

# Common Health Problems among Older People

Robert Cumming

Professor of Epidemiology and Geriatric Medicine

University of Sydney

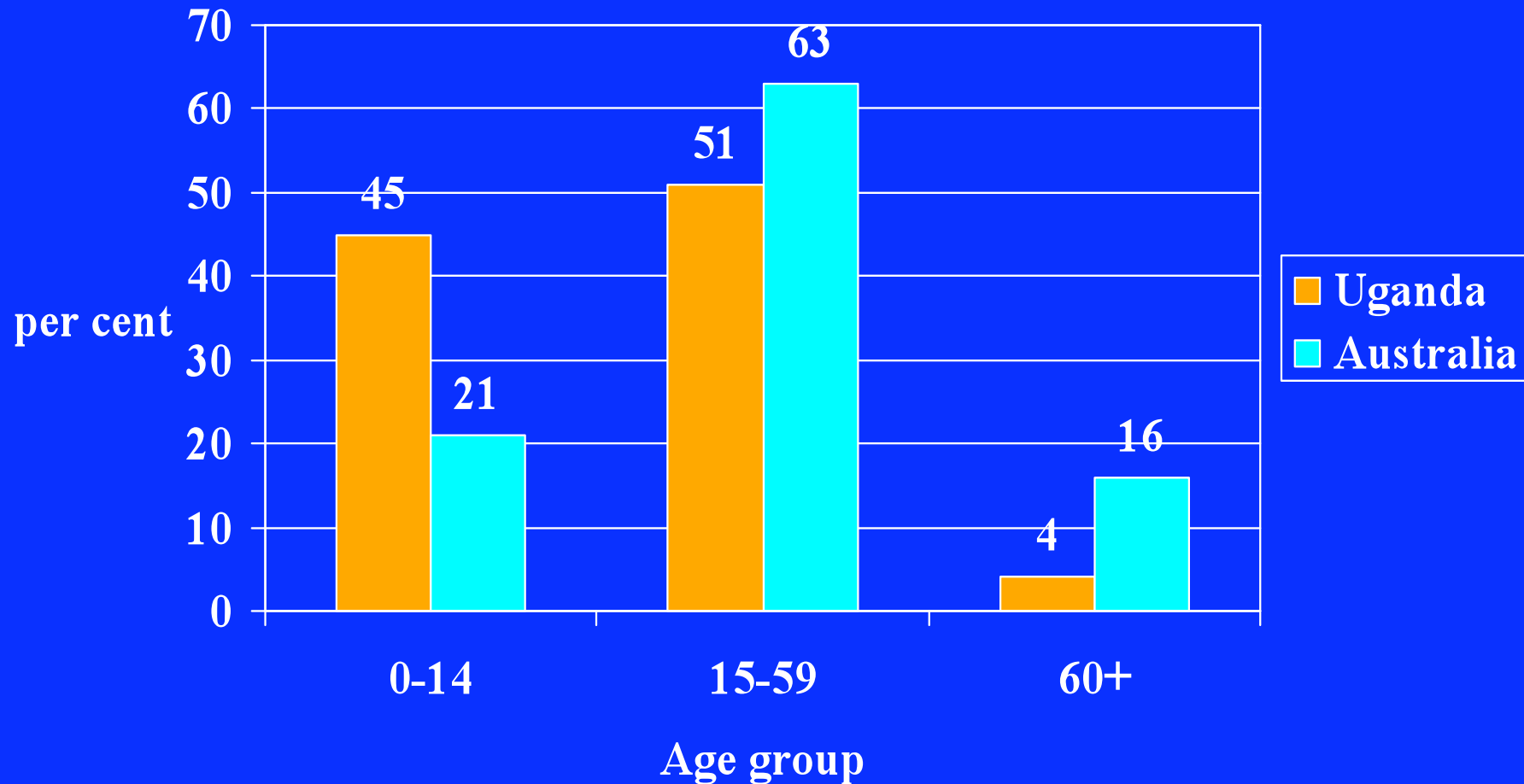
Australia

# Uganda and Australia

## Basic Facts

|                         | UGANDA      | AUSTRALIA  |
|-------------------------|-------------|------------|
| Population              | 28 million  | 21 million |
| GDP per capita          | \$360       | \$42,553   |
| Human Development Index | 154th       | 3rd        |
| Median age              | 15.6        | 36.7       |
| Fertility rate          | 6.8         | 1.8        |
| Infant mortality rate   | 77 per 1000 | 4 per 1000 |

# Population Age Distribution Uganda and Australia



# Life Expectancy at Various Ages Uganda and Australia

|                | Uganda | Australia |
|----------------|--------|-----------|
| <b>Males</b>   |        |           |
| Birth          | 45.3   | 76.4      |
| 60 years       | 14.4   | 20.4      |
| 80 years       | 5.2    | 7.5       |
| <b>Females</b> |        |           |
| Birth          | 46.8   | 82.0      |
| 60 years       | 15.9   | 24.6      |
| 80 years       | 5.7    | 9.4       |

# Leading Causes of Death at Age 60+ Sub-Saharan Africa

## Males

1. Heart disease
2. Stroke
3. Pneumonia
4. COPD
5. Prostate cancer
6. TB
7. HIV/AIDS

## Females

1. Stroke
2. Heart disease
3. Pneumonia
4. Kidney disease
5. Diabetes
6. COPD
7. Hypertensive heart dis.

Cervical cancer is no 10 and  
breast cancer is no 11

# The Geriatric Giants

## Isaacs (1966)

- Iatrogenic problems (polypharmacy)
- Immobility
- Incompetence (dementia)
- Incontinence
- Instability (falls)

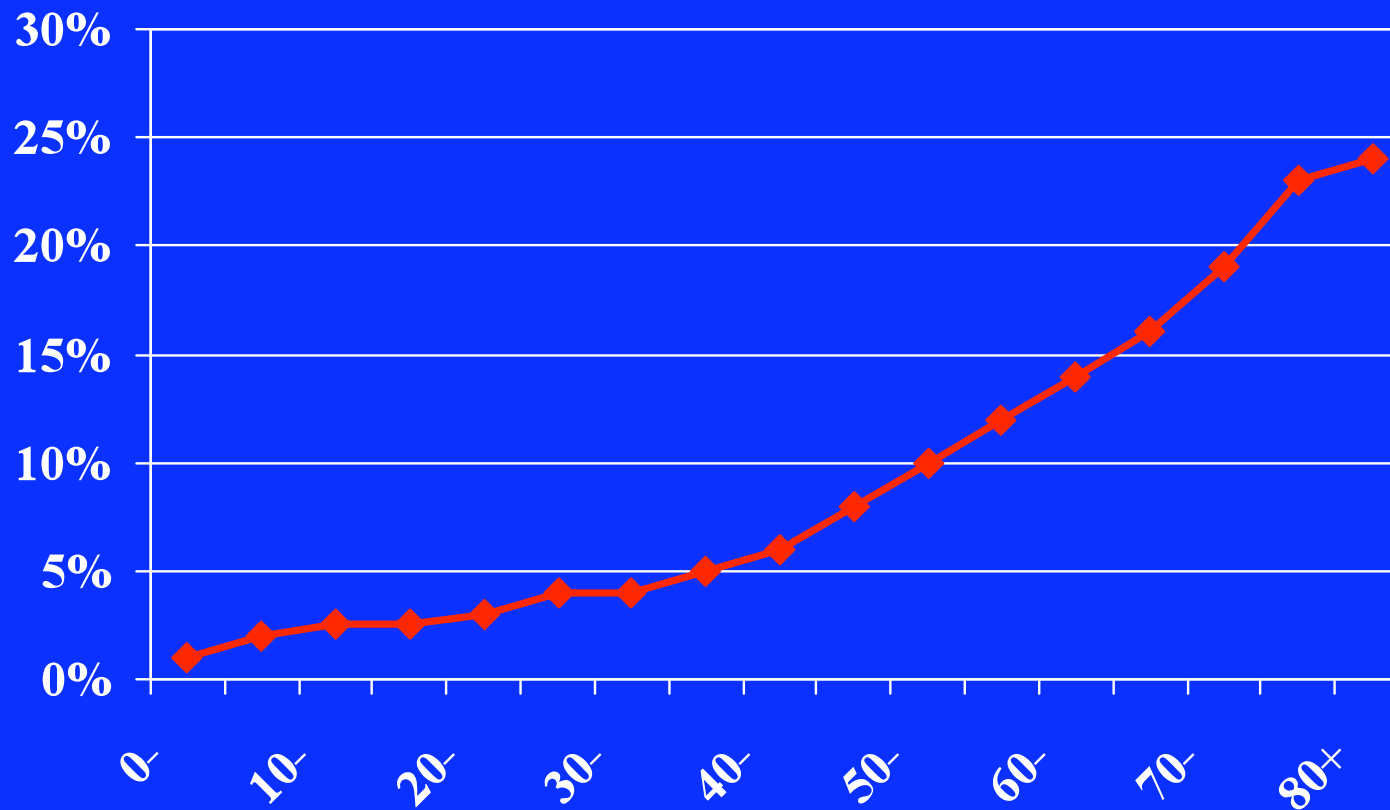
# Recent Ugandan “Health” Surveys

- Uganda Population Census (2002)
- Uganda National Household Survey (2005-6)
- Uganda Demographic and Health Survey (2006)
- The Aged Family Uganda Survey (2006)
- HelpAge International Mbarara Survey (2006)

# Prevalence of Disability

## Population and Housing Census

### Uganda 2002



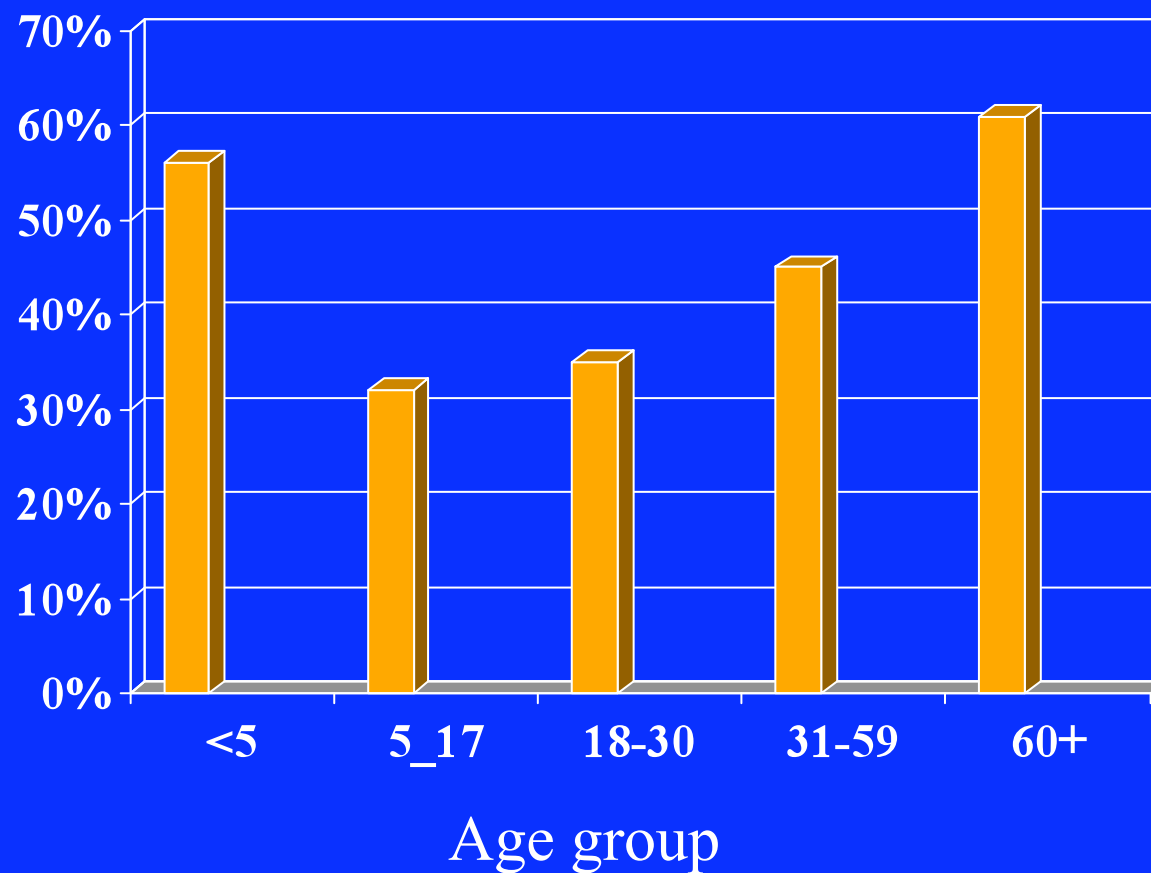
Difficulty in moving, seeing, hearing, speaking or learning that has lasted 6 months or more



# Unwell in Previous Month

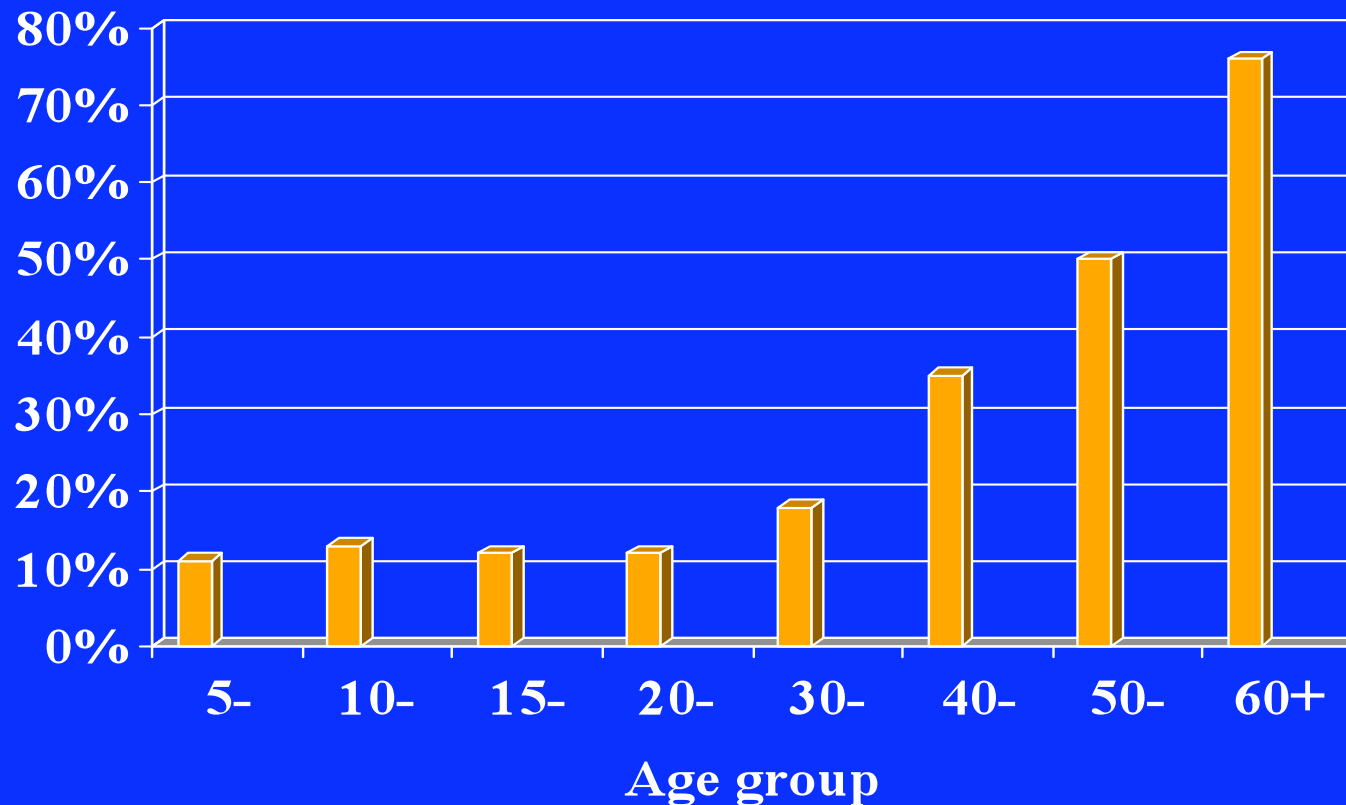
## Uganda National Household Survey

### 2005-6



# Prevalence of Disability

## Uganda Demographic and Health Survey 2006



Difficulty with seeing, hearing, walking, remembering, self-care or communicating

# TAFU Survey of Older People in Uganda (2006)

- 382 subjects
  - 182 interviewed individually
  - 200 interviewed in groups
- Selected from 7 districts from all 4 regions of Uganda and Kampala
- Age range 65-80 (mean: 68 years)
- 55% female
- Semi-structured interview

# Health Problems

## TAFU Survey

Do you have any sickness now?

|                               |           |
|-------------------------------|-----------|
| Back and bone problems        | 310 (81%) |
| Dental problems               | 302 (79%) |
| Arthritis                     | 279 (73%) |
| Poor vision                   | 205 (54%) |
| Breathing problems (“asthma”) | 153 (39%) |
| General weakness (“anaemia”)  | 121 (32%) |
| Memory problems               | 47 (12%)  |

# Survey of Older People Mbarara, Uganda (2006)

- 157 randomly selected subjects
- Selected from parishes in Mbarara district, western Uganda
- Age range 50-99 years
- 53% female
- Structured interview

# Health Problems Mbarara Survey

Illness suffered in the past 30 days

|                       |     |
|-----------------------|-----|
| Back pains            | 48% |
| Joint pains/arthritis | 42% |
| Fever/malaria         | 33% |
| Headache              | 33% |
| Poor eyesight         | 25% |

# Common Health Problems Among Older People

## Causes of death

- Heart disease
- Stroke

## Causes of disability

- Arthritis
- Dementia
- Incontinence
- Falls and fractures
- Poor vision

## Risk factors

- Diabetes
- High blood pressure
- Obesity

## Other

- Depression
- Polypharmacy

# Risk Factors for Heart Disease and Stroke

- Smoking
- High blood pressure
- Diabetes
- High serum cholesterol
- Lack of exercise
- Obesity

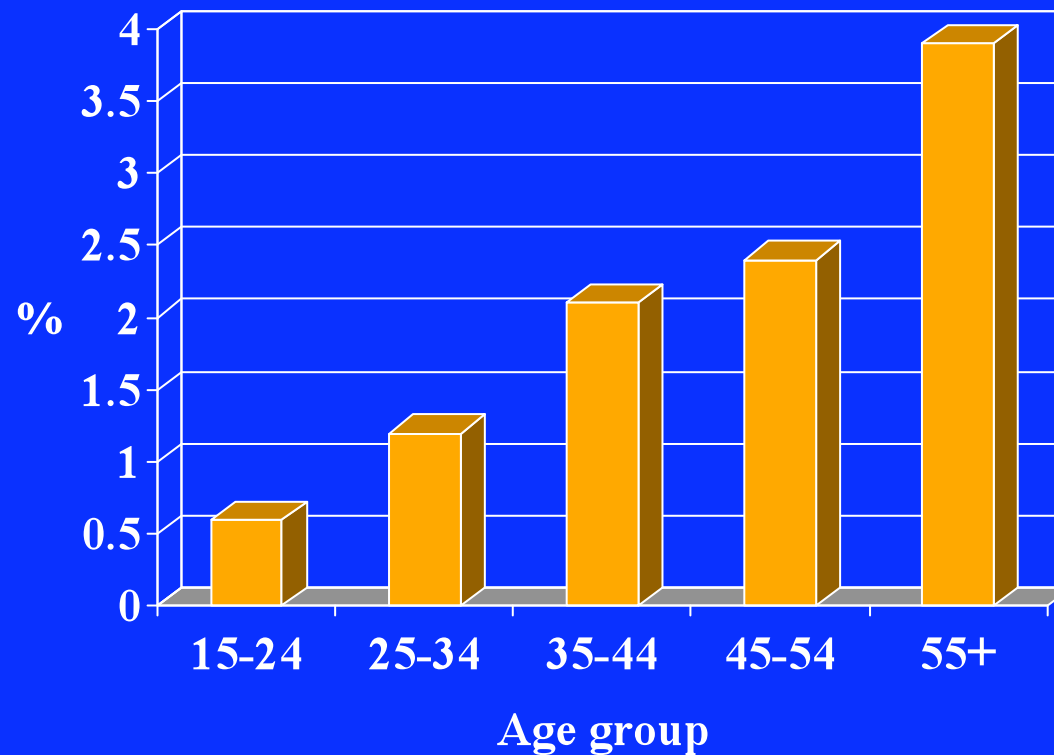


# Prevalence of High Blood Pressure (>140/90)

|                  | Males | Females |
|------------------|-------|---------|
| Australia (2000) | 31%   | 27%     |
| Cameroon (1998)  |       |         |
| Urban            | 23%   | 16%     |
| Rural            | 14%   | 16%     |
| Tanzania (2000)  |       |         |
| Urban            | 30%   | 29%     |
| Rural            | 32%   | 31%     |

Source: Steyn et al in Disease and Mortality in Sub-Saharan Africa, World Bank 2006

# Prevalence of Diabetes Cameroon (1997)



Source: Mbanya et al. Diabetologia 1997;40:824-829

# Prevalence of Obesity

|              | Males | Females |
|--------------|-------|---------|
| Australia    | 18.0% | 17.0%   |
| Gambia       |       |         |
| Urban        | 1.8%  | 12.2%   |
| Rural        | 0.1%  | 1.1%    |
| South Africa |       |         |
| Urban        | 7.5%  | 30.0%   |
| Tanzania     |       |         |
| Urban        | 6.9%  | 17.4%   |

Source: Steyn et al in Disease and Mortality in Sub-Saharan Africa, World Bank 2006

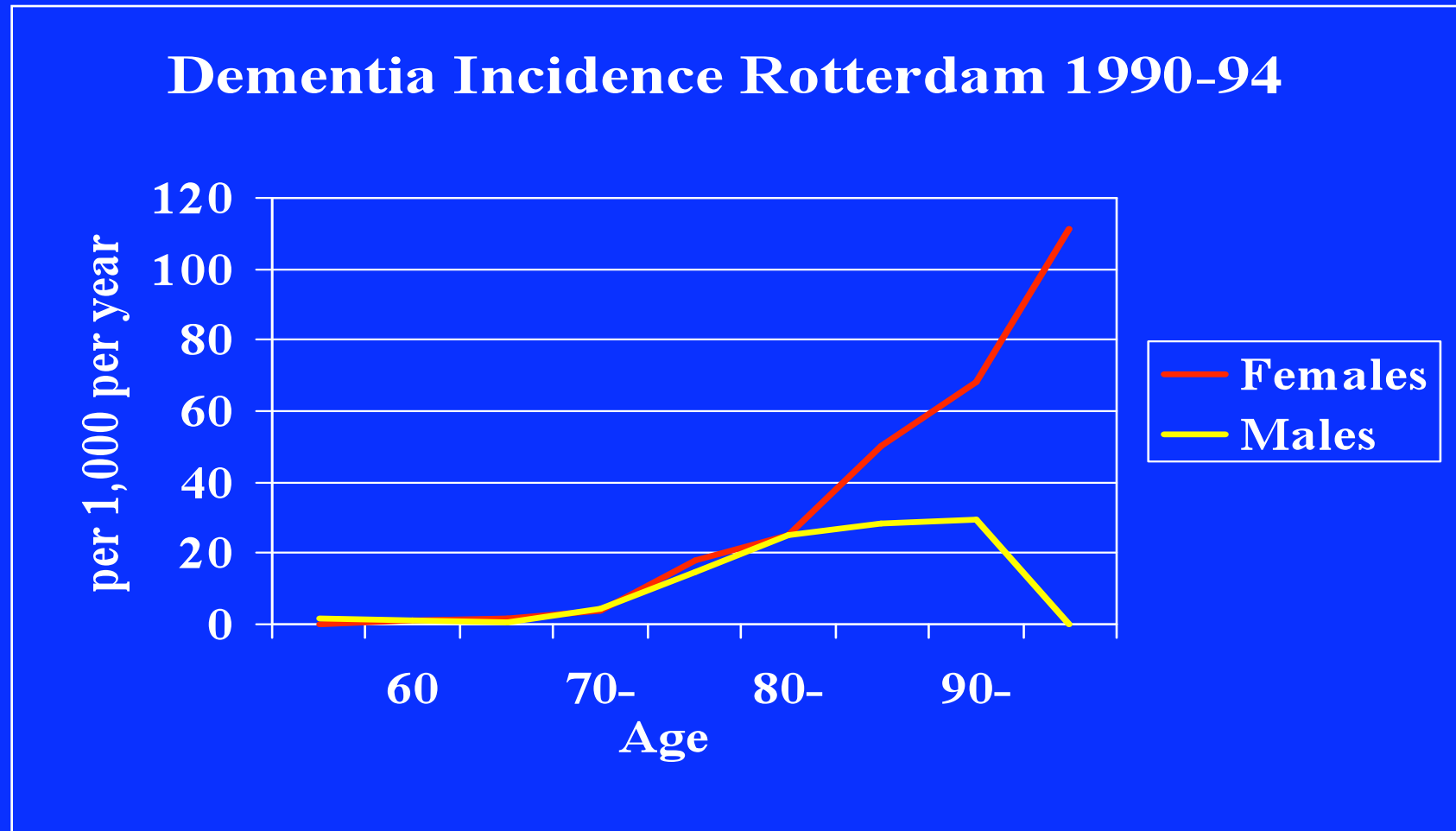
# Prevalence of Osteoarthritis NHANES, USA

| Site  | Age group |       |
|-------|-----------|-------|
|       | $\geq 35$ | 70-74 |
| Hands | 30%       | 85%   |
| Knees | 10%       | 30%   |
| Hips  | 1%        | 10%   |

# Risk factors for Osteoarthritis

- Female sex
- Obesity
- Injuries to joints
  - A single major injury
  - Minor injury due to repetitive heavy lifting, kneeling, squatting

# Dementia Incidence



Source: Ott et al. Am J Epidemiol 1998;147:574-80

# Prevalence of Dementia Nigeria and USA

| Age group                 | Nigeria<br>(Ibadan) | USA*<br>(Indianapolis) |
|---------------------------|---------------------|------------------------|
| 65-74                     | 0.9%                | 1.8%                   |
| 75-84                     | 2.7%                | 6.7%                   |
| 85+                       | 9.6%                | 17.1%                  |
| Overall,<br>aged-adjusted | 2.3%                | 4.8%                   |

\* African-Americans living in the community

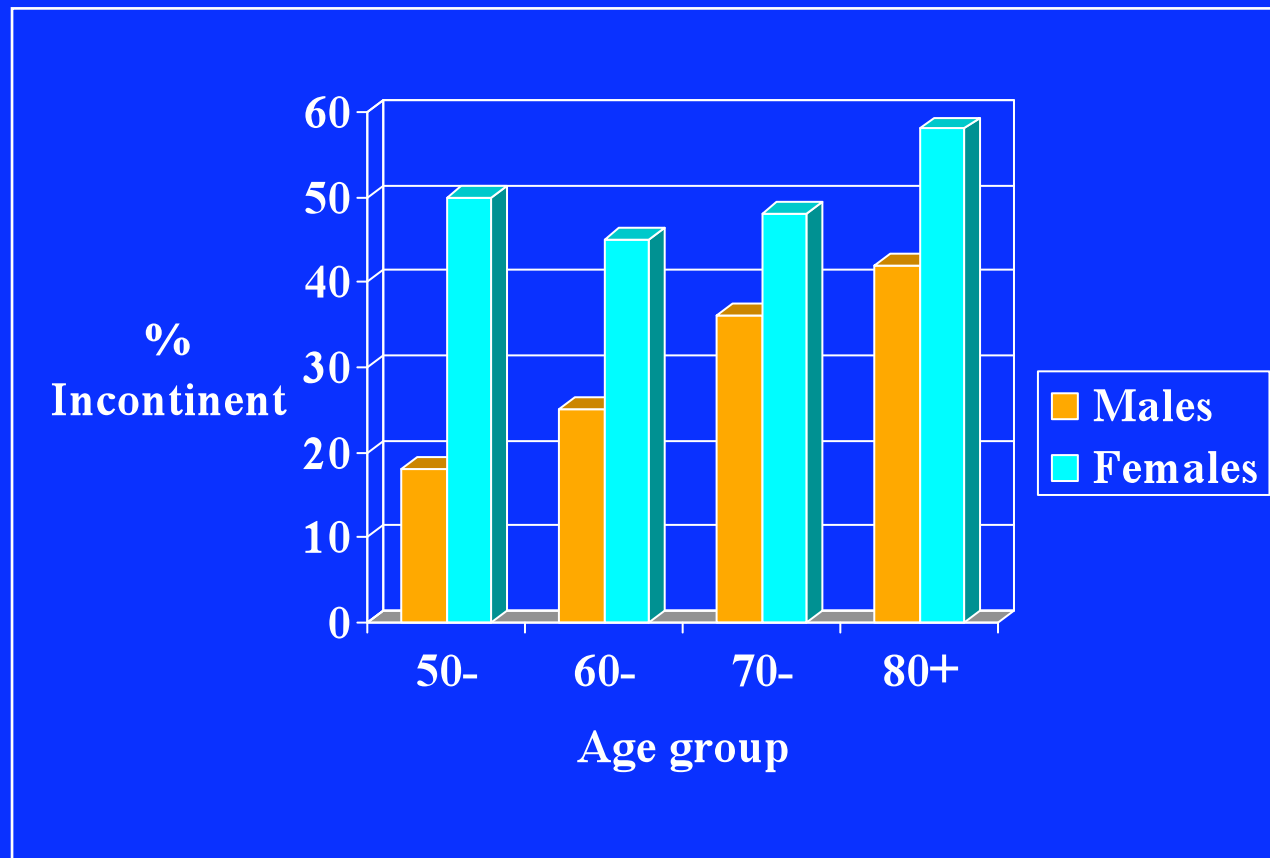
Source: Hendrie et al. Am J Psych 1995;152:1485-1492

# Risk Factors for Dementia

- Head injury
- Lack of education
- High blood pressure
- Smoking
- High serum cholesterol
- Lack of exercise (physical and mental)



# Urinary Incontinence Prevalence

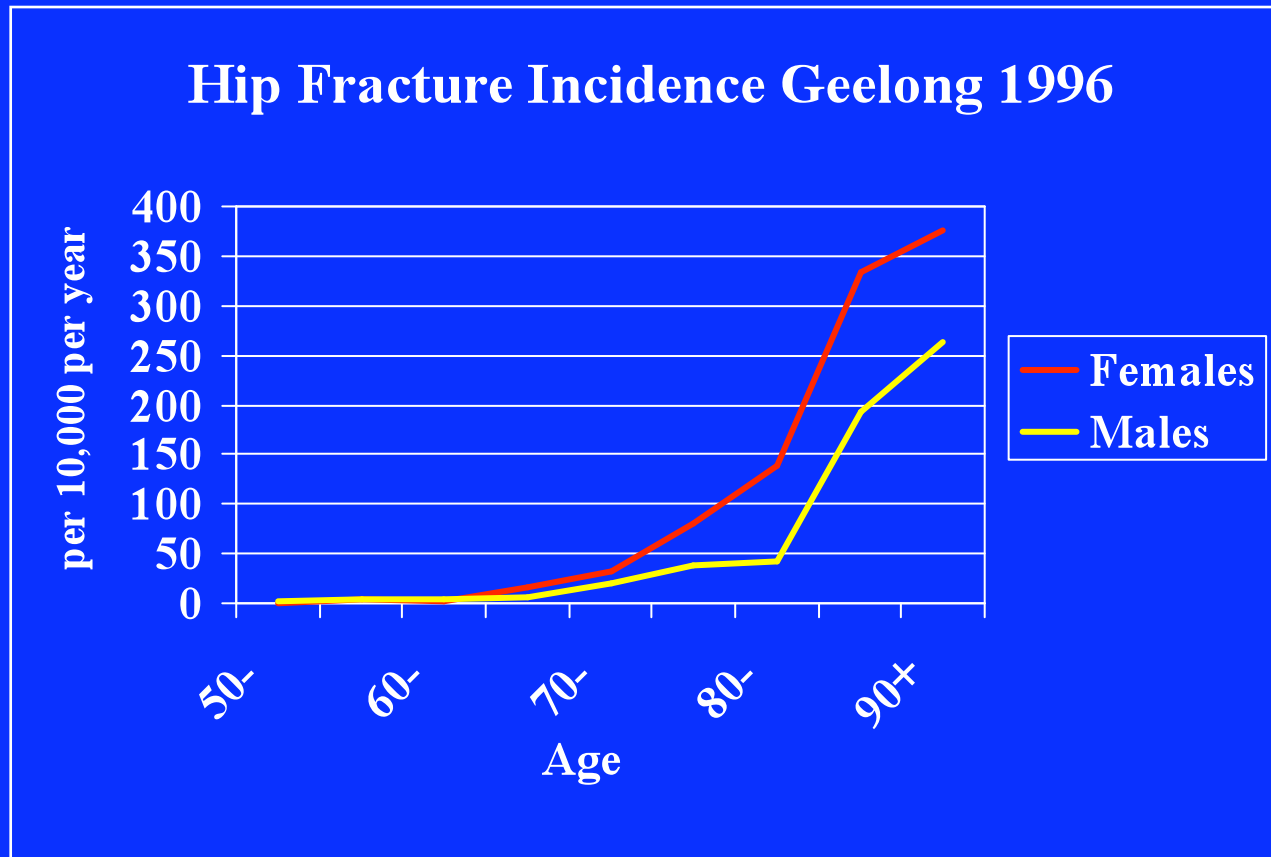


Source: J Am Geriatr Soc 1998;46:467-72

# Causes of Urinary Incontinence

- Birth trauma (females)
- Enlarged prostate (males)
- Dementia
- Poor mobility

# Hip Fracture Incidence



Source: Sanders et al. Osteoporosis Int 1999;10:240-7

Lifetime risk of hip fracture: 15% in women; 6% in men

# Risk Factors for Fractures

## Weak bones

- Female sex
- White race
- Being underweight
- Lack of exercise
- Lack of calcium
- Smoking

## Falls

- Poor balance
- Muscle weakness
- Any acute illness
- Stroke, Parkinson's D.
- Poor eyesight
- Psychotropic meds
- Dementia
- Environmental hazards

# Causes of Poor Vision

- Cataract
- Macular degeneration
- Glaucoma
- Diabetic retinopathy
- Hypertensive retinopathy

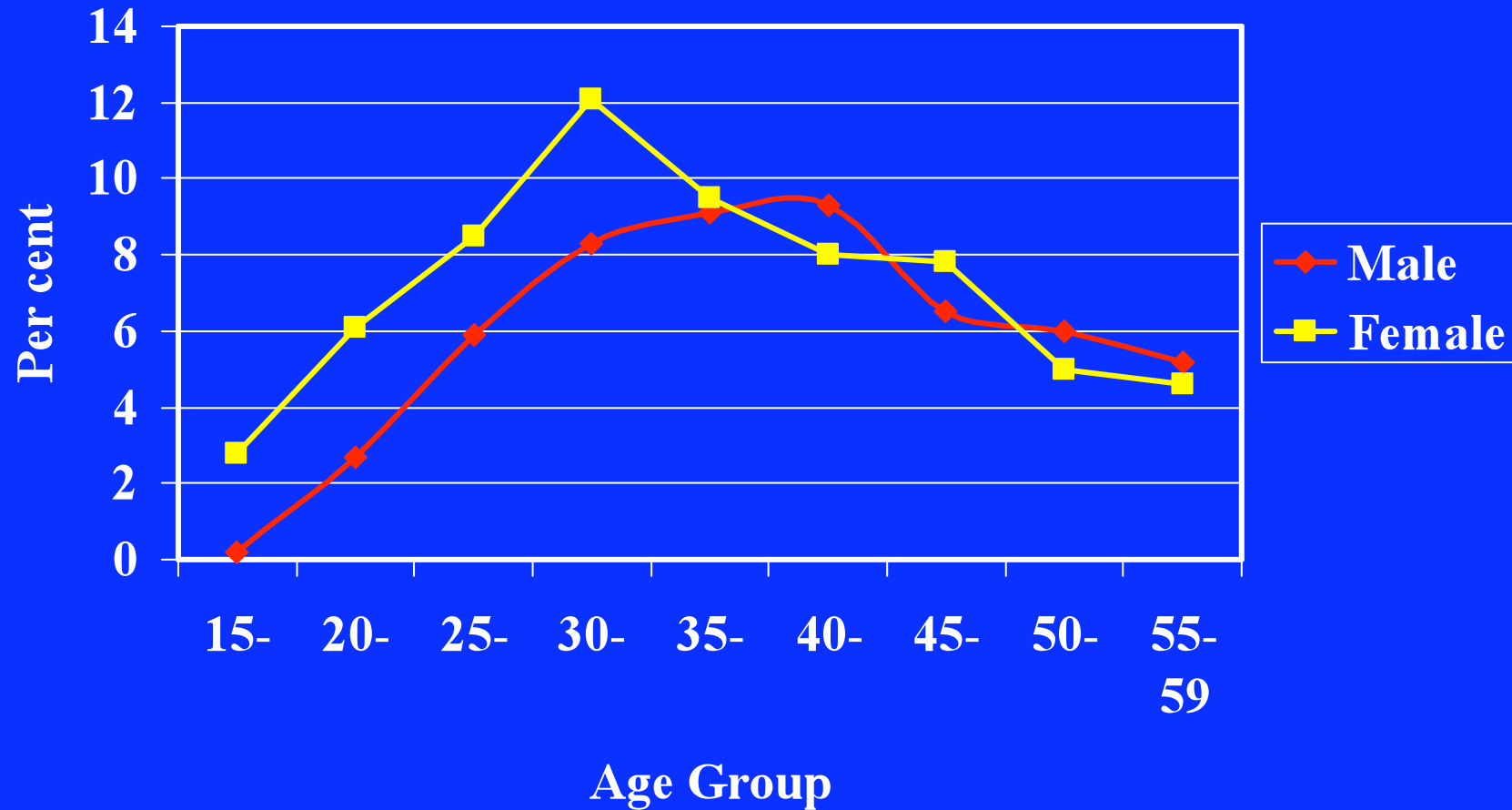
# **HIV and Older People in Sub-Saharan Africa**

# Sub-Saharan Africa

In sub-Saharan Africa there are:

- 25 million people living with HIV
- 37 million older people (aged 60+)

# HIV Prevalence in Uganda





# Percentage of AIDS Cases Aged 50 years and Over

| Region/country | Percentage |
|----------------|------------|
| Australia      | 9.3%       |
| USA            | 10.7%      |
| UK             | 11.0%      |
| Africa         | 5.6%       |
| Asia           | 4.5%       |
| Latin America  | 7.4%       |

Source: Knodel et al. JAIDS 2003;33:S153-S165

# Caregiver Burden Uganda

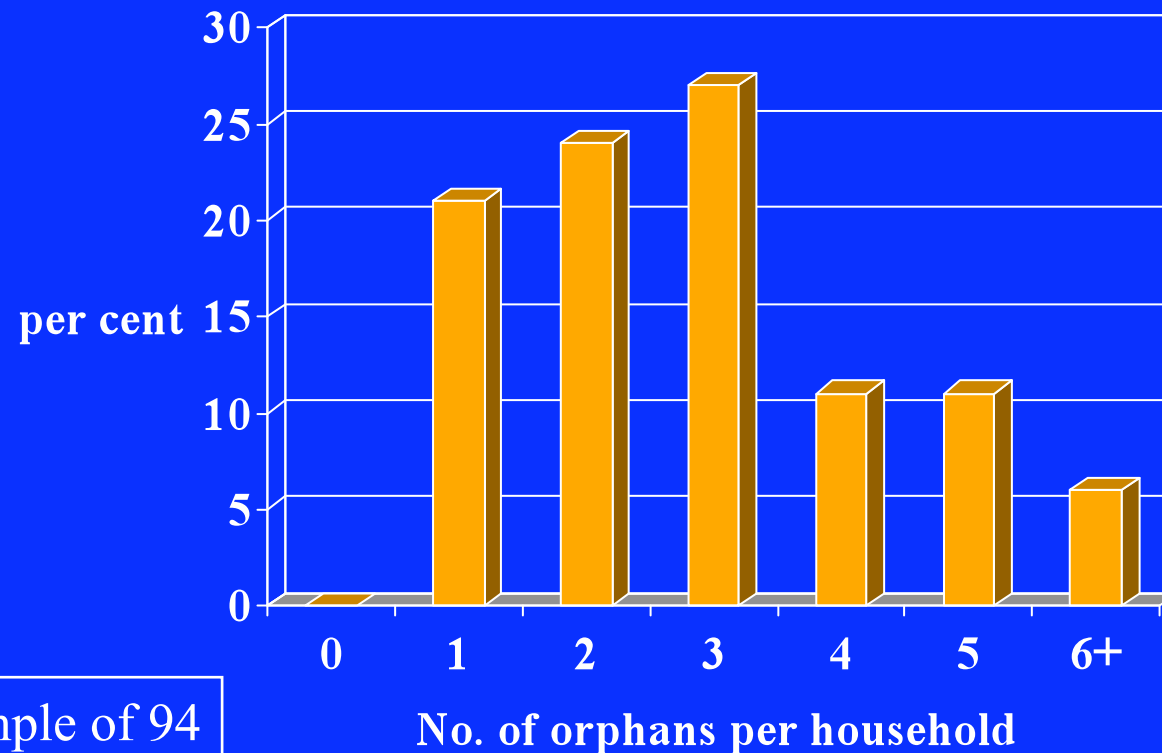
- Western Uganda (Kabaroole, Kamwenge)
- n=120 caregivers of people with AIDS
- Caregiver Burden Questionnaire (Guberman)
- Mean age 39 years (32% older than 50 years)

# Health Problems Among Caregivers of People with AIDS

| Problem           | Percentage |
|-------------------|------------|
| Depression        | 92%        |
| Exhaustion        | 82%        |
| Sleeping problems | 68%        |
| Backache          | 50%        |
| Headaches         | 52%        |
| Backache          | 50%        |

Source: Kipp et al. J Transcult Nurs 2007;18:358-365

# Grandparents Caring for Orphans Uganda 2006



Random sample of 94  
heads of households  
aged 50+ in Kayunga

Source: Kakooza J

# SUMMARY

|                     | <b>Prevent?</b> | <b>Cure?</b>                 | <b>Rehabilitate?</b> |
|---------------------|-----------------|------------------------------|----------------------|
| Heart attacks       | ++++            | ++                           | ++                   |
| Stroke              | ++++            | +                            | ++++                 |
| Arthritis           | ++              | ++++ (TJR)<br>+ (other)      | ++                   |
| Incontinence        | ++              | +                            | +                    |
| Dementia            | +               | No                           | ++                   |
| Falls and fractures | ++              | ++ (surgery)                 | ++                   |
| Poor vision         | +               | ++++ (cataract)<br>+ (other) | ++                   |

# CONCLUSIONS

- Older people suffer from a wide range of health problems
- Many of these problems can be prevented and/or treated (curative and/or rehabilitation)
- However, there is very little information about the health of older people in Uganda, which makes it very difficult to plan preventative, treatment and rehabilitation services

# The Mzee Study

## Ugandan Study of Health and Ageing

### Study design

- 1000 people aged 60+ living in 2 or 3 ‘representative’ Ugandan communities
- Ideally, do repeat assessments every 2 years
- Comprehensive assessment of physical, psychological and social health
  - Questionnaires (including assessment of cognition)
  - Clinical examination (BP, height, weight, vision)
  - Blood (cholesterol, glucose, haemoglobin)

This study is still in the formative stage and requires refinement and funding.