Race towards Sustainable Development Goal (SDG) #3 – How will Non-Communicable Diseases affect the progress towards the Goals

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Centre for Science and Environment (CSE) workshop

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NCDs: The Big Four

- Cardiovascular Disease
- Cancer
- Diabetes
- Chronic Respiratory Diseases
Global deaths: Both sexes, all ages, 2017
SSA deaths: Both sexes, all ages, 2017
LMICs: 4 in 5 deaths from NCDs
WHO Global Health Estimates: Projection of deaths by cause 2016 - 2060 for WORLD

- **Communicable, maternal, perinatal and nutritional conditions**
- **Noncommunicable diseases**
- **Injuries**
Projections 2016 - 2060

WHO Global Health Estimates: Projection of deaths by cause 2016 - 2060 for AFRO

Year

Number of deaths

- Communicable, maternal, perinatal and nutritional conditions
- Noncommunicable diseases
- Injuries
Double burden of disease in the slums of Kenya
Samuel Oji Oti

PhD REVIEW

Exploring the paradox: double burden of malnutrition in rural South Africa

Elizabeth W. Kimani-Murage

Background: This article is a review of the PhD thesis by Elizabeth Kimani-Murage that explores the double burden of malnutrition in rural South Africa. This is in the context of a worryingly rapid increase in obesity and obesity-related diseases in low- and middle-income countries (LMICs) including South Africa, and in the wake of on-going nutrition transition and lifestyle changes in these countries.

Objective: To understand the profiles of malnutrition among children and adolescents in a poor, high HIV prevalent, transitional society in a middle-income country.

Methods: A cross-sectional growth survey was conducted in 2007 targeting 4,000 children and adolescents aged 1–20 years. In addition, HIV testing was carried out on children aged 1–5 years and Tanner pubertal assessment among adolescents aged 9–20 years.

Results: The study shows stunting at an early age and adolescent obesity, particularly among girls, that co-exists in the same socio-geographic population. The study also shows that HIV is an independent modifiable risk fac-
Why?
Why = 4 X 4

CARDIOVASCULAR DISEASES
DIABETES
CANCER
CHRONIC RESPIRATORY DISEASES

and their 4 common RISK FACTORS

Tobacco use
Harmful use of alcohol
Physical inactivity
Unhealthy diet
The Kentucky fried chicken Kenyans are queuing up for

SATURDAY AUGUST 20 2011

By JOHN FOX fox@africaonline.co.ke

A few weeks ago when we were being driven north in a minibus from Johannesburg to Hoedspruit, and when we reached Lydenburg, our driver asked if we would mind if he took a small detour.

“On this trip, this is where I get my lunch of Kentucky Fried Chicken,” he said.

And so he did. “This is the best fried chicken in South Africa,” he said.
Africa: Overburdened Health Systems
50 cancer patients affected as key machine breaks down again
Global Response

Set of 9 voluntary global NCD targets for 2025

- Premature mortality from NCDs 25% reduction
- Essential NCD medicines and technologies 80% coverage
- Drug therapy and counseling 50% coverage
- Diabetes/obesity 0% increase
- Raised blood pressure 25% reduction
- Tobacco use 30% reduction
- Salt/sodium intake 30% reduction
- Physical inactivity 10% reduction
- Harmful use of alcohol 10% reduction
By 2030, reduce by a third premature mortality from non-communicable diseases through prevention, treatment and promote mental health and well-being.
Global Response

TIME TO DELIVER
Third UN High-level Meeting on Non-communicable Diseases

27 SEPTEMBER 2018
New York
Global Response - Stakeholders

IDRC | CRDI
International Development Research Centre
Centre de recherches pour le développement international

Canada

NCD Alliance

WORLD BANK

Global Alliance for Chronic Diseases
An Alliance of Health Research Funders

Bloomberg Philanthropies

PRB
Inform Empower Advance

AstraZeneca
Young Health Programme
A global community investment initiative

Reframing Noncommunicable Diseases and Injuries for the Poorest Billion
The share of ‘development assistance for health’ dedicated to NCDs has remained at 1–2% (US$ 492 million out of US$ 36 billion) of the total since 2000. This level of funding is insufficient to attain the nine targets in WHO Global Action Plan on NCDs.
From 2011 to 2025 it is estimated that NCDs will drain over **US$ 50 trillion** from the global economy. Fortunately, preventing NCDs is very cheap in comparison with the costs of inaction. Scaling up the ‘best buys’ from **5% to 80%** coverage in all LMICs would cost **US$ 11.4 billion**.
WHAT GOVERNMENTS CAN DO TO
PROMOTE HEALTH

- Advance universal health coverage
- Access to quality services
- Access to affordable services
- Protection from financial risk
- Implement policies, engage the public
- Ensure healthy diets
- Make health risks clear
- Leverage taxes
- Tighten laws and regulations
- Generate data for health
- Create healthy cities and environments

WHAT PEOPLE CAN DO TO
PROTECT HEALTH

- Follow medical advice
- Stay physically active
- Get vaccinated
- Breastfeed
- Avoid tobacco use
- Avoid harmful use of alcohol
- Avoid consumption of food and drinks high in salt, sugar or unhealthy fats
- Avoid air pollution

World Health Organization

TOGETHER LET’S BEAT NCDs
Preparing for the third UN High-level Meeting on NCDs, 2018

It’s time for the world to deliver and protect people and communities and #beatNCDs

www.who.int/beat-ncds
Africa’s Response

Algeria
Benin
Botswana
Burkina Faso
Cabo Verde
Cameroon
Central African Republic
Chad
Comoros
Congo
Côte d'Ivoire
Democratic Republic of the Congo
Eritrea
Ethiopia
Gabon
Gambia
Ghana
Guinea
Kenya
Lesotho
Liberia
Madagascar
Malawi
Mali
Mauritania
Mauritius
Mozambique
Niger
Nigeria
Rwanda
São Tomé and Príncipe
Seychelles
Senegal
Sierra Leone
Swaziland
Togo
Uganda
United Republic of Tanzania
Zambia
Zanzibar
Zimbabwe
Africa’s Response

KENYA NATIONAL STRATEGY FOR THE PREVENTION AND CONTROL OF NON-COMMUNICABLE DISEASES
2015 - 2020

National Policy and Strategic Plan of Action on Prevention and Control of Non-Communicable Diseases (NCDs)

Non-Communicable Disease Control Programme
Federal Ministry of Health
Abuja, Nigeria.
May 2013

STRAEGIC AND ACTION PLAN
THE PREVENTION AND CONTROL
NON COMMUNICABLE DISEASES
IN TANZANIA 2016 – 2020
Africa’s Response: Sluggish and Disjointed

New or revamped units/depts.

or NCDs in MoHs: Still poorly funded

Many small scale isolated research studies

Some attempts to include NCD indicators in HMIS

Health sector driven with little MSA
expansion of national health insurance to cover some NCDs.

Development of treatment guidelines and disease or risk factor specific policies, programs or action plans.

Some targeted laws and regulations e.g. SSB Tax in SA industry interference.
Africa’s Response: My subjective verdict
Our findings suggest that Africa is off track in achieving the NCD indicators by the set deadlines. To take sustained public health gains, more effort and commitment is urgently needed from government partners and societies to implement these recommendations in a broader strategy. While donors need to suit NCD advocacy with funding, African institutions such as The African Union (AU) and other sub-regional bodies such as West African Health Organization (WAHO) and various country offices could potentially play stronger roles in advocating for more NCD policy efforts in Africa.”
Africa’s Response: Where we should focus

NCD ALLIANCE CAMPAIGN PRIORTIES

The 2018 United Nations High-Level Meeting on NCDs

1. PUT PEOPLE FIRST
2. BOOST NCD INVESTMENT
3. STEP UP ACTION ON CHILDHOOD OBESITY
4. ADOPT SMART FISCAL POLICIES THAT PROMOTE HEALTH
5. SAVE LIVES THROUGH EQUITABLE ACCESS TO NCD TREATMENT AND UHC
6. IMPROVE ACCOUNTABILITY FOR PROGRESS, RESULTS AND RESOURCES
Thailand: At the forefront of Universal Health Coverage

By Piyasakol Sakolsatayadorn, Minister of Public Health, Royal Thai Government

Thailand has proved to the world that Universal Health Coverage (UHC) is achievable. Even with a GNI per capita of US$ 1,900 in 2002, the entire population was fully covered by publicly-financed health insurance schemes.
Because we are poor, we cannot afford not to have universal health coverage.
About us:

- Established by an act of Canada’s parliament in 1970
- We fund research in developing countries to promote growth, reduce poverty, and drive large-scale positive change
- Our head office is located in Ottawa, Canada + 4 regional offices:
  - LAC: Montevideo, Uruguay
  - SSA: Nairobi, Kenya
  - MENA: Amman, Jordan
  - SEA: New Delhi, India
Vision:

« Knowledge, innovation, and solutions to improve the lives of people in the developing world »

IDRC realize this vision by working toward 3 strategic objectives across its programming:

1. Invest in knowledge and innovation for large-scale positive change;
2. Build the leaders for today and tomorrow;
3. Be the partner of choice for greater impact.
IDRC Research Focus

Agriculture and Environment
- Agriculture and Food Security
- Climate Change
- Food, Environment and Health

Inclusive Economies
- Employment and Growth
- Governance and Justice
- Maternal and Child Health
- Think Tank Initiative

Technology and Innovation
- Foundations for Innovation
- Networked Economies

NCD prevention
Food, Environment, and Health

A population health research program with 3 foci

Main focus on the prevention of chronic non-communicable diseases, with emphasis on healthier food systems and healthier diets
  - food system/environment change (fiscal, policy, community)

Preventable infectious diseases
  - vector-borne diseases
    - helminths
    - Ebola
    - Chagas

Tobacco control
  - fiscal & policy measures
  - sound economic rationale

A common, binding goal of prevention by:

- Addressing determinants of health and risk factors for disease through actions that are largely outside the control of the health sector
- Changing the environment and circumstances in which people live to enable better health
FEH funding commitments since 2015

Food systems/environments targeting the prevention of NCDs: $19.3M. 28 projects

Tobacco control: $3.5M. 9 projects

Other NCD prevention: $2M. 12 projects

Infectious disease: $11.8M. 19 projects
The Potential Impact of a 20% Tax on Sugar-Sweetened Beverages on Obesity in South African Adults: A Mathematical Model

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Abstract

\textbf{Background/Objectives:} The prevalence of obesity in South Africa has risen sharply, as has the consumption of sugar-sweetened beverages (SSBs). Research shows that consumption of SSBs leads to weight gain in both adults and children, and reducing SSBs will significantly impact the prevalence of obesity and its related diseases. We estimated the effect of a 20% tax on SSBs on the prevalence of and obesity among adults in South Africa.

\textbf{Methods:} A mathematical simulation model was constructed to estimate the effect of a 20% SSB tax on the prevalence of obesity. We used consumption data from the 2012 SA National Health and Nutrition Examination Survey and a previous meta-analysis of studies on own- and cross-price elasticities of SSBs to estimate the shift in daily energy consumption.
Parliament finally passes sugary drinks tax

South Africa is on the right path to reverse the alarming numbers of diabetes cases and other NCDs associated with obesity.
IDRC Program: example of impact

EAST AFRICA
- Rwanda
- Tanzania
- Uganda
- Kenya

SOUTHERN AFRICA
- Botswana
- Zambia
- Namibia

Readiness to Adopt Food Related Non-Communicable Disease Prevention Policies in Africa
Strengthening tobacco control in West Africa: How CRES is leading the charge
CRES: Curbing tobacco use through research and advocacy

Consortium pour la Recherche Économique et Sociale (CRES) successfully engaged in research and outreach activities, both in Senegal and across West Africa, by focusing on reforms to tobacco taxation.
IDRC Program: example of impact
Tobacco tax reforms to promote economic development in West Africa

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Thank you

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