



Health Policy

Subject 8

Global Health



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Learning Objectives

Objectives

By the end of this lecture, students should be able to:

1. Define global health
2. shed the light on some issues and perspective of global health.
3. Discuss **key dimensions of global health.**
4. **Describe the** goals of **global health.**
5. Important aspects in the function of global health.

Global health is the health of populations in a global context and transcends (exceeds) the perspectives and concerns of individual nations.

Health problems that transcend national borders or have a global political and economic impact, are often emphasized.

Definition : 'the area of study, research and practice that places a priority on improving health and achieving equity in health for all people worldwide'.

Global health is about achieving better health outcomes for vulnerable populations and communities around the world ,

What are the four key dimensions of global health?

It is supported by four main bases:

(A) clinical decision based on data and evidence;

(B) population-based rather than individual focus;

(C) social goals;

(D) preventive rather than curative care.

The main goal is to **eliminate health disparities** in low-resource settings around the world **through research, education and collaborative intervention**.

Thus, global health is about:

- worldwide **improvement** of health,
- **reduction of disparities**, and
- **protection against global threats** that disregard national borders .



✚ The major international agency for health is the [World Health Organization \(WHO\)](#).

✚ Other important agencies with impact on global health activities include [UNICEF](#), [World Food Program \(WFP\)](#), [United Nations University](#), [International Institute for Global Health](#), [Save the children](#), [CDC](#) (Centers for Disease Control and Prevention) and the [World Bank](#).

✚ A **major initiative** for improved global health is the [United Nations Millennium Declaration](#) and the globally approved [Millennium Development Goals](#).

History

- First occurred in the 1940s, with the formation of the **United Nations**, **World Health Organization** and **World Bank Group**.
- In 1948, United Nations gathered to create the **World Health Organization**.
- A **cholera epidemic** that took **20,000 lives** in Egypt in 1947 and 1948 encouraged the international community to action.
- One of the greatest accomplishments of the international health community since then was the **eradication of smallpox**. The last naturally occurring case of the infection was recorded in 1978.
- Subsequent efforts to **eradicate malaria** and other diseases have not been as effective.

Disciplinary perspectives

Global health is a **research field** of **medical** and **social science disciplines** — including **demography**, **economics**, **epidemiology**, **political economy** and **sociology**.

It focuses on **determinants and distribution of health** in international contexts.

1. An **epidemiological** perspective **identifies major global health problems**.
2. A **medical** perspective **describes the pathology** of major **diseases**, and **promotes prevention, diagnosis, and treatment** of these diseases.
3. An **economic** perspective emphasizes **how to achieve maximal health care effects from the available resources**.
4. **Ethical approach** emphasizes aspects of **health equity**.

Problems Common to Developing Countries

- Unsafe water
- Malnutrition & obesity
- Diarrheal diseases
- HIV/AIDS & malaria
- Tuberculosis
- Vaccine-preventable diseases .
- Maternal mortality
- Reproductive health
- Refugees from famine and war
- Viral hepatitis B
- Human trafficking

Old & New Emerging Health Issues

- Dengue fever
- Severe Acute Respiratory Syndrome (SARS)
- Cholera
- HIV/AIDS
- Hantavirus
- Influenza & avian flu
- EBOLA
- COVID19

Environment

- Global pollution
- Depletion of ozone layer
- Greenhouse gases
- Biodiversity of plants & animals
- Chemical pollution
- Radiation
- Bioterrorism
- **Tobacco-Related Illnesses**



Measurement is critical for global health

- To understand **disease trends** and to set priorities.
- To assess progress towards **elimination or other targets**.
- To **evaluate the effectiveness of interventions** .
- To provide feedback to improve performance.
- To improve **uses of resources** and investments.
- To measure **impact of donor aid**.
- For granting agencies to **evaluate their investments and strategies**.
- **Concern about diseases of poverty**" versus "**diseases of affluence**",

GLOBAL HEALTH STATUS: KEY HEALTH STATUS INDICATORS

- Maternal mortality rate
- Neonatal mortality rate
- Infant mortality rate
- Under-five mortality
- Life expectancy
- All-cause mortality rate
- **Prevalence & Incidence of diseases.**

Respiratory diseases and measles

- Infections of the respiratory tract and middle ear are major causes of **infant** and **child mortality**.
- In **adults**, **tuberculosis** is highly prevalent and causes significant morbidity and mortality.
- **Mortality in tuberculosis has increased** due to the spread of HIV (AIDS).
- The spread of respiratory infections is increased **in crowded conditions**.
- **Current vaccination programs** against childhood infections prevent deaths each year.
- **Measles** can effectively be prevented by **vaccination**. In spite of this, almost 200,000 people, mostly children under 5 years of age, died from measles.

- **Pneumonia** causes approximately 50 % of child deaths .
- New **vaccines pneumonia** are clearly **cost-effective in low-income countries**.
- Universal use of these vaccines are estimated to **prevent at least 1 000 000 child deaths annually**.
- For maximal long-term effect, **vaccination of children should be integrated with primary health care measures**.
- The important vaccines are **BCG**(for tuberculosis) , **DPT** (Diphtheria, Pertussis, Tetanus), **pneumonia, measles** , **MMR** (Measles , Mumps, Rubella).

The Global Burden of Asthma

- Asthma is a chronic non-communicable disease that seems to be overlooked and often undocumented in low to middle income countries.
- It is estimated that 300 million people globally, have it.
- As communities adopt western lifestyles and become developed, rates of asthma increase.
- Data gathered by the World Health Organization (WHO) projects that by 2025 there may be an additional 100 million asthmatics worldwide.

The **social and economic determinants** that **potentially increase the incidence of asthma** are:

- air pollution,
- tobacco smoking,
- lack of education,
- lack of health care resources and poverty.
- Many of the places that have burdens of disease associated with **lack of sanitary water** also experience a **lack of clean air**.

- **In low to middle income** countries **air** is often polluted because of **crowded living conditions** and **lack of formal policies to control industrial pollution**.

- In these areas **women and children** are also subjected **to toxins produced when cooking on open flames** within their homes.

Global strategies to improve the management of asthma:

1. the need for **standardized diagnosis**.
2. the need **for standardized definitions** of asthma (Many regions **have differing definitions**).
3. Improve **access to medical care**, as many people in developing countries have **very little access to medical care**; they may **never be diagnosed with asthma and may never receive treatment** for asthma symptoms.
4. **Medical resources** need to be more available **in low- and middle-income countries** so those suffering from asthma can receive treatment.
5. Improve **education** on **how to safely cook food and prevent the release of asthma triggers into the air** is an acknowledged disparity.

Diarrheal diseases

■ **Diarrheal infections** are responsible for 17 % of **deaths** among children under the **age of five** worldwide, mostly in **developing world**, making them the second most common **cause of child deaths globally**.

■ **Acute Gastroenteritis**

- Gastroenteritis resulting in 1.4 million deaths occur globally each year.
- Occurrence related to **poor hygiene**, especially among **bottle-feeding** babies.

■ Poor **sanitation** can lead to **increased transmission** through **water, food, hands and flies**.

■ **Rotavirus** is the most common cause of gastroenteritis in children in both the developed and developing world , is highly infectious and a major cause of severe diarrhea and death in children.

Cholera

- **Cholera** is an acute diarrheal disease that can kill within hours if left untreated.
- WHO have estimated that there are 1.4 to 4.3 million cases, and 28 000 to 142 000 deaths worldwide due to cholera every year.
- It is related to **lack of clean water and sanitation** as in the camps for **immigrant** persons or refugees.
- Up to 80% of cases can be successfully treated with **oral rehydration salts**.
- **Provision of safe water and sanitation** is important to control cholera and other waterborne diseases.
- **Oral cholera vaccines** are an additional way to control cholera but should not replace environmental control measures.
- WHO Global work on Cholera Control, was **implementation of global strategies** for cholera prevention and control globally.

Global strategies to improve the management of diarrhoea:

1. hygienic measures are important for the prevention of diarrhea , hand washing, proper water supply, proper sewage disposal.
2. Rotavirus vaccines are highly protective, safe and potentially cost-effective.
3. Dehydration due to diarrhea can be effectively treated through oral rehydration therapy (ORT), with dramatic reductions in mortality.
4. Important nutritional measures are promotion of breastfeeding and zinc supplementation.

Maternal health

- In many developing countries, **complications of pregnancy** and **childbirth** are the **leading causes of death among** women of reproductive age.
- **A woman dies** from complications from childbirth approximately **every minute**.
- According to the WHO, in its [World Health Report](#), **poor maternal conditions account for the fourth leading cause of death for women worldwide, after HIV/AIDS, malaria, and tuberculosis.**
- Most maternal deaths and injuries can be **prevented** and have been largely eradicated in the developed world – but still high in the [developing world](#).

The United Nations agreed to **reduce child mortality by two thirds** and **maternal mortality by three quarters** by 2015 as part of the millennium development goals (goals 4 and 5, respectively).

The important **maternal and neonatal interventions** packages used to **reduce maternal and neonatal** mortality include:

1. **Antenatal care:** (**During pregnancy**)

- **Tetanus toxoid:** Two tetanus toxoid Immunizations.
- **Screening** for: high blood pressure, infections, diabetes mellitus, congenital abnormalities.

2. **Natal care:** (**During labor or childbirth**)

- **delivery by skilled attendant:** Includes safe delivery, identification of complications, first aid, and referral of complicated cases.
- Management of **postpartum hemorrhage** .
- Management of **maternal sepsis** (intrapartum and post partum)
- Detection of **breathing problems** and resuscitation of newborn when required.
- Inpatient care for very **low birthweight babies**

3. Post Natal care:

- Management of premature and **low birthweight babies**.
- Support for **breast feeding mothers** (antenatal and neonatal): **promote early and exclusive breast feeding** provided by skilled care providers and community health workers.
- **promotion of family planning services.**
- **promotion of vaccination program.**
- **mother education about aspect of childcare(nutrition, prevention and management of diarrhea and respiratory infection).**

HIV/AIDS

- Human immunodeficiency virus (HIV) is first appeared in humans in the early 1980s.
- HIV progresses to a point where the infected person has AIDS or Acquired Immunodeficiency Syndrome.
- HIV becomes AIDS because the virus affects the **immune system**.
- HIV is transmitted through **bodily fluids**.
- It is sexually transmitted disease.
- Or intravenous drug use, blood transfusions, and unclean needles spread **HIV through blood and other fluids and breast feeding**.

- In June 2001, the [United Nations](#) held a Special General Assembly to :
- intensify international action to fight the HIV/AIDS epidemic and to
- mobilize the resources needed towards this aim, labeling the situation a "global crisis".
- Global provision of AIDS prevention program in all over the world specially in the underdeveloped countries.

Malaria

- ❑ Malaria has a significant impact on the health of infants, young children, and pregnant women worldwide.
- ❑ More than 800,000 African children under the age of five die of malaria each year.
- ❑ Malaria also contributes to malnutrition in children, which indirectly causes the death of half of all children under the age of five throughout the world.
- ❑ Fifty million pregnant women throughout the world are exposed to malaria each year.
- ❑ In malaria-endemic regions, one-fourth of all cases of severe maternal anemia and 20 % of all low-birth weight babies are linked to malaria.
- ❑ Economic effects of malaria include decreased work productivity, treatment cost, and time spent for getting treatment

Malaria Prevention and Control Strategies

- 1. Vaccine Development:** Currently, **no licensed vaccine** against malaria exists, a continuous efforts to develop malaria vaccine.
- 2. Drug Development:** Antimalarial drugs, in combination with **mosquito control** programs, played a key role in controlling malaria in endemic areas, however ,the **emergence and spread of drug-resistant malaria has contributed to a reemergence of malaria**. The need for new, effective drugs for malaria has become a critical priority on the global malaria research agenda.
- 3. Diagnostics:** New and improved diagnostics are essential for the effective control of malaria.
- 4. Vector Management Approaches:** Vector management tools such as, **insecticides, environmental modification, and bed nets** , efforts to prevent parasite transmission (from humans to mosquitoes and mosquitoes to humans) and reduce the mosquito population.
- 5. Prophylaxis treatment.**

Nutrition and micronutrient deficiency

- ❑ Good nutrition is an essential element in the ability to lead a healthy and productive life.
- ❑ So poor nutrition remains a critical global problem: Each year, more children die because of undernutrition.
- ❑ Greater than two billion people in the world are at risk of micronutrient deficiencies (including lack of vitamin A, iron, iodine and zinc).
- ❑ Malnutrition has enormous health and economic consequences on maternal and child health.
- ❑ Ending malnutrition by 2030 is a core element of the Sustainable Development Goals.

Prevention

1. Food security

policy to improve agricultural techniques, new technology in agricultural production,

2. Breastfeeding: advice mothers to breast feed their babies , **exclusive breastfeeding for 6 month.**

3. Development of weaning food for babies with affordable price.

4. Add **supplementary food** at the age of 4 months,

5. Fortification of foods, such as:

- iodization of salt
- flour has been fortified with iron, zinc, folic acid and vitamin B complex .
- fortification of powdered milk with vitamins and minerals.

6. Prevention of infection : such as respiratory **infection , diarrhea, by:**

- Vaccination
- proper hygiene
- proper water supply
- improvement of environmental condition, i.e. overcrowding

Chronic disease

- ❑ The relative importance of chronic **non-communicable disease** is increasing.
- ❑ For example, the rates of **type 2 diabetes**, associated with **obesity**, have been on the rise in developing countries.
- ❑ In **low-income countries**, the number of individuals with diabetes is expected to increase .
- ❑ Obesity is **preventable** and is associated with **numerous chronic diseases** including **cardiovascular conditions, diabetes, stroke, cancers** and **respiratory diseases**.
- ❑ Noting that **non-communicable diseases are the cause of some 35 million deaths each year**, the international community is being increasingly called to:
take important measures for **the prevention and control of chronic diseases,**

The major **changes in global health** that have occurred over the past 10 years, as a result of :

- ❖ the **global focus on poverty reduction**,
- ❖ new **global health threats** from HIV/AIDS, SARS, and avian influenza, and
- ❖ the international community's adoption of the **Millennium Development Goals (MDG)**,*

Global health policy has now become a **development, national security, and humanitarian issue** for all countries.

Significant **amounts of increased resources** for development assistance, much of it **targeted to health**, have subsequently been forthcoming.

