

SHOULD NON-COMMUNICABLE CONDITIONS OF HIGH BURDEN BUT LOW MORTALITY BE PRIORITISED IN SOUTH AFRICA?

Melvyn Freeman



health

Department:
Health
REPUBLIC OF SOUTH AFRICA

- “Non-communicable disease” is a negative description (i.e. by exclusion) and lacks specific defining and identifiable features
- Over time NCDs have become associated with particular diseases rather than as a catch all category for any condition that is not communicable

Which conditions are NCDs?



health

Department:
Health
REPUBLIC OF SOUTH AFRICA

- The “main” or “principle” NCDS that are most often identified (and identified in terms of the UN NCD meeting) as major development concerns are
 - Cardiovascular disease
 - Cancer
 - Diabetes
 - Chronic respiratory diseases



health

Department:
Health
REPUBLIC OF SOUTH AFRICA

1. High mortality – including high premature mortality.
2. Common risk factors:-
 - tobacco use
 - lack of exercise
 - poor diet
 - alcohol

Reasons why these conditions have been prioritised



health

Department:
Health
REPUBLIC OF SOUTH AFRICA

- National Service Delivery Agreement
 - HIV and AIDS and TB
 - Maternal and child health
 - Malaria (? Global fund)

Hopefully now to include at least the “main 4 NCDs”

What is already prioritised in SA?



health

Department:
Health
REPUBLIC OF SOUTH AFRICA

- There are limited resources – including financial and human resources
- It is necessary to focus - otherwise nothing may be done properly
- Putting additional resources into priorities and getting the systems and processes in place for a limited number of conditions can make more a difference than trying to do everything at once

Is it necessary to prioritise health conditions?



health

Department:
Health
REPUBLIC OF SOUTH AFRICA

- Mortality rates
- Burden of disease (disability adjusted life years)
- Community pressure (including lobby groups)
- Media pressure
- Vulnerable populations (e.g. women or children)
- Danger of spreading should the disease not be controlled
- Many other reasons

What should the criteria be for prioritising health conditions?

- 60% of deaths globally are caused by cardiovascular disease, diabetes, cancer and chronic respiratory disease, with around 80% of these deaths occurring in low and middle income countries
- Around a quarter of these deaths occur in people under 60 years of age
- Globally deaths due to NCDs are projected to increase by 17% over the next ten years, but the greatest increase (24%) is expected in the African region
- The focus therefore for prioritisation is primarily on **mortality**

UNGA MEETING



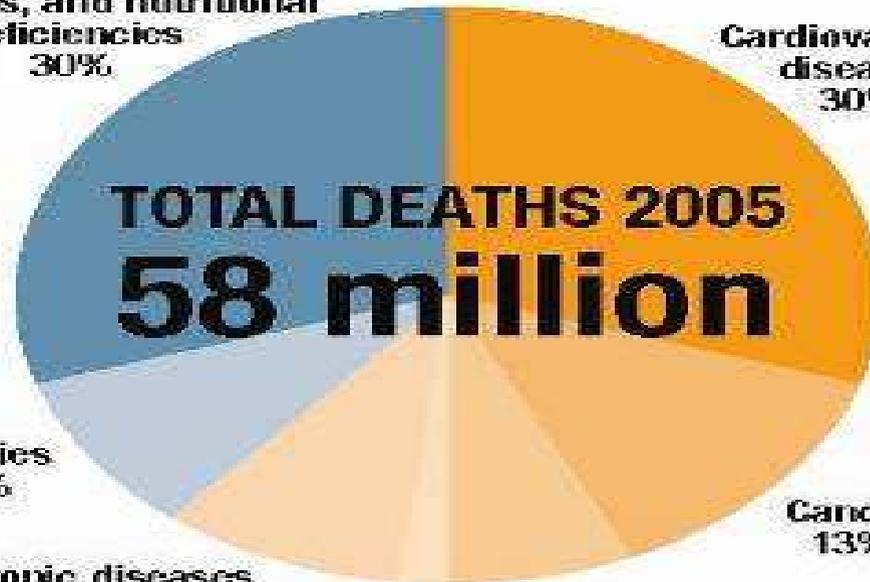
health

Department:
Health
REPUBLIC OF SOUTH AFRICA

Projected main causes of death, worldwide, all ages, 2005

Communicable diseases, maternal and perinatal conditions, and nutritional deficiencies
30%

Cardiovascular diseases
30%



Injuries
9%

Other chronic diseases
9%

Diabetes
2%

Chronic respiratory diseases
7%



health

Department
Health
REPUBLIC OF SOUTH AFRICA

Leading causes of burden of disease (DALYs), all ages, 2004

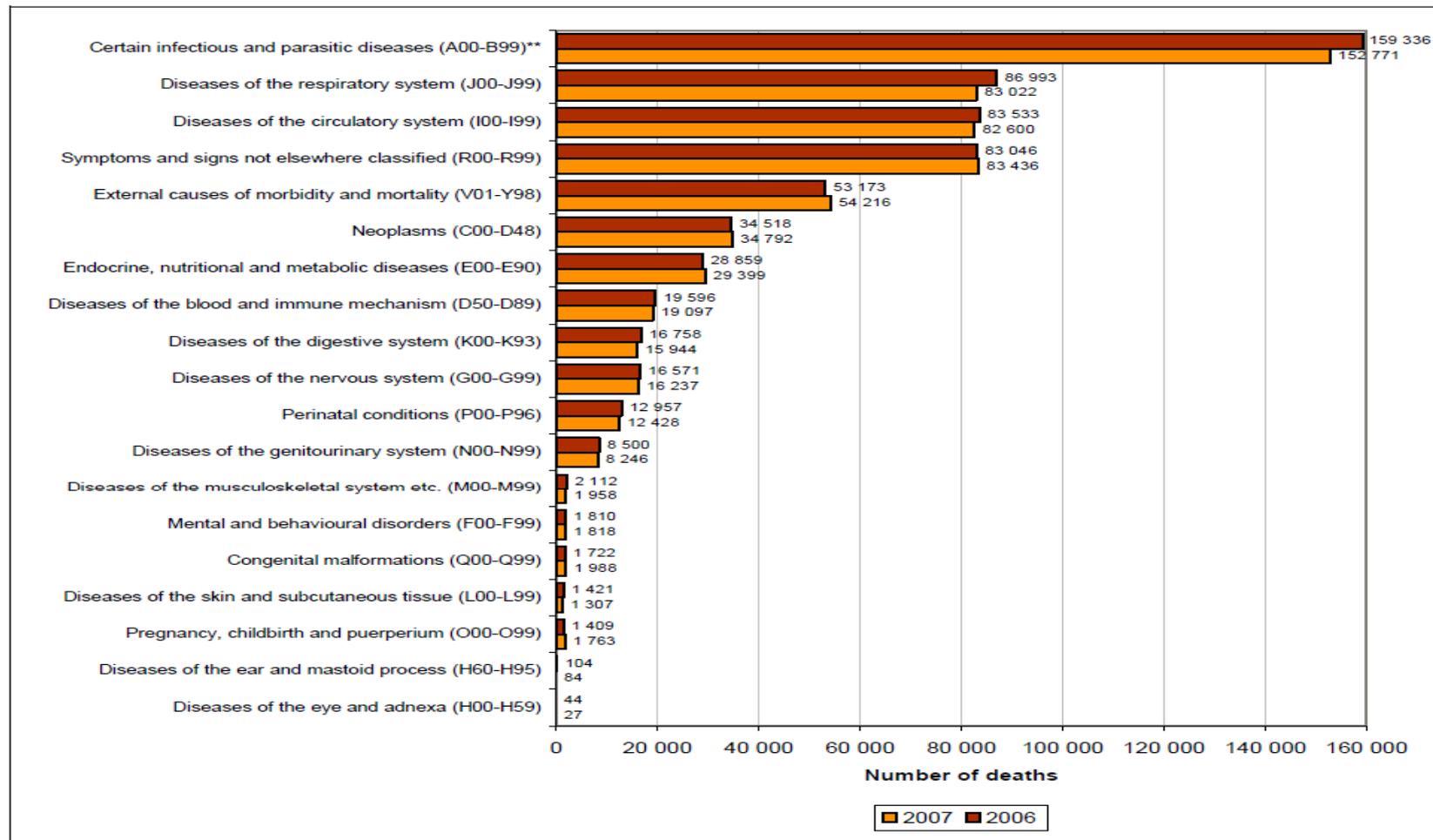
1 Lower respiratory infections	6.2
2 Diarrhoeal diseases	4.8
3 Unipolar depressive disorders	4.3
4 Ischaemic heart disease	4.1
5 HIV/AIDS	3.8
6 Cerebrovascular disease	3.1
7 Prematurity and low birth weight	2.9
8 Birth asphyxia and birth trauma	2.7
9 Road traffic accidents	2.7
10 Neonatal infections and other	2.7
11 Tuberculosis	2.2
12 Malaria	2.2
13 COPD	2.0
14 Refractive errors	1.8
15 Hearing loss, adult onset	1.8
16 Congenital anomalies	1.7
17 Alcohol use disorders	1.6
18 Violence	1.4
19 Diabetes mellitus	1.3
20 Self-inflicted injuries	1.3



health

Department:
Health
REPUBLIC OF SOUTH AFRICA

Figure 4.2: Number of deaths by main groups of causes of death and year of death, 2006* and 2007



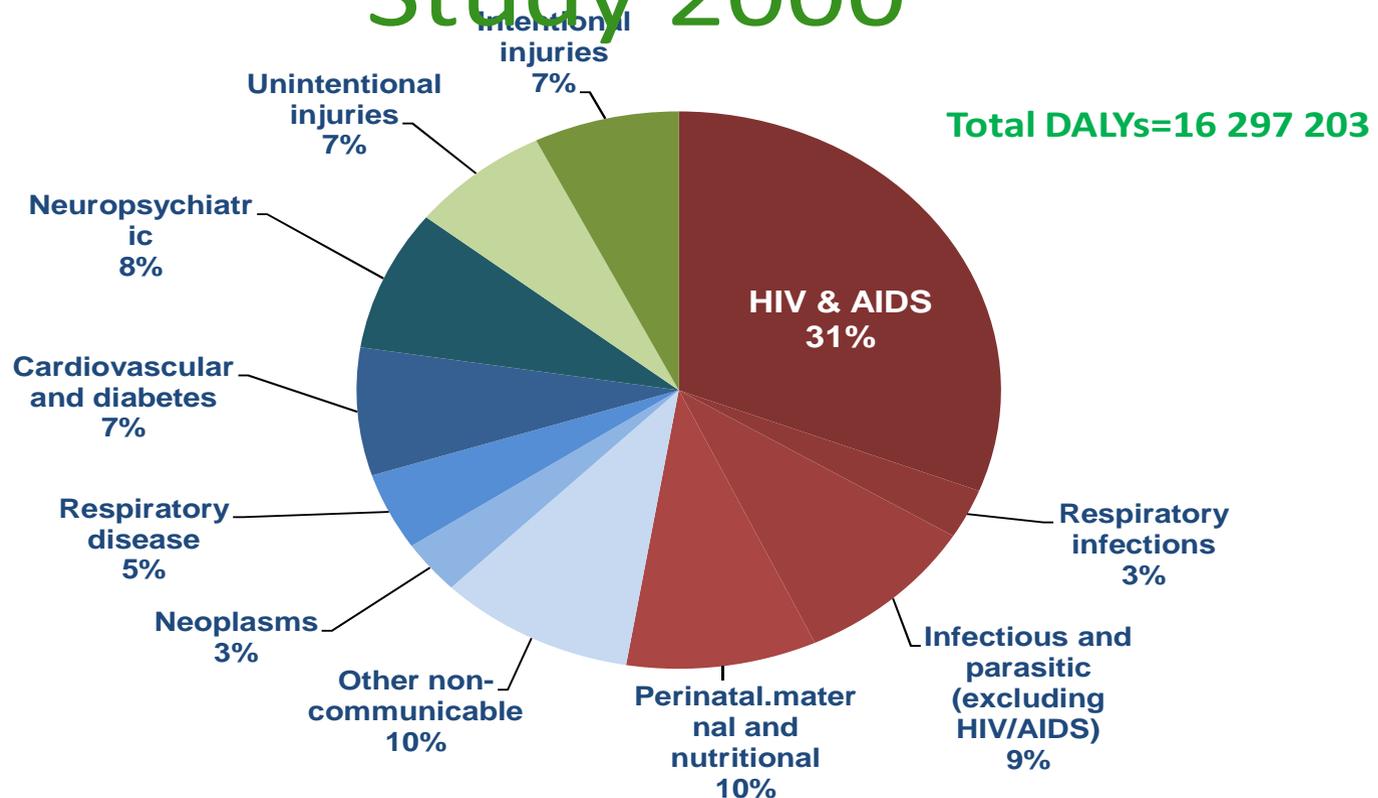
*Data for 2006 updated to include late registrations processed in 2008/9.

**Including deaths due to MDR-TB and XDR-TB.

Main causes of mortality from non-communicable conditions 2008

Heart disease	8.7%
Stroke	4.1%
Cancers	5%
Respiratory diseases (non-infectious)	3.3%
Diabetes	3.3%
Injuries	9%

National Burden of Disease Study 2000



Source: Revised South African National Burden of Disease Estimates for 2000
Norman et al, 2006



health

Department:
Health
REPUBLIC OF SOUTH AFRICA

- Lay definitions define disease as “a condition that results in pathological symptoms and *is not the direct result of physical injury*”
- So injury may be excluded not because it is not “non-communicable” but because it is not a disease. But it may well be included if we talk about non-communicable **conditions**
- Some mental health conditions may be similarly excluded, for example depression following violence against women

Should injuries be included as NCDs

- Dental caries (tooth decay) is the most common condition affecting children in South Africa
- 60% of 6 year olds, in their primary dentition, have decay and 55% untreated decay, therefore 91% goes untreated
- In the permanent dentition of 12 year olds 37% have caries which increase to 51% by the time they reach 15 years

Oral health

- Diet (sugar)
- Tobacco
- Alcohol
- Exercise?

**Oral health shares the risk factors
with the “main” NCDs**

- Cancer
- HIV
- Injury
- Diabetes
- Cardiovascular disease

Oral health shares high co-morbidity with the “main NCDs”



health

Department:
Health
REPUBLIC OF SOUTH AFRICA

12-month prevalence of adult mental disorders in South Africa (3)

Disorder	%
Anxiety	8.1
Mood	4.9
Impulse	1.8
Substance Use	5.8
Schizophrenia	1.0
Bipolar	1.0
Any anxiety, mood, impulse or substance use disorder	16.5

Mental health



health

Department:
Health
REPUBLIC OF SOUTH AFRICA

- Alcohol
- Diet
- Lack of exercise

**Mental health shares risk factors
with “main NCDs”**



health

Department:
Health
REPUBLIC OF SOUTH AFRICA

- Cardio-vascular disease
- Cancer
- Respiratory conditions
- Diabetes

Co-morbidity with “main NCDs”



health

Department:
Health
REPUBLIC OF SOUTH AFRICA

- In South Africa there are approximately 5 000 people per million population with cataract (i.e. around 250 000 people)
- In South Africa there are approximately 1 000 glaucoma-blind persons per million population with the prevalence of chronic glaucoma being 5%
- In 2002 it was estimated that diabetic retinopathy accounted for 5% of world blindness

Eye health



health

Department:
Health
REPUBLIC OF SOUTH AFRICA

- Risk factors for developing cataract are age, diabetes mellitus, hypertension and high body mass index, with cigarette smoking, ultraviolet light exposure and alcohol consumption also being implicated
- Risk factors for diabetic retinopathy include the duration of diabetes, the level of glycaemic control, dependence on insulin, presence of high blood pressure, serum lipid levels, pregnancy, nutritional and genetic factors

Risk factors for eye conditions



health

Department:
Health
REPUBLIC OF SOUTH AFRICA

- There is a risk that if the “main NCDs” are prioritised together with other health conditions that have already been prioritised then the “high burden but low mortality” conditions will not only remain where they are, but could be negatively affected in terms of funding, human resources, focus etc
- This could be disastrous for these already neglected conditions

What should happen to high burden conditions?

HAVING deliberated on NCDs prevention and control;

Hereby declare that:

1. In the WHO African Region, cardiovascular diseases, diabetes, cancers, chronic respiratory diseases, haemoglobinopathies (in particular sickle cell disease), mental disorders, violence and injuries represent a significant development challenge”

What did the Brazzaville declaration say?



health

Department:
Health
REPUBLIC OF SOUTH AFRICA

1. NCDs, principally cardiovascular diseases, diabetes, cancers and chronic respiratory diseases, are the leading causes of preventable morbidity and disability, and currently cause over 60% of global deaths, 80% of which occur in developing countries
2. In addition, other NCDs such as mental disorders also significantly contribute to the global disease burden

What did the Moscow Declaration say?