

Is Uganda ready to deal with the burden of Non-Communicable diseases?

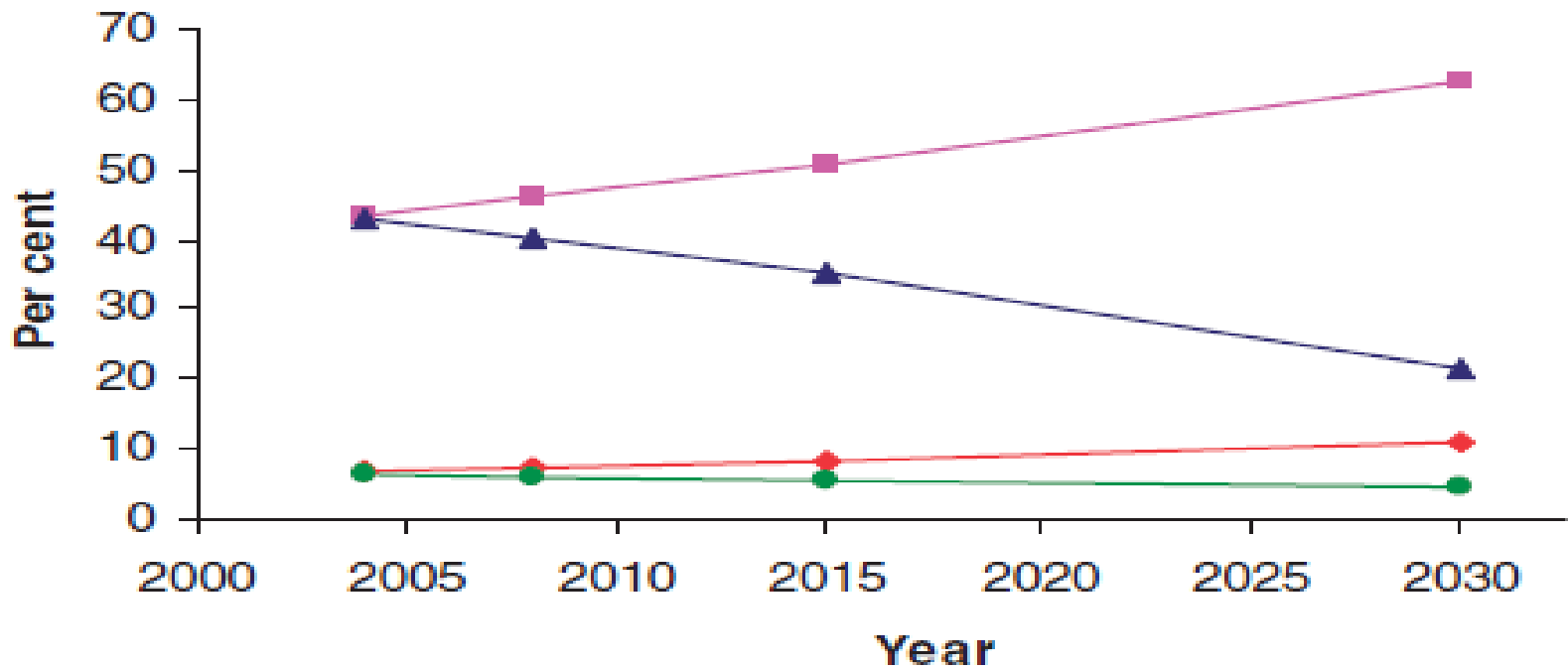
CEHURD

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What are Non-Communicable Diseases – NCDs?

- Diseases that are not passed from person to person
- They progress slowly

Age-standardized mortality in Sub-Saharan Africa



- Noncommunicable diseases
- ▲— Communicable diseases
- ◆— Injuries
- Maternal, perinatal, nutritional

NCD Burden

- Globally - 35 million people die from NCDs each year
- This is over 65% of world deaths
- 80% of these deaths occur in low and middle income countries (29 million)
- Most of those that die are before the age of 60

The Four Main NCDs

- 4 main NCDs account for 80% of NCD deaths
 - Cardiovascular – 17.3 million
 - Cancers – 7.6 million
 - Respiratory Diseases – 4.2 million
 - Diabetes – 1.3 million

Risk Factors

- The 4 groups of diseases share risk factors
 - Tobacco use – 6 million deaths every year
 - Insufficient physical activity – 3.2 million deaths every year
 - Harmful use of alcohol – 1.65 million every year
 - Unhealthy diets (low fruit and vegetable consumption) – 1.7 million deaths every year

How do these risk factors manifest?

- Raised blood pressure
- Overweight
- High blood glucose
- High levels of fat in the blood

How to Prevent and Control NCDs?

Reduce the risk factors
associated with NCDs

How?

- Diet – more fruit and more vegetable
- Physical Activity – 30 minutes per day for 5 days a week
- Limit Alcohol
- Do not Smoke

Prevalence of NCDs in Uganda

- Limited data is available
- 500% Increase in outpatient attendance at the Heart Institute (2005-2009)
- Upward trend in in cancer – Cancer Institute
- 5% Increase in NCDs among patients attending care and treatment at Mildmay (2010)

Design of the study - 4 questions

- What is the prevalence of NCDs and associated risk factors in Uganda
- What is the Knowledge, Attitudes, and Practices of the Ugandan population on the four risk factors
- What are the current policy and regulatory frameworks that support the prevention and control of NCDs? And how effective are they?
- What can we do to prevent and control NCDs in Uganda?

Study objectives

- **Objective 1:** To determine the prevalence of NCDs and associated risk factors in Uganda
- **Objective 2:** To identify Knowledge, attitudes and Practices of Ugandans around NCDs and the associated risk factors
- **Objective 3:** Identify policy and regulatory frameworks and assess their level of implementation
- **Objective 4:** Generate recommendations and develop an action plan

Methods

- Literature review
- Policy analysis
- KAP study among University Students in Wakiso, Mukono and Kampala districts - *Makerere, Uganda Christian University, Nkumba, and Kampala International University*
- Key Informant Interviews

Data analysis

- Limited published data on NCD prevalence in Uganda – metaanalysis not possible
- Policy content analysis – McMaster University Model & benchmarking against global frameworks
- KAP Study – used Epi-info 7 for data entry and analysis

WHO frameworks & guidance on NCDs

- WHO has provided guidance to support NCD programming
 - *The Global Action Plan for the Prevention and Control of NCDs - 2013-2020*
 - *NCD Global Monitoring Framework for the prevention and control of NCDs.*
 - *The World Health Organization Framework Convention on Tobacco Control (WHO FCTC)*
 - *The WHO Global Strategy on Diet, Physical Activity & Health*
 - *WHO Set of recommendations on the marketing of foods and non-alcoholic beverages to children.*

WHO “Best Buys” Interventions

Risk factor / disease	Interventions
Tobacco use	<ul style="list-style-type: none">• Tax increases• Smoke-free indoor workplaces and public places• Health information and warnings• Bans on tobacco advertising, promotion and sponsorship
Harmful alcohol use	<ul style="list-style-type: none">• Tax increases• Restricted access to retailed alcohol• Bans on alcohol advertising
Unhealthy diet and physical inactivity	<ul style="list-style-type: none">• Reduced salt intake in food• Replacement of trans fat with polyunsaturated fat• Public awareness through mass media on diet and physical activity
Cardiovascular disease (CVD) and diabetes	<ul style="list-style-type: none">• Counselling and multi-drug therapy for people with a high risk of developing heart attacks and strokes (including those with established CVD)• Treatment of heart attacks with aspirin
Cancer	<ul style="list-style-type: none">• Hepatitis B immunization to prevent liver cancer (already scaled up)• Screening and treatment of pre-cancerous lesions to prevent cervical cancer

Results

- Reported Prevalence of NCDs and associated risk factors
- Policy and regulatory framework
- KAP Study
 - Tobacco use
 - Alcohol and drug use
 - Physical activity
 - Healthy diet

Reported NCD and risk factor prevalence

Study	Prevalence of NCDs	Prevalence of risk factors
Murphy et al (2013) – Kasese district	21% - Hypertension 7.2 % - diabetes	9.6%- smoked 7.2% - ate fruit 1.2% - ate vegetables
UNHS 2009/10	9% NCDs 5% - hypertension	13% smoked
Kawuma (2012)	5 % increase in NCDs	

Policy and regulatory Framework

- NEMA 2004 – Control of Smoking in Public Places
- Darft tobacco control bill – with MOFPED
- NCD prevention and control policy – at technical working group.

KAP study

- 2000 University students – 500 randomly sampled from each University
- 48% - female and 52% Male
- Mean age – 22 years
- 75% of all sampled were between the ages of 20 -23.
- 67% could not accurately describe NCDs

Alcohol Use

- 40% of all females sampled had ever taken alcohol
- 49 % of all males sampled had ever taken alcohol
- Most of those that had ever taken alcohol had their first drink between 10 and 18 years of age

Tobacco Use

Variable	Prevalence
Ever smoked	15%
Currently use tobacco	12%
Use other tobacco products (shisha etc)	9%
Average number of cigarettes per day	5
Duration of smoking	Less than a year
Exposed to environmental smoke	40%
Exposed to pro-cigarette adverts	57%
Would like to stop smoking	74%
Ever received help to stop smoking	27%
Taught about smoking in a lecture	42%

Healthy diet

Variable	Prevalence
Ate fruits	94%
One portion per day	59%
Ate vegetables	93%
1-3 portions per day	86%

Physical Activity

Variable	Frequency (95%CI)		Average
	F	M	
Prevalence			
During the past 7 days - engaged in physical activity for at least 60 days	80% (73-85)	85% (79-90)	83%
Type of physical activity engaged in			
jogging	26% (20-35)	15%(7-20)	21%
walking	18%(16-24)	10%(4-12)	9%%
games	14%(9-18)	24%(2-10)	19%
None	14%(8-20)	12%(8-18)	13%%

Study Limitations

- No comparable data on NCD risk factors in this age group
- Could underestimate the magnitude of the problem – only 5% of Ugandan children have access to tertiary education
- KAP study used a self-administered questionnaire
- Time constraints

Emerging issues

Issue	Recommended solution
Dearth of information on NCDs and risk factors	Invest in community/population-based studies on NCDs and risk factors Partnership between MOH, Academia and civil society to conduct these studies
Apparent fragmentation in handling NCDs and risk factors at MOH level	Foster an integrated approach
Weak Policy and regulatory framework	Need to develop a national action plan on NCDs
Low community awareness	Social mobilization and awareness programs
High tobacco & alcohol use	Tobacco and alcohol regulation

National action Plan

Goal

“to reduce the impact of NCD morbidity and premature mortality in Uganda, with a target of at least 25 percent reduction in premature mortality from the four main NCDs by 2025”.

What do we need to do?

- Build multisectoral policies and partnerships for NCD prevention and control
- Reduce the prevalence of the main NCD risk factors and strengthen the protective factors
- Improve coverage and quality of care for NCDs and risk factors
- Strengthen our capacity for surveillance and research on NCDs, risk factors and social determinants.