

GLOBAL HEALTH 101

KaiserEDU.org Tutorial



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Tutorial Goals



Provide definitions of key concepts and measures

- 
- **Describe major global health challenges, the determinants of health, and burden of disease**



Summarize the global response to these challenges, including key stakeholders and key initiatives



Highlight future global health opportunities and challenges

Global Health is...

- ❖ No standard definition
- ❖ Approach to health globally has evolved from tropical health and international health to global health

Global health has been described as:

“encompassing ‘health problems, issues, and concerns that transcend national boundaries, and may best be addressed by cooperative actions’” and may be viewed “not just as a state but also the goal of improving health for all people by reducing avoidable disease, disabilities, and deaths.”

—Institute of Medicine (2009)

Selected Key Global Health Concepts and Measures

Prevalence

- the number of people with a particular condition at any given time

Incidence

- the number of new cases of a disease or condition in a population within a period of time

Morbidity

- the number of people who became ill from a disease or at a certain stage of life

Mortality

- the number of people who died from a disease or at a certain stage of life

Burden of Disease

- a comprehensive demographic and epidemiological framework used to assess the comparative importance of diseases, injuries, and risk factors in causing premature death, loss of health, and disability

Disability-Adjusted Life Year (DALY)

- designed to quantify the burden of diseases, injuries, and risk factors, adds together years of life lost due to premature mortality with the equivalent number of years of life lived with disability or illness

Major Global Health Challenges

Infectious Diseases

- HIV/AIDS
- Malaria
- Tuberculosis (TB)
- Neglected tropical diseases (NTDs)

Non-Communicable Diseases (NCDs)

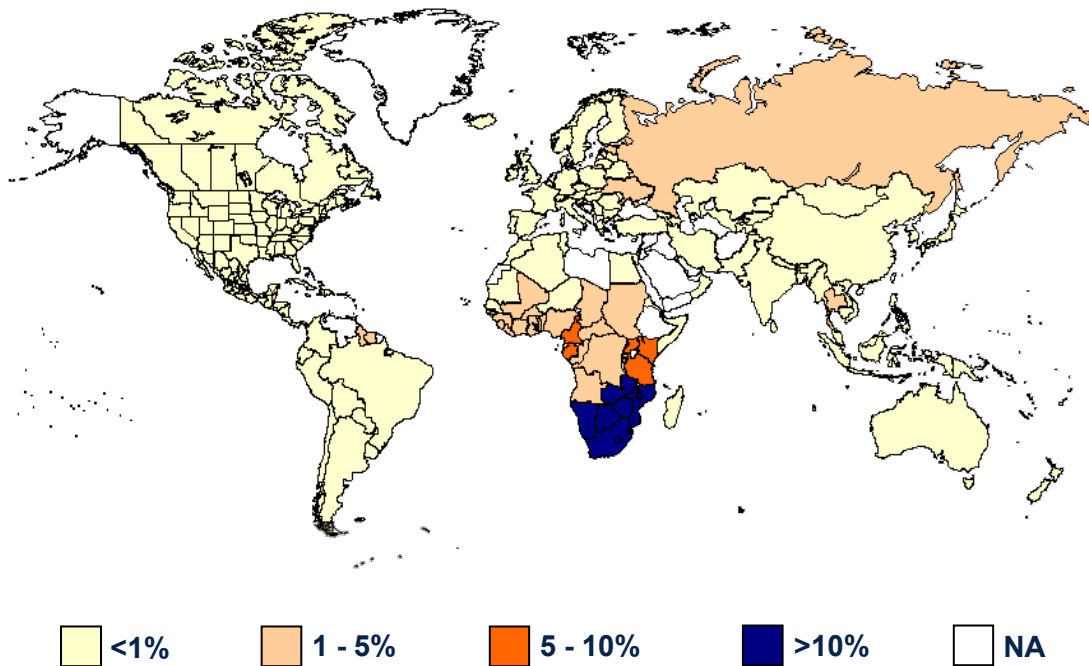
- Cancer
- Heart Disease
- Diabetes
- Obesity

Population-Based and Other Challenges

- Maternal, newborn, and child health (MNCH)
- Family planning and reproductive health (FP/RH)
- Nutrition
- Clean water, sanitation, and hygiene (WASH)
- Health systems strengthening

Major Global Health Challenges: Examples

Adult HIV Prevalence Rate (Ages 15-49), 2009



HIV/AIDS

- Almost all (97%) of those living with HIV reside in low- and middle-income countries, particularly in sub-Saharan Africa.

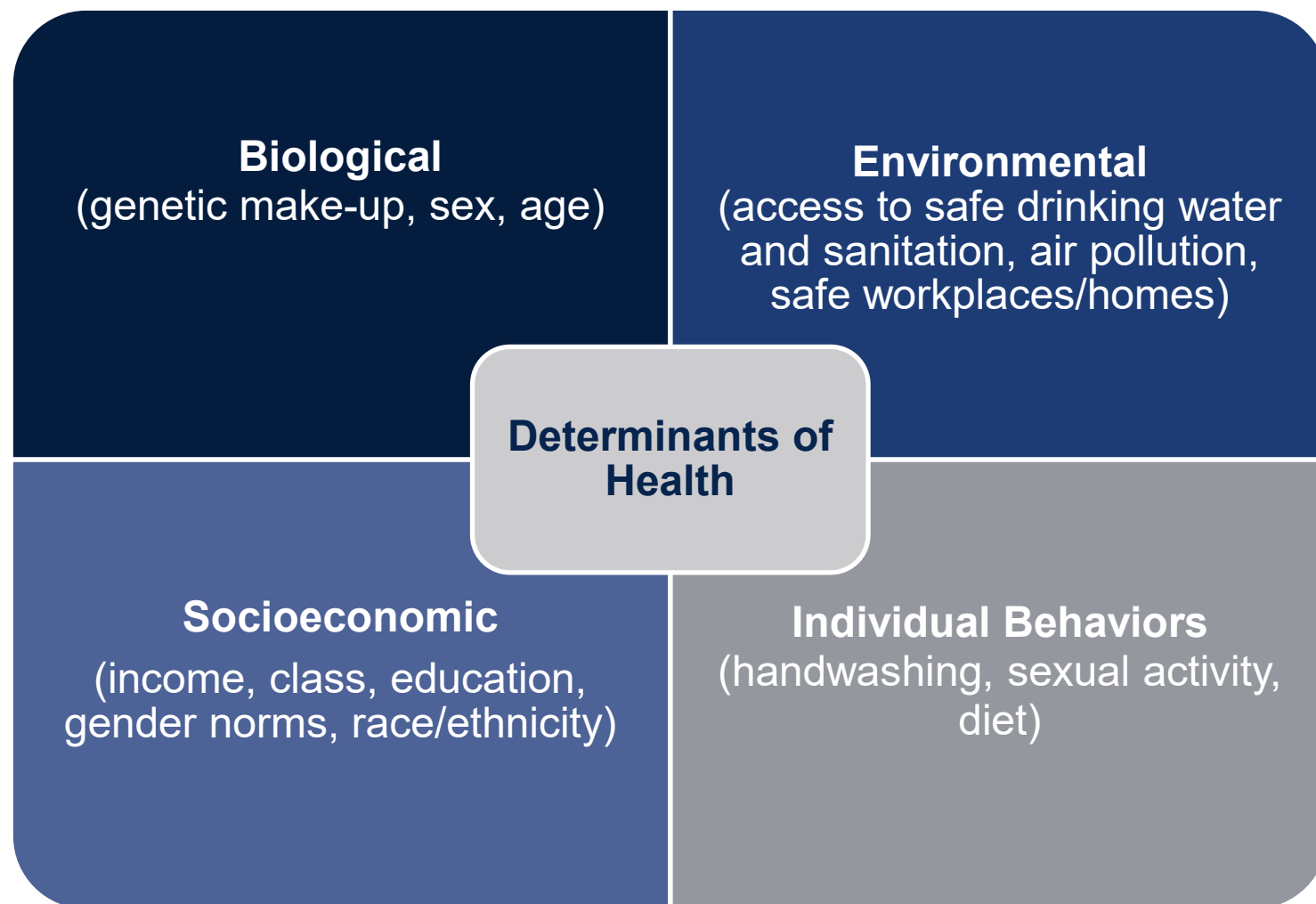
Non-Communicable Diseases (NCDs)

- Nearly 80% of all deaths caused by NCDs occurred in low- and middle-income countries in 2008.

Maternal Mortality

- 99% of maternal deaths occurred in developing countries in 2008.

Major Determinants of Health



Global Burden of Disease: Leading Causes of Death, 2008

Rank	Low-Income Countries	Middle-Income Countries	High-Income Countries
1	Lower respiratory infections	Ischaemic heart disease	Ischaemic heart disease
2	Diarrheal diseases	Stroke and other cerebrovascular diseases	Stroke and other cerebrovascular diseases
3	HIV/AIDS	Chronic obstructive pulmonary disease	Trachea, bronchus, lung cancers
4	Ischaemic heart disease	Lower respiratory infections	Alzheimer and other dementias
5	Malaria	Diarrheal diseases	Lower respiratory infections
6	Stroke and other cerebrovascular diseases	HIV/AIDS	Chronic obstructive pulmonary disease
7	Tuberculosis	Road traffic accidents	Colon and rectum cancers
8	Prematurity and low birth weight	Tuberculosis	Diabetes mellitus
9	Birth asphyxia and birth trauma	Diabetes mellitus	Hypertensive heart disease
10	Neonatal infections and other	Hypertensive heart disease	Breast cancer

Note: "Neonatal Infections and Other" category also includes other non-infectious causes arising in the perinatal period apart from prematurity, low birth weight, birth trauma and asphyxia.

Source: WHO, "The Top Ten Causes of Death," fact sheet #310, May 2011, " http://www.who.int/mediacentre/factsheets/fs310_2008.pdf.

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Global Burden of Disease: DALYs Lost, 2004

Rank	Low-Income Countries	Middle-Income Countries	High-Income Countries
1	Lower respiratory infections	Unipolar depressive disorders	Unipolar depressive disorders
2	Diarrheal diseases	Ischaemic heart disease	Ischaemic heart disease
3	HIV/AIDS	Cerebrovascular disease	Cerebrovascular disease
4	Malaria	Road traffic accidents	Alzheimer and other dementias
5	Prematurity and low birth weight	Lower respiratory infections	Alcohol use disorders
6	Neonatal infections and other	Chronic obstructive pulmonary disease	Hearing loss, adult onset
7	Birth asphyxia and birth trauma	HIV/AIDS	Chronic obstructive pulmonary disease
8	Unipolar depressive disorders	Alcohol use disorders	Diabetes mellitus
9	Ischaemic heart disease	Refractive errors	Trachea, bronchus, lung cancers
10	Tuberculosis	Diarrheal diseases	Road traffic accidents

Note: "Neonatal infections and other" category also includes other non-infectious causes arising in the perinatal period apart from prematurity, low birth weight, birth trauma and asphyxia. These non-infectious causes are responsible for about 20% of DALYs shown in this category.

Source: WHO, *The global burden of disease: 2004 update*, 2008,

http://www.who.int/healthinfo/global_burden_disease/2004_report_update/en/index.html.

Key Stakeholders in Global Health

Multilateral and International Organizations

- Global Fund
- UN Agencies, such as:
 - WHO
 - UNAIDS
 - UNFPA
- GAVI
- Stop TB
- Roll Back Malaria

Countries

- Donor countries, such as those in the Group of 8 (G-8, including United States of America, United Kingdom, Japan, Germany, France) and the Group of 20 (G-20)
- Partner countries, such as South Africa, Vietnam, and Haiti

Private Sector

- Businesses, including pharmaceutical companies
- Foundations

Academia and Research Organizations

- Universities
- Research institutions
- Think tanks

Civil Society

- Non-governmental organizations (NGOs)
- Community organizations

Individuals

- Affected individuals
- Family members
- Community members

Selected Recent Global Health Initiatives

**Global Alliance for
Vaccines and
Immunisation
(GAVI)**

2000

Abuja Declaration

2000

**Millennium
Development Goals
(MDGs)**

2000

**United Nations
General Assembly
on HIV/AIDS**

2001

**Global Fund to
Fight AIDS,
Tuberculosis, and
Malaria**

2002

**U.S. President's
Emergency Plan
for AIDS Relief
(PEPFAR)**

2003

**World Health
Organization 3x5
Initiative**

2003

**International Health
Regulations**

2005/2007

**International Health
Partnership Plus
(IHP+)**

2007

**United Nations Millennium Development Goals'
Review Summit**

2010

Spotlight on the Millennium Development Goals (MDGs)

“A new global partnership to reduce extreme poverty and setting out a series of time-bound targets”

Announced in the
United Nations
Millennium Declaration
(2000)

Agreed by all UN
member-states and the
world's leading
development institutions

Goal date:
2015

The Millennium Development Goals (MDGs)

MDG 1

- Eradicate extreme poverty and hunger

MDG 2

- Achieve universal primary education

MDG 3

- Promote gender equality and empower women

MDG 4

- Reduce child mortality

MDG 5

- Improve maternal health
- Achieve universal access to reproductive health

MDG 6

- Combat HIV/AIDS, malaria, and other diseases

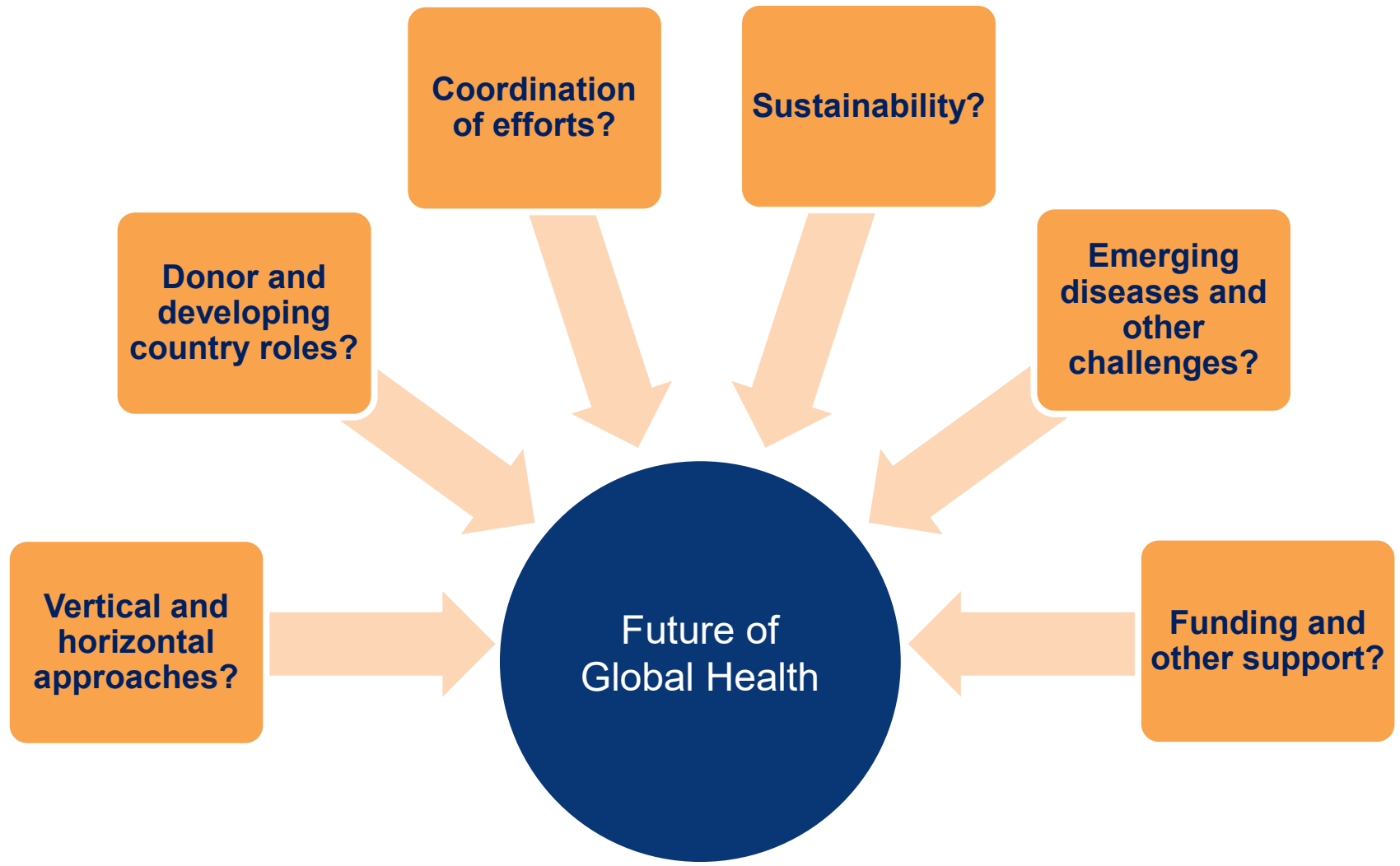
MDG 7

- Ensure environmental sustainability

MDG 8

- Foster global partnerships for development

Looking Forward: Selected Opportunities and Challenges



Additional Online Resources on Global Health

Multilateral and international organizations

GAVI	http://www.gavialliance.org/
Global Fund	http://www.theglobalfund.org/en/
Millennium Development Goals (MDGs)	http://www.un.org/millenniumgoals/
UNAIDS	http://www.unaids.org/en/
UNFPA	http://www.unfpa.org/public/
UNICEF	http://www.unicef.org/
World Health Organization	http://www.who.int/en/

Learning, data, and analysis

Kaiser Family Fndn. Global Health Gateway	www.globalhealth.kff.org
KaiserEDU issue module on global health	www.KaiserEDU.org
Kaiser Daily Global Health Policy Report	http://globalhealth.kff.org/News.aspx
Consortium of Universities for Global Health	http://www.cugh.org/index.php
Global Health Council	www.globalhealth.org/
Global Health Education Consortium	http://globalhealthedu.org/
Institute of Medicine	http://iom.edu/