

*Non-Communicable
Diseases (NCDs):
The Social Justice Issue of
our time*

CHRISTINE NGARUIYA, MD MSC DTM&H

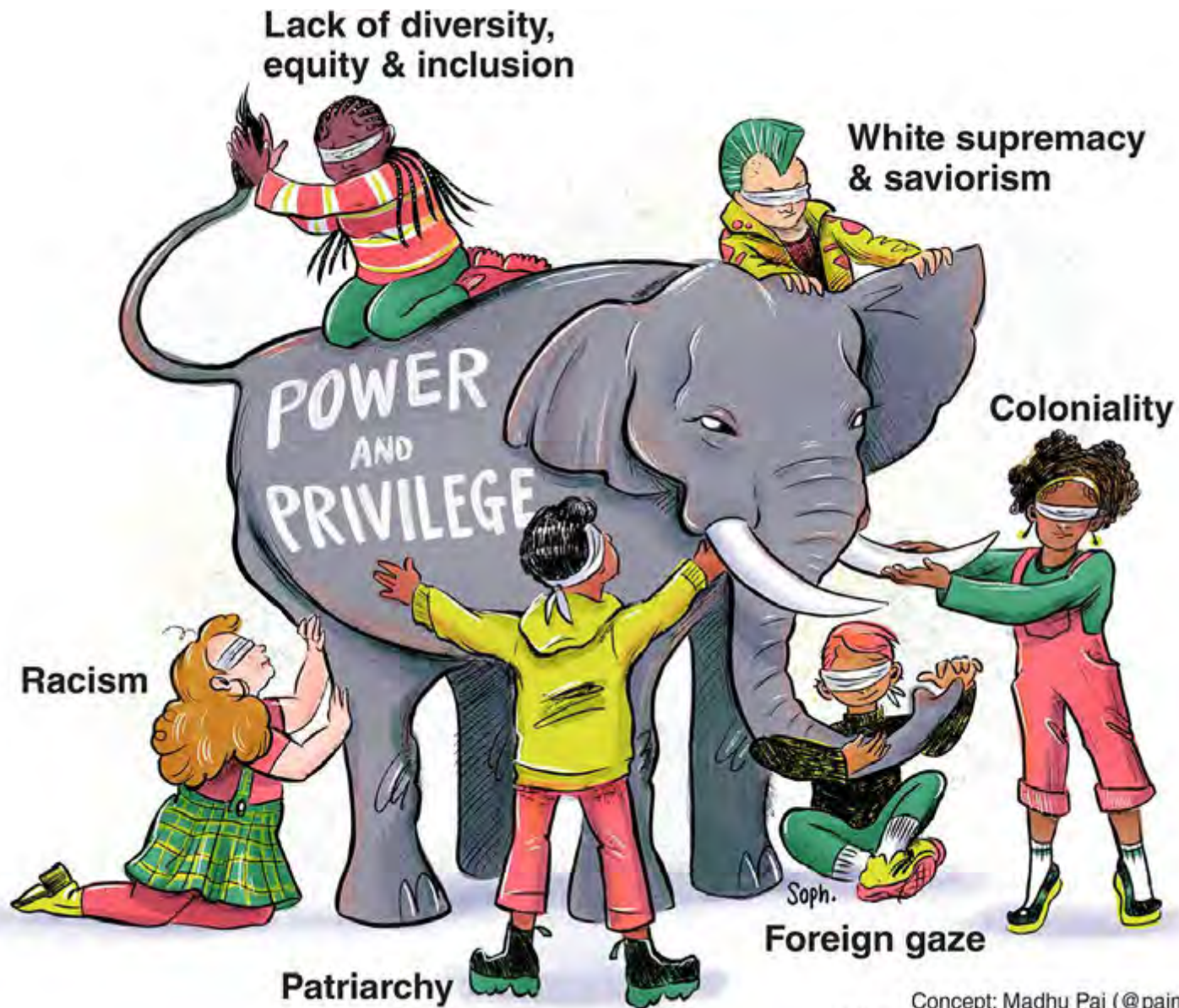
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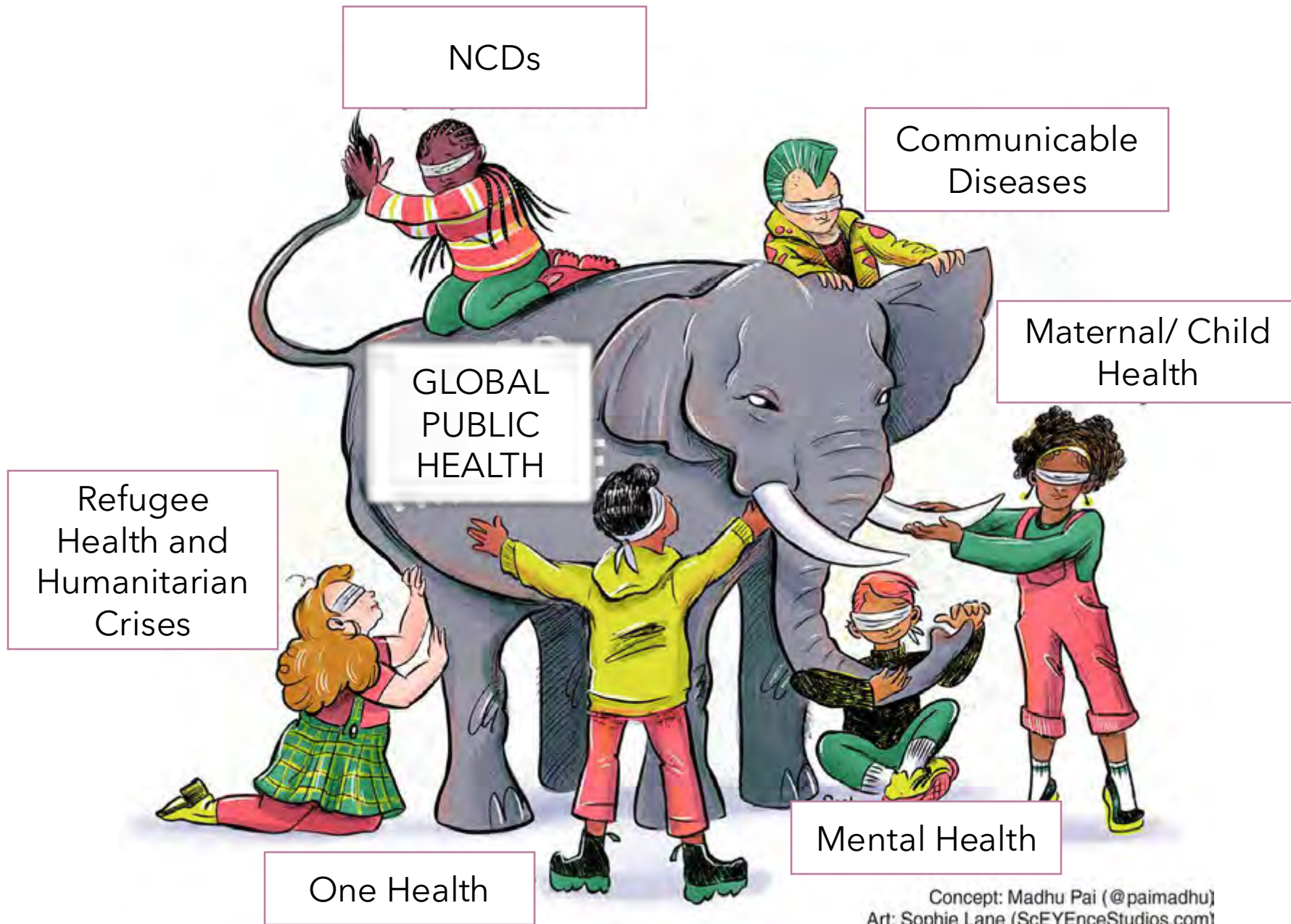
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DEPARTMENT OF EMERGENCY MEDICINE,

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Concept: Madhu Pai (@paimadhu)
Art: Sophie Lane (ScEYenceStudios.com)



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THE LANCET

COMMENT | [VOLUME 386, ISSUE 10011, P2378, DECEMBER 12, 2015](#)



PDF [268 K]

Offline: Chronic diseases—the social justice issue of our time

[Richard Horton](#) 

Published: December 12, 2015 • DOI: [https://doi.org/10.1016/S0140-6736\(15\)01178-2](https://doi.org/10.1016/S0140-6736(15)01178-2)

“

The central failure has been to convince governments that NCDs represent a threat to their present and future security.

NCDs are not Ebola.

They don't kill millions of children.

And there is no civil society movement demanding government action.

NCDs are... driven by the products of legal (if not loved) multinational corporations. They are by-products of our freedoms, unfortunate but inevitable consequences of human advance.

The global health community needs to tell a different story about NCDs. It is struggling to do so.

”

What is your vision for your nation?

“

What is your vision for your
nation?

”

Kenyan

Univ of Nebraska

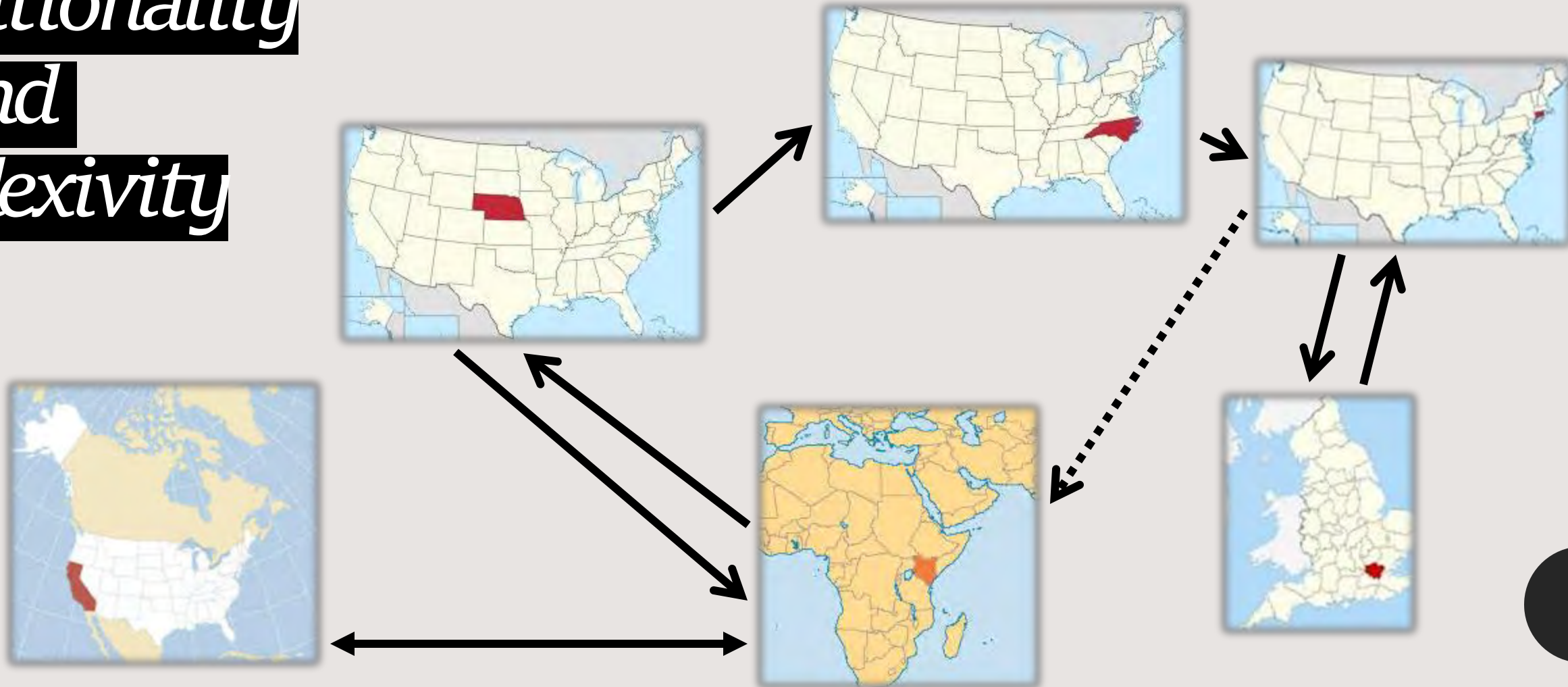
Yale

Why me?
Positionality
and
Reflexivity

Nebraskan

UNC-Chapel Hill

LSHTM



Kenyan

Univ of Nebraska

Yale

*Positionality
and Reflexivity*

Nebraskan

UNC-Chapel Hill

LSHTM



“NAIROBI”





Nairobi

Forbes

FORBES > INNOVATION > HEALTHCARE

Double Agents In Global Health

Madhukar Pai Contributor

write about global health, infectious diseases, and equity

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San Francisco



Origin
Story



NCD
Basics
Definitions
&
Epidemiology



NCDs &
social justice



NCDs &
action



How does one define a Non-communicable Disease (NCD)?



How does one define a Non-communicable Disease (NCD)?

World Health Organization (WHO):
“**Noncommunicable diseases (NCDs)**, also known as chronic diseases, are not passed from person to person. They are of **long duration and generally slow progression.**”



Global
Both sexes, All ages, 2021, DALYs

Stroke

Lung C

Colorectal C

Stomach C

Back Pain

COVID-19

Neonatal

Breast C

Afib
Diabetes

What about the numbers?

Headaches

Alzheimer's

Blindness

Falls

Drug Use

Road Inj

Orn C

COPD

Asthma

IBD

Depression

Self-Harm

Violence

LDL

ILD

Pharm

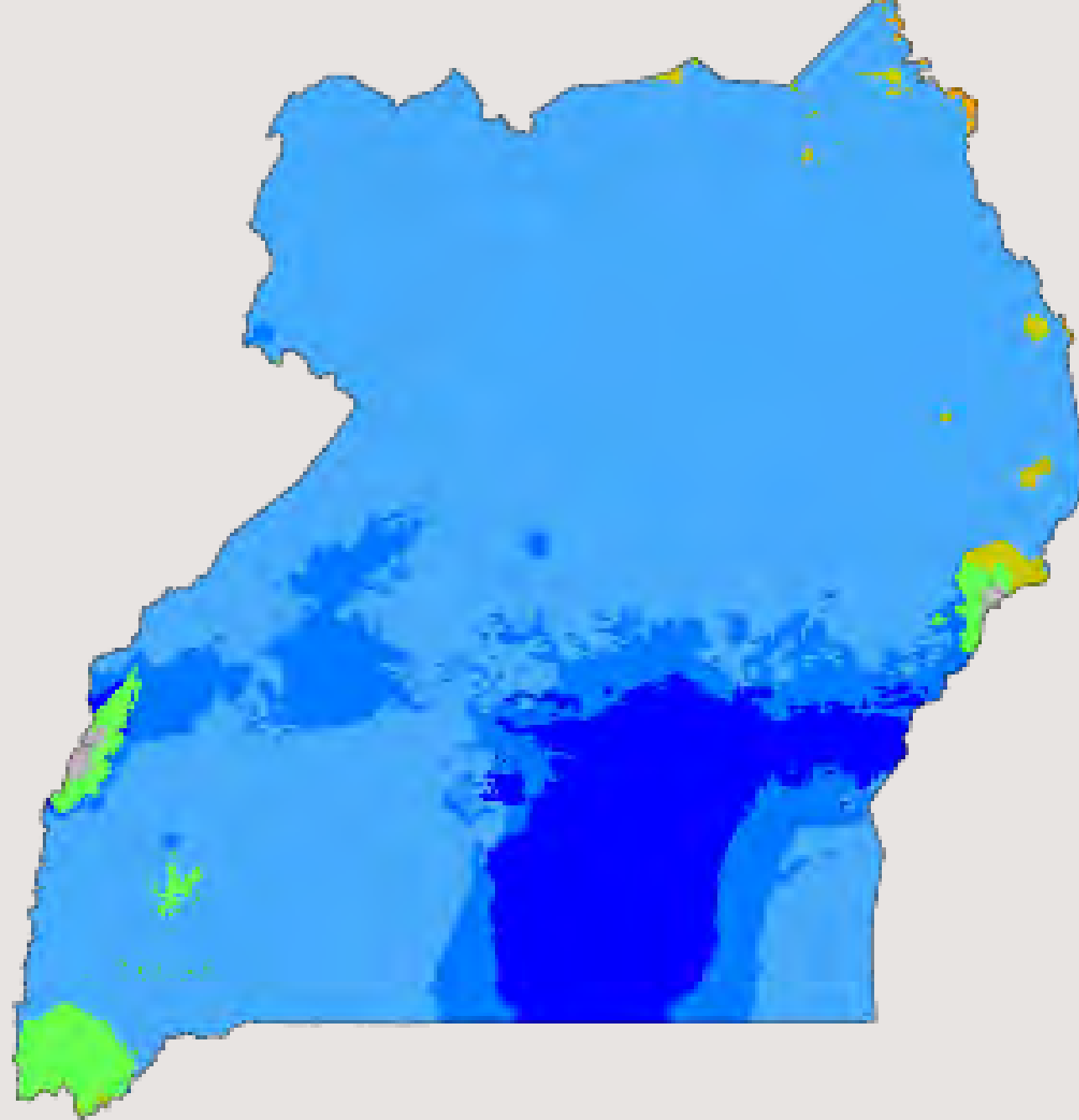
IL

41

MILLION

annual global NCD deaths





**Uganda
population:
44 MILLION**



Uganda
population:
44 MILLION



41 MILLION



41

MILLION

annual global NCD deaths



41 MILLION

**annual global NCD deaths
(74% or around $\frac{3}{4}$ of global
deaths)**



41 MILLION

**annual global NCD deaths
(74% or around $\frac{3}{4}$ of global
deaths)**



Deaths:

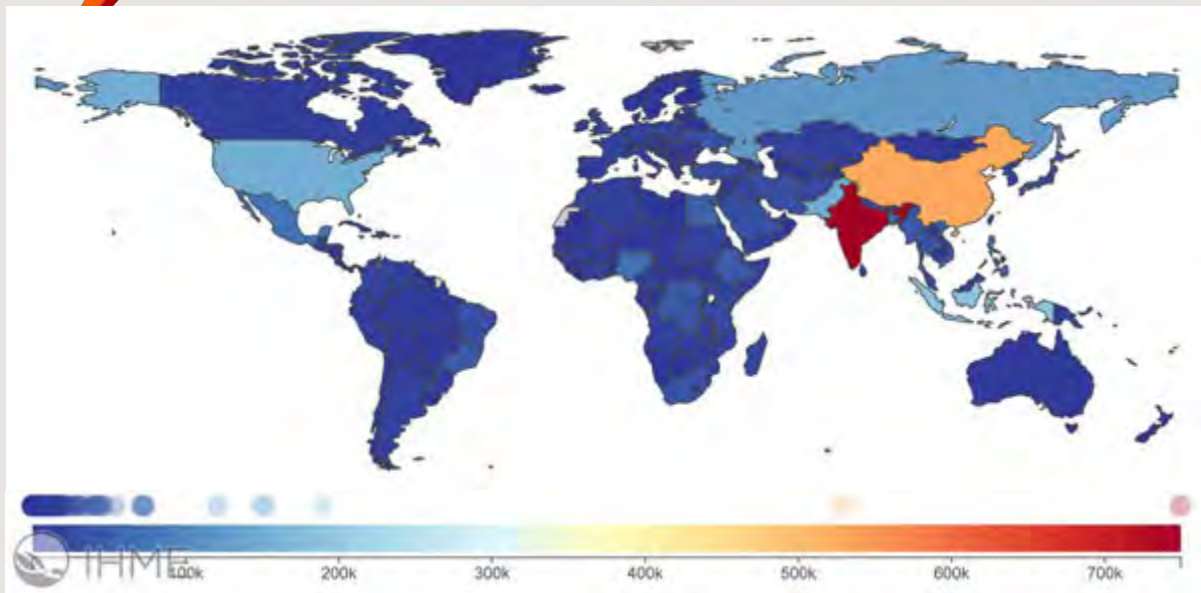
7,010,681

<https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>

41 MILLION



**Three quarters or 75% deaths
occur in Low- and Middle-
Income Countries**



<https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>

41 MILLION



85% of premature deaths

Between 30-69 years

**occur in Low- and Middle-
Income countries**

<https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>

80 under 40 by 2020: an equity agenda for NCDs and injuries

[Agnes Binagwaho](#) [✉](#) • [Marie Aimée Muhimpundu](#) • [Gene Bukhman](#) for the NCD Synergies Group

Published: January 04, 2014 • DOI: [https://doi.org/10.1016/S0140-6736\(13\)62423-X](https://doi.org/10.1016/S0140-6736(13)62423-X)



85% of premature deaths

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41 MILLION



<https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>

Origin
Story



NCD
Basics
Definitions
&
Epidemiology



NCDs &
social justice



NCDs &
action





Gates Foundation

Chronic Respiratory Disease



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Charlie Shoemaker for The New York Times

Cancer



© 2012

Charlie S

Tobacco Use



Diabetes



NCDs and the Environment



Chronic Respiratory Disease



Received: 17 November 2021

Revised: 24 August 2022

Accepted: 3 October 2022

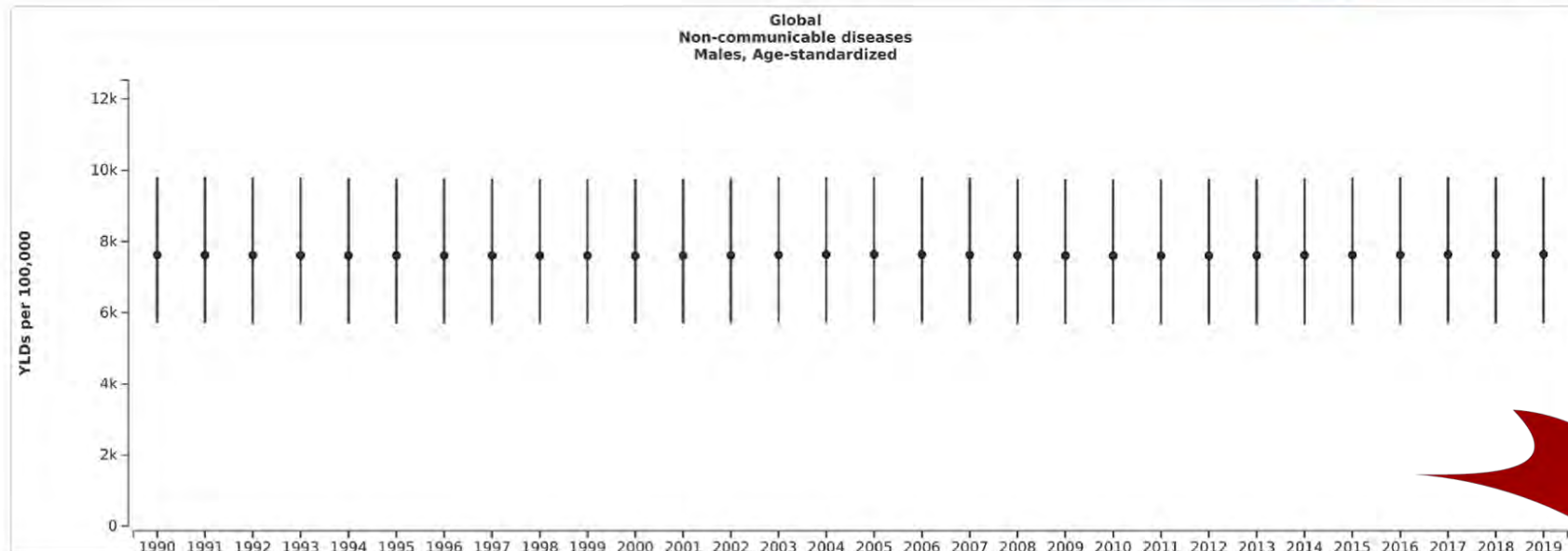
DOI: 10.1096/fba.2021-00140

FASEB BioAdvances Open Access WILEY

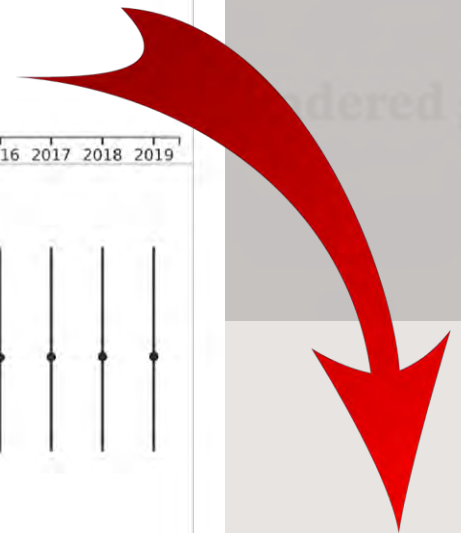
REVIEW

When women win, we all win—Call for a gendered global NCD agenda

Christine Ngaruiya^{1,2,3,4} 



Data / GHO / Themes / Topics
SDG Target 3.4 Non-communicable diseases and mental health
Appears in: [Noncommunicable diseases](#) | [Global Health Estimates: Life expectancy and leading causes of death and disability](#)





Tobacco Use

08/01/2021 - 07/31/2024 (Project Period)

NGARUIYA, CHRISTINE (PD/PI)

Adaptation and testing of a novel text-based tobacco cessation and education intervention in Kenyan Emergency Department patients
(Title)

Awarded. Non-fellowships only

> [BMC Public Health](#). 2018 Nov 7;18(Suppl 3):1223. doi: 10.1186/s12889-018-6058-5.

Tobacco use and its determinants in the 2015 Kenya WHO STEPS survey

Christine Ngaruiya ¹, Hussein Abubakar ^{2 3}, Dorcas Kiptui ^{2 4}, Ann Kendagor ^{2 4}, Melau W Ntakuka ⁴, Philip Nyakundi ², Gladwell Gathecha ^{2 3}

Affiliations + expand

PMID: 30400915 PMID: [PMC6219013](#) DOI: [10.1186/s12889-018-6058-5](#)

Abstract

Background: According to the World Health Organization (WHO), in 2015, over 1.1 billion people smoked tobacco, which represents around 15% of the global population. In Africa, around one in five adults smoke tobacco. The 2014 Kenya Global Adult Tobacco Survey reported that 2.5 million adults use tobacco products. The objective of our study was to describe patterns and determinants

Epidemiology

More epidemiology

Intervention design/
implementation

Kenya

Pakistan

Uganda

Nigeria

Central Africa (DRC,
Gabon, Cameroon)

PLOS ONE

PUBLISH ABOUT BROWSE SEARCH

OPEN ACCESS PEER-REVIEWED

RESEARCH ARTICLE

Target women: Equity in access to mHealth technology in a non-communicable disease care intervention in Kenya

Christine Ngaruiya, Samuel Oti, Steven van de Vijver, Catherine Kyobutungi, Caroline Free

Published: September 11, 2019 • <https://doi.org/10.1371/journal.pone.0220834>

111 Save 9 Citation

1,461 View 8 Share

Global Grand Challenges

ABOUT PARTNERSHIPS CHALLENGES AWARDS GRANT OPPORTUNITIES

Large Language Models (LLMs) Targeting Non-Communicable Disease Risk Factors Among Kenyan Youth

Use of Natural Language Processing for Identification of Gender Differences in Acute Myocardial Infarction Presentation and Management in Pakistan

14 Pages • Posted: 9 Dec 2021

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[Zainab Samad](#)

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[Salma Tajuddin](#)

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1 Bridging gaps in automated acute myocardial
2 infarction detection between high-income and low-
3 income countries

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Digital Health

Robert Kardashian Health Scare Is a Window Into an Epidemic Afflicting the Rest of The World

Diabetes doesn't always come in the shapes and sizes that we think of either. To be sure, it is easy to blame the disease on "poor lifestyle choices" made by individuals who could otherwise prevent the afflictions of the disease on themselves. But the potential for developing the disease also has to do with genetics.

By Christine Ngaruiya, MD MSc DTM&H, Contributor

Faculty in the Dept. of Emergency Medicine at Yale and Public Voices Fellow with The OpEd project.

02/09/2016 06:47pm EST | Updated February 9, 2017

This post has been published on the website of The OpEd Project. Used under license. Contributions must be at least 1000 words.

THE BLOG

Nicki Minaj and Ne-Yo Take the Stage in Controversial Africa Performances: Where Do We Draw the Line?

By Christine Ngaruiya, MD MSc DTM&H, Contributor

Faculty in the Dept. of Emergency Medicine at Yale and Public Voices Fellow with The OpEd project.

01/23/2016 06:27am EST | Updated January 21, 2017



Silent killers: pandemic of the 21st century

BY CHRISTINE NGARUIYA, MD, DTM&H — 10/13/15 02:00 PM EDT

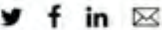
THE VIEWS EXPRESSED BY CONTRIBUTORS ARE THEIR OWN AND NOT THE VIEW OF THE HILL

4 C

Yale University School of Public Health
Global Health NOW

NCD Focus Lags Behind Global Need

May 31, 2016
CHRISTINE NGARUIYA



© 2012 Pinky Patel, Courtesy of Photoshare

The 17th round of the [Grand Challenges Grants](#), which closed recently, provides an opportunity for novel research, programming and technology development affecting global health priorities. Unfortunately, the organization missed another chance to add an important focus area: non-communicable diseases (NCDs).

Advocacy: non-traditional writing

ABOUT

truthout



LOS ANGELES

MUSLIM BAN

HEALTH CARE

GAZA

DONALD TRUMP

KILMAR ABREGO GARCIA

OP-ED | ENVIRONMENT & HEALTH

Cuts to Biomedical Research Will Cost Lives, Scientific Breakthroughs & Careers

Biomedical research funding is under threat as the National Institutes of Health faces an indirect cost cap.

By Deepti Pradhan & Christine Ngaruiya, TRUTHOUT

April 6, 2025

Advocacy: non-traditional writing

What is equity, justice and liberation?

Craig Frohle:

COMMENT | [VOLUME 386, ISSUE 10011, P2378, DECEMBER 12, 2015](#)

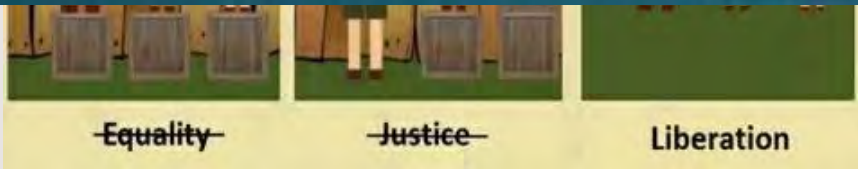


PDF [26]

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Published: December 12, 2015 • DOI: [https://doi.org/10.1016/S0140-6736\(15\)01178-2](https://doi.org/10.1016/S0140-6736(15)01178-2)



<http://www.pugetsoundoff.org/blog/equality-versus-equity>

What is equity, justice and liberation?



Craig Frohle:

- Equality vs Equity
- Equality is about sameness, equity is about fairness... **justice**
- Equality < Justice < Liberation



<http://www.pugetsoundoff.org/blog/equality-versus-equity>

Origin
Story



NCD
Basics
Definitions
&
Epidemiology



NCDs &
social justice



**NCDs &
action**



social justice

Diet

Exercise

Alcohol Use

Tobacco Use



Cardiovascular disease

Diabetes

Cancer

Chronic Respiratory Disease



UN General Assembly Third High-level Meeting on NCDs

27 September 2018 09:00 – 17:00 UTC Time | New York, United States

On 27 September 2018, the United Nations General Assembly is staging the third High-level Meeting on the prevention and control of noncommunicable diseases (NCDs), which will undertake a comprehensive review of the global and national progress achieved in putting measures in place that protect people from dying too young from heart and lung diseases, cancers and diabetes.

[Find out more](#)



TOGETHER LET'S BEAT NCDs

Preparing for the third UN High-level Meeting on NCDs, 2018

Global policy

UN General Assembly Third High-level Meeting on NCDs

27 September 2018 09:00 – 17:00 UTC Time | New York, United States

On 27 September 2018, the United Nations General Assembly is staging the third High-level Meeting on the prevention and control of noncommunicable diseases (NCDs), which will undertake a comprehensive review of the global and national progress achieved in putting measures in place that protect people from dying too young from heart and lung diseases, cancers and diabetes.

[Find out more](#)



4th High-level Meeting of the United Nations General Assembly on the Prevention and Control of on NCDs (2025)

15 December 2021 | Meeting report



[Download \(2.1 MB\)](#)

WHO TEAM

Noncommunicable diseases

EDITORS

WHO

NUMBER OF PAGES

26



[Goals](#)

3

Ensure healthy lives and promote well-being for all at all ages

3 GOOD HEALTH AND WELL-BEING



Target

3.4

By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being

Indicators ▲

3.4.1

Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease

3.4.2

Suicide mortality rate

GLOBAL ACTION PLAN

FOR THE PREVENTION AND CONTROL OF NONCOMMUNICABLE DISEASES

2013-2020



A **25%** relative reduction in risk of premature mortality from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases.



At least **10%** relative reduction in the harmful use of alcohol, as appropriate, within the national context.



A **10%** relative reduction in prevalence of insufficient physical activity.



A **30%** relative reduction in mean population intake of salt/sodium.



A **30%** relative reduction in prevalence of current tobacco use in persons aged 15+ years.



A **25%** relative reduction in the prevalence of raised blood pressure or contain the prevalence of raised blood pressure, according to national circumstances.



Halt the rise in diabetes and obesity.



At least **50%** of eligible people receive drug therapy and counselling (including glycaemic control) to prevent heart attacks and strokes.



An **80%** availability of the affordable basic technologies and essential medicines, including generics, required to treat major noncommunicable diseases in both public and private facilities.



GLOBAL ACTION PLAN

FOR THE PREVENTION AND CONTROL OF NONCOMMUNICABLE DISEASES









2013-2020

Diet

Exercise

Alcohol Use

Tobacco Use

-  A **25%** relative reduction in risk of premature mortality from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases.
-  At least **10%** relative reduction in the harmful use of alcohol, as appropriate, within the national context.
-  A **10%** relative reduction in prevalence of insufficient physical activity.
-  A **30%** relative reduction in mean population intake of salt/sodium.
-  A **30%** relative reduction in the prevalence of cardiovascular disease in persons aged 15+ years.
-  A **25%** relative reduction in the prevalence of hypertension or contain the prevalence of hypertension according to national circumstances.
-  **Halt the rise** in diabetes and obesity.
-  At least **50%** of eligible people receive counselling (including glycaemic control) to prevent or delay onset of diabetes and strokes.

Cardiovascular disease

Diabetes

Cancer

Chronic Respiratory Disease

Global Monitoring Framework

Mortality & Morbidity

Unconditional probability of dying between ages 30 and 70 years from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases

Cancer incidence by type of cancer

Risk Factors

Harmful use of alcohol (3)
Low fruit and vegetable intake
Physical inactivity (2)
Salt intake
Saturated fat intake
Tobacco use (2)
Raised blood glucose/diabetes
Raised blood pressure
Overweight and obesity (2)
Raised total cholesterol

National Systems Response

Cervical cancer screening
Drug therapy and counseling
Essential NCD medicines & technologies
Hepatitis B vaccine
Human Papilloma Virus vaccine
Marketing to children
Access to palliative care
Policies to limit saturated fats and virtually eliminate *trans* fats

Total number of related indicators in brackets

25 Indicators

Risk Factors

Modifiable risk factors

- Harmful use of alcohol (3)
- Low fruit and vegetable intake
- Physical inactivity (2)
- Salt intake
- Saturated fat intake
- Tobacco use (2)

Metabolic risk factors

- Raised blood glucose/diabetes
- Raised blood pressure
- Overweight and obesity (2)
- Raised total cholesterol

National Systems Response

- Cervical cancer screening
- Drug therapy and counseling
- Essential NCD medicines & technologies
- Hepatitis B vaccine
- Human Papilloma Virus vaccine
- Marketing to children
- Access to palliative care
- Policies to limit saturated fats and virtually eliminate *trans* fats



YP-CDN
Young Professionals
Chronic Disease Network

- About ▾
- Our Work ▾
- Our Issues ▾
- Get Involved ▾
- Blog

Join the world's 1st and largest social network of young health professionals targeting chronic illness like cancer and diabetes.

NCD organizations/ organizers

NCD Alliance

SUBSCRIBE TO OUR UPDATES LOGIN ENGLISH 22 ALERTS

SEARCH

HOME WHY NCDS WHO WE ARE WHAT WE DO RESOURCES NEWS & EVENTS JOIN US

Translating the Post-2015 Agenda: Action on NCDs for a Sustainable Future

About the NCD Alliance

HOME | WHO WE ARE | ABOUT THE NCD ALLIANCE

With a strong track record, vision and expertise, the NCD Alliance is uniquely placed to drive the NCD agenda forward.

NCD Alliance ANNUAL

Origin
Story



NCD
Basics
Definitions
&
Epidemiology



NCDs &
social justice



NCDs &
action



“

What is your vision for your nation?

”





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