

Non-Communicable Diseases in South Africa

A RACE AGAINST TIME

Assoc Prof Debbie Bradshaw



South African Medical Research Council

BUILDING A HEALTHY NATION THROUGH RESEARCH





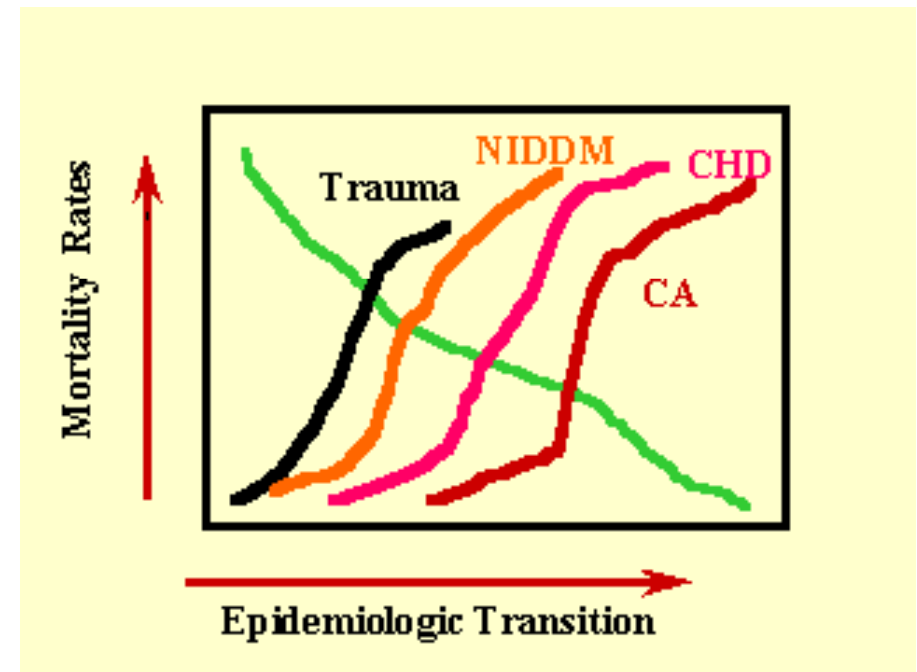
Health transition

- **Omran**

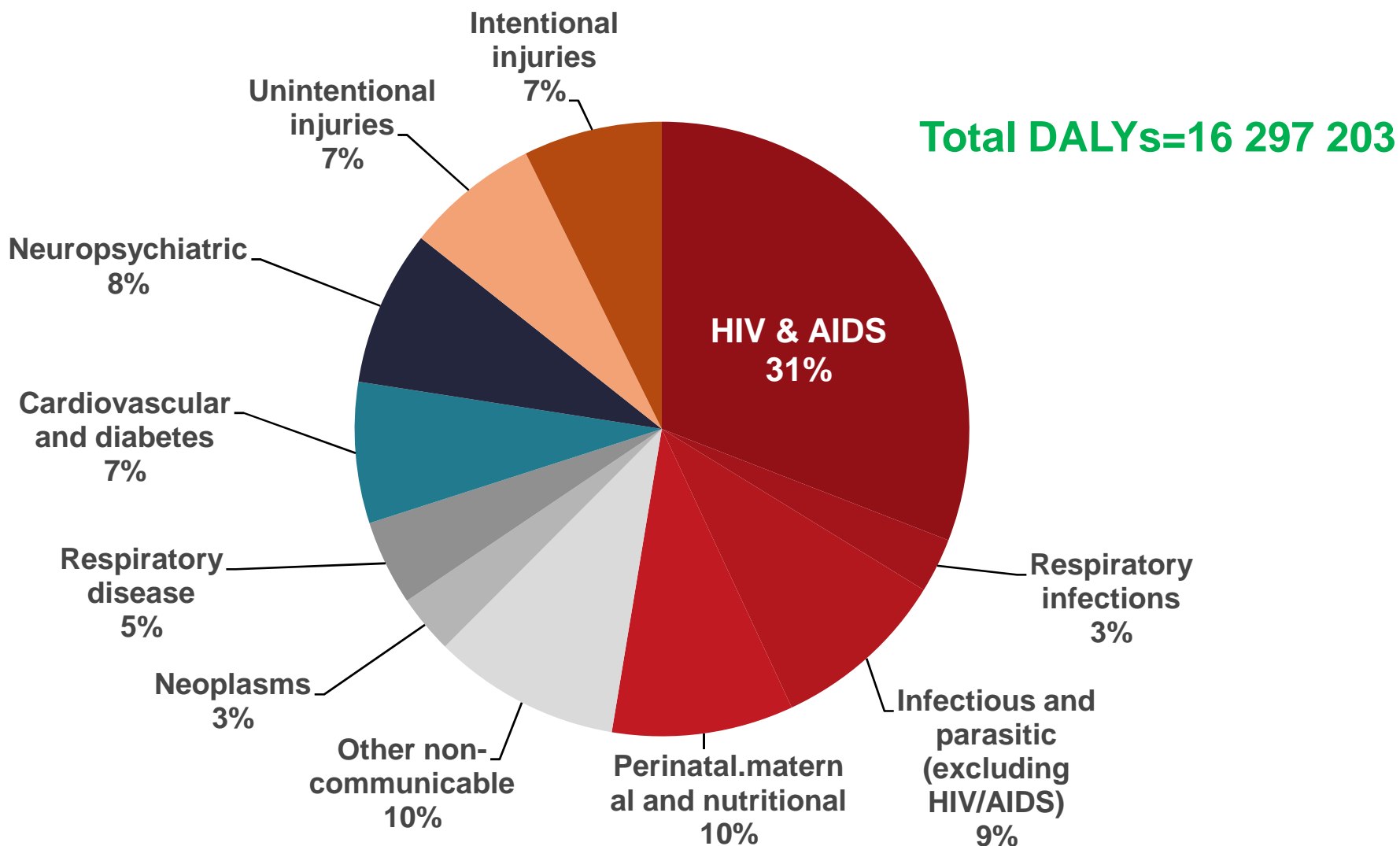
- Pestilence and famine
- Receding pandemics
- Degenerative and man-made diseases

- **Frenk *et al***

- Bi-polar protracted transition - double burden experienced by developing countries



National Burden of Disease Study 2000

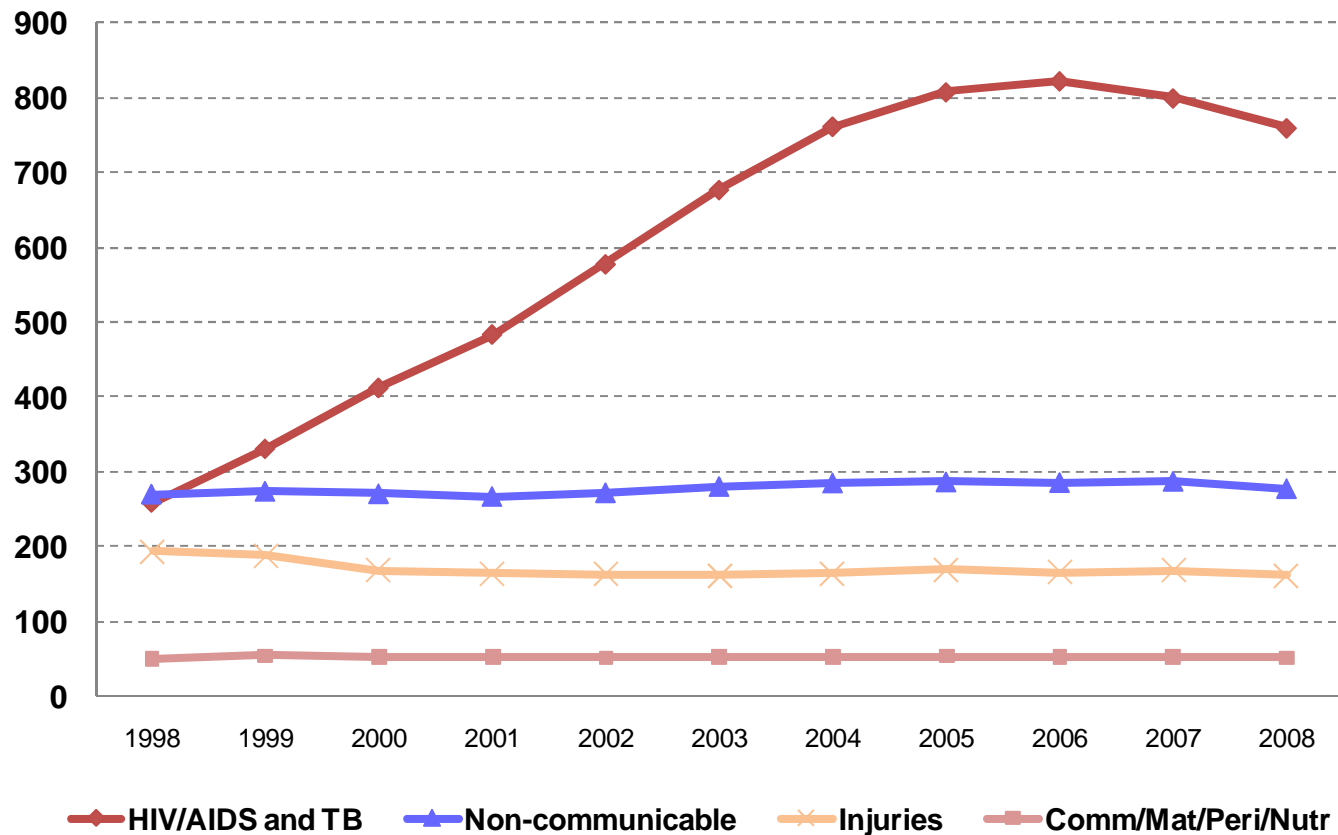


Source: Revised South African National Burden of Disease Estimates for 2000
Norman et al, 2006



Mortality rate in adults 15-59 years by broad cause, 1998-2008

Age specific rate per 100 000 population

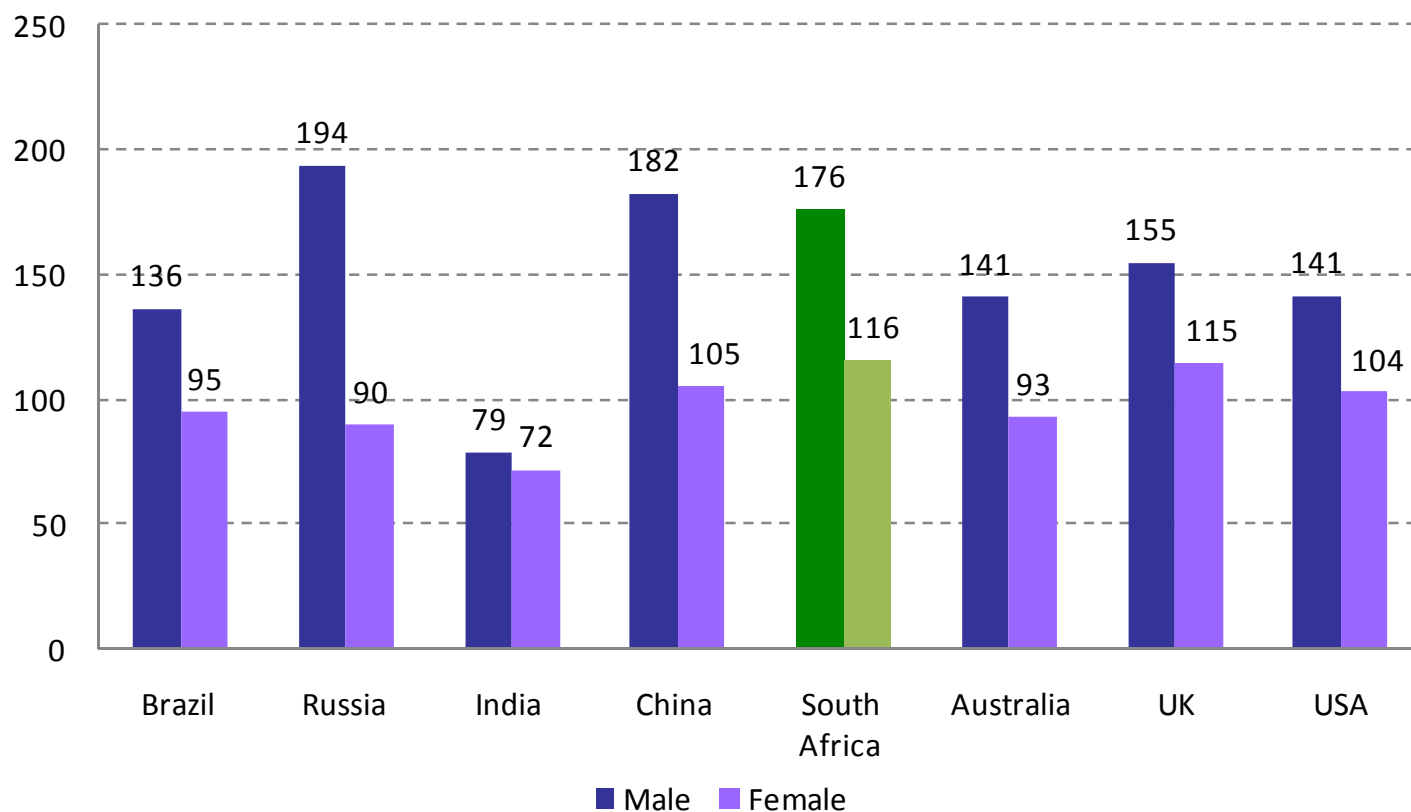


Source: Preliminary estimates from 2nd National Burden of Disease Study



Cancers 2008

Age standardised mortality rate per 100 000 population

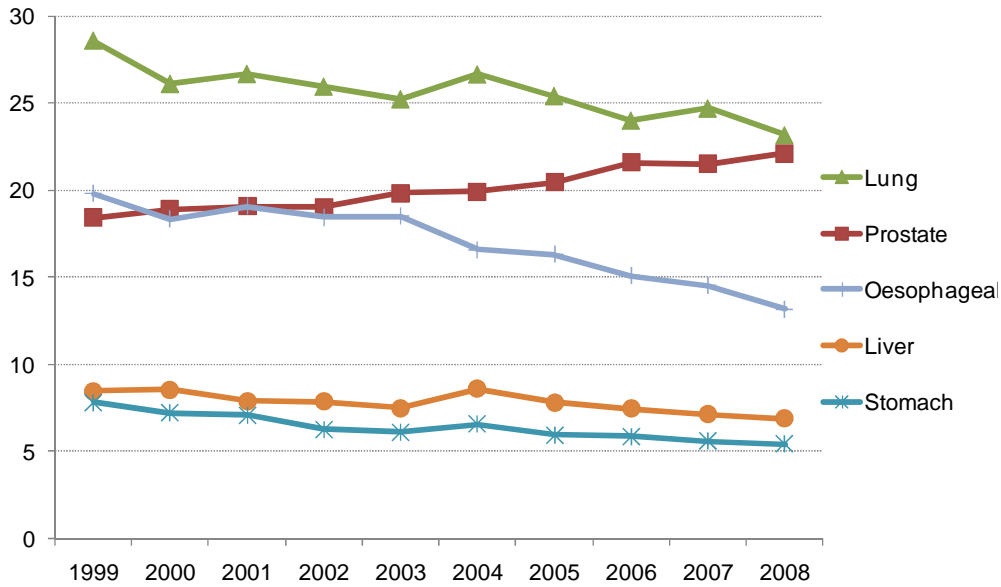


Source: StatsSA cause of death data adjusted for ill-defined causes
WHO Global status report on noncommunicable disease 2010

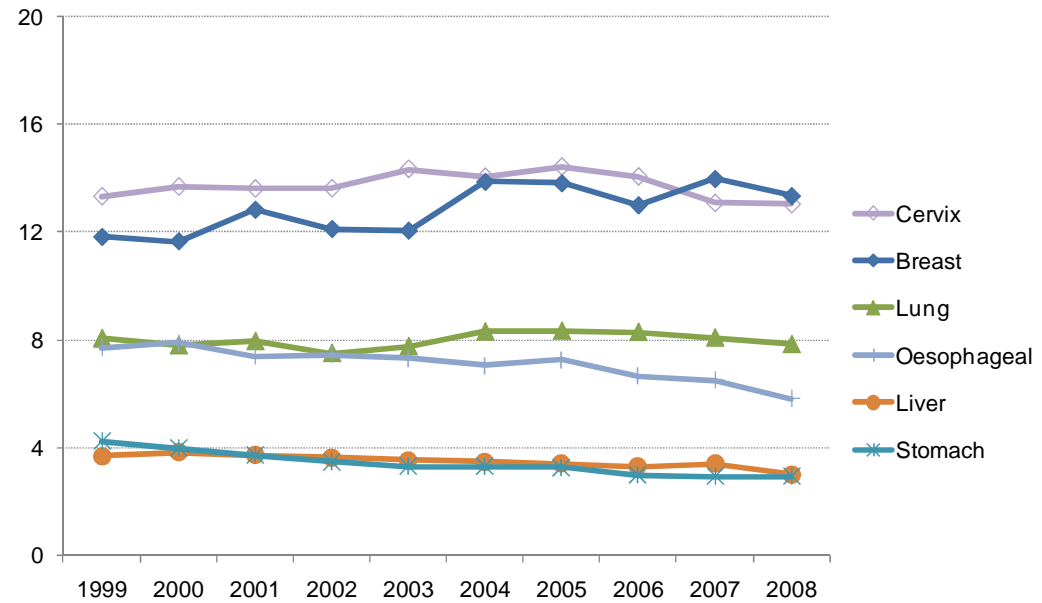
Cancer mortality by sex, 1999-2008

Age standardised rate per 100 000 population

MALE



FEMALE

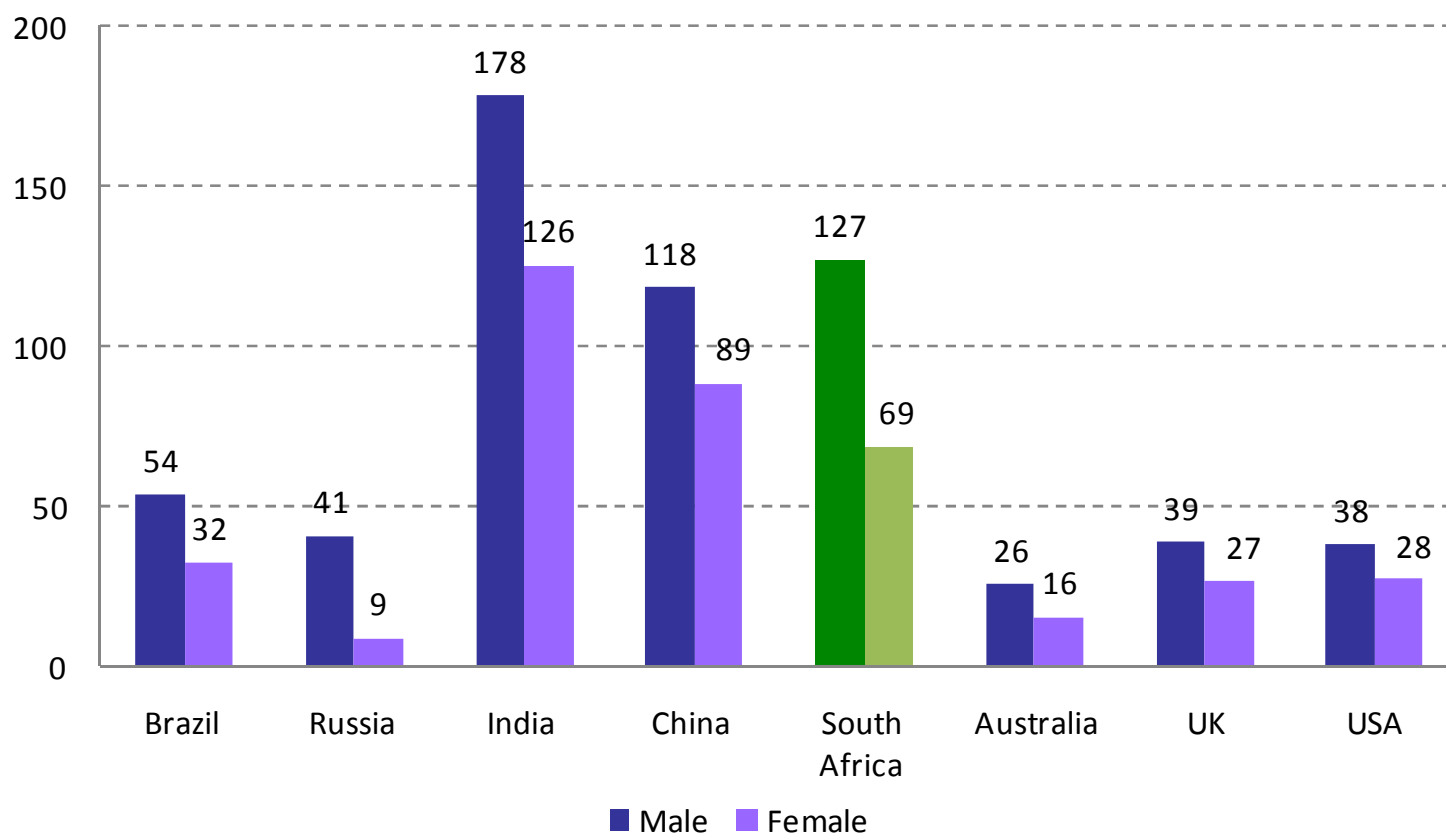


Source: Own calculations from StatsSA cause of death data



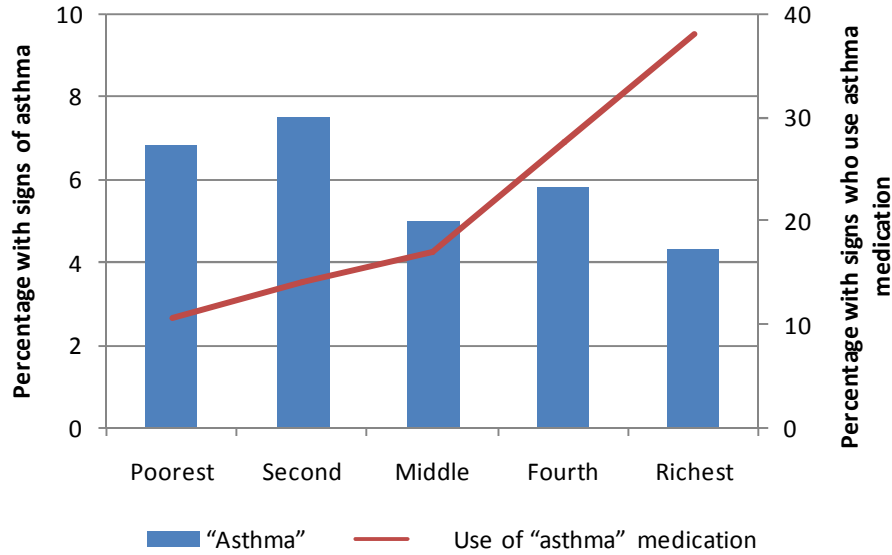
Chronic respiratory diseases 2008

Age standardised mortality rate per 100 000 population

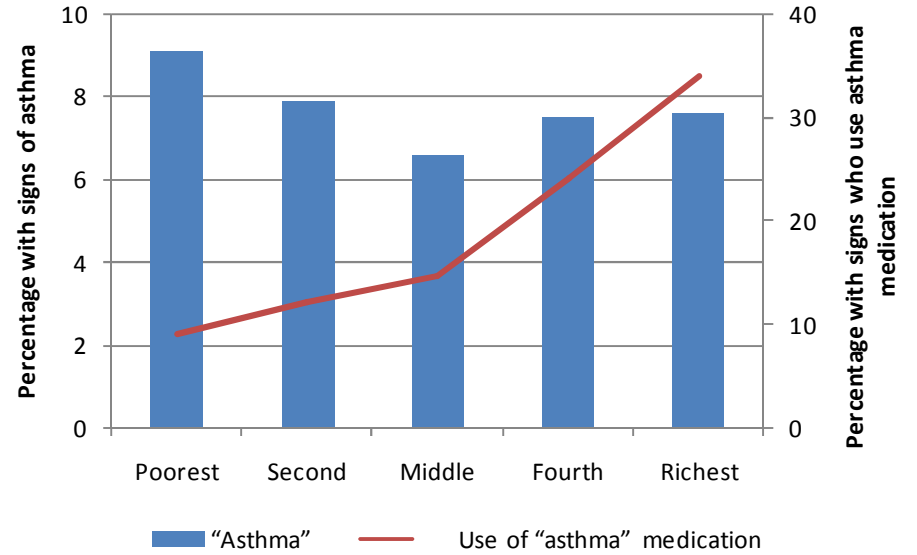


Source: StatsSA cause of death data adjusted for ill-defined causes
WHO Global status report on noncommunicable disease 2010

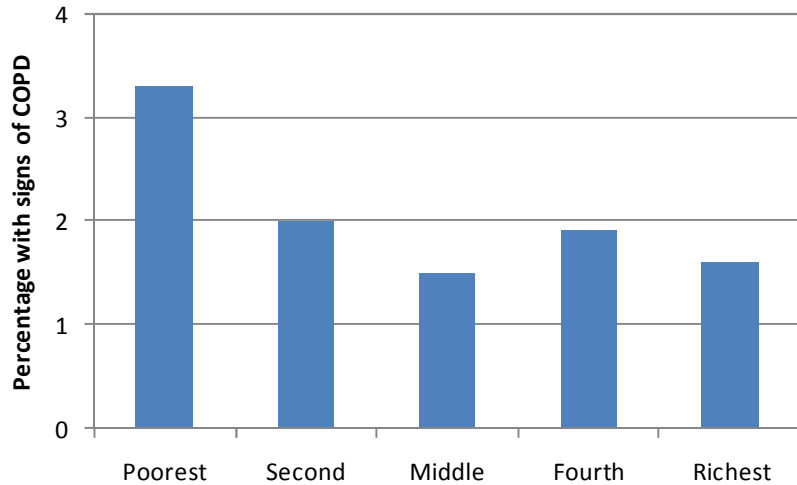
Asthma and treatment, males 15+ yrs



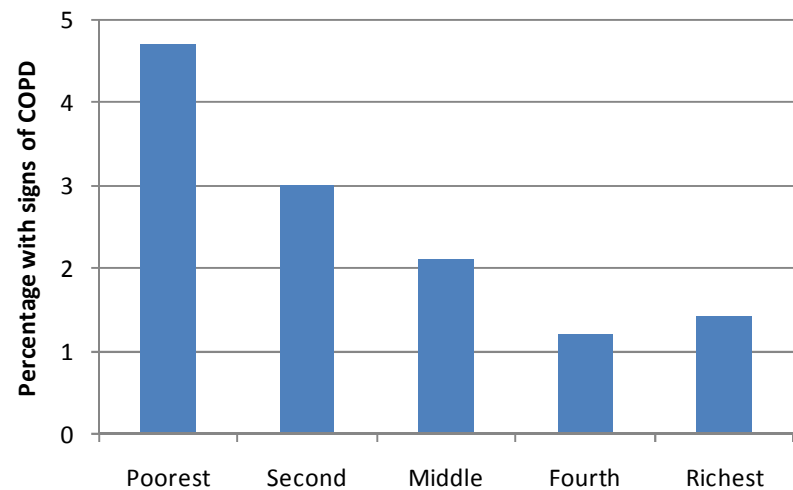
Asthma and treatment, females 15+



COPD, males 15+ yrs



COPD, females 15+ yrs

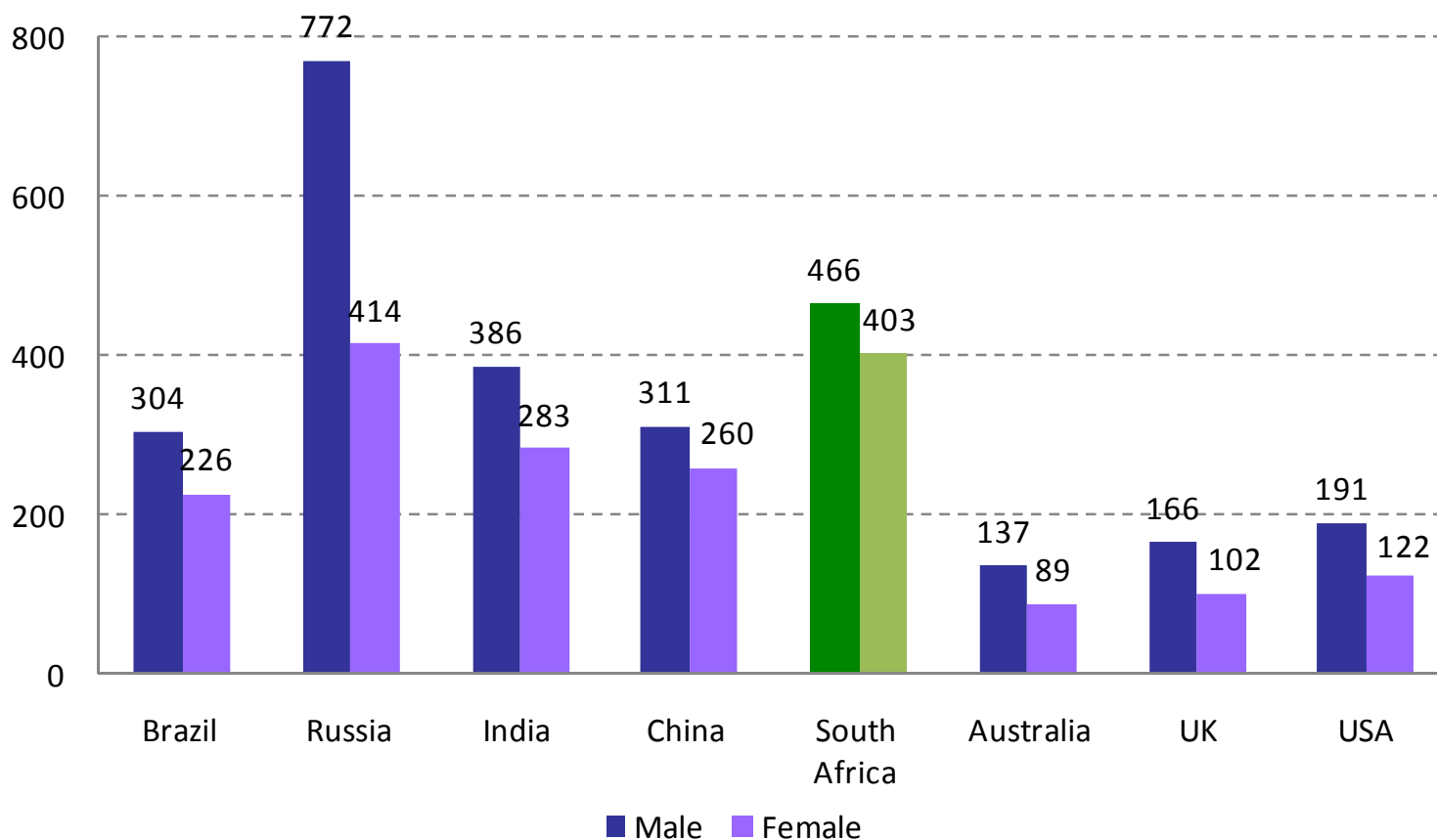


Source: Schneider et al, 2009



Cardiovascular diseases and diabetes 2008

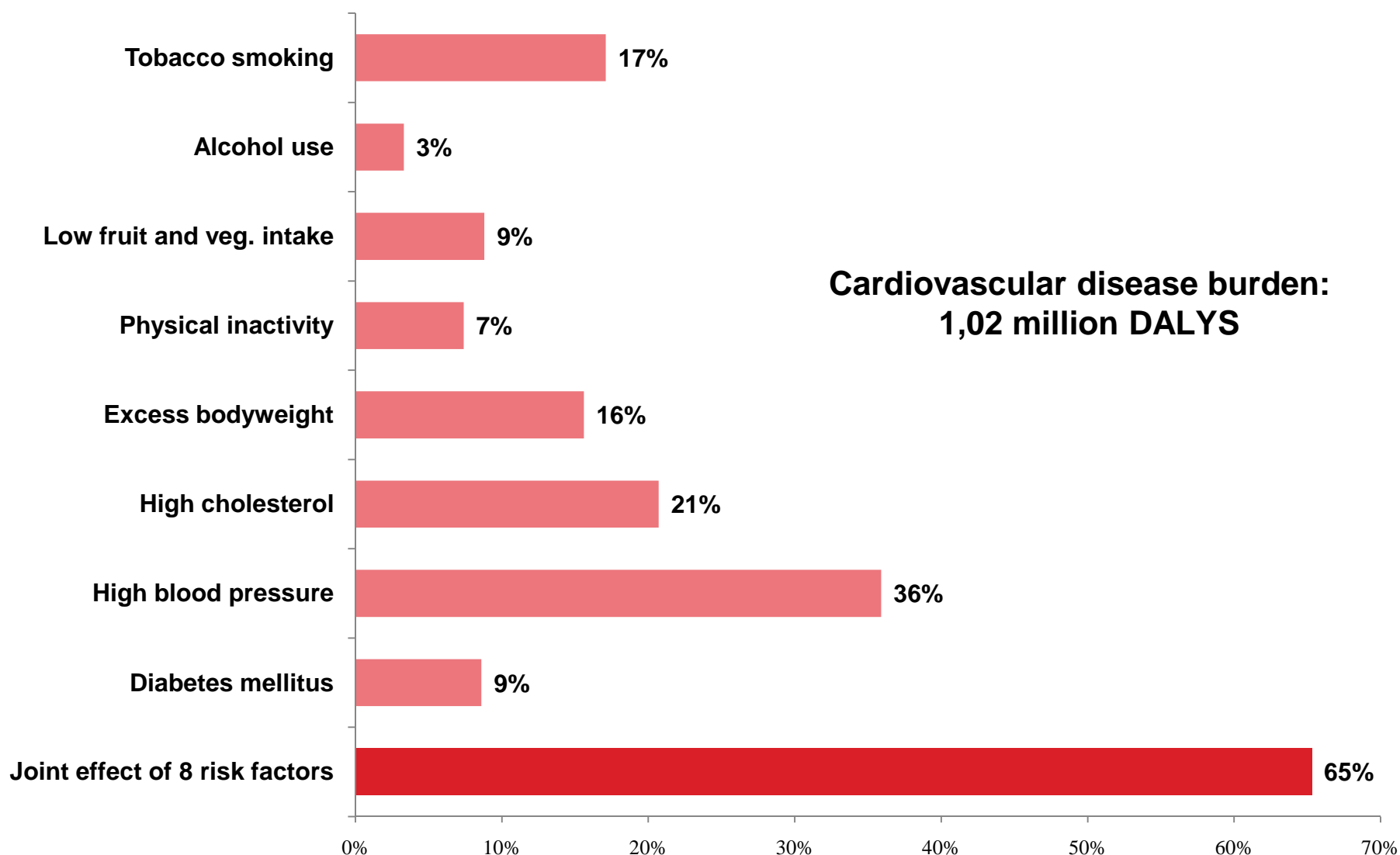
Age standardised mortality rate per 100 000 population



Source: StatsSA cause of death data adjusted for ill-defined causes

WHO Global status report on noncommunicable disease 2010

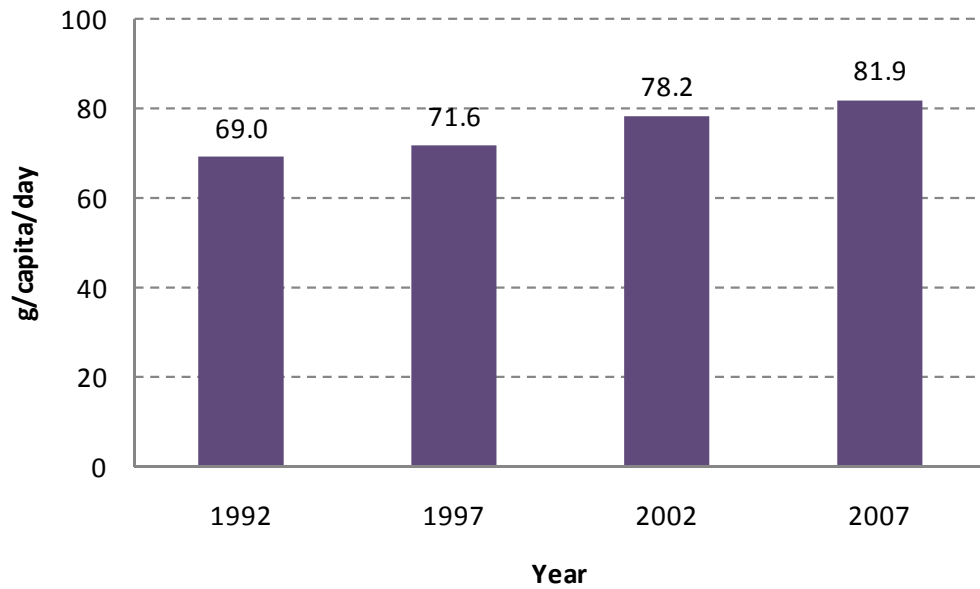
Cardiovascular disease attributable to 8 risk factors South Africa 2000



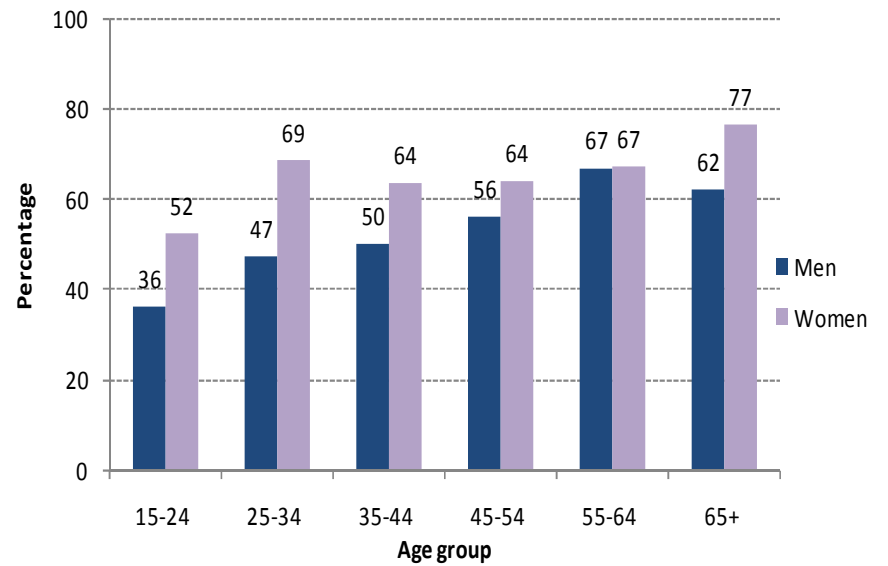
Source: Joubert et al



Fat supply quantity South Africa

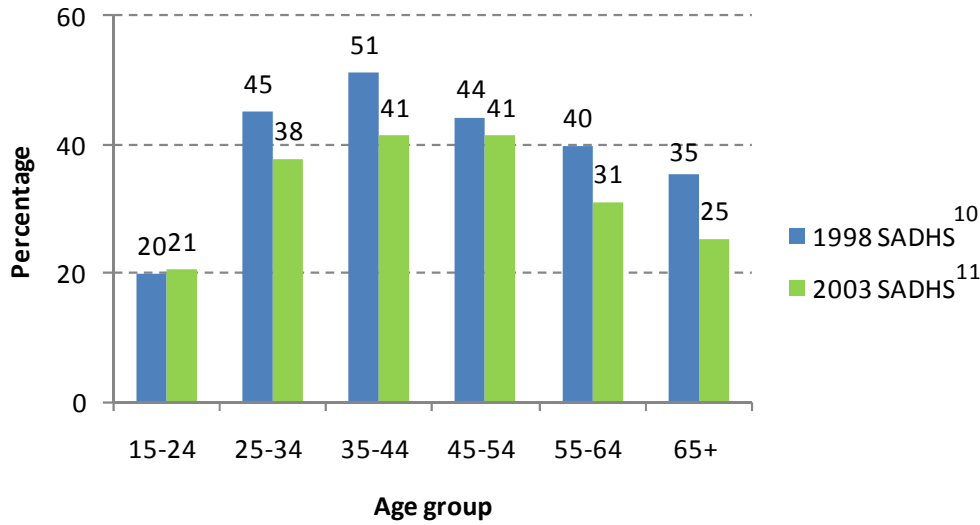


Physical inactivity SADHS 2003¹¹

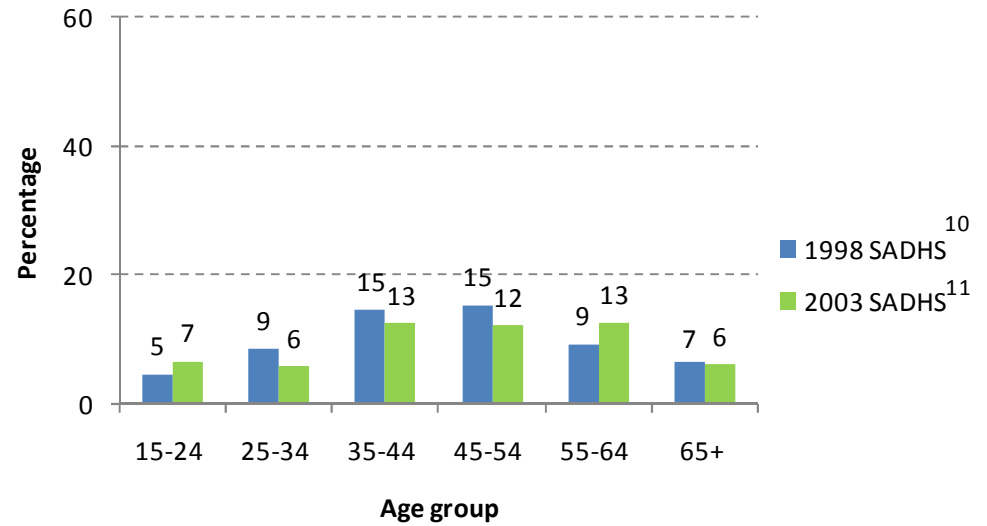


Source: FAO website

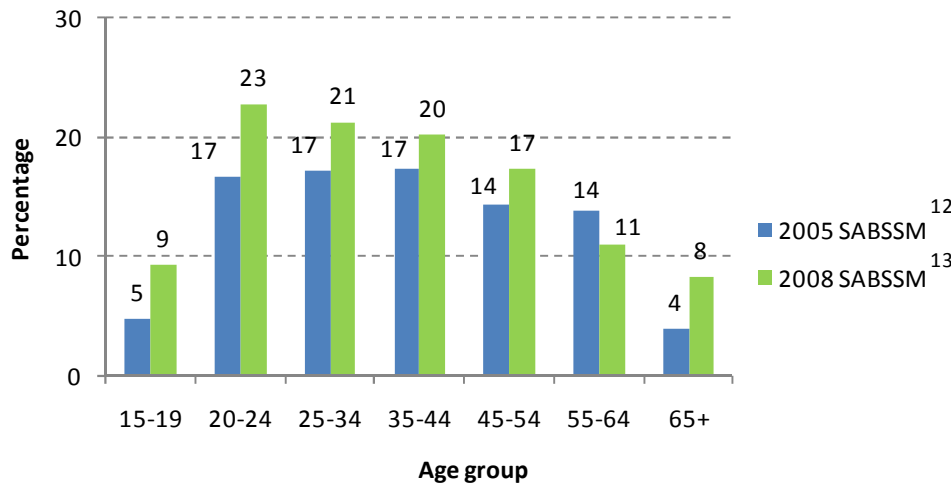
**Tobacco use (daily)
Men**



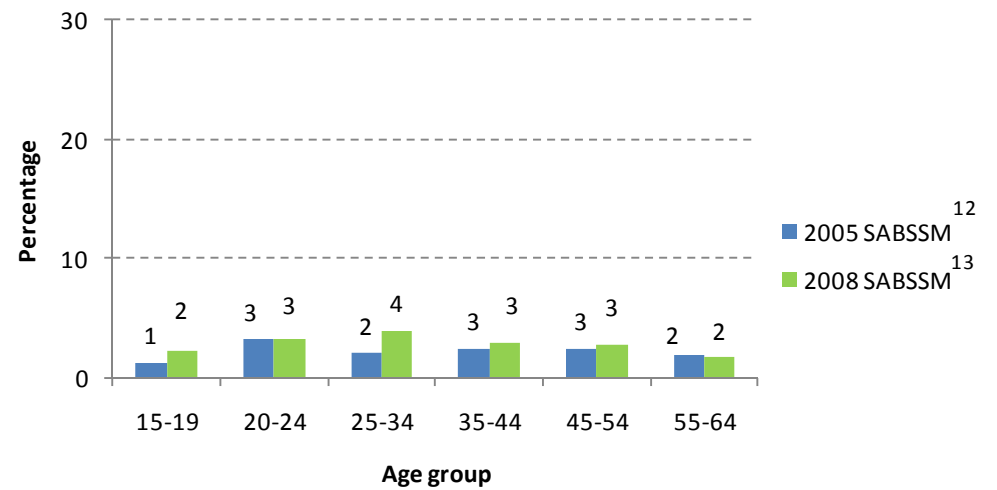
**Tobacco use (daily)
Women**



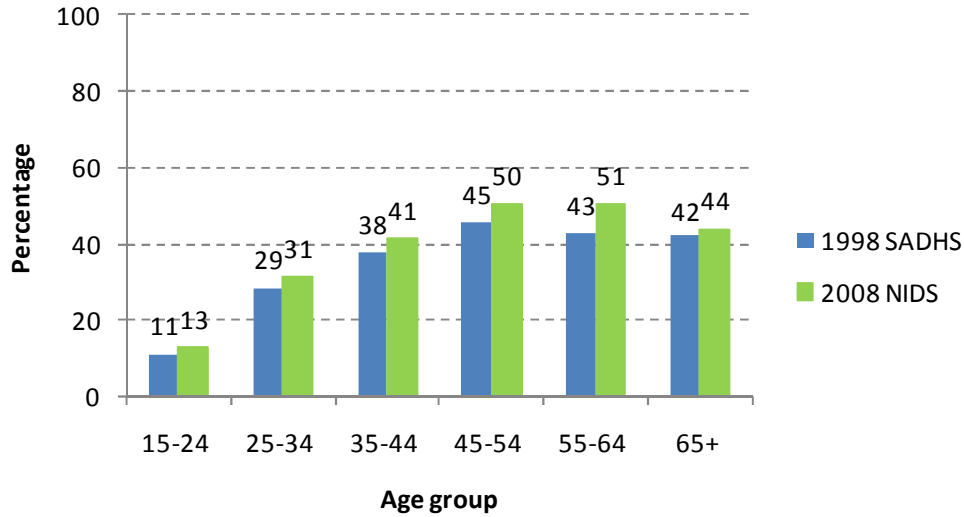
**Hazardous/harmful alcohol use (AUDIT_≥8)
Men**



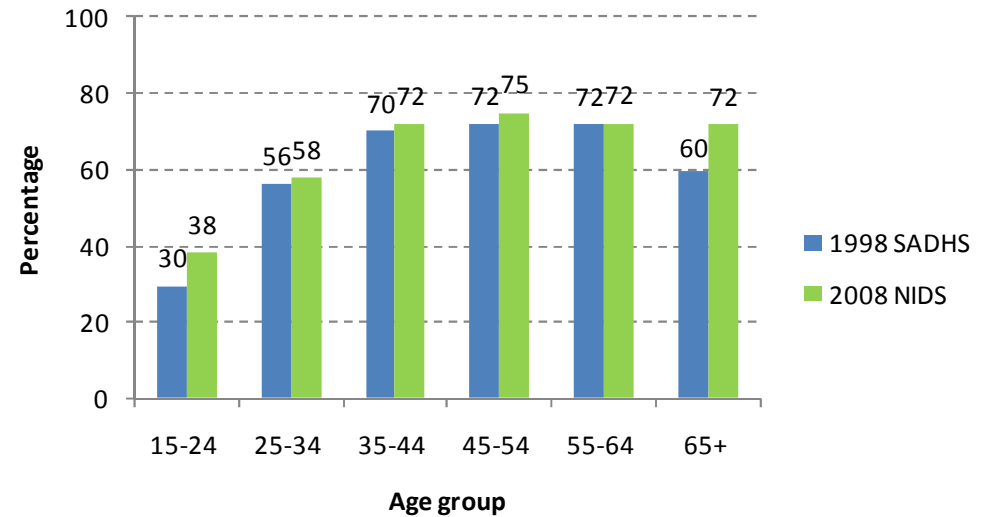
**Hazardous/harmful alcohol use (AUDIT_≥8)
Women**



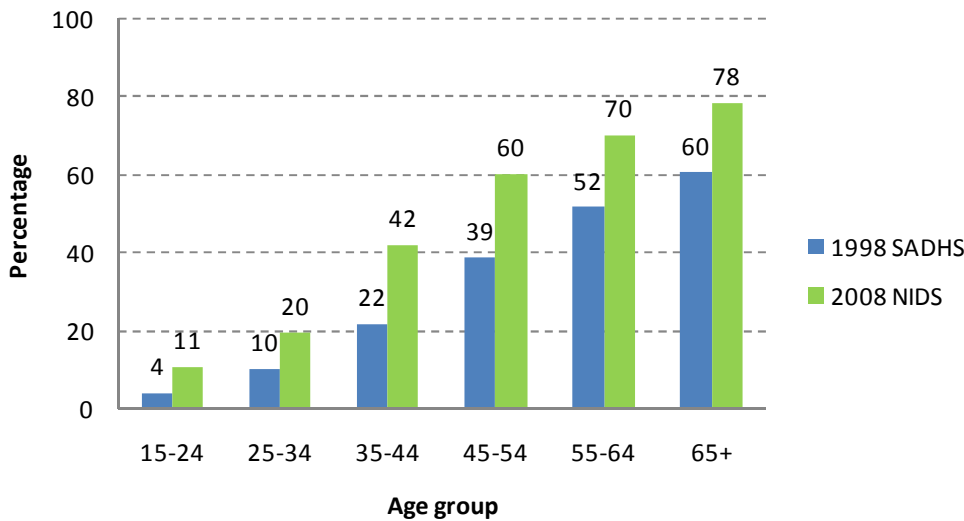
**Overweight and obesity (BMI_≥25)
Men South Africa**



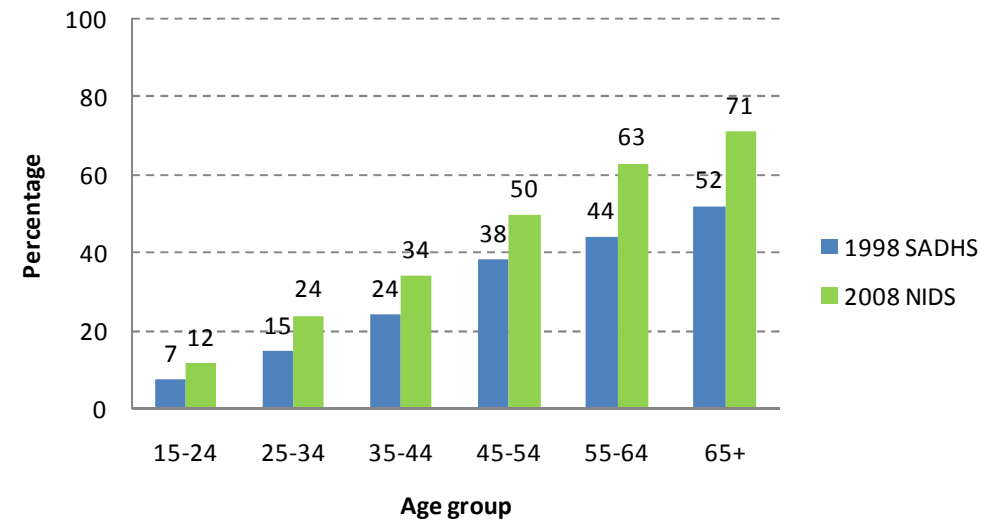
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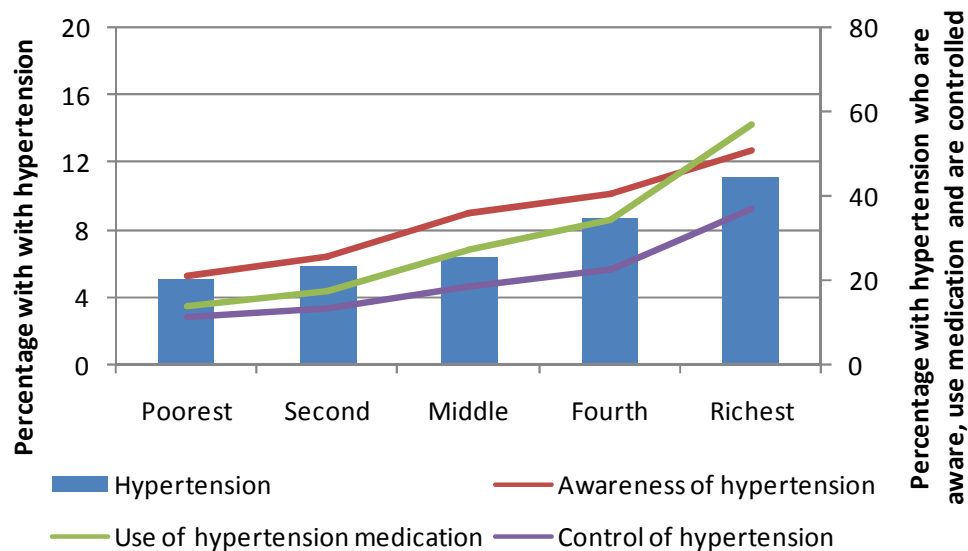
**Hypertension (bp_≥140/80 or meds)
Men South Africa**



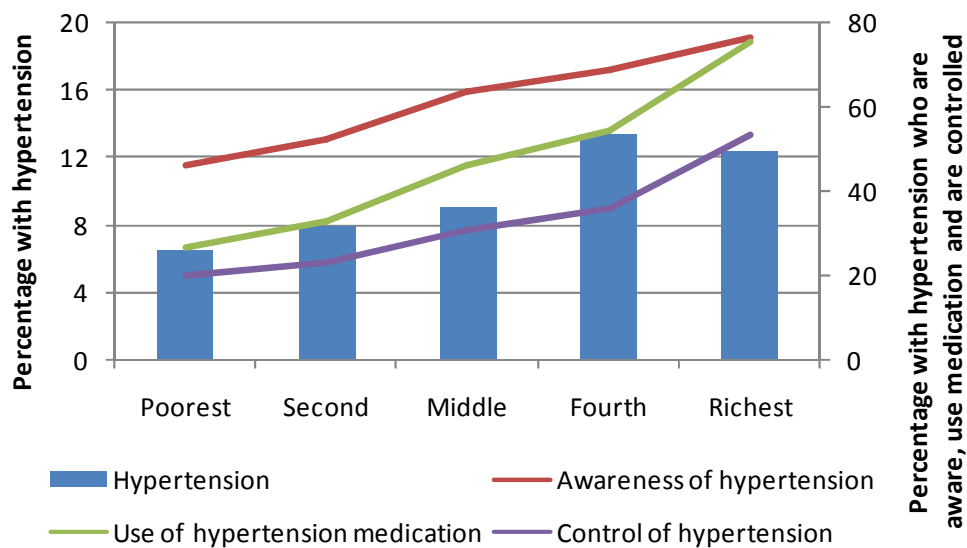
**Hypertension (bp_≥ 140/80 or meds)
Women South Africa**



Hypertension, awareness and treatment, males 15+ yrs

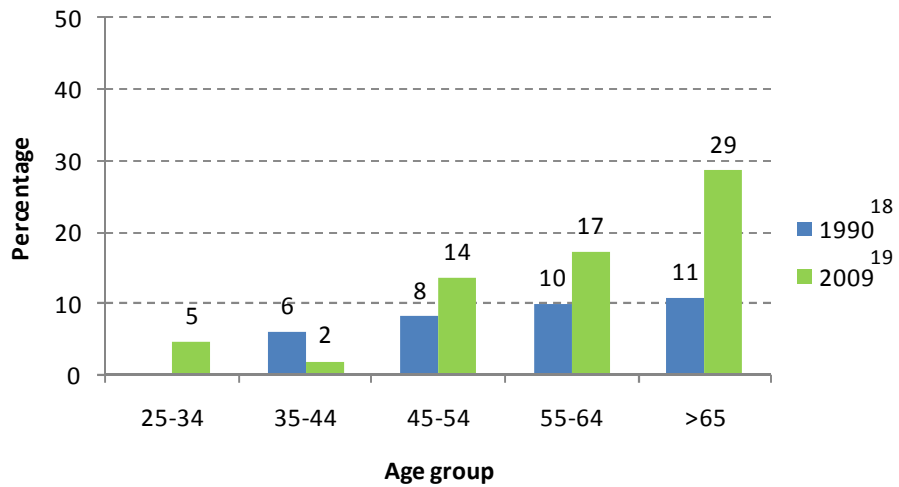


Hypertension, awareness and treatment, females 15+ yrs

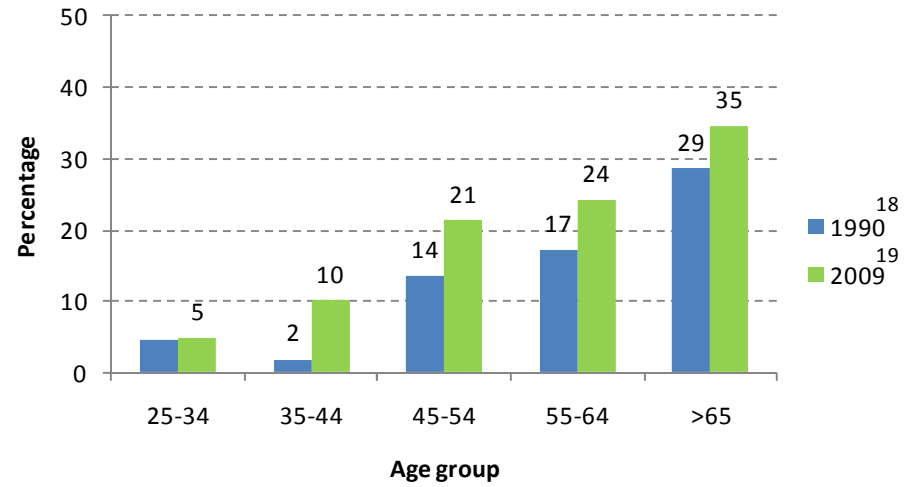


Source: Schneider et al, 2009

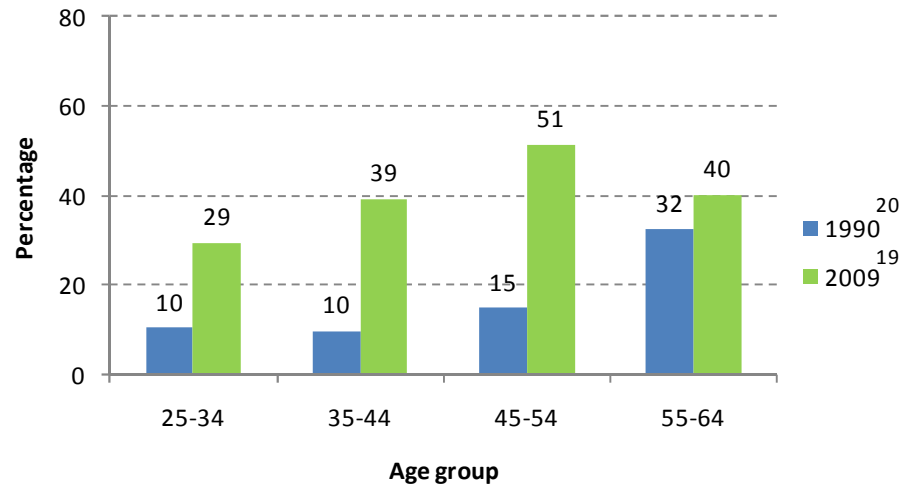
**Diabetes (>11.1 mmol/l)
Men Cape Town Ekhasi (township)**



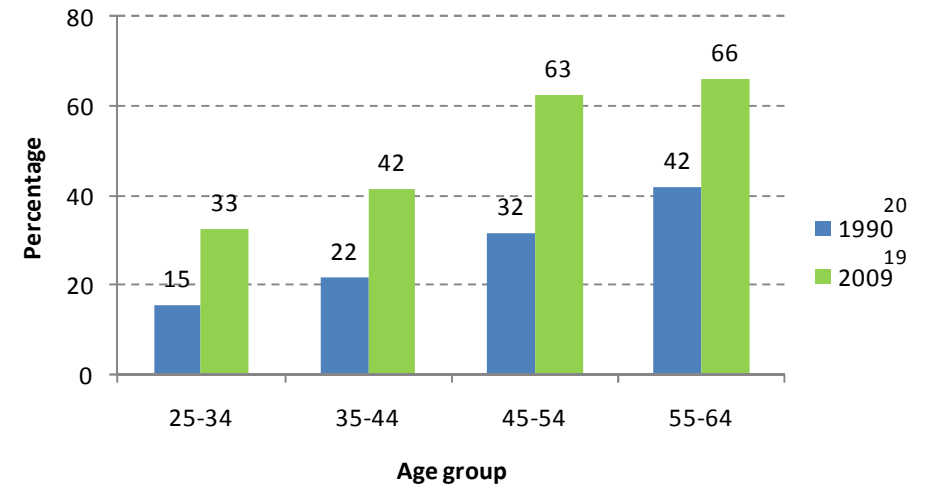
**Diabetes (>11.1 mmol/l)
Women Cape Town Ekhasi (township)**



**LDL blood cholesterol (>3 mmol/l)
Men Cape Town Ekhasi (township)**

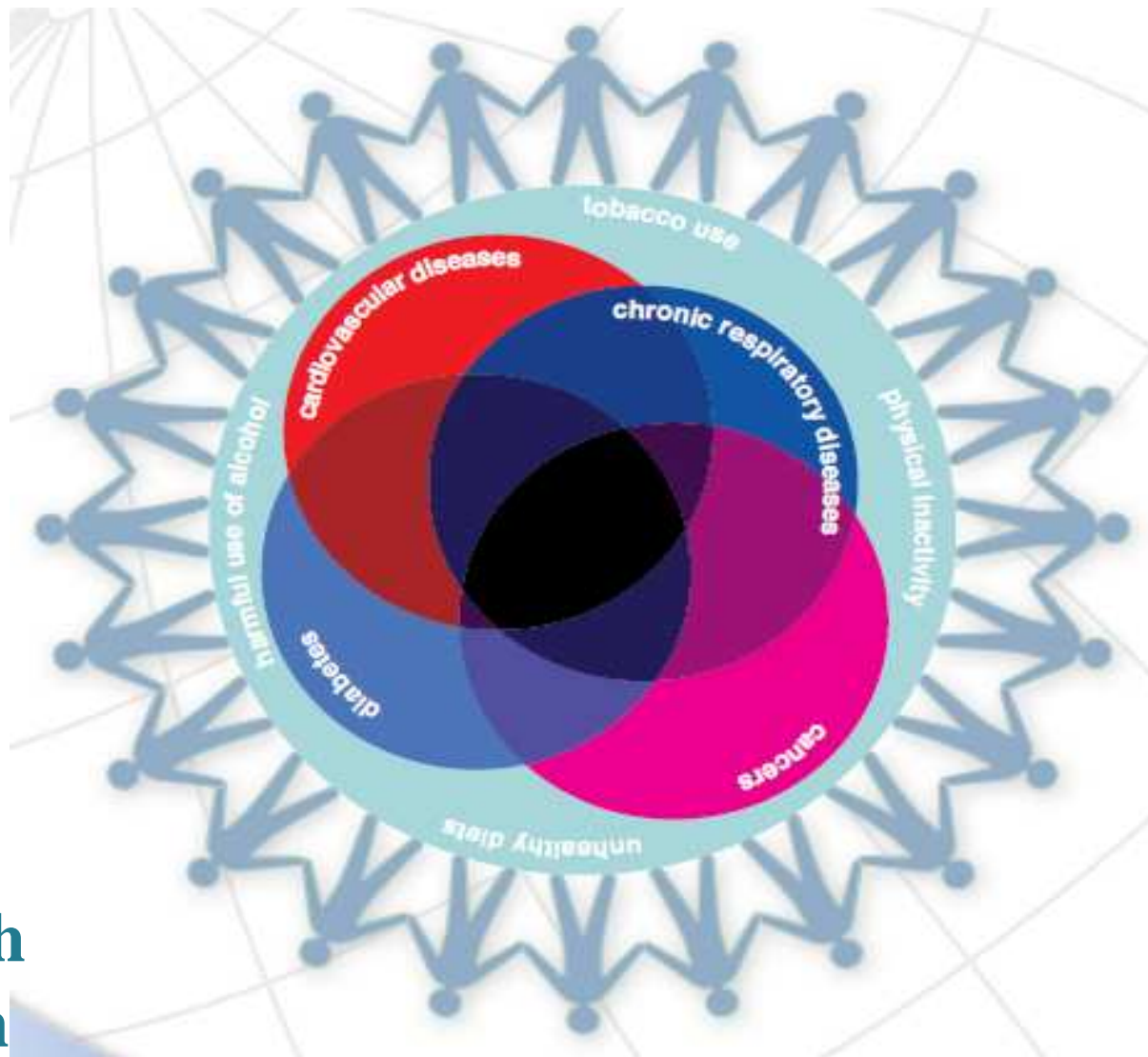


**LDL blood cholesterol (>3 mmol/l)
Women Cape Town Ekhasi (township)**



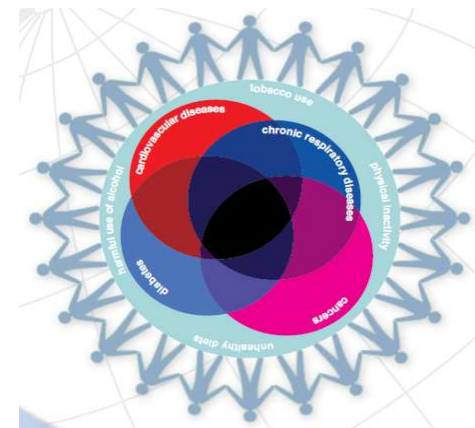
Source: Levitt et al, 1990; Oelofse et al, 1990; Unpublished data provided by Prof Levitt

Global status report on noncommunicable diseases 2010



World Health
Organisation

- **4** risk factors ie tobacco use, unhealthy diet, lack of physical activity and harmful use of alcohol
- contribute to **FOUR** chronic diseases ie heart disease, type 2 diabetes, lung disease and some cancers
- which, in turn, contribute to more than **80%** of preventable deaths from noncommunicable diseases in the world



Source: WHO Global status report on noncommunicable diseases 2010

If we want to meet the NSDA target of extending life expectancy, the trends in the risk factor profile must be reversed. A national policy and strategy for NCDs is urgently needed.

It should include:

1. Population-wide interventions

that promote healthy diet, physical activity, healthy environment and no smoking or harmful alcohol use

2. Strengthen primary health care

to effectively diagnose and manage NCDs and their risk factors with special attention on the poor

3. Strengthen quality assurance

comprehensive surveillance platform for monitoring and evaluation, platform for synthesis of evidence and innovative research



Mental ill-health

Not only did neuropsychiatric conditions account for 8% of DALYs in 2000, the SASH survey found that 16.5% of South African adults experienced a mental health problem in the year prior to the survey.

Mental illness has profound effect on the individual and their family.

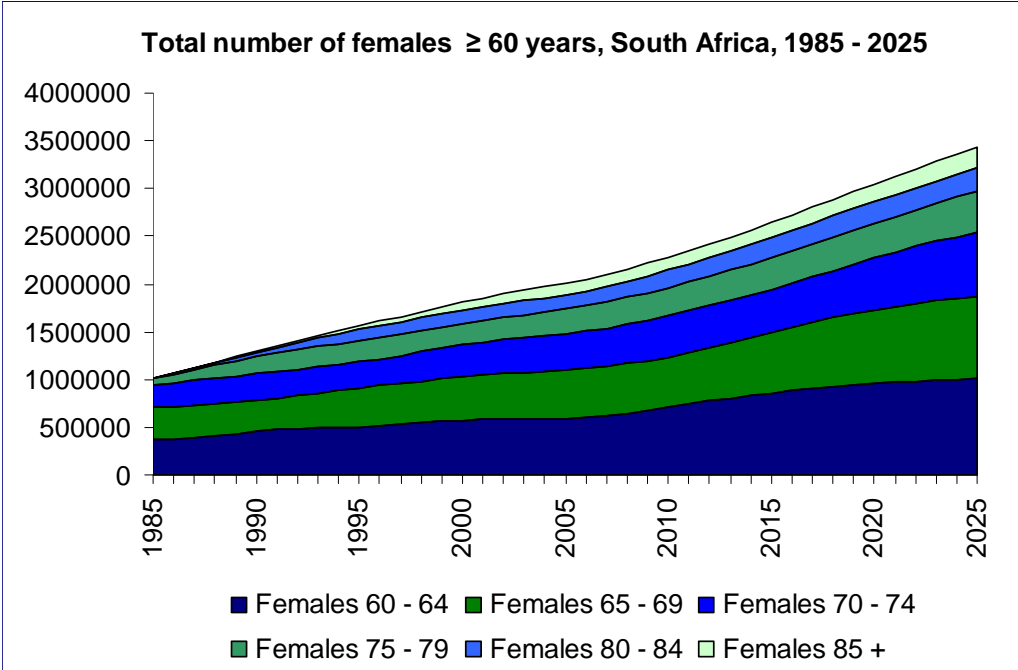
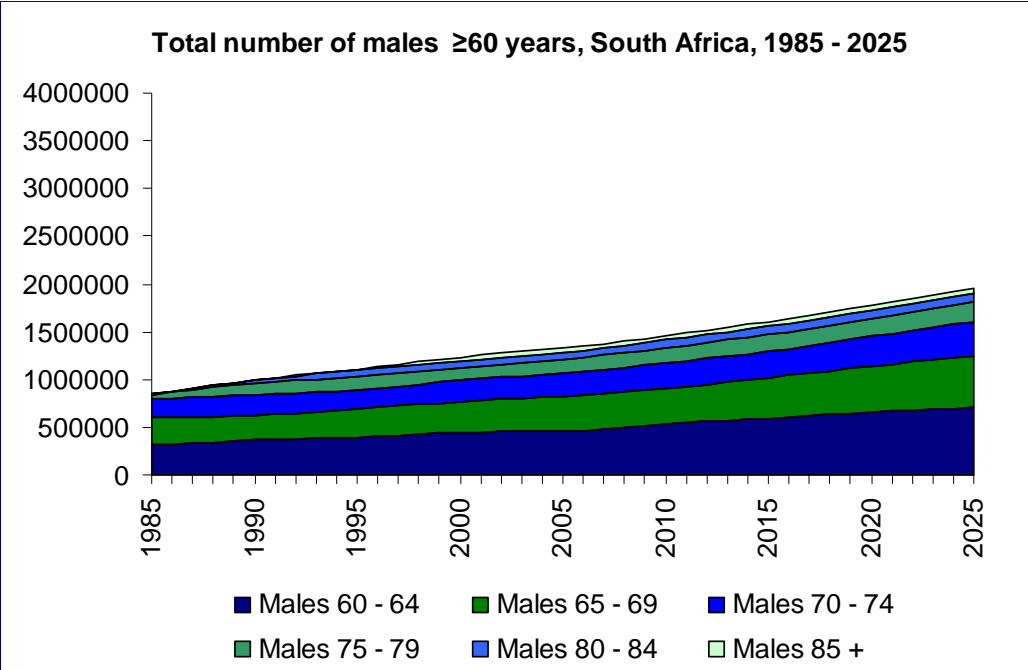
It is a risk factor for other NCDs – and many health conditions increase the risk for mental disorders. Also, co-morbidity complicates help-seeking behaviour, diagnosis and treatment .

THERE ARE COST-EFFECTIVE INTERVENTIONS TO BETTER MANAGE MENTAL ILLNESS

Projected number of persons 60+, 1985-2025

Men

Women



Source: ASSA2008



NON-COMMUNICABLE DISEASES

– *A race against time*

Debbie Bradshaw,¹ Krisela Steyn,² Naomi Levitt,² and Beatrice Nojilana¹

1. MRC BURDEN OF DISEASE RESEARCH UNIT, SOUTH AFRICAN MEDICAL RESEARCH COUNCIL

2. CHRONIC DISEASE INITIATIVE FOR AFRICA, DEPARTMENT OF MEDICINE, UNIVERSITY OF CAPE TOWN



Investing in intensive NCD prevention and treatment programmes NOW will have tremendous payoffs for the future of our country

BUT there is no health without MENTAL health

Acknowledgements

Statistics South Africa and Department of Health for data

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Prof Eric Bateman, Dr Niresh Bhagwandin
and Ms Jean Fourie for review



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