Introduction to Global Health

Prof. Madhukar Pai, MD, PhD
Canada Research Chair in Epidemiology & Global Health
Director, McGill Global Health Programs
madhukar.pai@mcgill.ca

@paimadhu
Historical origins of global health

• Colonial medicine
• Missionary medicine
• Military medicine
• Tropical medicine
• International health
• Global health
Global health 1.0

“Global health 1.0 was called tropical medicine and was primarily concerned with keeping white men alive in the tropics.”

Colonial overtones

https://blogs.bmj.com/bmj/2013/10/08/richard-smith-moving-from-global-heath-3-0-to-global-health-4-0/
Global health 2.0

“Global health 2.0 was called international health and comprised clever people in rich countries doing something to help people in poor countries.”

Cold War overtones

https://blogs.bmj.com/bmj/2013/10/08/richard-smith-moving-from-global-health-3-0-to-global-health-4-0/
Global health 3.0

“Global health 3.0, which is still the main manifestation of global health, is about researchers from rich countries leading research programmes in poor countries.”

https://blogs.bmj.com/bmj/2013/10/08/richard-smith-moving-from-global-heath-3-0-to-global-health-4-0/
Global health 4.0

“Global health 4.0, increasingly the present and certainly the future, is research and other activities being led by researchers from low and middle income countries.”

https://blogs.bmj.com/bmj/2013/10/08/richard-smith-moving-from-global-health-3-0-to-global-health-4-0/
Global health still mimics colonial ways: here’s how to break the pattern

August 18, 2019 4.17am EDT

Author

Madhukar Pai
Director of Global Health & Professor, McGill University

“…at its core, (global health) history remains predominantly about flows of goods, services, and strategies along well-trod, north-south pathways.”
1

The Roots of Global Health Inequity

Key Points

- Weak health systems have deep historical roots.
- Colonized and exploited countries have the weakest health systems.
- The legacy of slavery and colonialism impacts health in the present day through racially based oppressive policies that result in differential risk, poor access to care, and unequal health outcomes.
- Neoliberal economic policy impaired the ability of impoverished governments to deliver health care as a basic right.
- The 1978 global conference on primary health care, held in Alma Ata in the former Soviet Union, declared that “health for all” was the future.
- Selective primary health care proposed in 1979, supplanted the broader aspirations of health as a human right.
- The history of impoverishment from colonialism and slavery to the neoliberal economic policies in the postcolonial period led to a near-absence of medical care in impoverished countries in the 1970s through the late 1990s.
Impact of colonialism

Persistent echoes of colonialism (close to home)

Poor health status of Indigenous Peoples in Canada

High maternal mortality among Black women in US
We need to decolonize global health...

“I hope that we can begin to truly decolonize global health by being aware of what we do not know, that people understand their own lives better than we could ever do, that they and only they can truly improve their own circumstances and that those of us who work in global health are only, at best, enablers.”

Seye Ambimbola

https://academic.oup.com/inthealth/article/10/2/63/4924746
Towards a common definition of global health

Jeffrey P Kaplan, T Christopher Bond, Michael H Merson, K Srinath Reddy, Mario Henry Rodriguez, Nelson K Sewankambo, Judith N Wasserheit, for the Consortium of Universities for Global Health Executive Board*

**Definition:** 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.

<table>
<thead>
<tr>
<th>Global health</th>
<th>International health</th>
<th>Public health</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Geographical reach</strong></td>
<td>Focuses on issues that directly or indirectly affect health but that can transcend national boundaries</td>
<td>Focuses on health issues of countries other than one's own, especially those of low-income and middle-income</td>
</tr>
<tr>
<td><strong>Level of cooperation</strong></td>
<td>Development and implementation of solutions often requires global cooperation</td>
<td>Development and implementation of solutions usually requires binational cooperation</td>
</tr>
<tr>
<td><strong>Individuals or populations</strong></td>
<td>Embraces both prevention in populations and clinical care of individuals</td>
<td>Embraces both prevention in populations and clinical care of individuals</td>
</tr>
<tr>
<td><strong>Access to health</strong></td>
<td>Health equity among nations and for all people is a major objective</td>
<td>Seeks to help people of other nations</td>
</tr>
<tr>
<td><strong>Range of disciplines</strong></td>
<td>Highly interdisciplinary and multidisciplinary within and beyond health sciences</td>
<td>Embraces a few disciplines but has not emphasised multidisciplinarity</td>
</tr>
</tbody>
</table>

Table: Comparison of global, international, and public health
“Global health, while a marked improvement on its forebear “international health,” remains a collection of problems rather than a discipline. The collection of problems... all turn on the quest for equity.”

Inequities are staggering

http://www.effectivealtruism.org/
World's 26 richest people own as much as poorest 50%, says Oxfam

Charity calls for 1% wealth tax, saying it would raise enough to educate every child not in school

The top 26 billionaires own $1.4 trillion — as much as 3.8 billion other people

Instead of rich vs. poor, Hans Rosling gives us a different way of looking at the world...
1 billion: Level 1

https://www.gapminder.org/dollar-street/matrix
3 billion: Level 2

https://www.gapminder.org/dollar-street/matrix
2 billion: Level 3

https://www.gapminder.org/dollar-street/matrix
1 billion: Level 4

https://www.gapminder.org/dollar-street/matrix
Q: which level are you on?
Giving What We Can is fundraising for 2017

We need your support to continue to grow our community of committed, effective givers. Help us make 2017 even bigger by making a donation to our parent organisation, The Centre for Effective Altruism.

[Donate Now]

How rich am I?

Location
United States
This determines both your currency and your cost of living.

Income can't be blank
USD
The total income for your household after tax.

People in your household
- 1 adults
- 0 children
We use equalised income.

Calculate!
“We are privileged, and that privilege comes with obligations to others and especially to the poor. Realize your good fortune, and share it with others by putting your gifts and training in the service of those who may not have had the same opportunities but are certainly appreciative of your powers to do good.”

Paul Farmer in *To Repair the World*, 2013
So why does inequity matter for health?
Which level you live on has a HUGE impact on your health!

Born in Montreal
Life expectancy: 82

Born in Iqaluit, Nunavut
Life expectancy: 73

Born in Uttar Pradesh, India
Life expectancy: 64
Those on Level 1/2 die of easily treatable causes...

~300,000 mothers and ~6 million children die around the time of birth, largely in poorer countries

1.7 million people die of tuberculosis every year
Even in a rich, Level 4 country like Canada, you can see how inequities drive health outcomes.

TB incidence rates in Canada
We can move the needle a lot, if we focused on those on Levels 1 and 2

100x Multiplier: We are about 100 times richer than the poorest billion people in the world, and we can do several hundred times more to help them than we can to help others in the rich countries we live in.

http://www.effectivealtruism.org/
Why care about global health?

• Address serious inequities in health
  • There is an ethical & humanitarian imperative to ensure health as a fundamental right for all

• Globalization has truly made the world flatter – “we are in this together”

• Some problems are too big/complex for countries to deal with (transnational effort is needed)
40 years after the world promised ‘health for all’…

Countries are facing a financing gap of up to $54 billion a year to achieve the SDG health targets.

AT LEAST HALF THE WORLD’S POPULATION STILL LACKS ACCESS TO ESSENTIAL HEALTH SERVICES.

http://www.who.int/sdg/infographics/en/
We live in a flat, highly interconnected world

“We live in a time when the incubation period of every known human pathogen is longer than the longest intercontinental flight”

https://news.harvard.edu/gazette/story/2015/09/bringing-global-health-home/
State of Global Health
The World as 100 People over the last two centuries

**Extreme Poverty**
- 90 not living in extreme poverty
- 99 not living in extreme poverty
- 6 not living in extreme poverty
- 94 living in extreme poverty

**Democracy**
- 1 living in a democracy
- 44 not living in a democracy
- 56 living in a democracy
- 1 living in a democracy

**Basic Education**
- 83 have not attained any education
- 14 have not attained any education
- 17 have basic education or more
- 86 have basic education or more

**Vaccination**
- 0 vaccinated
- 14 not vaccinated
- 86 vaccinated
- 14 not vaccinated

**Literacy**
- 15 are not able to read
- 88 are not able to read
- 12 are able to read
- 85 are able to read

**Child Mortality**
- 43 die before they are 5 years old
- 4 die before they are 5 years old
- 57 survive the first 5 years of life
- 96 survive the first 5 years of life

Data sources:
- Vaccination: WHO Global data are available for 1980 to 2015 – the OPTS vaccination was licenced in 1949.
- Education: OECD for the period 1960 to 1995. UNESCO for the time thereafter.

All visualizations are from OurWorldinData.org an online publication that presents the empirical evidence on how the world is changing.

Licensed under CC-BY-SA by the author Max Roser
Life expectancy

http://ourworldindata.org/
Child mortality

OurWorldInData

Child mortality by world region – by Max Roser
Children dying before the age of 5 per 1,000 live births.

Falling faster
Number of deaths of under-5-year-olds*, m

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual</th>
<th>At 1990-2000 trend</th>
<th>At 1996-2001 trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>14</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>1995</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Brookings Institution

*Developing countries

© The Economist Newspaper Limited, London, September 27, 2014

http://ourworldindata.org/
Maternal mortality

Source: Our World in Data

http://ourworldindata.org/
We have seen big drops with some infections
Smallpox & polio
Malaria
BUT A LOT OF WORK TO BE DONE

Unfinished agenda:
High rates of avoidable maternal and child deaths & infectious diseases

Emerging agenda:
Demographic change and shift to NCDs and injuries; pandemics; AMR; environmental health & climate change

Financial protection agenda:
Impoverishing health expenditure and increasing costs

Lancet 2035
Unfinished agenda: maternal & child deaths, and infectious diseases

~300,000 mothers and ~6 million children die around the time of birth, largely in poorer countries

1.6 million people die of tuberculosis every year
Emerging agenda: antimicrobial resistance
Emerging agenda: planetary health & climate change

The World's Poorest Are More Likely to Have a Cellphone Than a Toilet
Emerging agenda: NCD pandemic
While globalization poses major challenges, it also offers exciting opportunities...
How can you have a global health impact?
There are so many sessions! I can't decide between 'hunger' and 'poverty'!
Education/expertise can help make an impact

- Medicine?
- Public health?
- Nursing?
- Allied health sciences?
- Engineering?
- Management/MBA? Law?
- Basic science research?
Global health goes well beyond medical/clinical care...

a variety of actors are now involved
Basic researcher

Epidemiologist/public health

Industry/pharma professional

Journalist

Political leader

Global health diplomat

Anthropologist/social scientist

Advocate

Policy maker

Humanitarian/medical worker

Negotiator/business leader

Philanthropist
So, no matter what specific field you pursue and where you work, you can make an impact!

“Go out there build a society of givers, not takers. For me a taker is someone who has no choice. If we have a choice, be a giver.”

Joanne Liu, President, MSF
McGill Alumna
But make sure you have a critical perspective on global health...
Avoid global health malpractice!

Do NOT:

• 1. Perpetuate colonial practices
• 2. Undermine local talent & expertise
• 3. Practice medicine (without a license)
• 4. Engage in voluntourism
• 5. Try to ‘fix’ issues that you don’t understand
• 6. Go overseas without pre-departure training
• 7. Do research without supervision (& ethics review)
• 8. Conduct parachute research
• 9. Put yourself in dangerous situations
• 10. Make promises you cannot keep

Books that offer a critical perspective
Opportunities through GHP
Global Health Scholars

**Scholars** (Undergraduates) receive $2,000-5,000 and are matched with faculty supervisor to help with an international, Northern Canada, or local global health project during the summer.

**Events throughout the year**
- GH Insight Nights: 1st Wednesdays of the month
- Workshops and trainings
- PPHS 511 and Summer Institute courses

Opens January 2020!
International Electives and Placements

Are you thinking of spending some time abroad during your studies at McGill? There are many options for you to investigate. If you are an undergraduate and interested in study abroad or study away opportunities for credit the McGill International Education Office is your best source of information. If you are a student looking specifically for a global health related research or clinical placements then the Global Health Program have some ideas for you.

+ First things first….. Why are you going abroad for a portion of your studies?
+ Considering the different options
+ Before you depart
+ When you return
Travel Awards and Student Initiatives Fund

Travel Awards
• Fall and Spring cycles. Opens September 4th

Student Initiatives Fund
• Small amount of funding for student events
• Applications should be submitted at least 6 weeks prior to the event.
Coursework
SAVE THE DATE!

GLOBAL HEALTH NIGHT 2019

NOVEMBER 5, 2019, 4:00 TO 7:30PM
CENTRE MONT-ROYAL, 2200 MANSFIELD

4:00 - 6:00PM: POSTER PRESENTATIONS
AND WINE & CHEESE

6:00 - 7:30PM: PROGRAM WITH KEYNOTE SPEAKERS
DRS. ABHAY & RANI BANG, FOUNDERS OF
THE ‘SOCIETY FOR EDUCATION, ACTION
AND RESEARCH IN COMMUNITY HEALTH’
(SEARCH) IN INDIA

"Our vision is to realize Arogya Swaraj: People’s Health in People’s Hands. Empowering individuals and communities to take charge of their own health, and thereby, help them achieve freedom from disease as well as dependence." - Dr. Abhay Bang

RSVP by October 25: www.mcgill.ca/globalhealth
Stay connected

- [www.mcgill.ca/globalhealth](http://www.mcgill.ca/globalhealth)
- Facebook: McGill GHP
- Twitter: @McGillGHP
- Instagram: @ghpmcgill