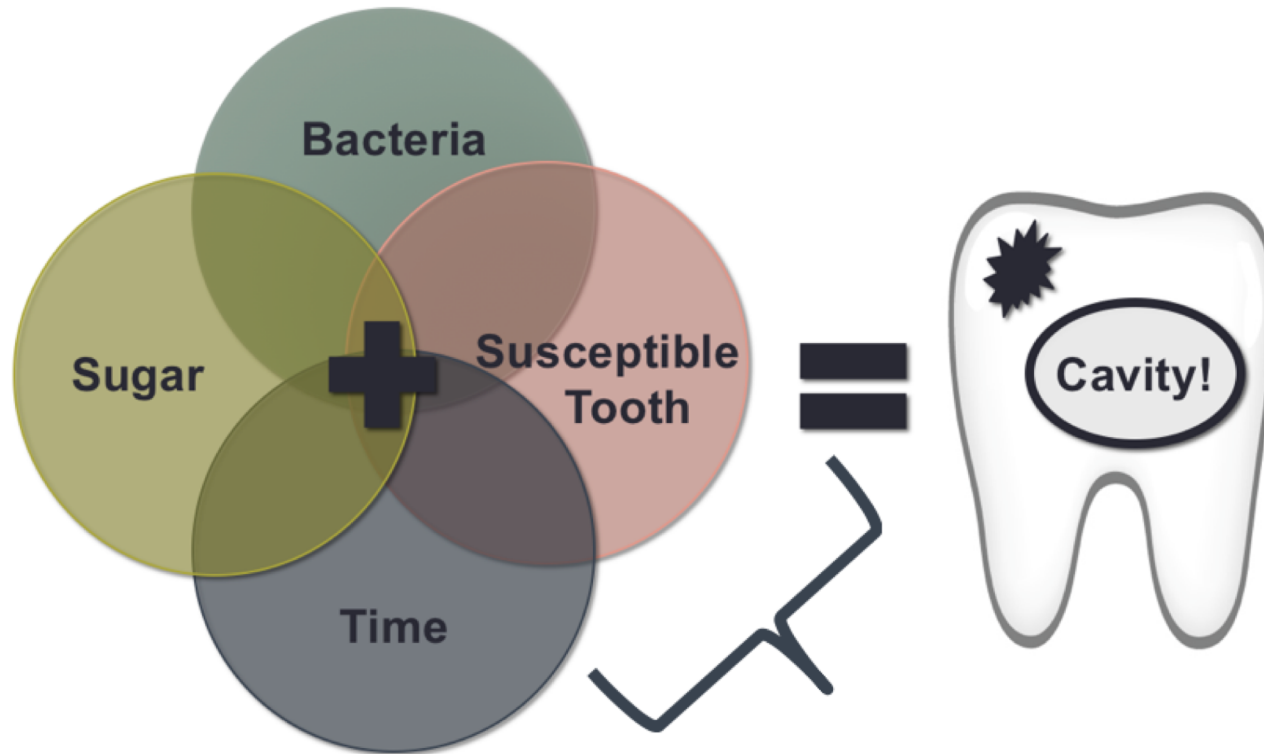
Disadvantages:

- Not universal/generalizable
- Time consuming and costly
- Can stigmatize or stereotype health beliefs

Models for Health

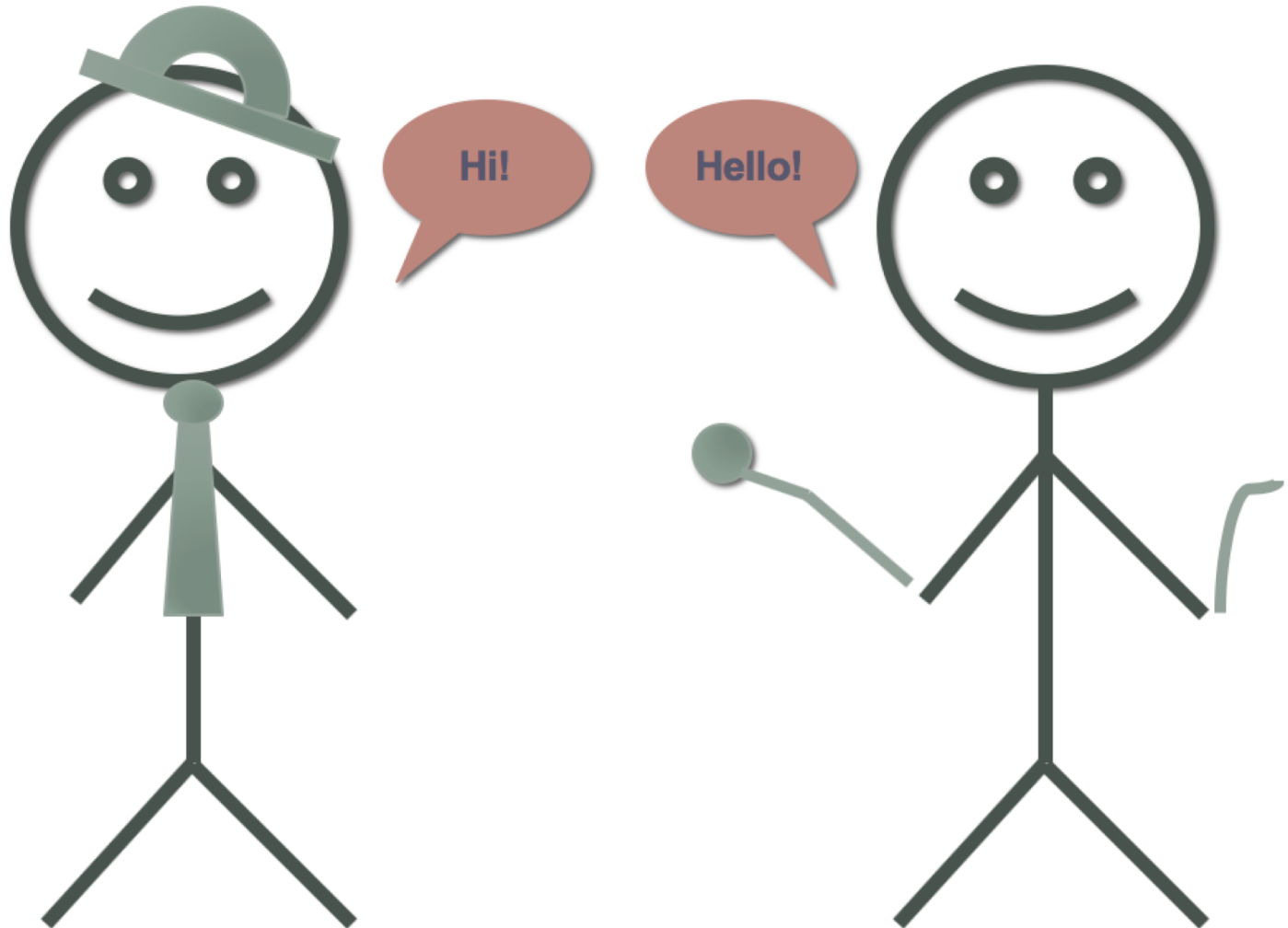


What is a susceptible tooth?



Gender, age, race, socioeconomic status, built/home environment, education, political climate, marital status, social support, language, culture, physical ability/disability, transportation/proximity, religion, employment...

Joe Meets Dr. Tooth





To continue learning, please check out our other modules:

Module 1: Global Trends

Module 2: Global Goals

Module 3: Back to Basics-Primary Care

Module 5: Ethics and Sustainability



Global Health Starter Kit for Dental Education

Funding for the project “Toward Competency-Based Best Practices for Global Health in Dental Education: A Global Health Starter Kit” was provided by a Consortium of Universities for Global Health Dr. Thomas Hall Global Health Education Grant. We wish to acknowledge the CUGH Global Oral Health Interest Group for their support of this project and the competency work on which it was based.

We also wish to acknowledge the Harvard School of Dental Medicine Department of Oral Health Policy and Epidemiology and Office of Global and Community Health for their support of this project and the course material on which it was based, and Dr. Erinne Kennedy for her contributions to the work in Alaska.