

Introduction to Global health

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Mission of this lecture(objectives)

- 1. Teach every medical about global health.*
- 2. Develop a global health network for students to tackle local to global health problems.*
- 3. Health is becoming a global problem, with chronic diseases being a number one killer around the globe*
- 4. By learning more about global health research, students will be better equipped to face the challenges of their unique profession*



Global health

Is an important concept that students need to understand. Global health is not about a single health problem such as malaria, TB, or AIDs. Global health is not about the health of one country or region. Global health transcends boundaries and regions, encompassing all the factors that comprise our health

Global health is everywhere-in your clinics, in your communities, and in your countries

Health and Global Health, WHO


“Health is not only the absence of infirmity and disease but also a state of physical, mental and social well-being.”

Global Health Issues

- Refers to any health issue that concerns many countries or is affected by transnational determinants such as:
 - Climate change
 - Urbanisation
 - Malnutrition – under or over nutrition

Or solutions such as:

- Polio eradication
- Containment of avian influenza
- Approaches to tobacco control



Every things about health is both local and global, therefore all physicians, nurses, and allied health professions must know about both local and global health


GloCal Health (Global to Local)







Global health is an important new concept. The Institute of Medicine refers to global health as

"health problems, issues and concerns that transcend national boundaries, may be influenced by circumstances or experiences in other countries, and are best addressed by cooperative actions and solutions."

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- It is not just health problems that cross borders or are common to countries around the world; solutions to these problems can also cross borders and be shared, regardless of level of development.
 - All countries can both learn from other countries and also share their own experiences and information.



An enlightened **new** definition of global health paints the picture of a two-way street: Shared problems, sharing solutions. This new definition is very important for the science of global health, as global health is portrayed as a **road of sharing**.




The philosophy of the new global health would include the importance of information sharing. The world is huge and health challenges are diverse, depending on the region. Thus, **research** is important for meeting the health challenges in both the developing and developed world.

WHO (World Health Organization)

is the directing and coordinating authority for health within the United Nations system. It is responsible for providing leadership on global health matters, shaping the health research agenda, setting norms and standards, articulating evidence-based policy options, providing technical support to countries and monitoring and assessing health trends.

Health is a fundamental human right


The idea that health is a human right was articulated in the United Nation's Universal Declaration of Human Rights, created over 50 years ago at the inception of the organization. This idea is of pivotal importance in the development of the science of global health. Medical, public health, and nursing students need to be aware of the impact they can make on the global health in the future.



If medical, public health, and nursing students work together, we can change global health. This collaborative effort in global health research will help us to cross geographic, economic, and all other boundaries now dividing our fields.

Key Concepts in Relation to Global Health

1. The determinants of health
2. The measurement of health status
3. The importance of culture to health
4. The global burden of disease
5. The key risk factors for various health problems
6. The organisation and function of health systems

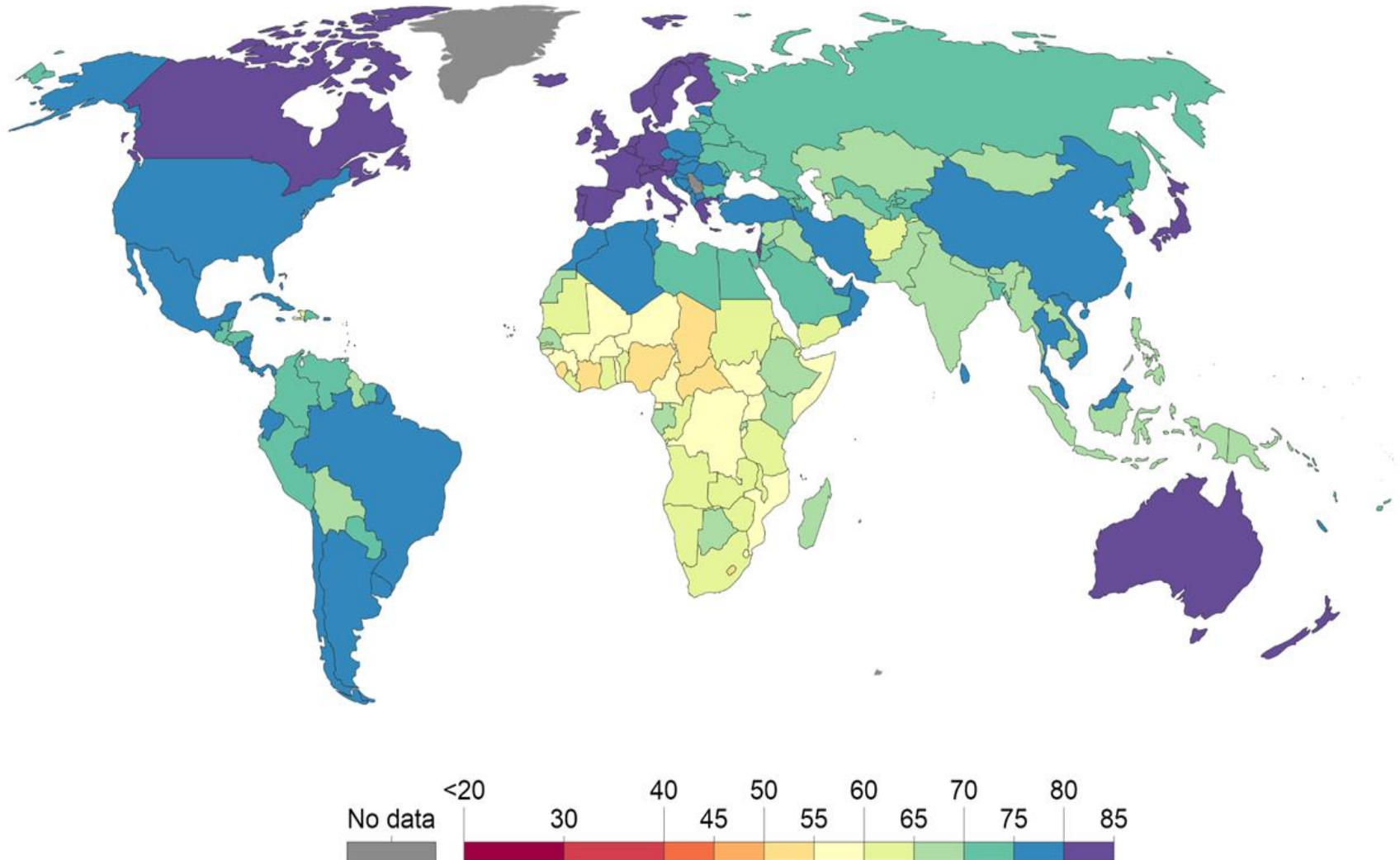


In the past 100 years, life expectancy has been on the rise in the majority of developing and developed countries. We are healthier today than we have ever been in the history of mankind.

This improvement in life expectancy has been achieved due to improved prevention, **information sharing**, and **global** health.

Life expectancy, 2015

Shown is period life expectancy at birth. This corresponds to an estimate of the average number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life




Source: Clio-Infra estimates until 1949; UN Population Division from 1950 to 2015

OurWorldInData.org/life-expectancy-how-is-it-calculated-and-how-should-it-be-interpreted/ • CC BY-SA

COMPARATIVE DATA (1)

	IRELAND	DEVELOPING COUNTRIES
■ INFANT MORTALITY RATE	7	100-190
■ UNDER 5 MORTALITY RATE	10	175-300
■ MATERNAL MORTALITY RATE	2	600-1600
■ LIFE EXPECTANCY	F - 82 M - 77	F < 50 M < 50 but may be = or > F



You as a future doctors will never see a case of smallpox- this is very different than in your great grandfather's era. Clinicians worked together with public health workers and global health scientists to eradicate one of the most deadly diseases know to man. We can continue the success of smallpox if we work together on other local problems, we can have an enormous global impact.

Smallpox vaccination: the case of global health effort in disease eradication




Edward Jenner
1749-1823



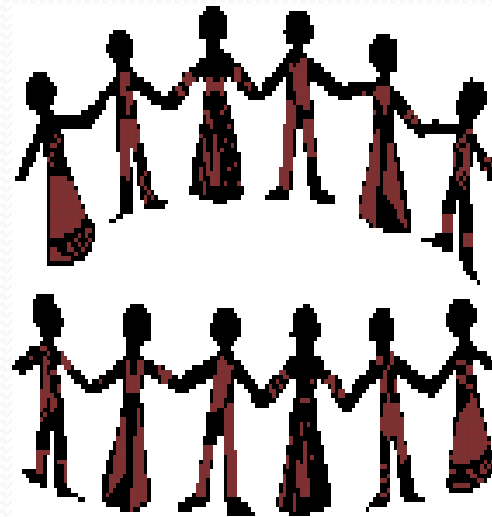
Most important problems of global health today


- **Communicable, maternal, perinatal and nutritional conditions**
- **Noncommunicable diseases**
- **Injuries**



Non-communicable diseases are the most widespread diseases seen by the majority of medical students in their practice. We need to work together to share our knowledge about these conditions for prevention and cure.

Interdisciplinary approaches are needed to ease the burden of both communicable and non-communicable diseases

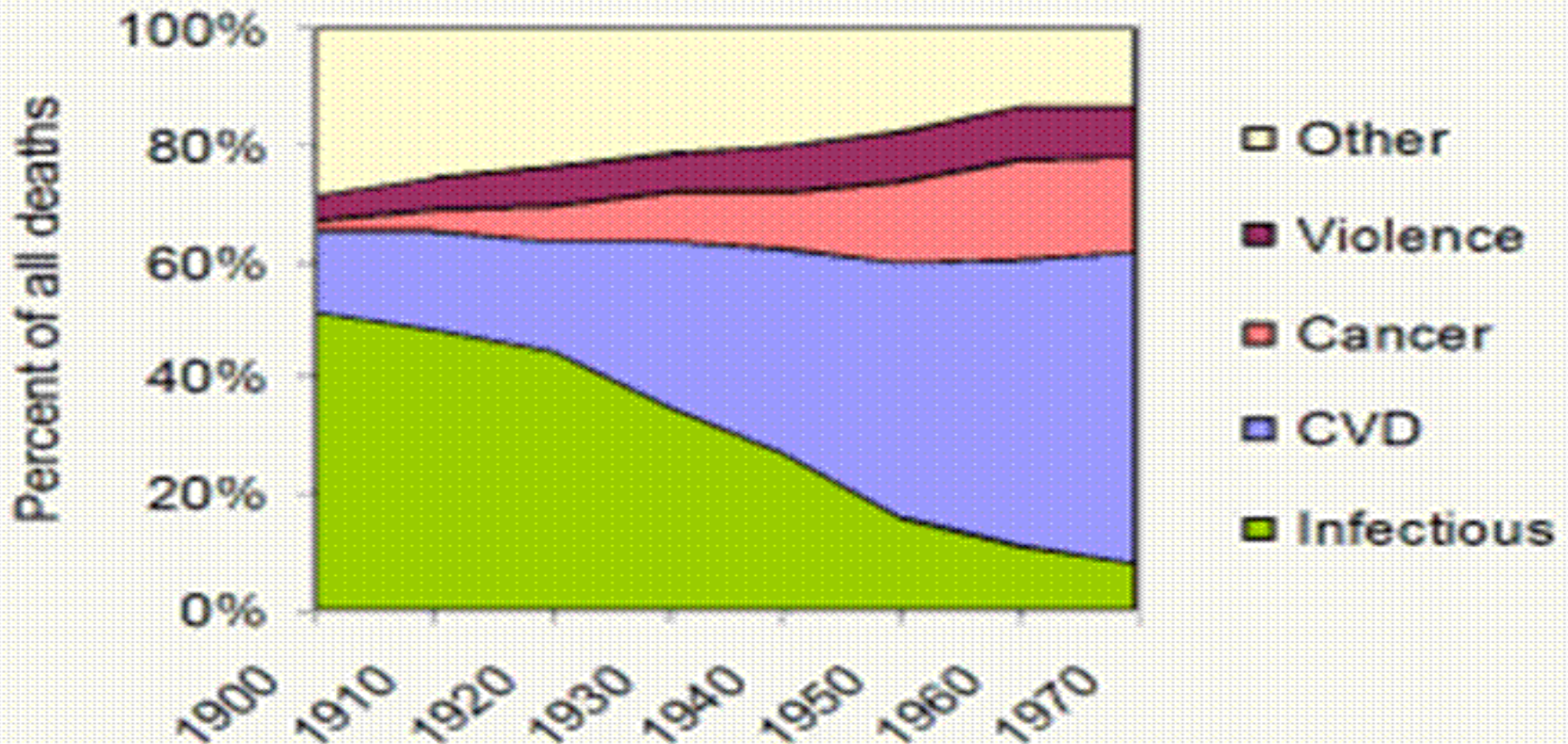




Professionals from different areas of expertise working together eradicated smallpox. If a challenging disease like smallpox could be eradicated, similar collaborative efforts could prove to be successful for eradicating other diseases and challenges to global health

Epidemiological transition

Health transition: proportionate mortality by broad cause of death (US, 1900-1970)

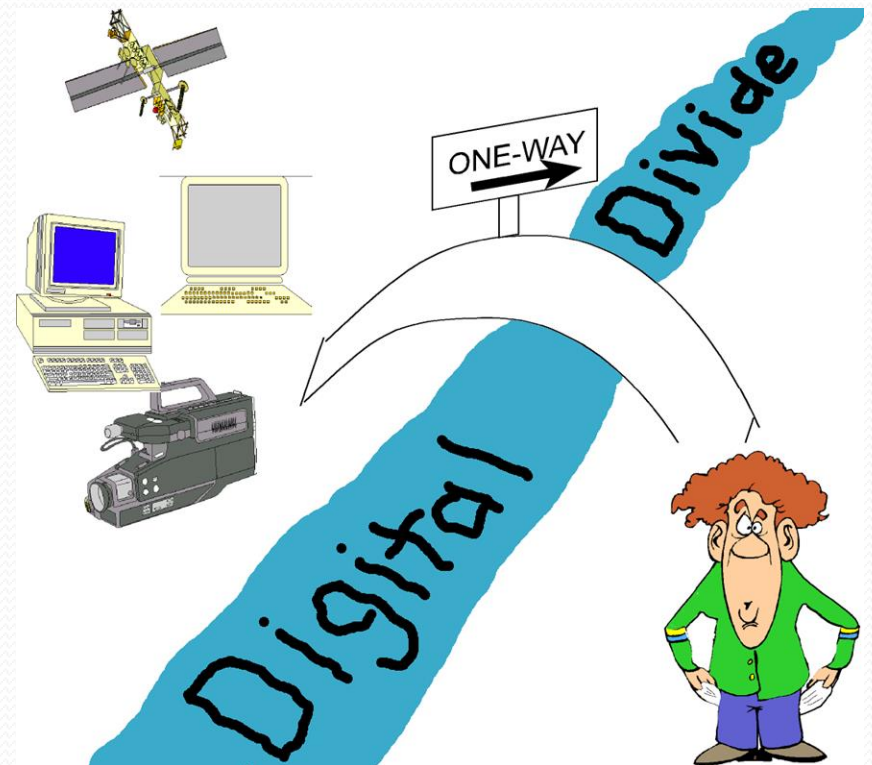



10 leading causes of death around the world (WHO)

Cause of death	Death in Millions	Percent of Death
Coronary heart disease	7.20	12.2
Stroke and other cerebrovascular diseases	5.71	9.7
Lower respiratory infections	4.18	7.1
Chronic obstructive pulmonary disease	3.02	5.1
Diarrheal diseases	2.16	3.7
HIV/AIDS	2.04	3.5
Tuberculosis	1.46	2.5
Trachea, bronchus, lung cancers	1.32	2.3
Road traffic accidents	1.27	2.2
Prematurity and low birth weight	1.18	2.0

Digital divide: gap between haves and have nots

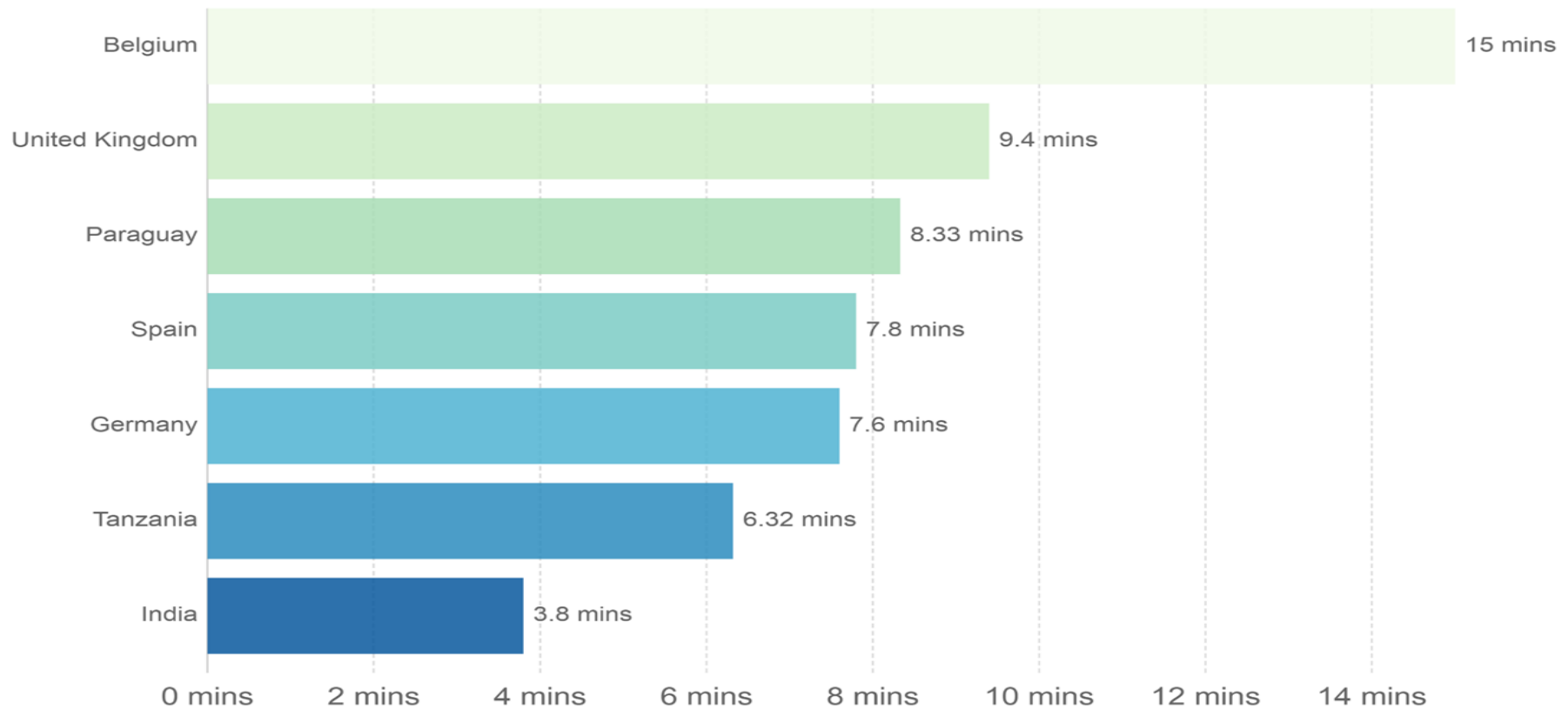
One of the biggest global health challenges is access to information




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- One of the biggest challenges to global health is access to information. We need to share information in the area of global health research across the digital divide.
 - Much of clinical practice and prevention is the sharing of knowledge. If we can harness the information revolution, we can have a profound effect with our patients and the people of the world.

Time that doctors spend with a patient

Average time that a doctor spends with every patient. India figure refers to Delhi and cannot be applied nationwide. The timing of recorded values differ country to country. Cross country comparisons should be made with caution.





Medical students can learn directly from the lectures presented in the super course . They can also use the lectures and slides for presenting to their patients, the community or their own students.

Visit the Supercourse overview lecture at

<http://www.pitt.edu/~super1/lecture/lec6961/index.htm>