

Introduction to Global Health

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@paimadhu



Historical origins of global health

- Colonial medicine
- Missionary medicine
- Military medicine
- Tropical medicine
- International health
- Global health



Sir Ronald Ross, Mrs. Ross, Mahomed Bux and laboratory assistants at the laboratory in Calcutta where the life history of the malaria parasite in birds was fully worked out in 1898. (Courtesy: London School of Hygiene and Tropical Medicine)



1900: Walter Reed, MD, Yellow Fever



Yellow Fever Dormitory

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 (exploitative)



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 or paternalistic 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.”

Folks from high-income countries dominate all aspects of global health today



<https://blogs.bmj.com/bmj/2013/10/08/richard-smith-moving-from-global-health-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.”

Long way to go, to reach this goal!

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



THE CONVERSATION

Academic rigor. journalistic flair

Global health still mimics colonial ways: here's how to break the pattern

August 18, 2019 4:17am EDT



Author

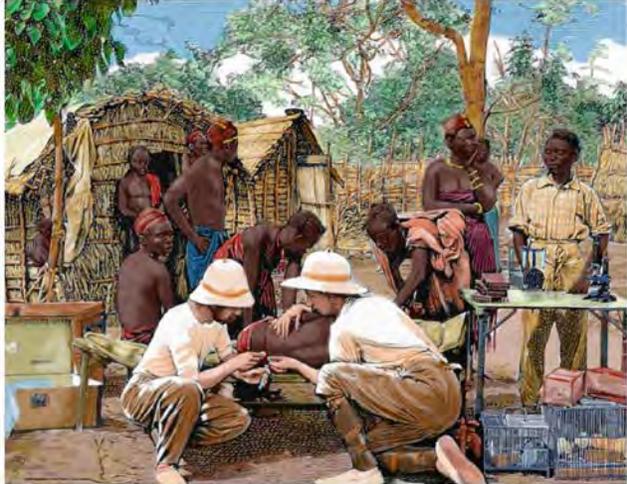


Madhukar Pai
Director of Global Health & Professor,
McGill University

Global Health Research Needs More Than A Makeover



Madhukar Pai Contributor @
Healthcare
I write about global health, infectious diseases, and equity



HISTORY OF AFRICA, Doctors in an expedition of European explorers, examining the native blood ... [+] UNIVERSAL IMAGES GROUP VIA GETTY IMAGES

Global Health Needs To Be Global & Diverse



Madhukar Pai Contributor @
Healthcare
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Like Davos, the field of global health is dominated by men from elite institutions in high-income ... [+] BLOOMBERG NEWS

<https://theconversation.com/global-health-still-mimics-colonial-ways-heres-how-to-break-the-pattern-121951>

<https://www.forbes.com/sites/madhukarpai/#510a177245af>

**A
HISTORY
OF
GLOBAL
HEALTH**



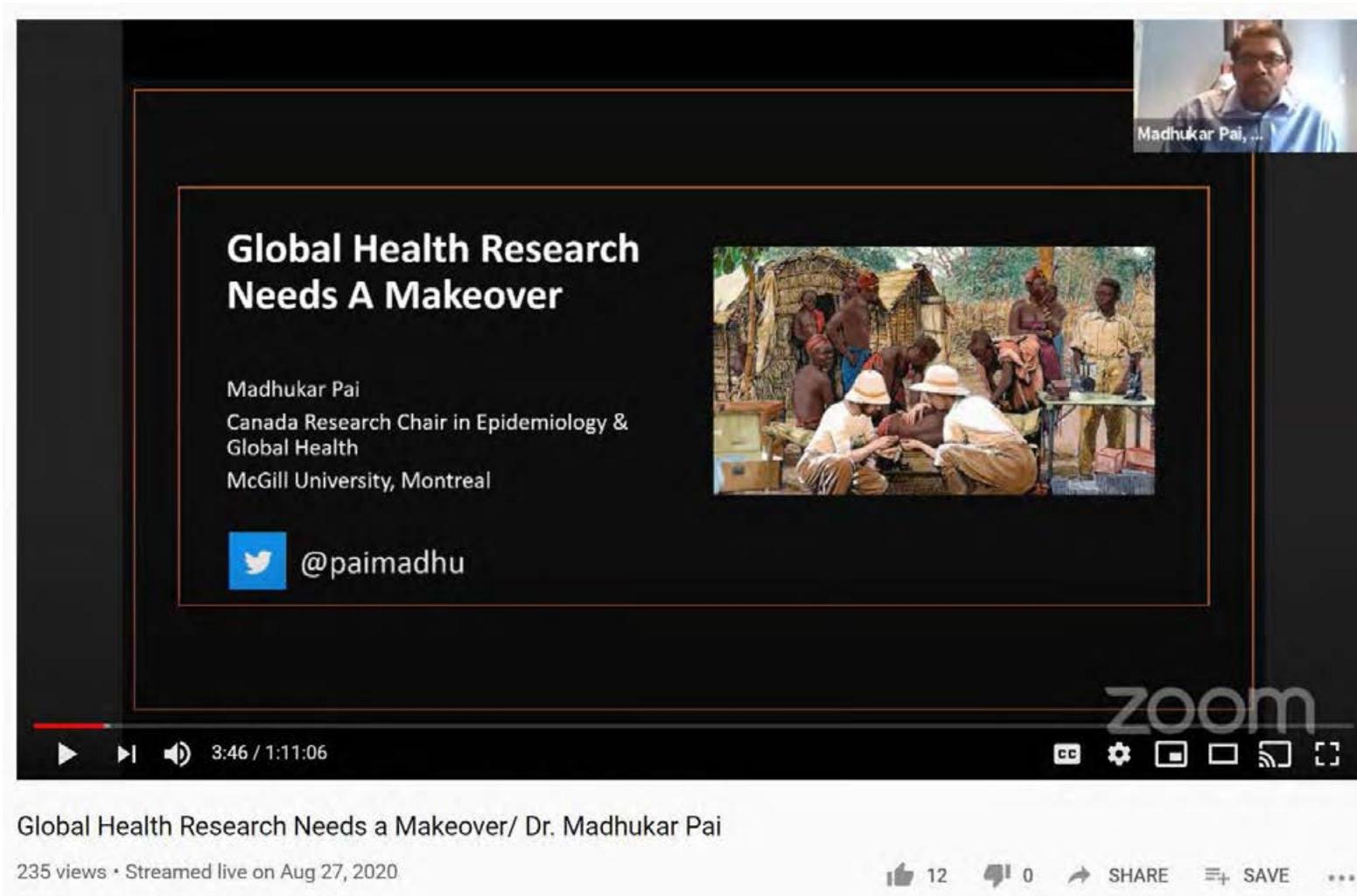
**INTERVENTIONS INTO
THE LIVES OF OTHER PEOPLES**

RANDALL M. PACKARD



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

Please watch! (required)



Global Health Research Needs A Makeover

Madhukar Pai
Canada Research Chair in Epidemiology & Global Health
McGill University, Montreal

 @paimadhu

3:46 / 1:11:06

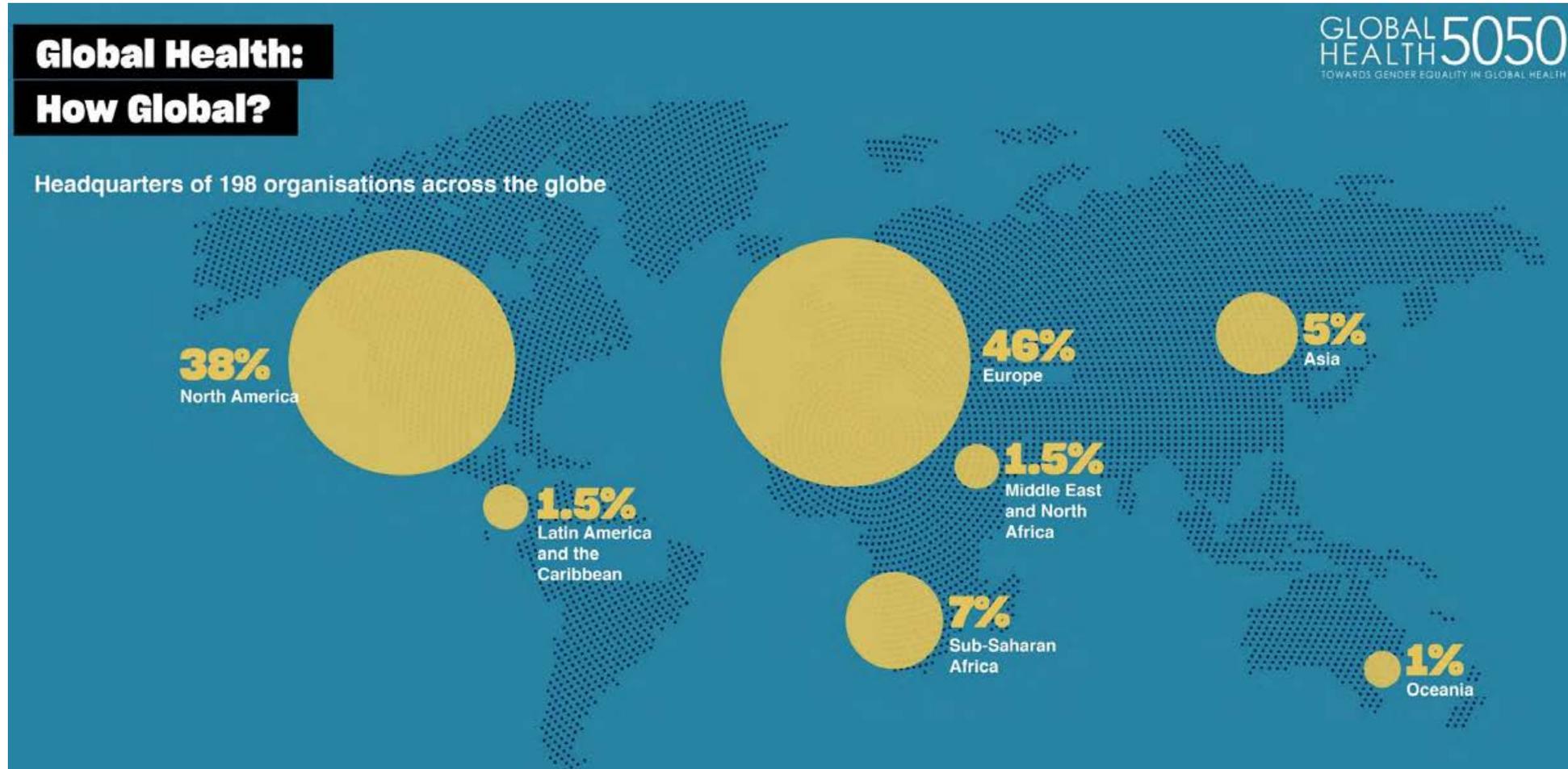
Global Health Research Needs a Makeover/ Dr. Madhukar Pai

235 views • Streamed live on Aug 27, 2020

12 0 SHARE SAVE ...

<https://www.youtube.com/watch?v=sgFKREe6Txc>

Global health orgs: mostly in HICs



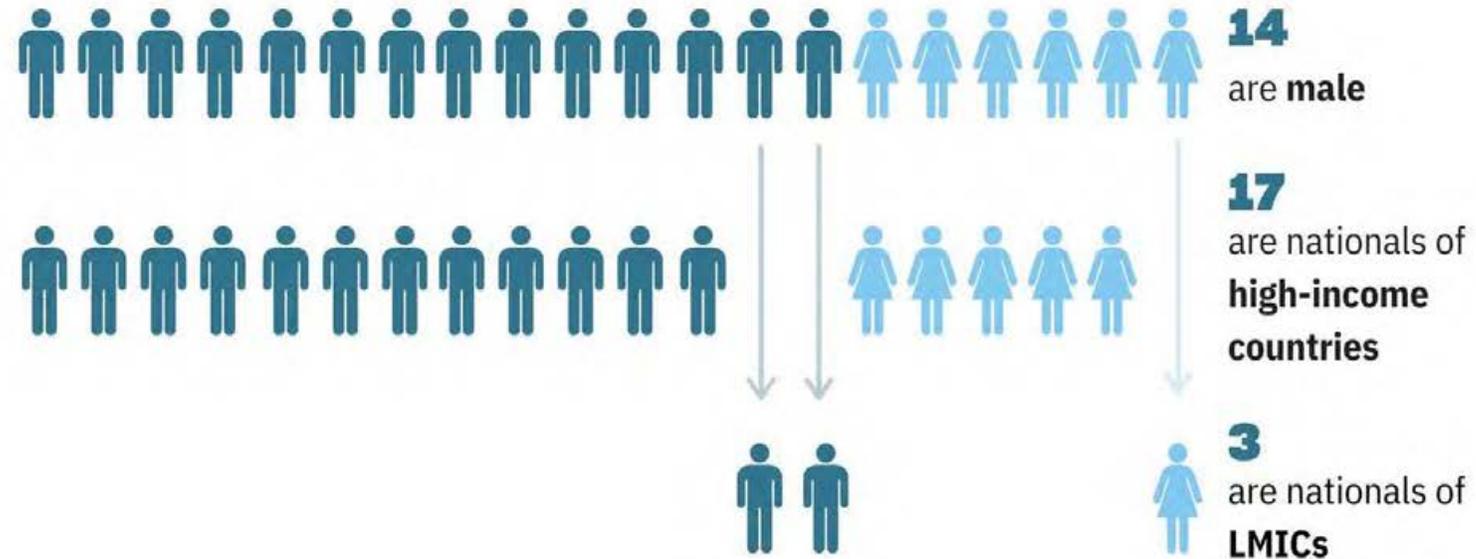
<https://globalhealth5050.org/>

**Power,
privilege
and
priorities**

Global
Health
50/50
Report
2020

#ThisisGender
#GH5050

Global Health 50/50 found that for every 20 global health leaders...

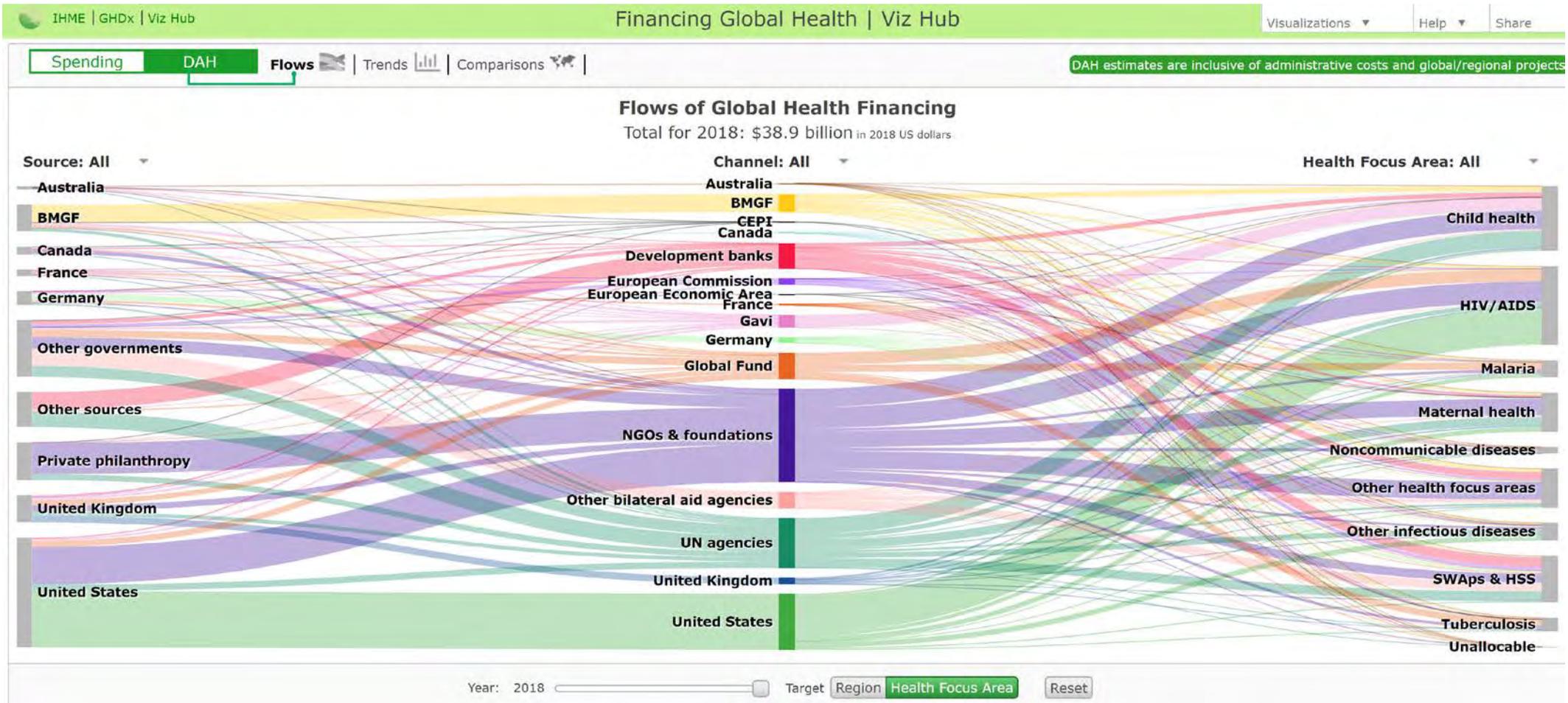


...patterns of privilege prevail

“Over 70% of CEOs and board chairs are men, while just 5% of leaders are women from LMICs. Gender parity will not be reached among CEOs for 40 years if current trends persist.”

<https://globalhealth5050.org/>

Global health funding: mostly from HICs



Publications: dominated by HIC authors

Research

BMJ Global Health

Who is telling the story? A systematic review of authorship for infectious disease research conducted in Africa, 1980–2016

Rose Mbaye,¹ Redeat Gebeyehu,² Stefanie Hossmann,³ Nicole Mbarga,^{4,5} Estella Bih-Neh,⁶ Lucrece Eteki,⁷ Ohene-Agyei Thelma,⁸ Abiodun Oyerinde,⁹ Gift Kiti,¹⁰ Yvonne Mburu,¹¹ Jessica Haberer,^{12,13} Mark Siedner,¹⁴ Iruka Okeke,⁹ Yap Boum ^{7,15}

Authorship trends in *The Lancet Global Health*

Adithi R Iyer
adithii@stanford.edu

Human Biology Department, Stanford University,
Stanford, CA 94305, USA

Chersich et al. *Globalization and Health*
DOI 10.1186/s12992-016-0172-x

Globalization and Health

RESEARCH

Open Access



Local and foreign authorship of maternal health interventional research in low- and middle-income countries: systematic mapping of publications 2000–2012

Matthew F. Chersich^{1,2,3*}, Duane Blaauw², Mari Dumbaugh^{4,5}, Loveday Penn-Kekana^{2,6}, Ashar Dhana², Siphwe Thwala², Leon Bijlmakers⁷, Emily Vargas^{8,9}, Elinor Kern², Francisco Becerra-Posada¹⁰, Josephine Kavanagh², Priya Mannava¹¹, Langelihle Mlotshwa^{2,5}, Victor Becerril-Montekio⁹, Katharine Footman⁶ and Helen Rees^{1,12}

Research

BMJ Global Health

Stuck in the middle: a systematic review of authorship in collaborative health research in Africa, 2014–2016

Bethany L Hedt-Gauthier ¹, Herve Momo Jeufack,² Nicholas H Neufeld,³ Atalay Alem,⁴ Sara Sauer,⁵ Jackline Odhiambo,⁶ Yap Boum ⁷, Miriam Shuchman,³ Jimmy Volmink⁸

Tropical Medicine and International Health

doi:10.1111/tmi.12966

VOLUME 22 NO 11 PP 1362–1370 NOVEMBER 2017

Authorship in paediatric research conducted in low- and middle-income countries: parity or parasitism?

Chris A. Rees¹, Heather Lukolyo^{2,3}, Elizabeth M. Keating^{2,4}, Kirk A. Dearden⁵, Samuel A. Luboga⁶, Gordon E. Schutze² and Peter N. Kazembe^{2,7}

1 Division of Emergency Medicine, Boston Children's Hospital, Harvard Medical School, Boston, USA

2 Department of Pediatrics, Baylor College of Medicine, Houston, USA

3 Baylor College of Medicine Children's Foundation Uganda, Kampala, Uganda

4 Baylor College of Medicine Children's Foundation Lesotho, Maseru, Lesotho

5 IMA World Health, Dar es Salaam, Tanzania

6 Makerere University College of Health Sciences, Kampala, Uganda

7 Baylor College of Medicine Children's Foundation Malawi, Lilongwe, Malawi

Global health orgs: racism/sexism is widespread

'Boys club' culture at UNAids allowed for sexual harassment and bullying – report

Staff Surveys Reveal Widespread Racism at the United Nations

Médecins Sans Frontières is 'institutionally racist', say 1,000 insiders

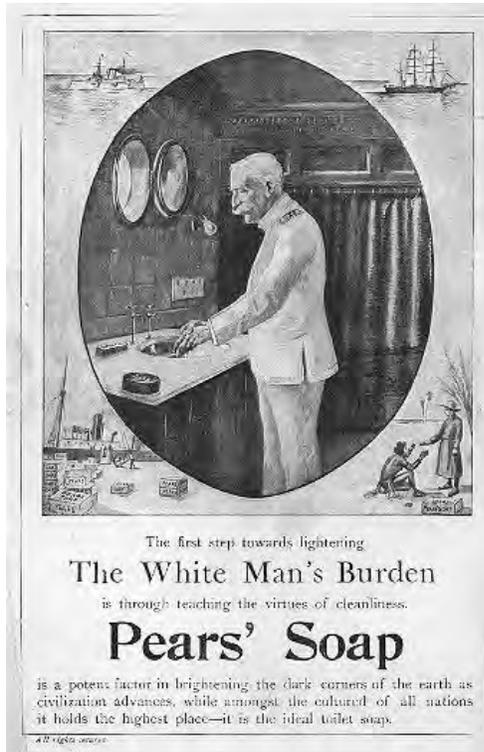
Medical charity accused of shoring up colonialism and white supremacy in its work

Employees Are Calling Out Major Reproductive Rights Organizations For Racism And Hypocrisy

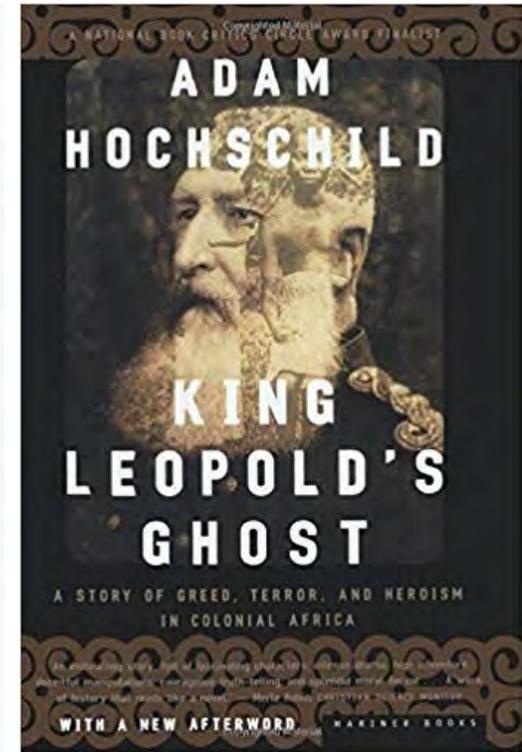
World Health Organization orders internal investigation into alleged racism, misconduct

'White faux feminism': Women Deliver investigate internal racism allegations

Impact of colonialism



Global Health: From Dependency to Decolonization
(Purse) Strings Attached
republic.com.ng

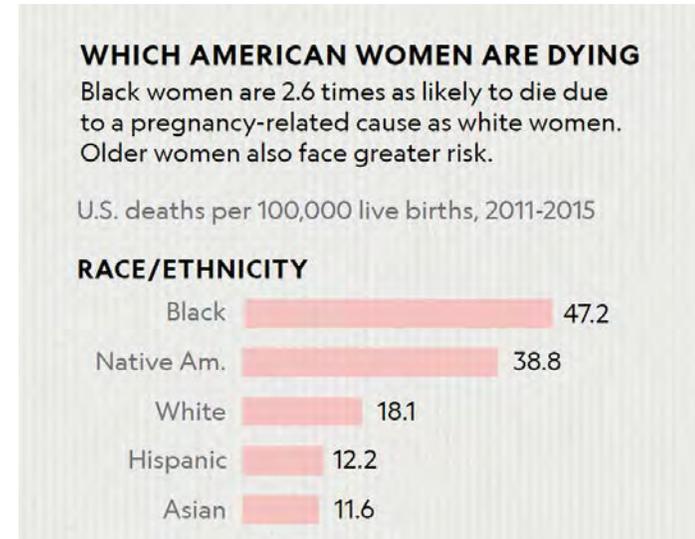


Persistent echoes of colonialism (close to home)

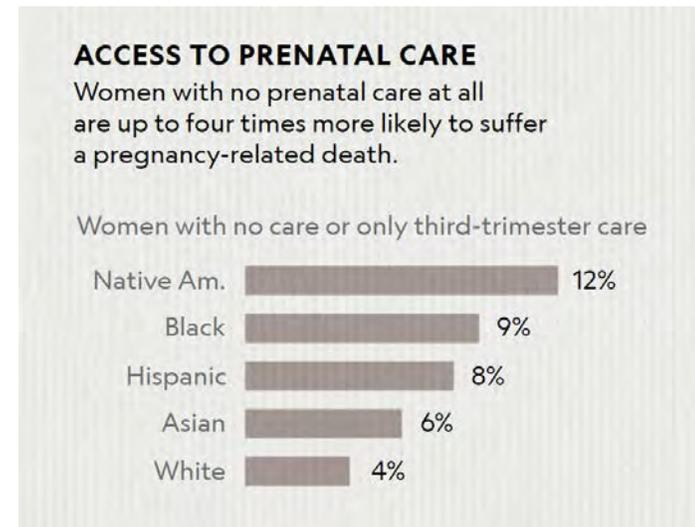
Poor health status of Indigenous Peoples in Canada



<https://healthydebate.ca/2019/01/topic/tuberculosis-inuit-canada>



High maternal mortality among Black women in US



<https://www.nationalgeographic.com/culture/2018/12/maternal-mortality-usa-health-motherhood/>

Growing movement to decolonize global health...

THE C-WORD: TACKLING THE ENDURING LEGACY OF COLONIALISM IN GLOBAL HEALTH



By Sudipta Saha, Purvaja Kavattur, Amina Goheer

<https://www.healthsystemsglobal.org/blog/341/The-C-Word-Tackling-the-enduring-legacy-of-colonialism-in-global-health.html>

Commentary

BMJ Global Health

Decolonising global health: if not now, when?

Ali Murad Büyüm,¹ Cordelia Kenney,¹ Andrea Koris,² Laura Mkumba ³,
Yadurshini Raveendran ⁴

<https://gh.bmj.com/content/bmjgh/5/8/e003394.full.pdf>

Decolonizing GH conferences or webinars at:
Harvard, Duke, Edinburgh, Karolinska, Georgetown, etc.

Towards a common definition of global health

*Jeffrey P Koplan, 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.

| | Global health | International health | Public health |
|----------------------------|--|--|---|
| Geographical reach | Focuses on issues that directly or indirectly affect health but that can transcend national boundaries | Focuses on health issues of countries other than one's own, especially those of low-income and middle-income | Focuses on issues that affect the health of the population of a particular community or country |
| Level of cooperation | Development and implementation of solutions often requires global cooperation | Development and implementation of solutions usually requires binational cooperation | Development and implementation of solutions does not usually require global cooperation |
| Individuals or populations | Embraces both prevention in populations and clinical care of individuals | Embraces both prevention in populations and clinical care of individuals | Mainly focused on prevention programmes for populations |
| Access to health | Health equity among nations and for all people is a major objective | Seeks to help people of other nations | Health equity within a nation or community is a major objective |
| Range of disciplines | Highly interdisciplinary and multidisciplinary within and beyond health sciences | Embraces a few disciplines but has not emphasised multidisciplinary | Encourages multidisciplinary approaches, particularly within health sciences and with social sciences |

Table: Comparison of global, international, and public health

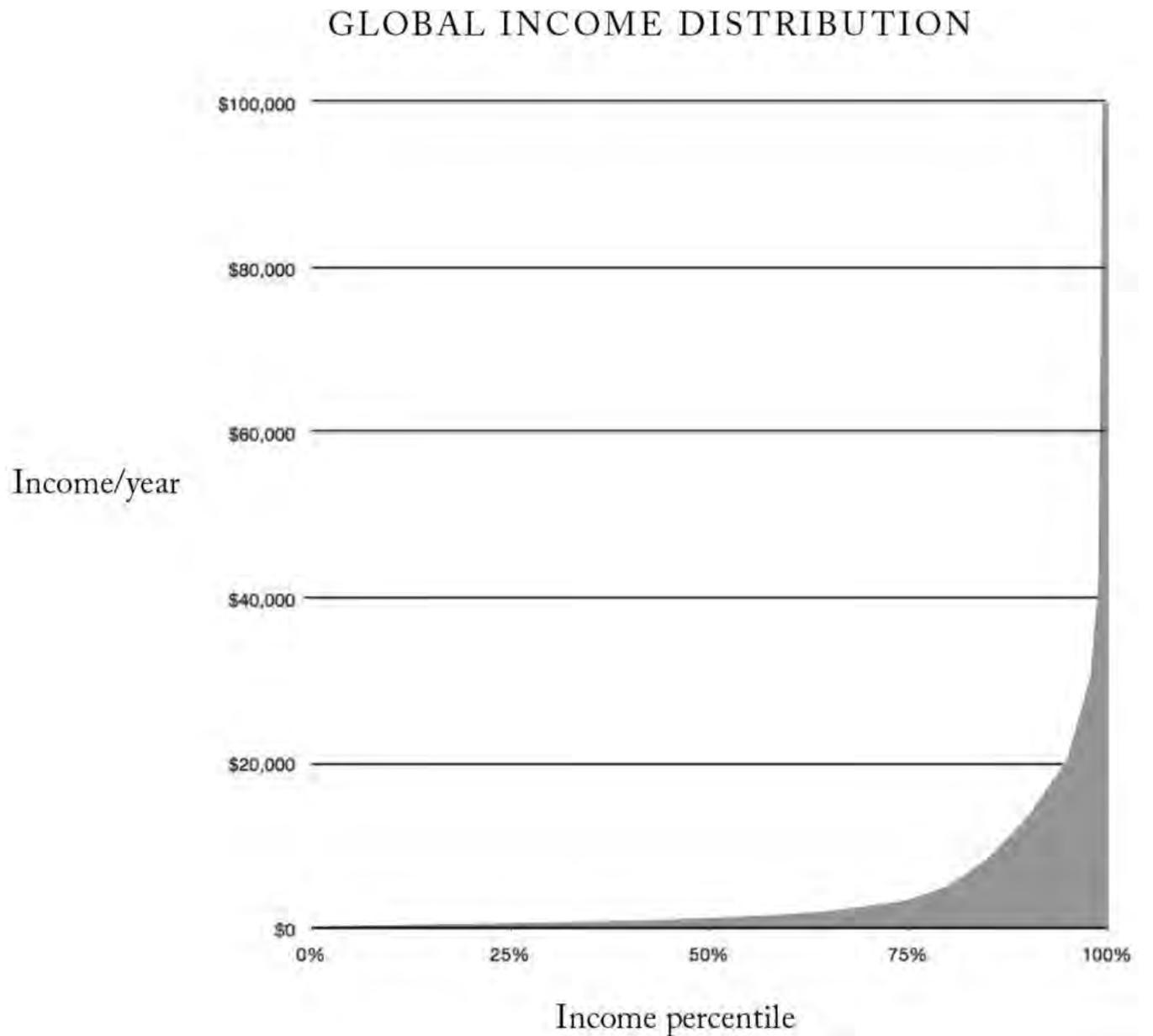


“Global health, while a marked improvement on its forebear “international health,” remains a collection of problems rather than a discipline. The collection of problems... all turn on the quest for *equity*.”

Paul Farmer, *Reimagining Global Health*, UC Press, 2013

Inequities are
staggering

<http://www.effectivealtruism.org/>



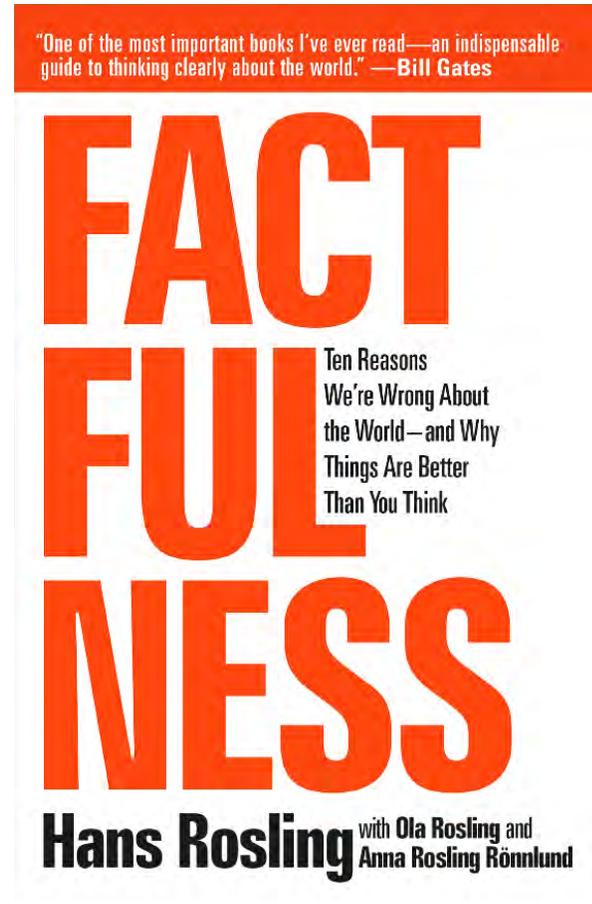
World's 26 richest people own as much as poorest 50%, says Oxfam

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

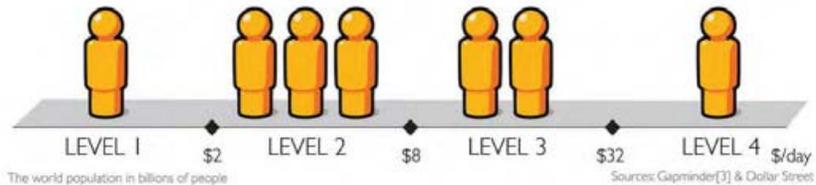
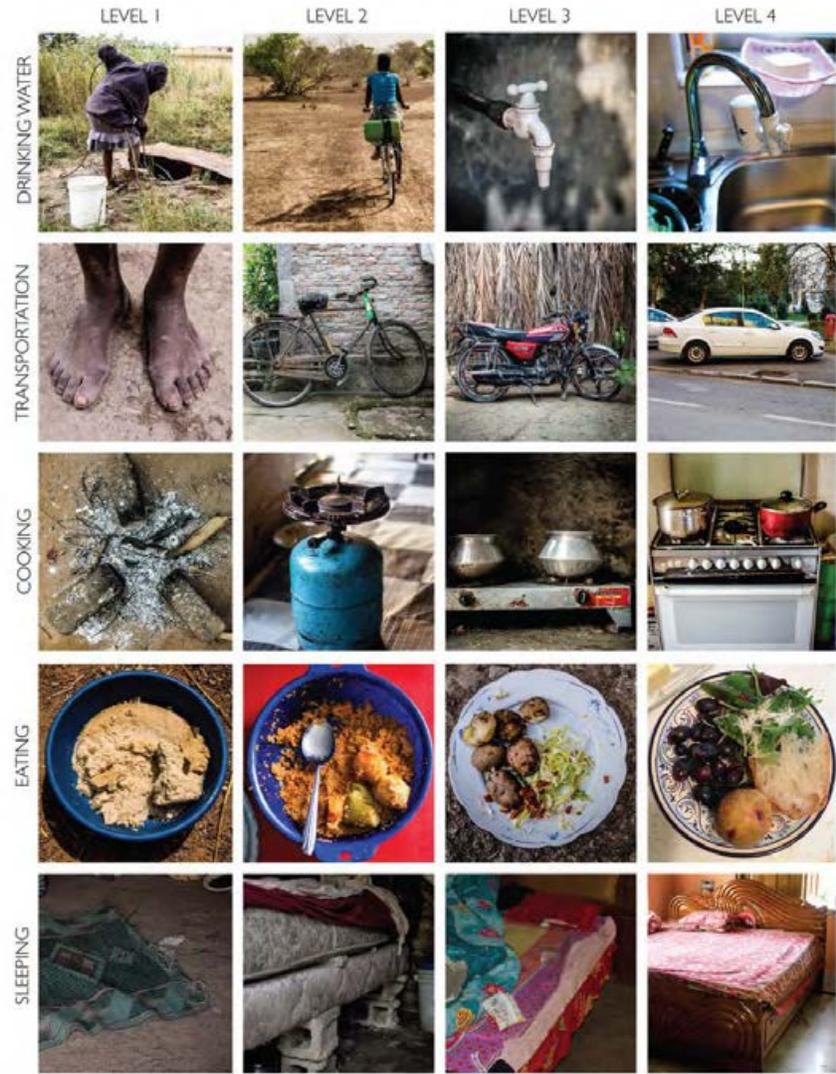


**The top 26
billionaires own
\$1.4 trillion — as
much as 3.8 billion
other people**

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



LIFE ON THE FOUR INCOME LEVELS

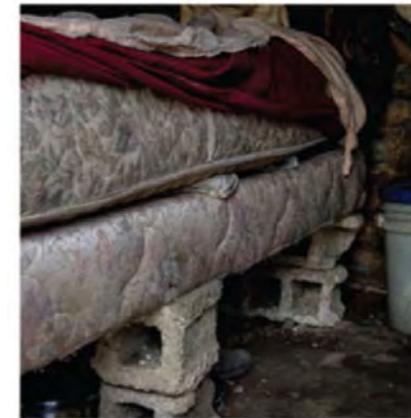
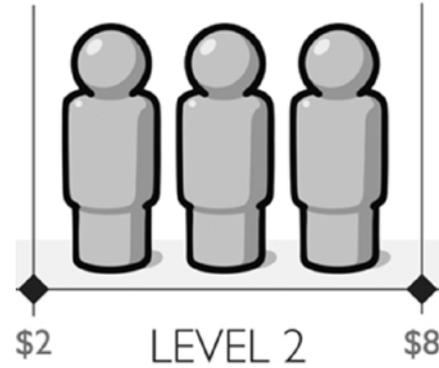


1 billion: Level 1



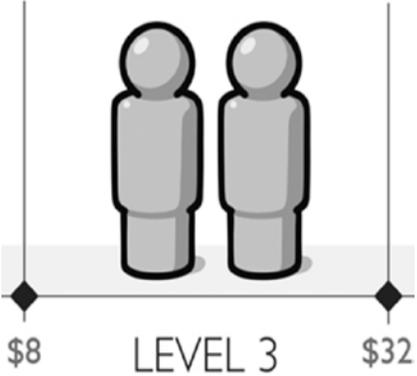
<https://www.gapminder.org/dollar-street/matrix>

3 billion: Level 2



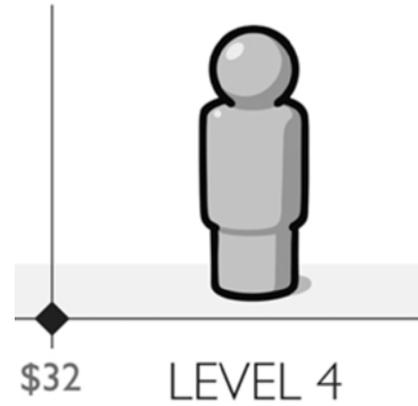
<https://www.gapminder.org/dollar-street/matrix>

2 billion: Level 3



<https://www.gapminder.org/dollar-street/matrix>

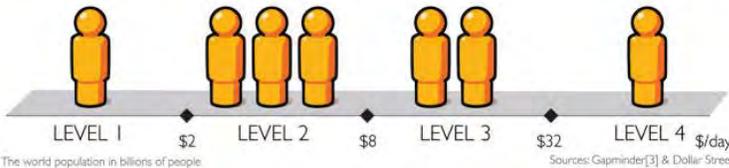
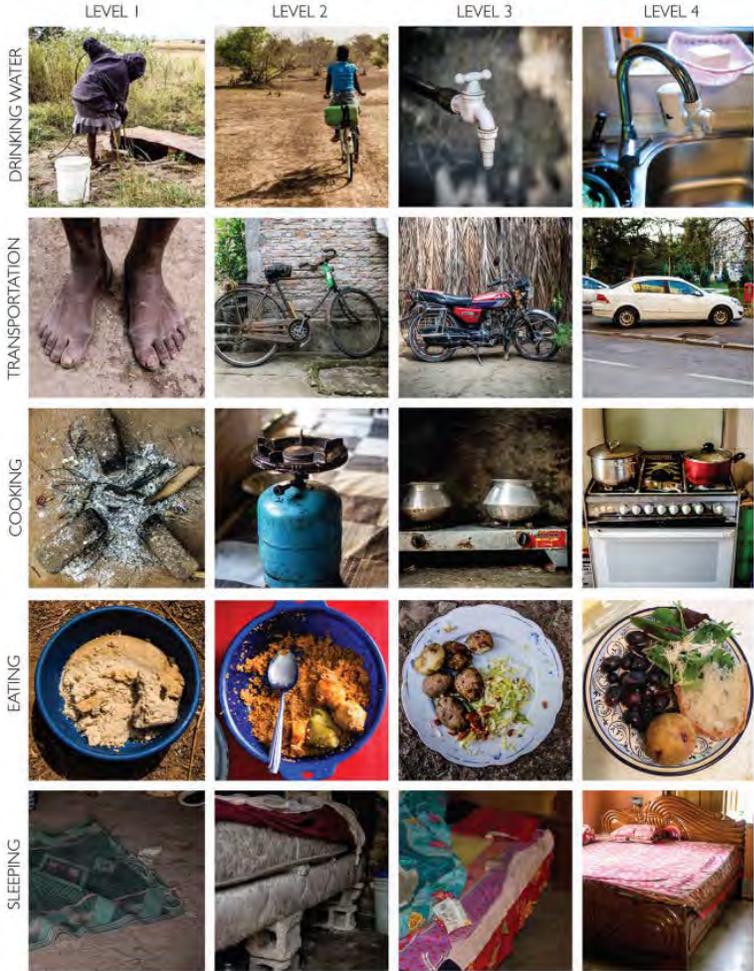
1 billion: Level 4



<https://www.gapminder.org/dollar-street/matrix>

Q: which level are you on?

LIFE ON THE FOUR INCOME LEVELS



The world population in billions of people Sources: Gapminder[3] & Dollar Street

How Rich Am I?

Find out how rich you are compared to the rest of the world – are you on the global rich list?

Country: **United States of America** (Select your country)

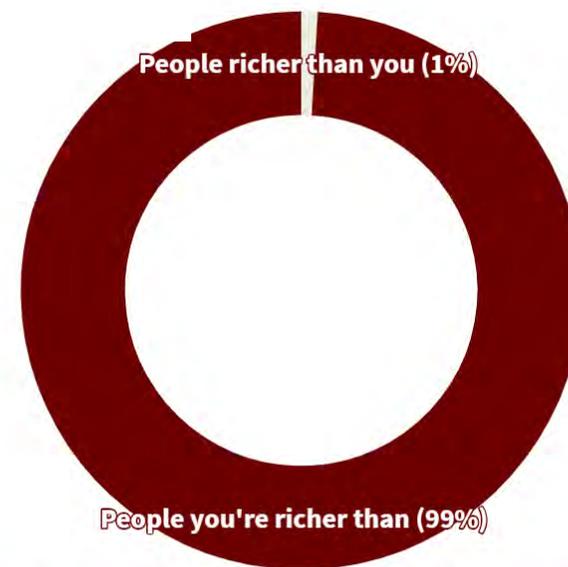
Income: **USD** (Enter your annual **post-tax** household income in USD)

Adults: **1** (Enter the number of adults in your household)

Children: **0** (Enter the number of children in your household)

CALCULATE ✓

The How Rich Am I Calculator is a project of [Giving What We Can](#)

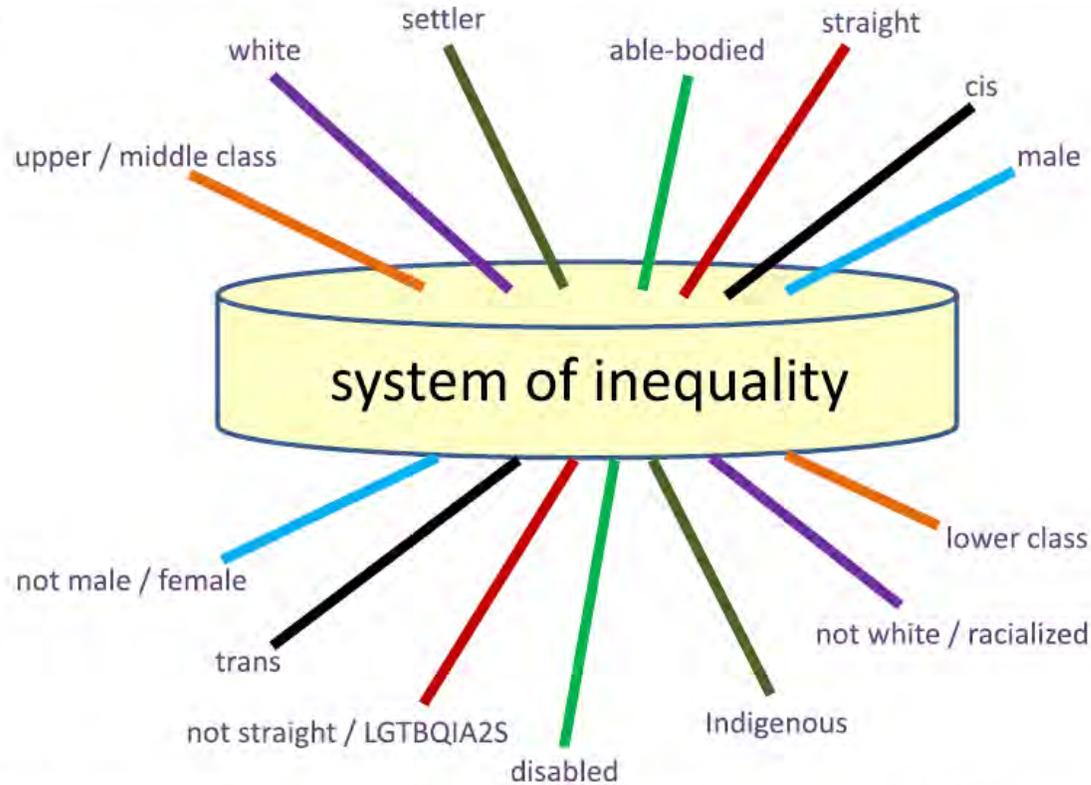


You are in the richest 1% of the global population



“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



Each of the following systems of inequality* (or coins) intersects with the others to co-constitute inequalities:

- classism
- racism
- settler colonialism
- ableism
- heterosexism
- cisgenderism
- sexism

*These examples do not represent all systems of inequality; e.g., other coins not presented here include systems of inequality related to age, religion, accent, or shade of skin.

Fig. 2 The intersecting nature of the coins, which produces complex patterns of advantage and disadvantage

WHEEL OF POWER/PRIVILEGE



Adapted from ccrweb.ca

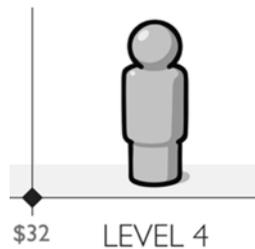
@sylviaaduckworth

So why does inequity & lack of privilege matter for health?

Which level you live on has a HUGE impact on your health!



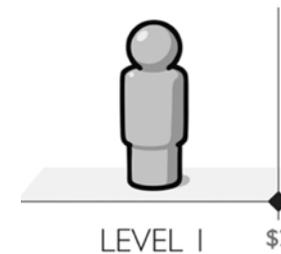
Born in **Montreal**
Life expectancy: 82



Born in **Iqaluit, Nunavut**
Life expectancy: 73



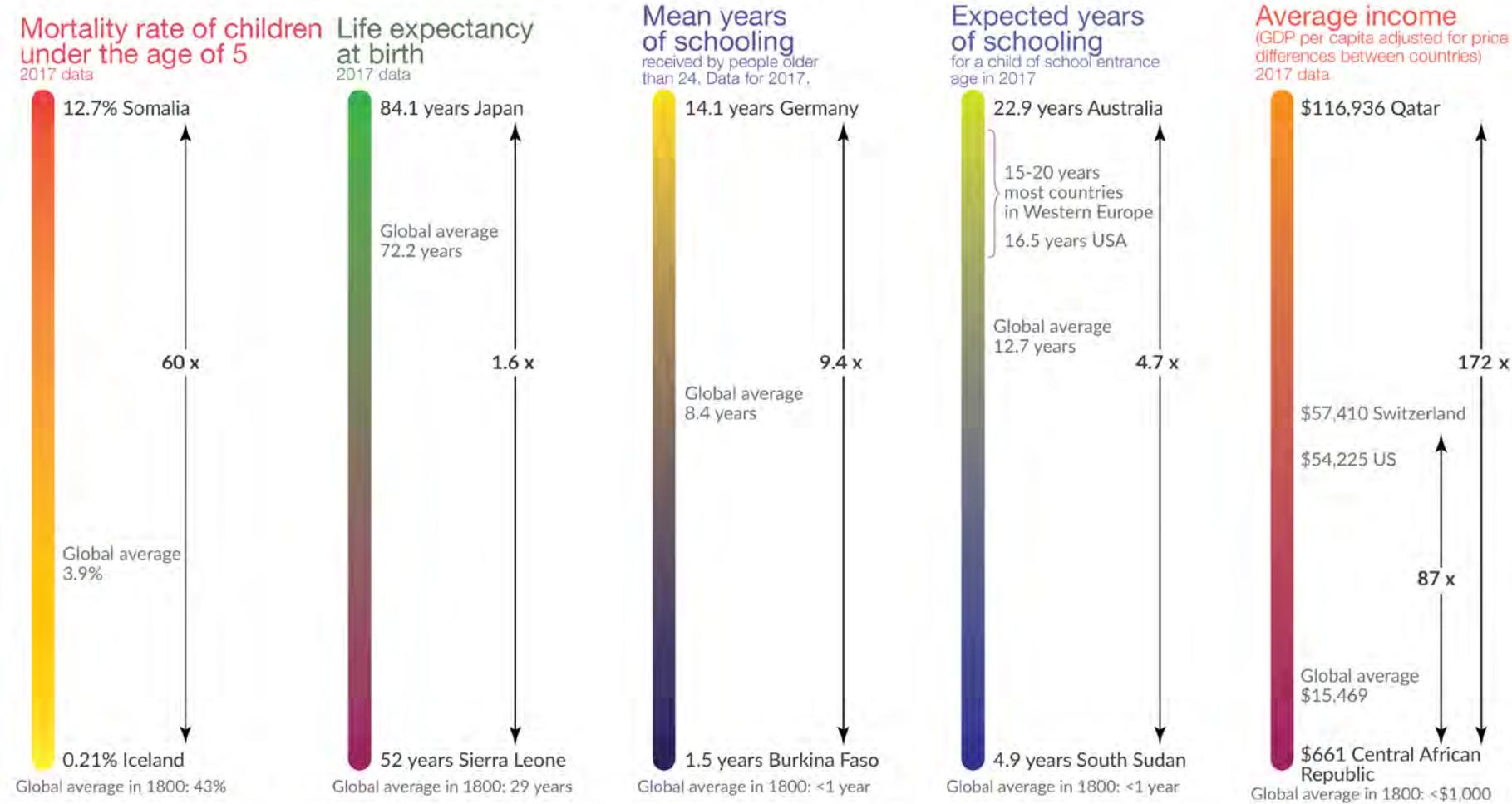
Born in **Uttar Pradesh, India**
Life expectancy: 64



“...where you live isn’t just more important than all your other characteristics, it’s more important than everything else put together” Max Roser, Our World in Data

Global inequality in living conditions

between the world’s worst-off and best-off countries



Data source: all data for 2017 is taken from various UN publications. Historical estimates for 1800 are from OECD – How was life? and Our World in Data. This is a visualization from OurWorldinData.org, where you find data and research on the world’s largest problems.

Licensed under CC-BY by the author Max Roser.

McGill student Clara Kuk created this tutorial



<https://clarakuk.wixsite.com/globalhealth>

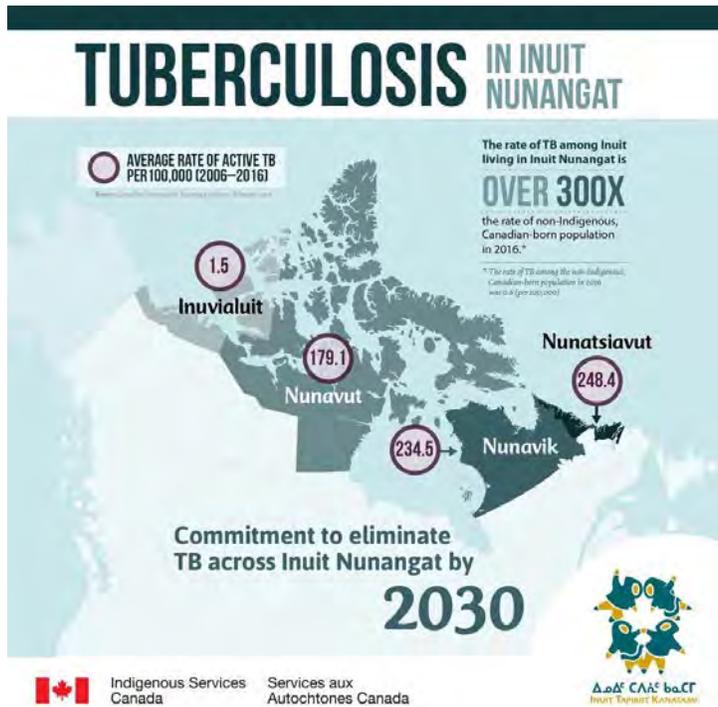
People on Level 1/2 die of easily treatable causes...



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

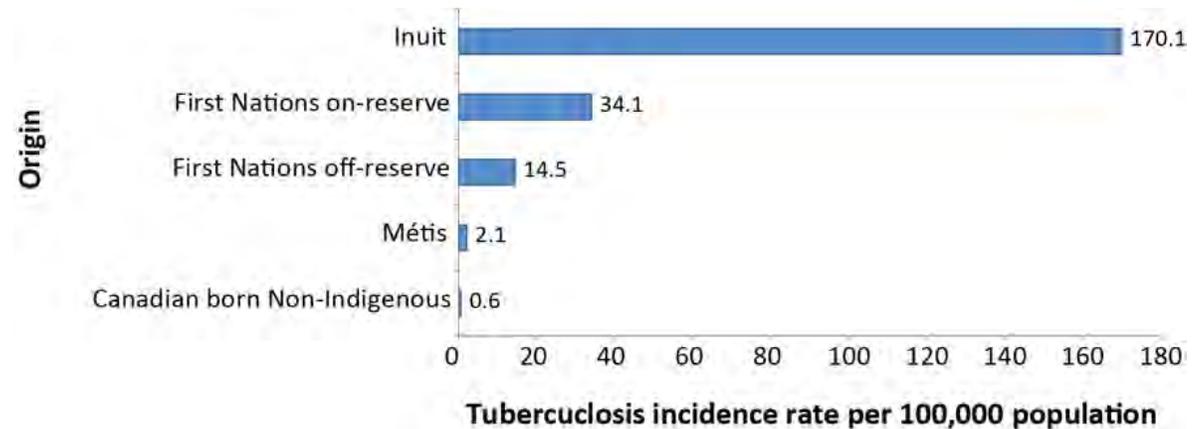


1.5 million people die of tuberculosis every year



Even in a rich, Level 4 country like Canada, you can see how inequities drive health outcomes

TB incidence rates in Canada

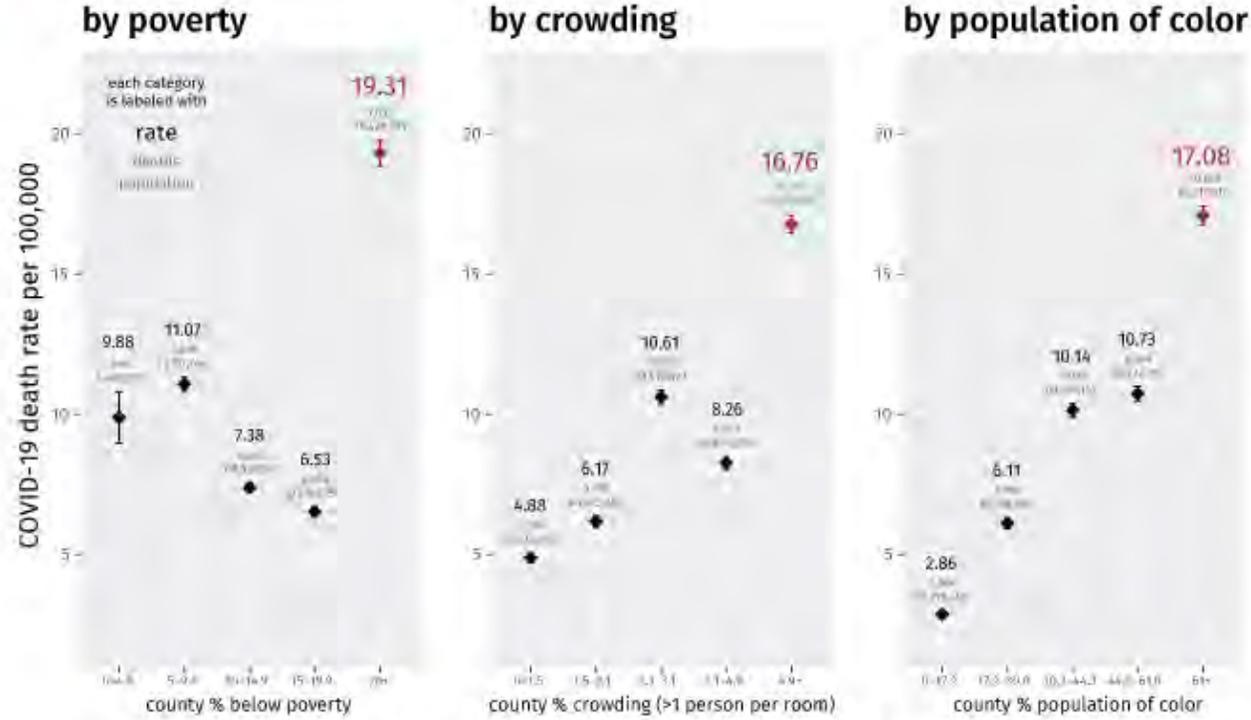




The Harvard Center for Population and Development Studies

Inequities in US COVID-19 Deaths

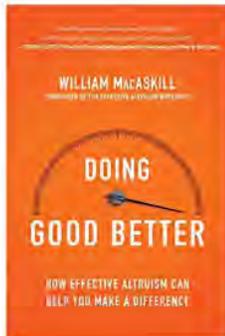
(as of April 16, 2020)



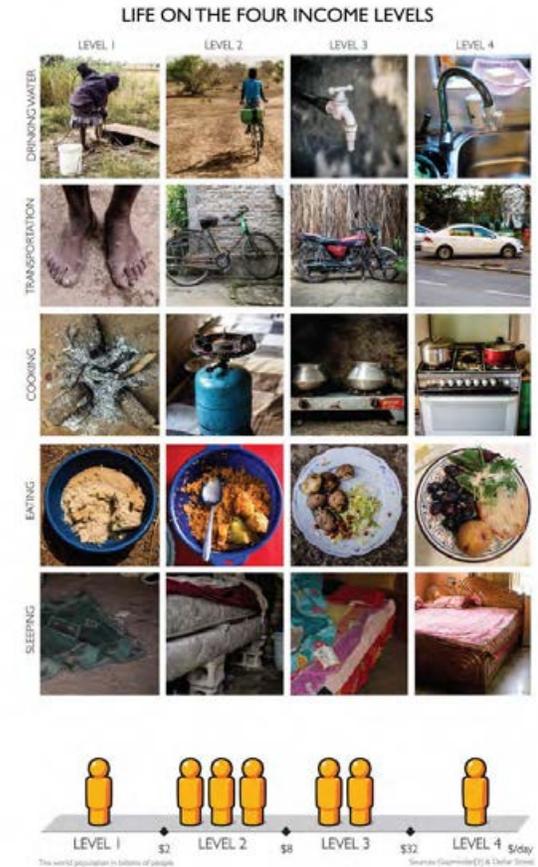
people living in the most disadvantaged counties have the **highest** COVID-19 death rates

Source: Chen JT, Krieger N. Revealing the unequal burden of COVID-19 by income, race/ethnicity, and household crowding: US county vs ZIP code analyses. *Harvard Center for Population and Development Studies Working Paper Series*, Volume 19, Number 1. April 21, 2020. <https://tinyurl.com/ya44we2r>

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.



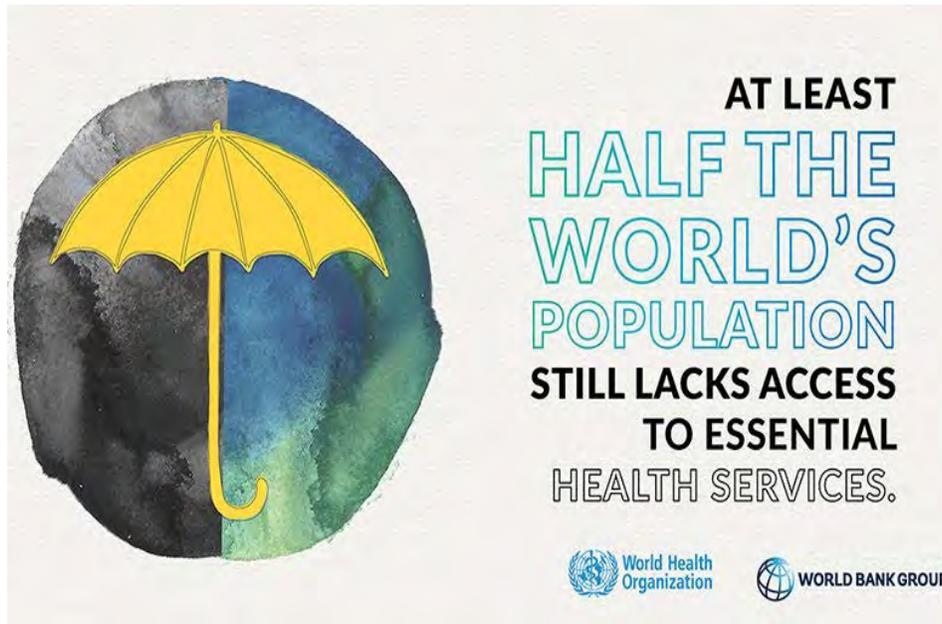
<http://www.effectivealtruism.org/>



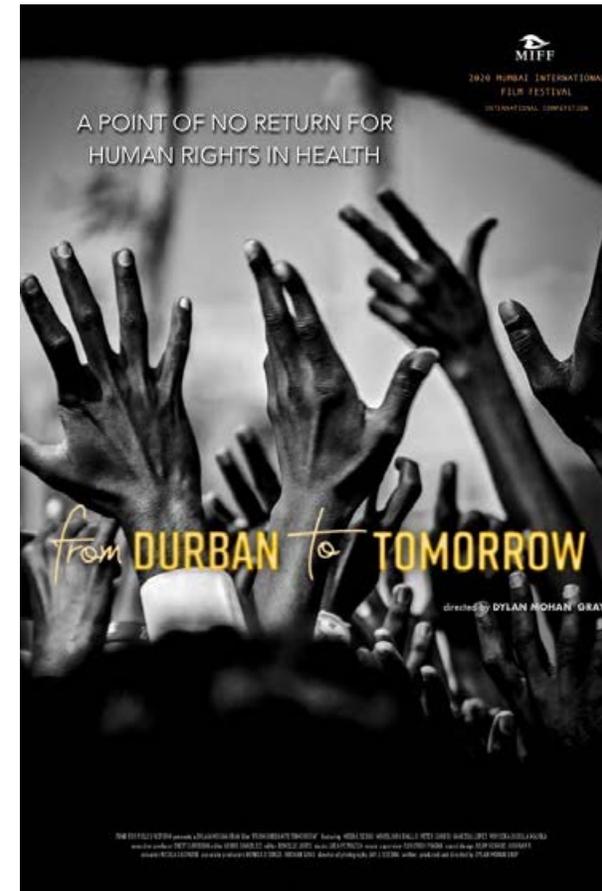
Why care about global health?

- Address serious inequities in health
 - There is an ethical & humanitarian imperative to ensure **health as a fundamental right for all** [watch: *From Durban To Tomorrow*]
- Globalization has truly made the world flatter – “we are in this together”
 - Covid-19 pandemic!
- Some problems are too big/complex for countries to deal with (transnational effort is needed)
 - Climate change
 - Pandemics

40 years after the world promised 'health for all'...



<http://www.who.int/sdg/infographics/en/>

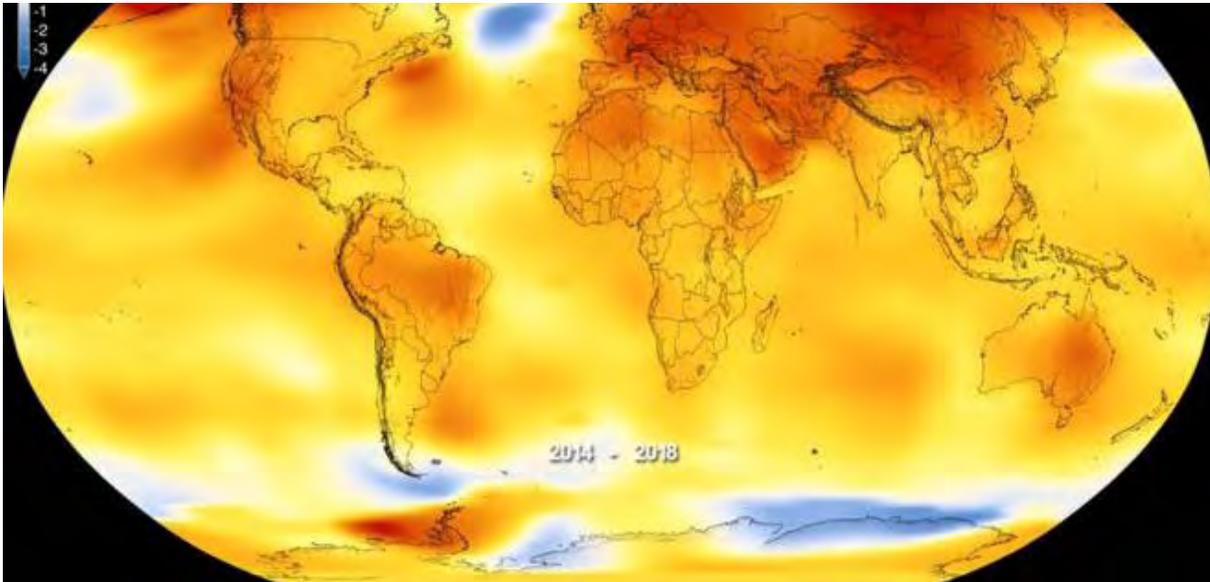


This film is all about the fight for human rights in health

Covid-19 shows us 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”



10 Reasons to Consider Global Health

1. Spend your privilege & become allies to those who are less privileged
2. Develop a 'global state of mind' & practice global solidarity
3. Address health & humanitarian needs (locally and globally)
4. Develop cultural sensitivity & become anti-racist
5. Learn to manage with less
6. Become a better health professional or researcher
7. Conduct research
8. Develop innovations
9. Build capacity
10. Influence policy & engage in advocacy

AMA Journal of Ethics

Illuminating the Art of Medicine

PERSONAL NARRATIVE
MAR 2010

Training for a Global State of Mind

Jane Philpott, MD

Motivations I'd rather suppress

- For the excitement and mystique
- “Glamour” of becoming an MSF doctor
- Because global health is “sexy”
- Because it’s trendy
- I want to be like David Suzuki
- “Vacation-electives”
- A love of adventure travel
- Get more points for your frequent-flyer program

Motivations I can tolerate

- Sense of reward
- Feeling useful
- Feel more reward helping those with greater need vs. helping those who have so much
- I'm selfish. I love to travel and work, so why not combine both and benefit society at the same time?
- A yearning for purpose
- Meet other people who are like-minded
- Curiosity about the world
- Guilt—too much given to me—time to give back
- Interesting medical problems
- To broaden my clinical experience
- To contribute to the country where my parents grew up
- To better understand the background of immigrant populations in Canada
- I worked for MSF last year and found it immensely rewarding
- Encourages government and private donations to university programs
- To attract high-profile staff to universities
- Universities are interested because they want to market themselves and this is another way to look good to the public
- Universities want to attract students

Motivations to which I aspire

- Recognizing that I am part of a global community
- Because my definition of community is broad and physicians are a resource to the community
- Because physicians need to be advocates for all patients
- “Reverse entitlement”—feeling as though my upbringing and country of birth have given me so much that I have a responsibility to repay it to those less fortunate
- Exchange of ideas and cultures
- Because resources should be redistributed to where they are needed
- Learn about disparities of health delivery and health care
- Learn how different cultures approach the same health issues
- Learn how borders affect health
- Learn about how international policies relate to global health
- To better understand the social determinants of health
- Many of the principles of international health also apply to medical practice here (e.g. underserved populations and aboriginal health)
- To gain a balanced perspective on life
- Justice—health as a human right

“The finest motivation for global health education is the recognition of our **common humanity, our shared destiny,** and the interconnected determinants of health. We should continue our efforts to train excellent physicians with a global state of mind. May the training proceed in a spirit of humility, reciprocity and solidarity.” Dr Jane Philpott



Covid-19: stunning lack of global solidarity

Antonio Guterres: UN chief laments lack of global solidarity in COVID-19 fight [COMMENTS](#)

By Ryan Thompson & Tokunbo Salako with AP • last updated: 20/07/2020



HEALTH AND SCIENCE

WHO says partisan politics and lack of global solidarity is 'fueling' coronavirus pandemic

PUBLISHED MON, APR 20 2020 1:02 PM EDT | UPDATED MON, APR 20 2020 3:39 PM EDT

 [Herbety Louche Jr.](#)
@HERBETYJR

SHARE [f](#) [t](#) [in](#) [e](#)

Thousands sign COVID-19 global solidarity manifesto

"The COVID pandemic has exposed inequities and injustices that have long been part of our world."

By MAAYAN JAFFE-HOFFMAN | MAY 23, 2020, 2:04 PM



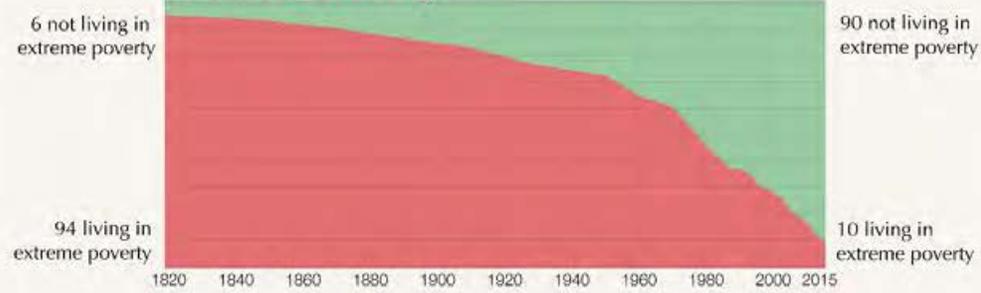
'Vaccine nationalism' threatens global plan to distribute COVID-19 shots fairly

By Kai Kupferschmidt | Jul. 28, 2020, 5:50 PM

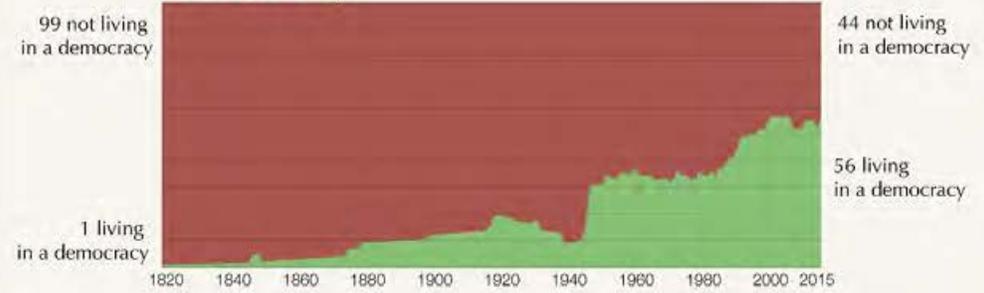
State of Global Health (pre-Covid19)

The World as 100 People over the last two centuries

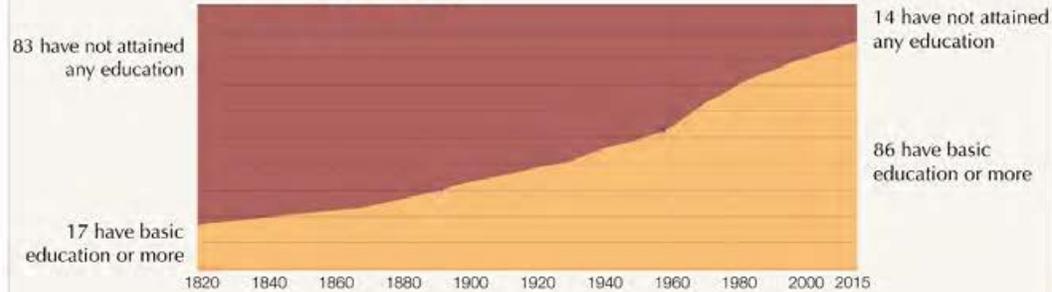
Extreme Poverty



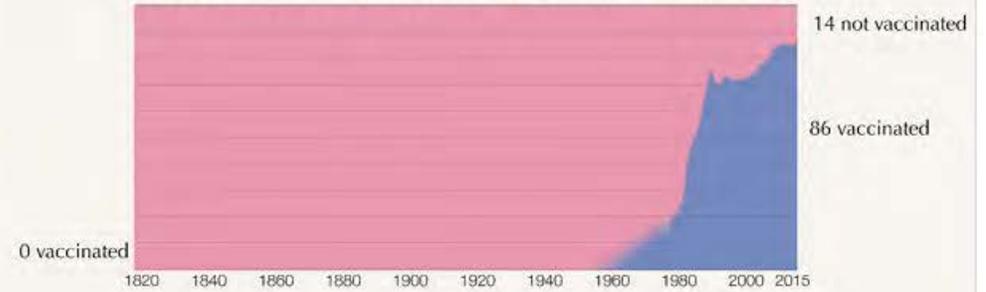
Democracy



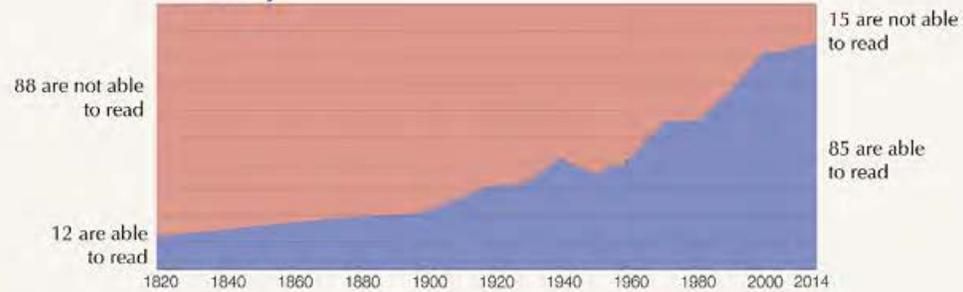
Basic Education



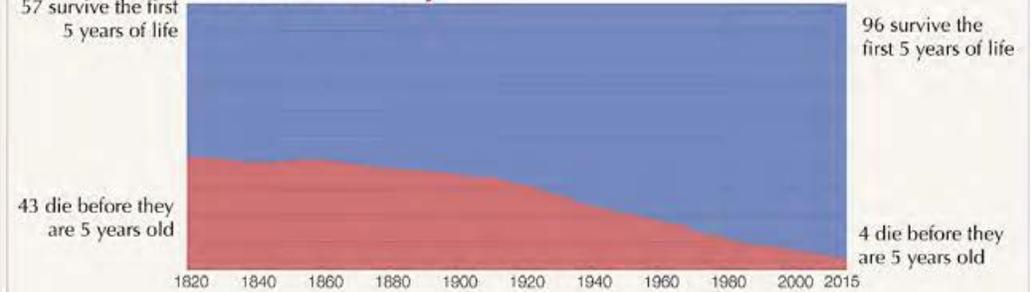
Vaccination against diphtheria, pertussis (whooping cough), and tetanus



Literacy



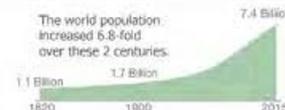
Child Mortality



Data sources:

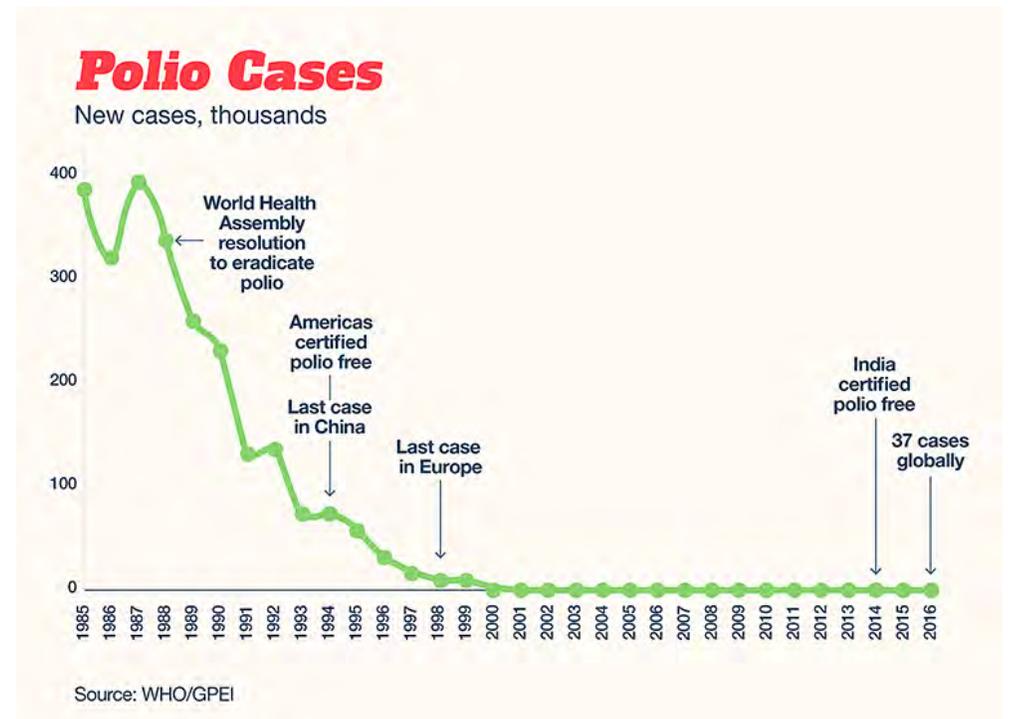
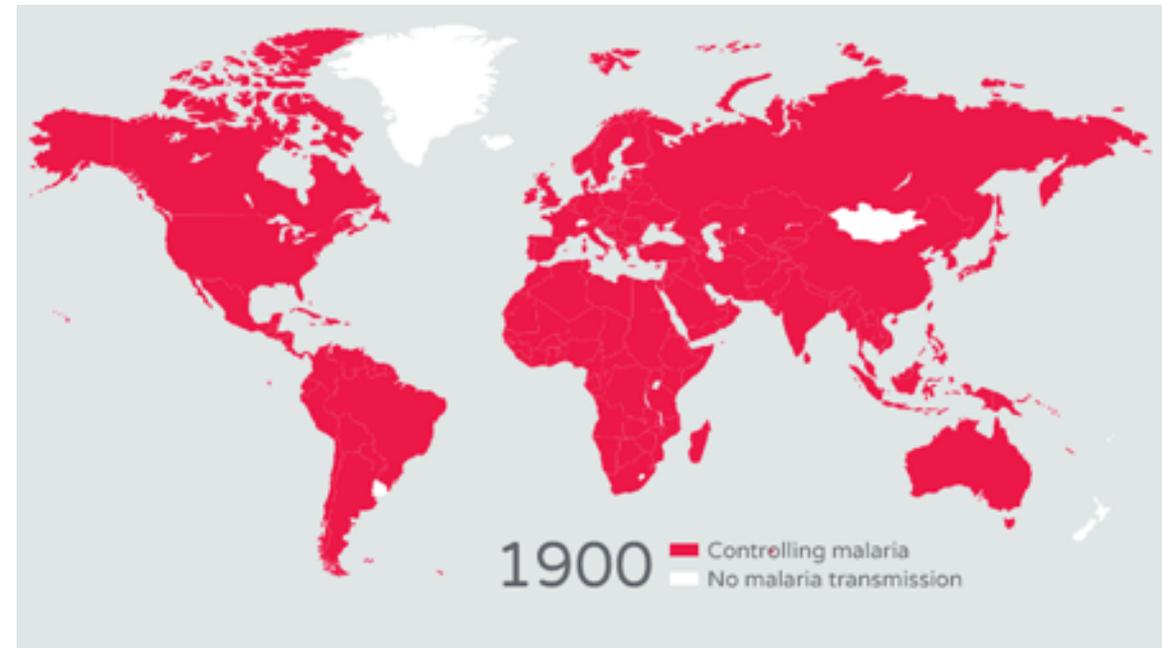
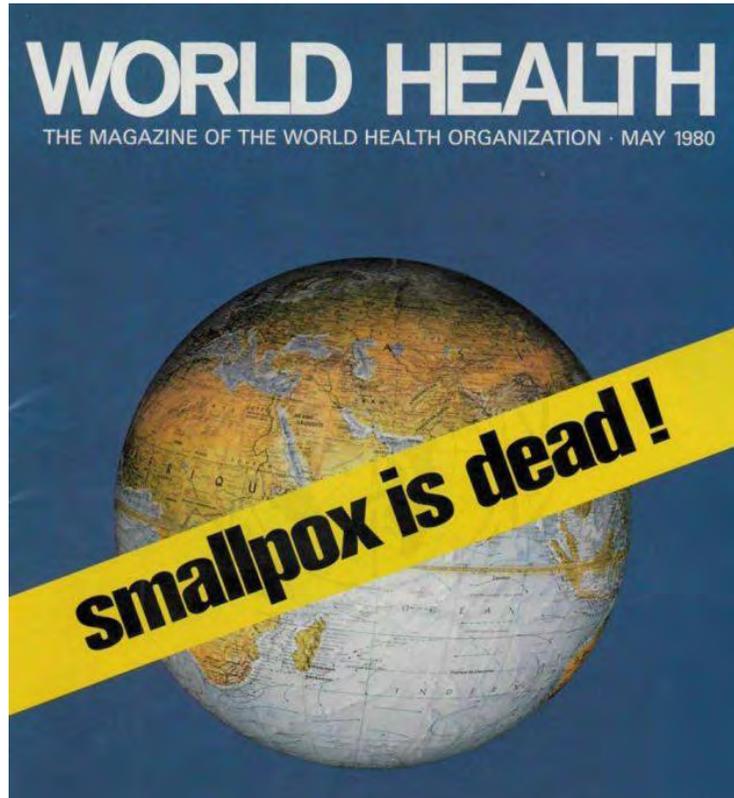
Extreme Poverty: Bourguignon & Morrison (2002) up to 1970 – World Bank 1981 and later (2015 is a projection).
Vaccination: WHO (Global data are available for 1980 to 2015 – the DPT3 vaccination was licensed in 1949)
Education: OECD for the period 1820 to 1960. ITASA for the time thereafter.
Literacy: OECD for the period 1820 to 1990. UNESCO for 2004 and later.

Democracy: Polity IV index (own calculation of global population share)
Colonialism: Wimmer and Min (own calculation of global population share)
Continent: HYDE database
Child mortality: up to 1960 own calculations based on Gapminder; World Bank thereafter

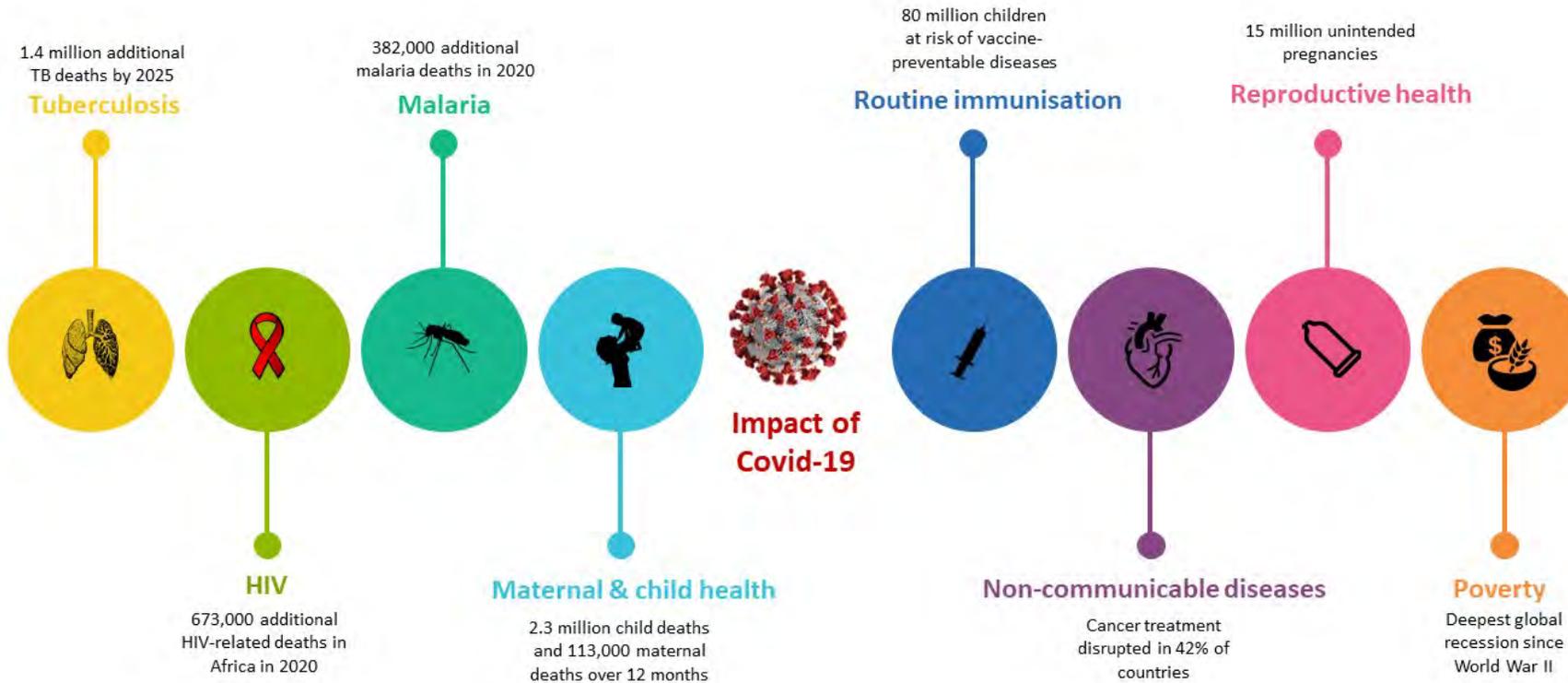


All these visualizations are from OurWorldInData.org an online publication that presents the empirical evidence on how the world is changing.

Progress against several infections

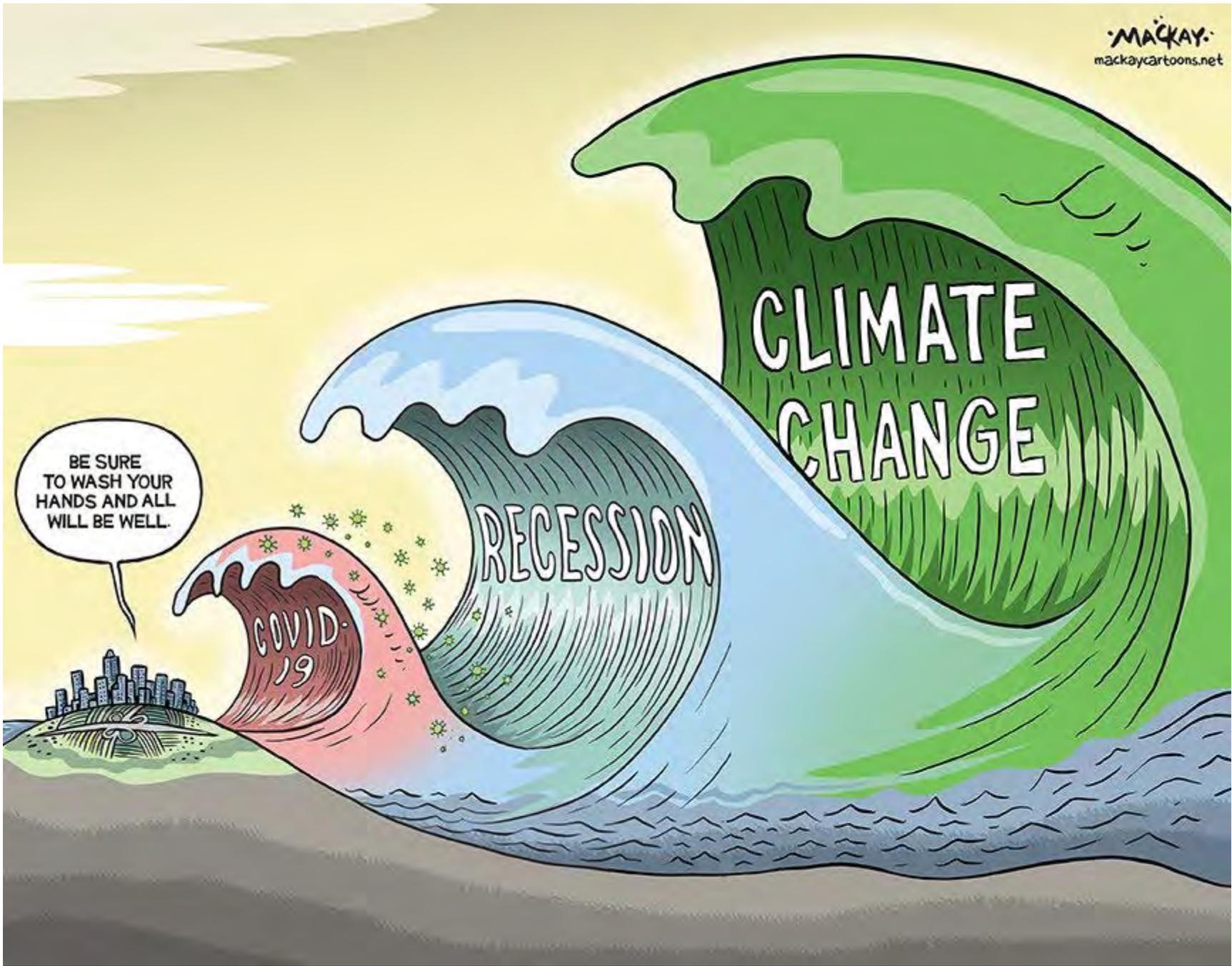


Covid-19 is rolling back decades of progress!





Emerging agenda: antimicrobial resistance, non-communicable diseases & climate crisis



BE SURE
TO WASH YOUR
HANDS AND ALL
WILL BE WELL.

COVID-
19

RECESSION

CLIMATE
CHANGE

Huge challenges are also
opportunities...

How can you have a global health impact?



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

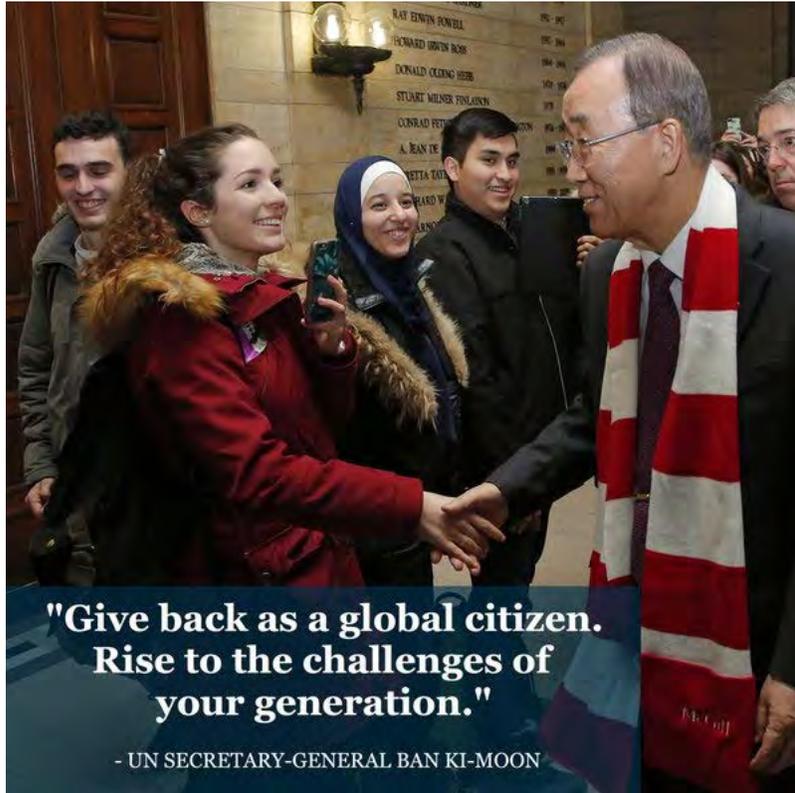


Negotiator/business leader



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...

Beware the White Savior Complex



8:16

+ PLAYLIST

DOWNLOAD

EMBED

TRANSCRIPT

SPECIAL REPORT

American With No Medical Training Ran Center For Malnourished Ugandan Kids. 105 Died

August 9, 2019 · 5:44 PM ET
Heard on All Things Considered

NURITH AIZENMAN



MALAKA GHARIB



Renee Bach, 30, is being sued in Ugandan civil court over the deaths of children who were treated at the critical care center she ran in Uganda. She has left Uganda and is now living in Bedford County, Virginia, where she grew up.

Julia Rendleman for NPR

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



<https://www.globalhealthnow.org/2019-08/10-fixes-global-health-consulting-malpractice>

The McGill Global Health Starter Kit

You have your classes, your books, your syllabi, but what about global health? We have you covered!



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