

# ELSA wave 2 Launch- Health

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# Objective measures of physical health

- New outcomes in ELSA
- Differences by age
- Differences by total wealth
- Conclusion

# What's new in wave 2

- Nurse visit

  - Anthropometry (height, weight, waist hip)

  - BP

  - Lung function (PF, FEV1 and FVC)

  - Blood samples for:

    - Lipids, inflammatory markers, fasting blood glucose and glycosylated haemoglobin

    - Haemoglobin and ferritin

    - DNA

# What's new in wave 2(continued)

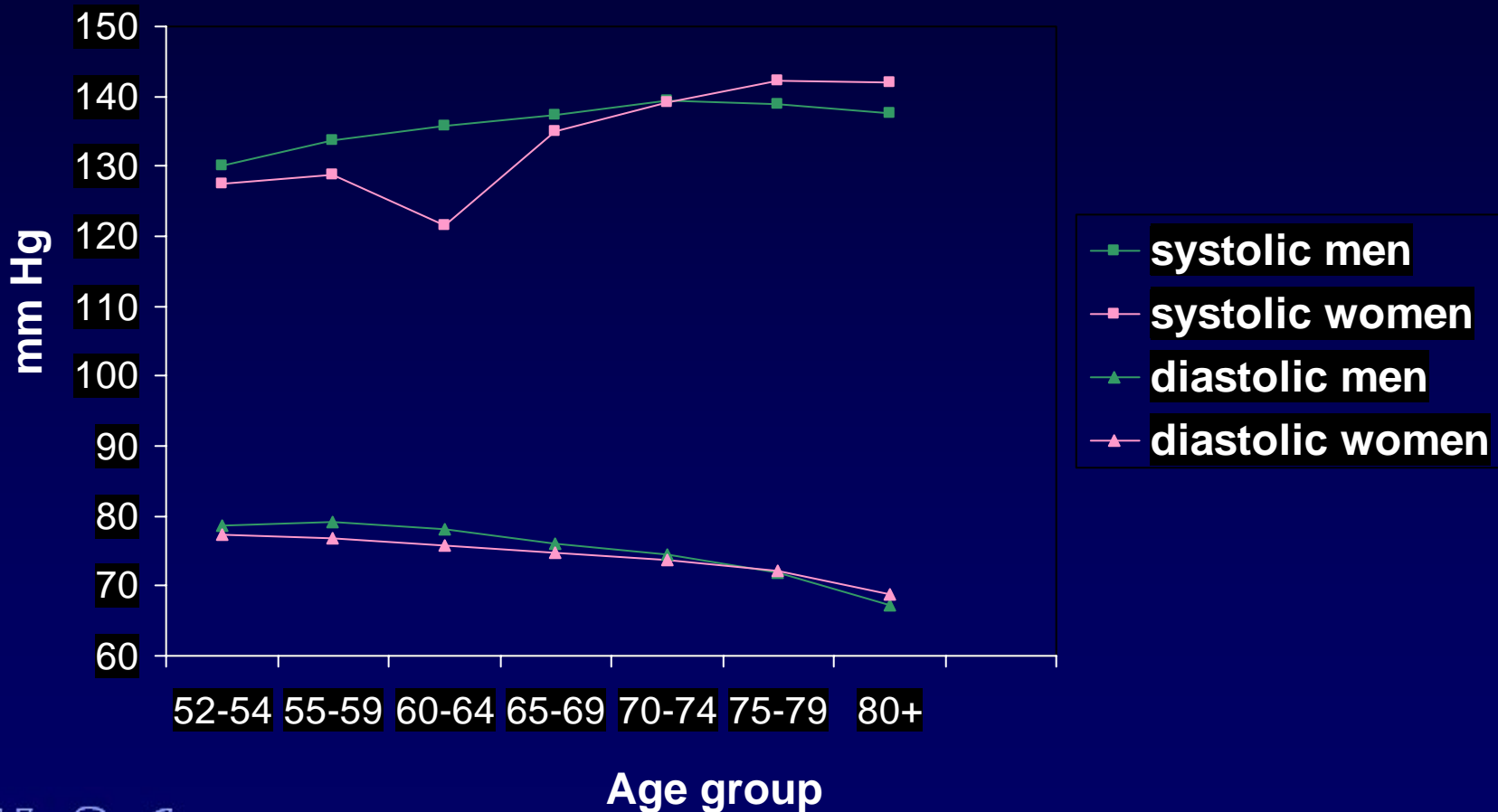
## Physical performance tests:

- lower limb mobility (time for five chair rises, 5 progressively more difficult balance tests),
- a measure of muscle strength (grip strength)

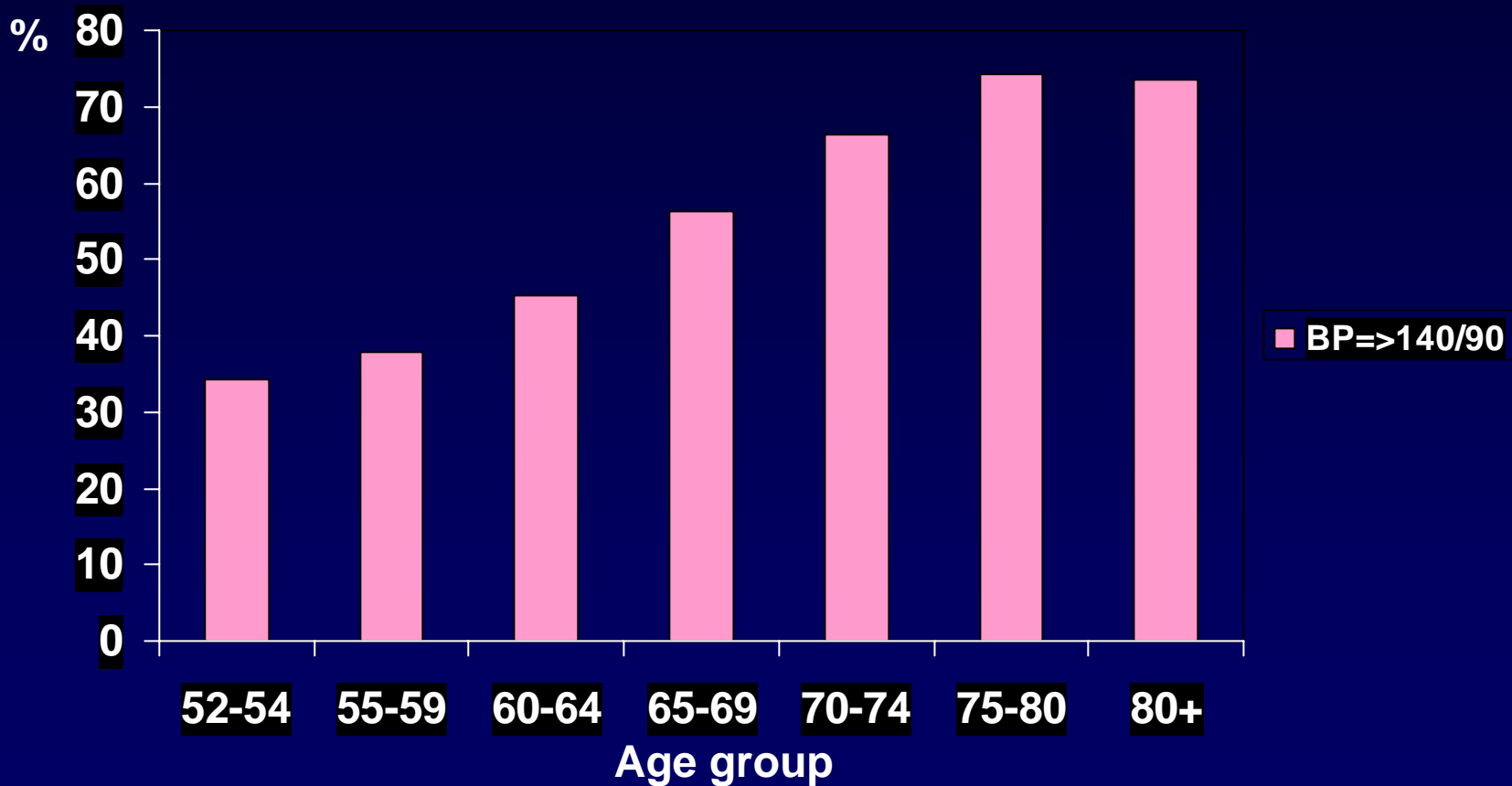
## Saliva samples (for cortisol)

# Differences by age

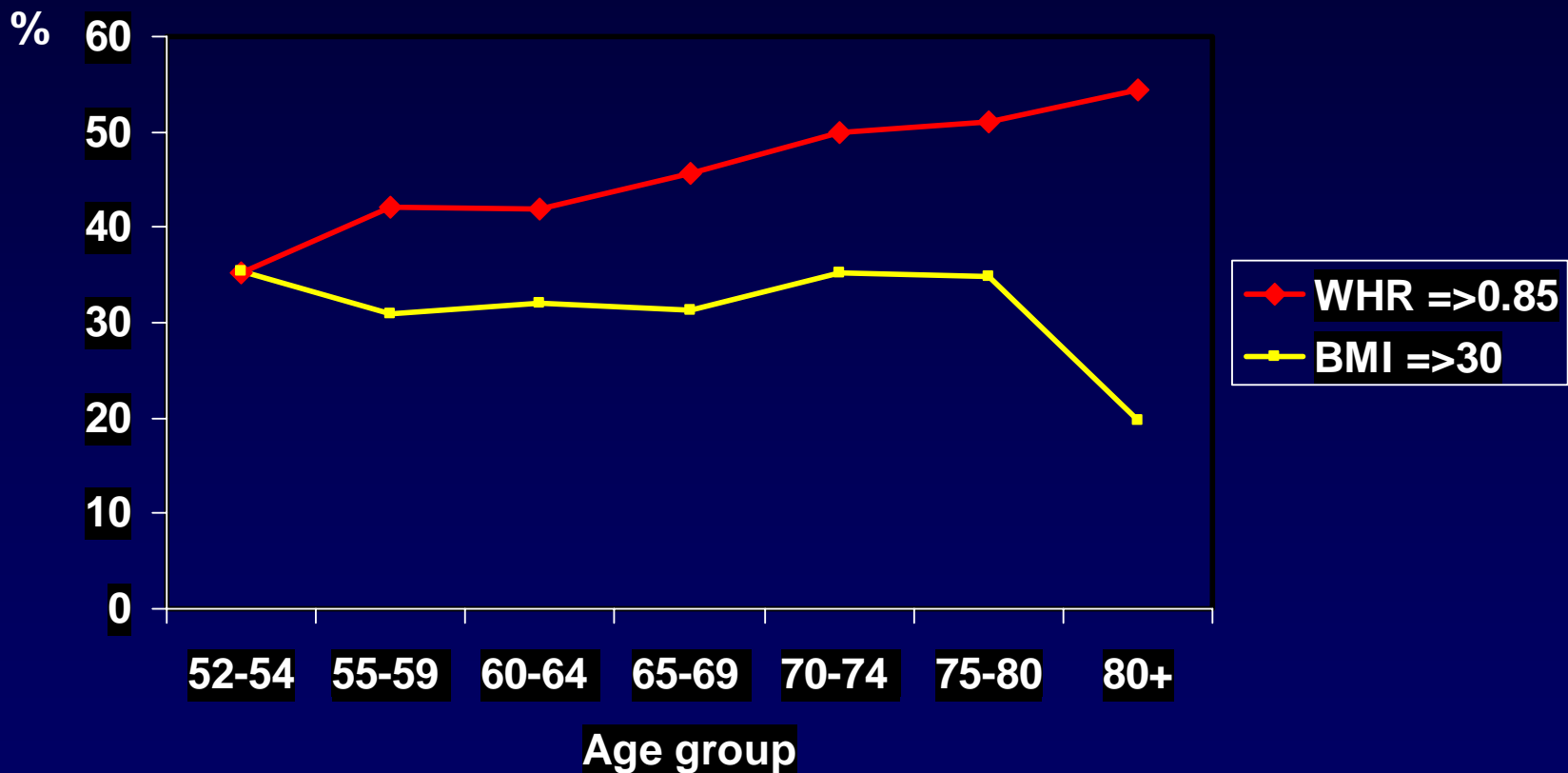
# Differences in blood pressure with age



# Percentage of women with hypertension by age group

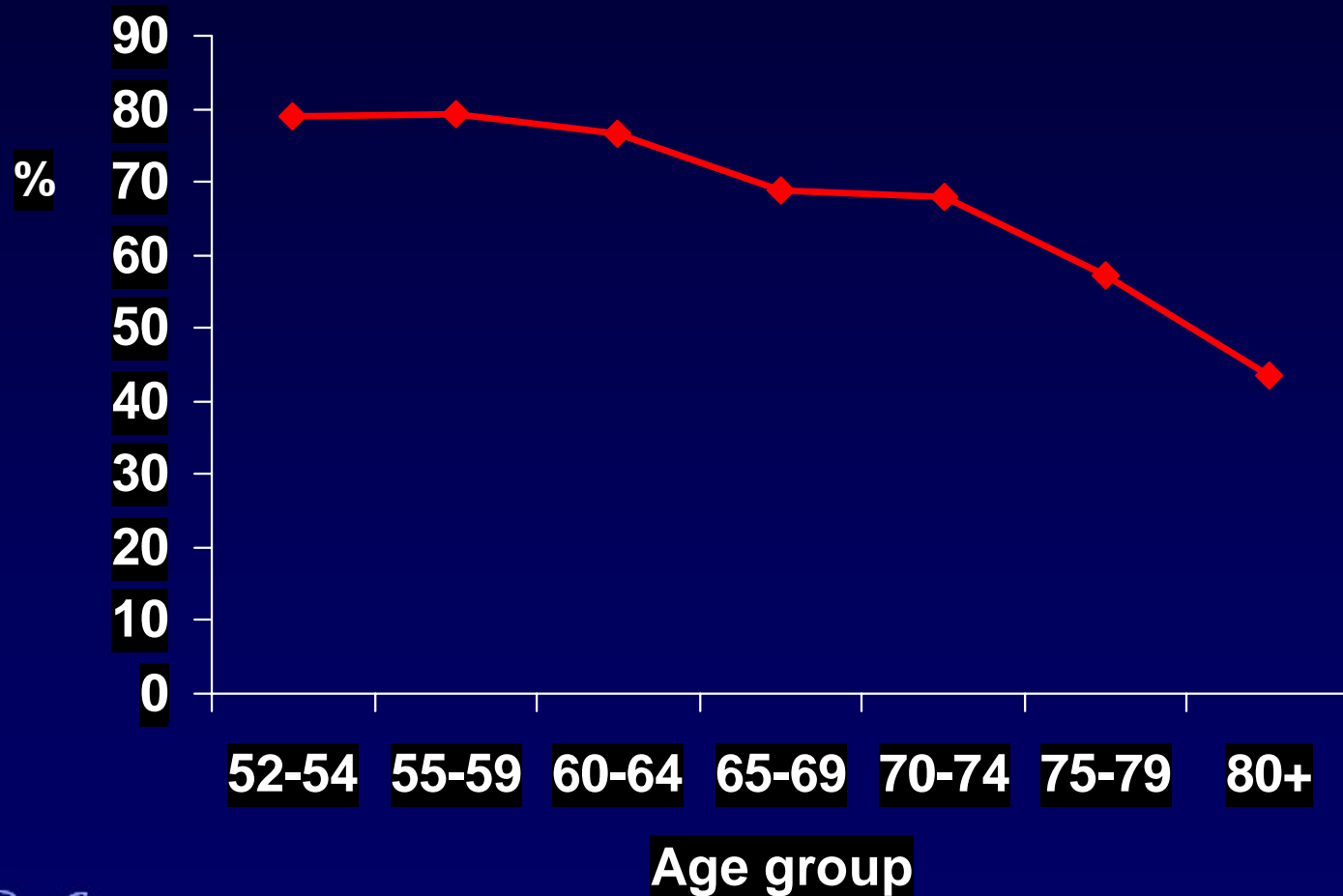


# Women- % obese and % with raised waist:hip ratio (WHR) by age group

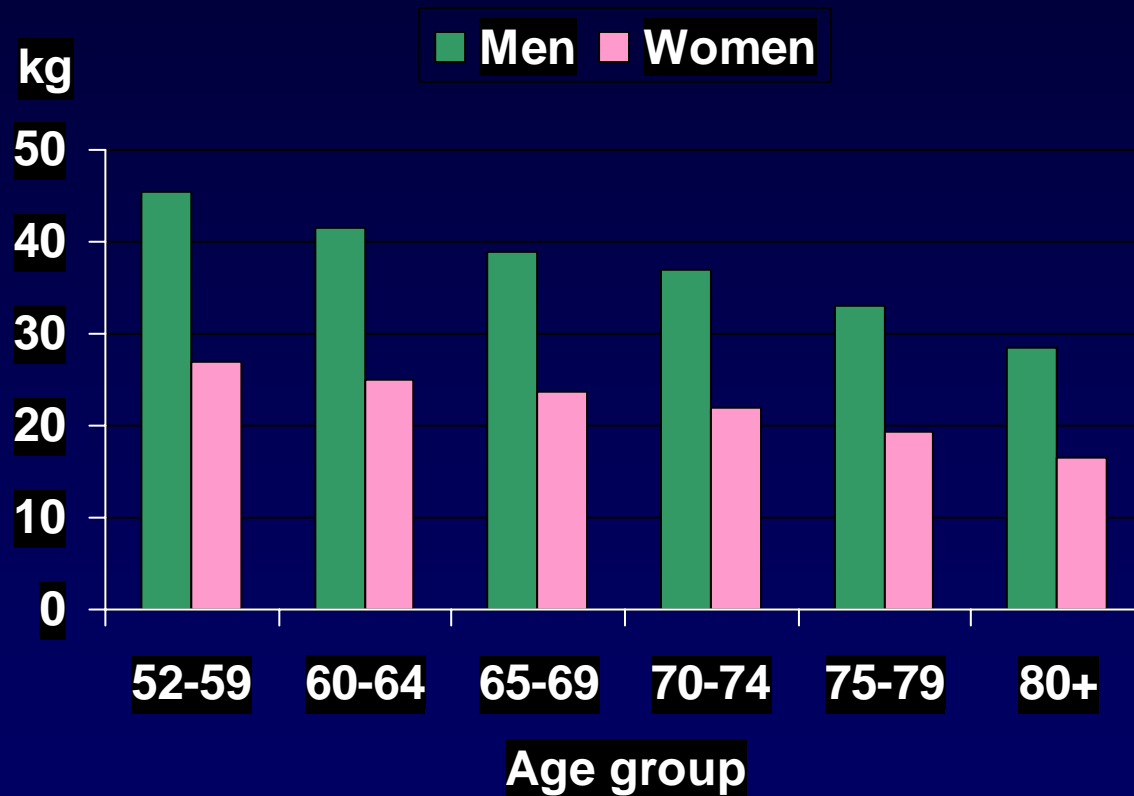




# Percentage of men with raised total cholesterol (5mmol/l or more) by age

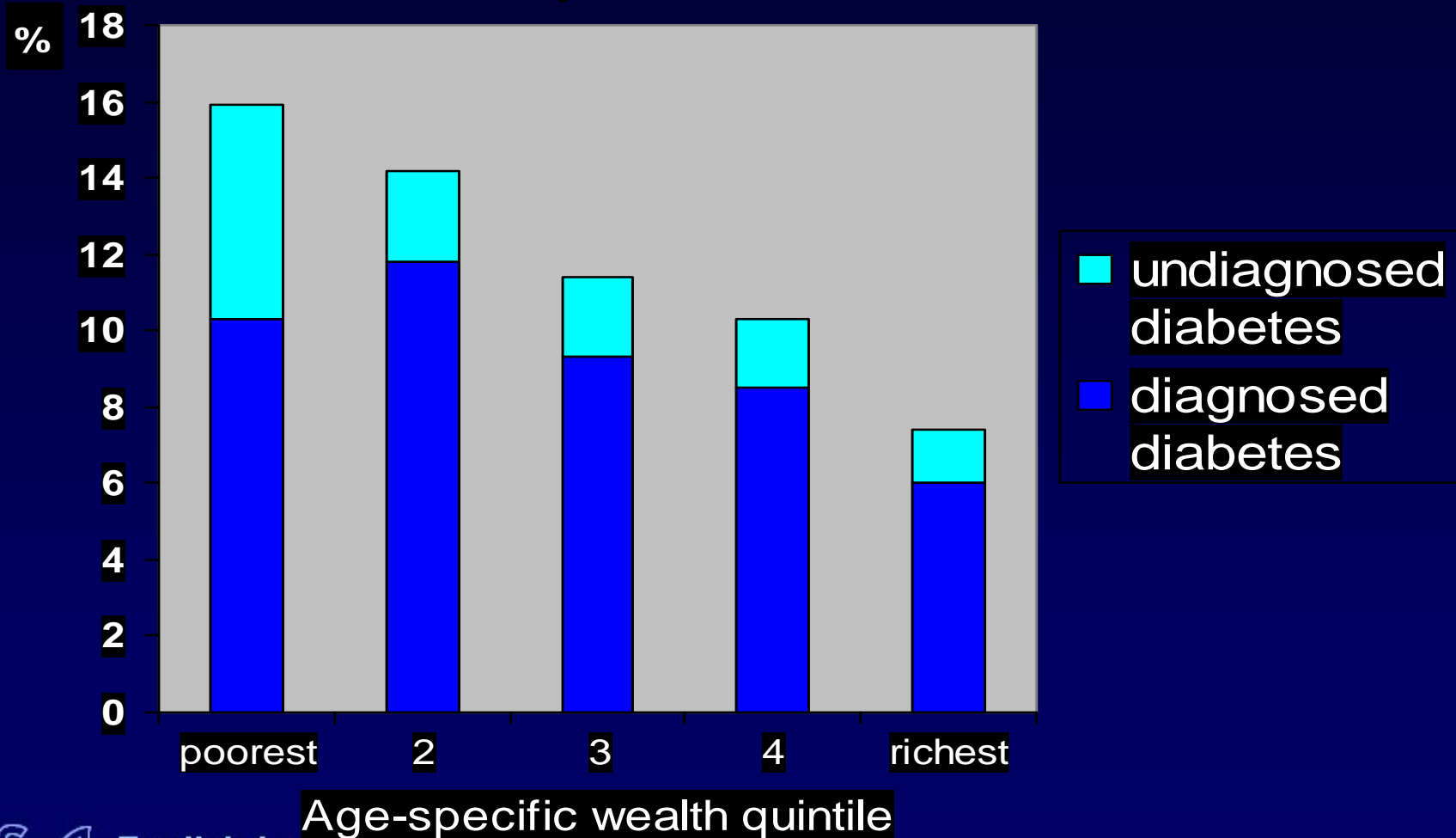


# Grip strength by age

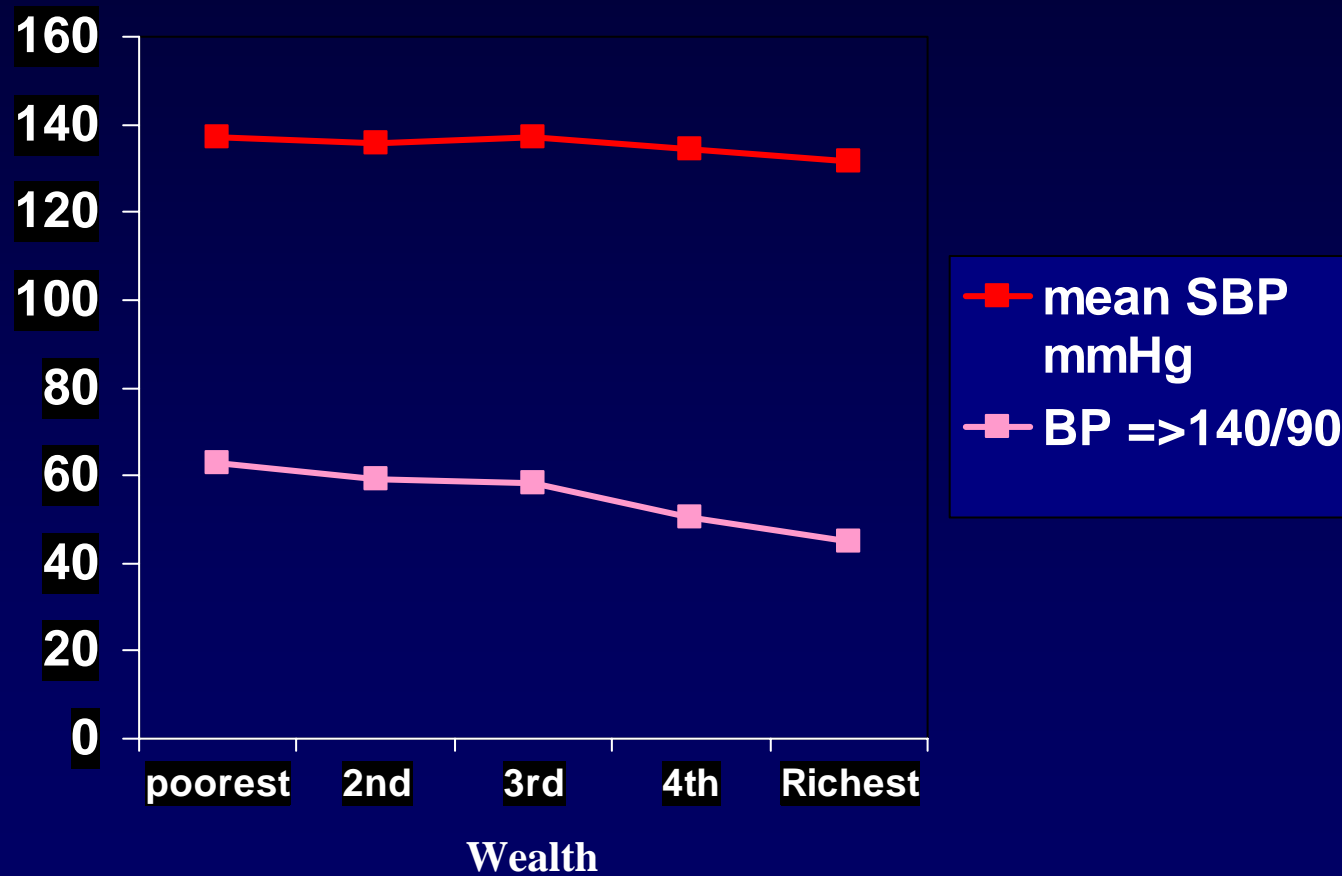


# Differences by wealth

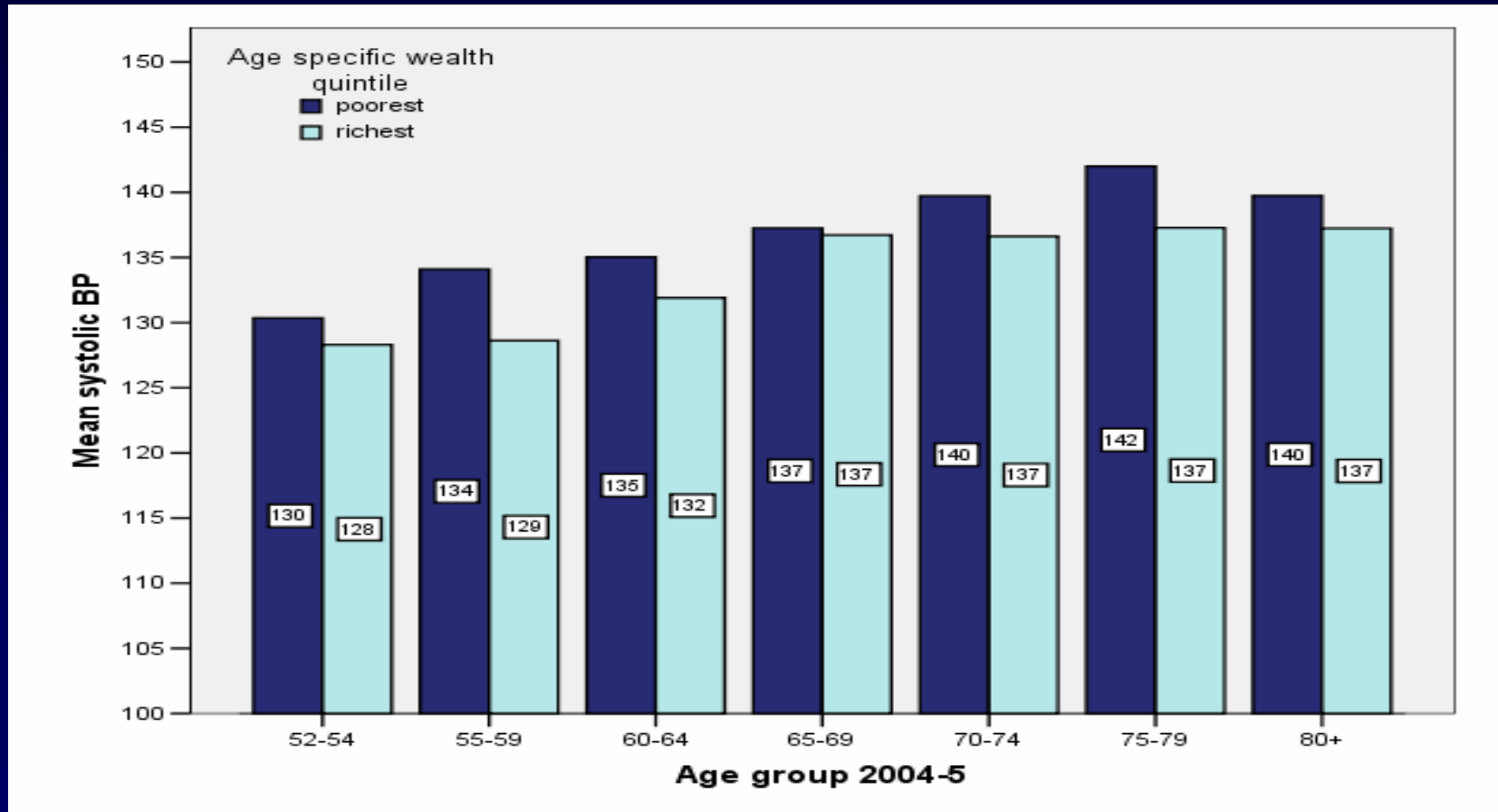
# Differences in the prevalence of diabetes by wealth



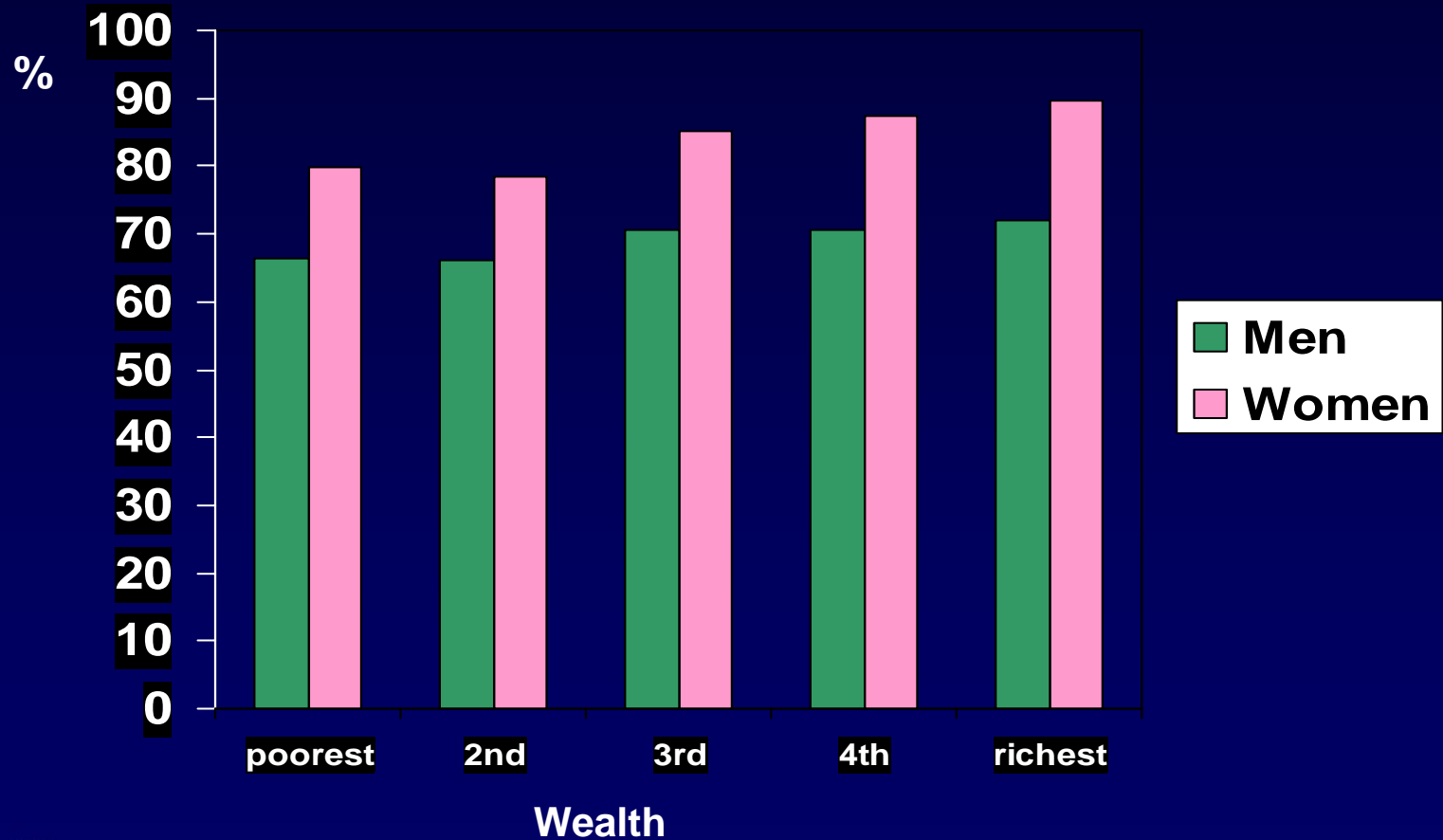
# Women –systolic blood pressure hypertension and wealth



# Systolic BP by wealth across age groups



# Percentage with raised total cholesterol (5mmol/l or more) by wealth



# Short Physical Performance Battery

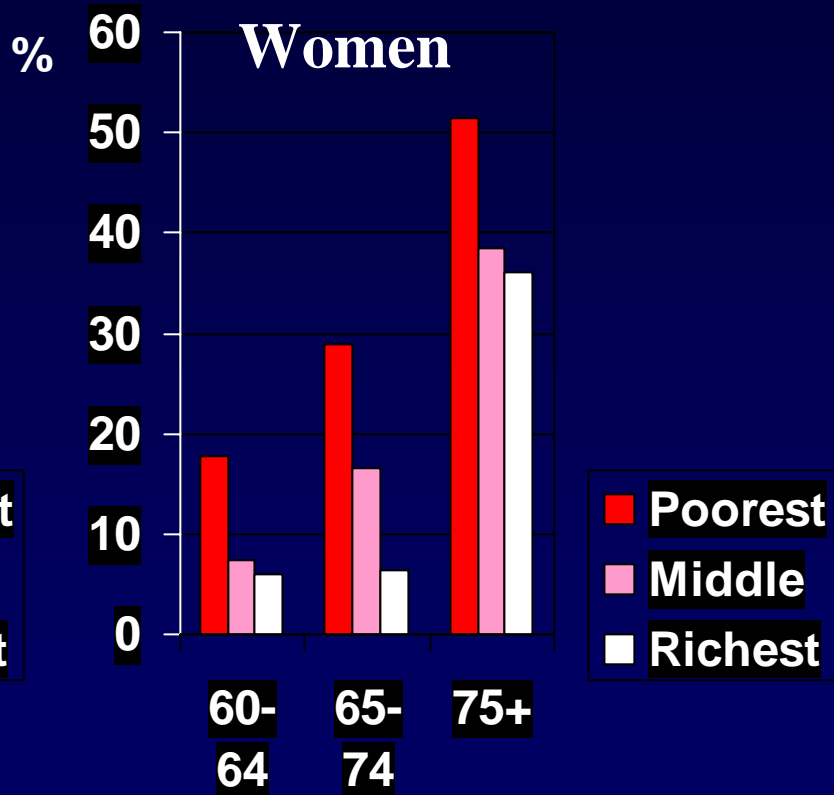
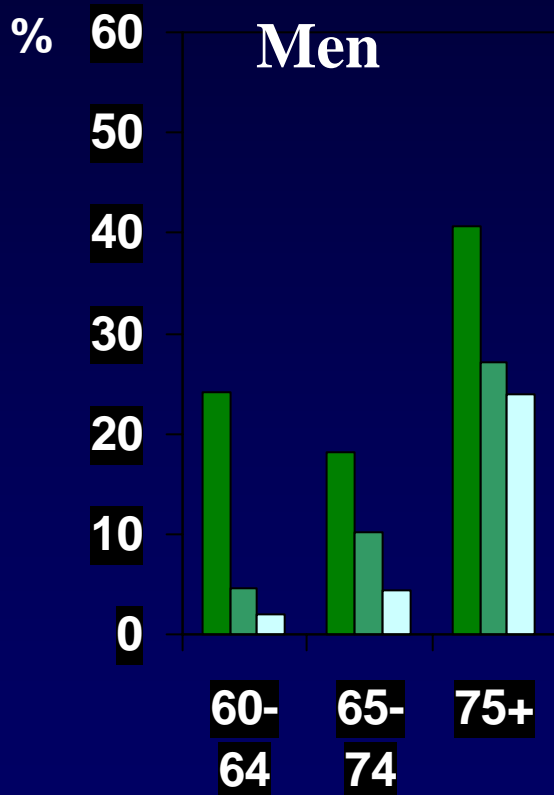
Combined score (range 0-12) for:

- Gait speed
- Chair rises
- Balance tests

Impairment (score 8 or less) is predictive of future disability



# Impairment on Short Physical Performance Battery, by wealth tertile and age

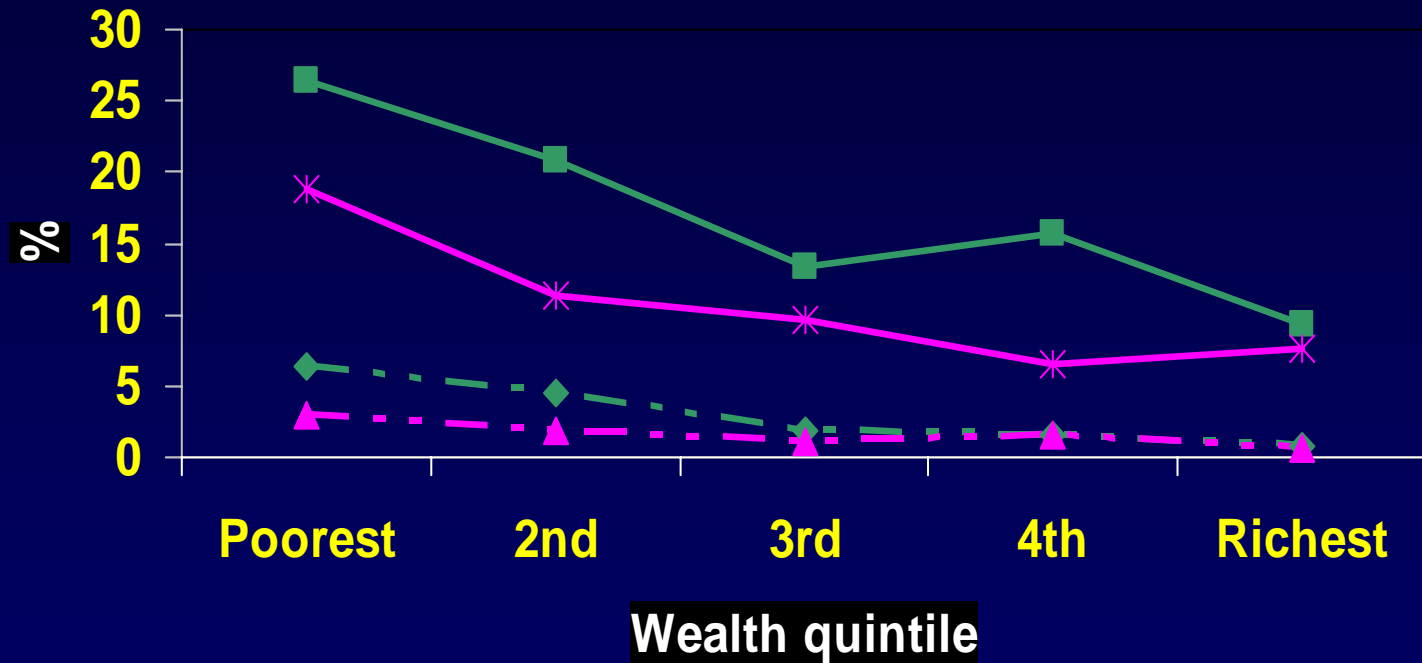


# Summary

- Most of the biological measures deteriorate with age but there are exceptions.
- Many biological measures are better in the richer than poorer people, but there are exceptions.
- Differences by wealth are not always in the expected direction

# Change in health between waves

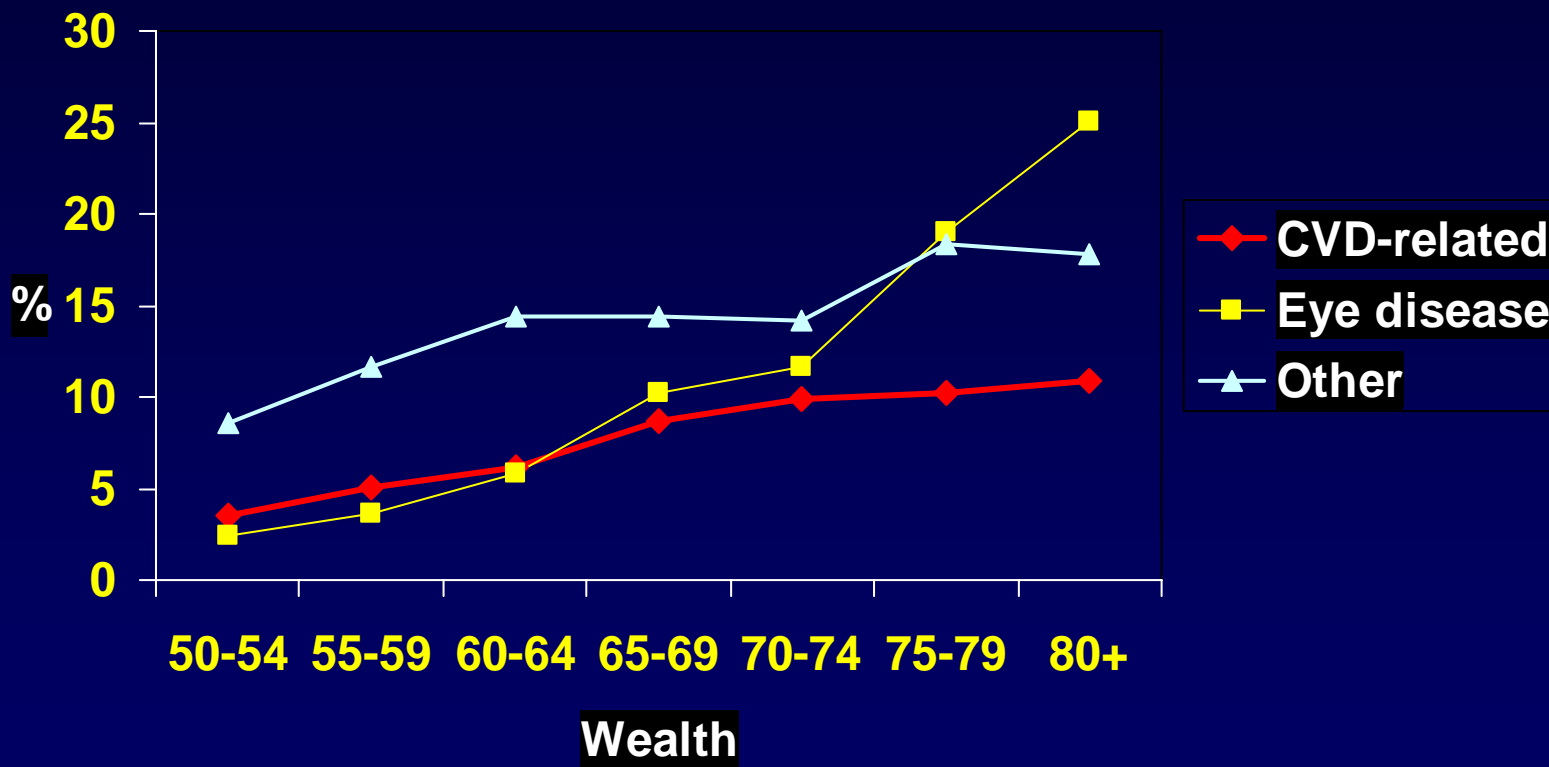
# Deaths between waves, by wealth



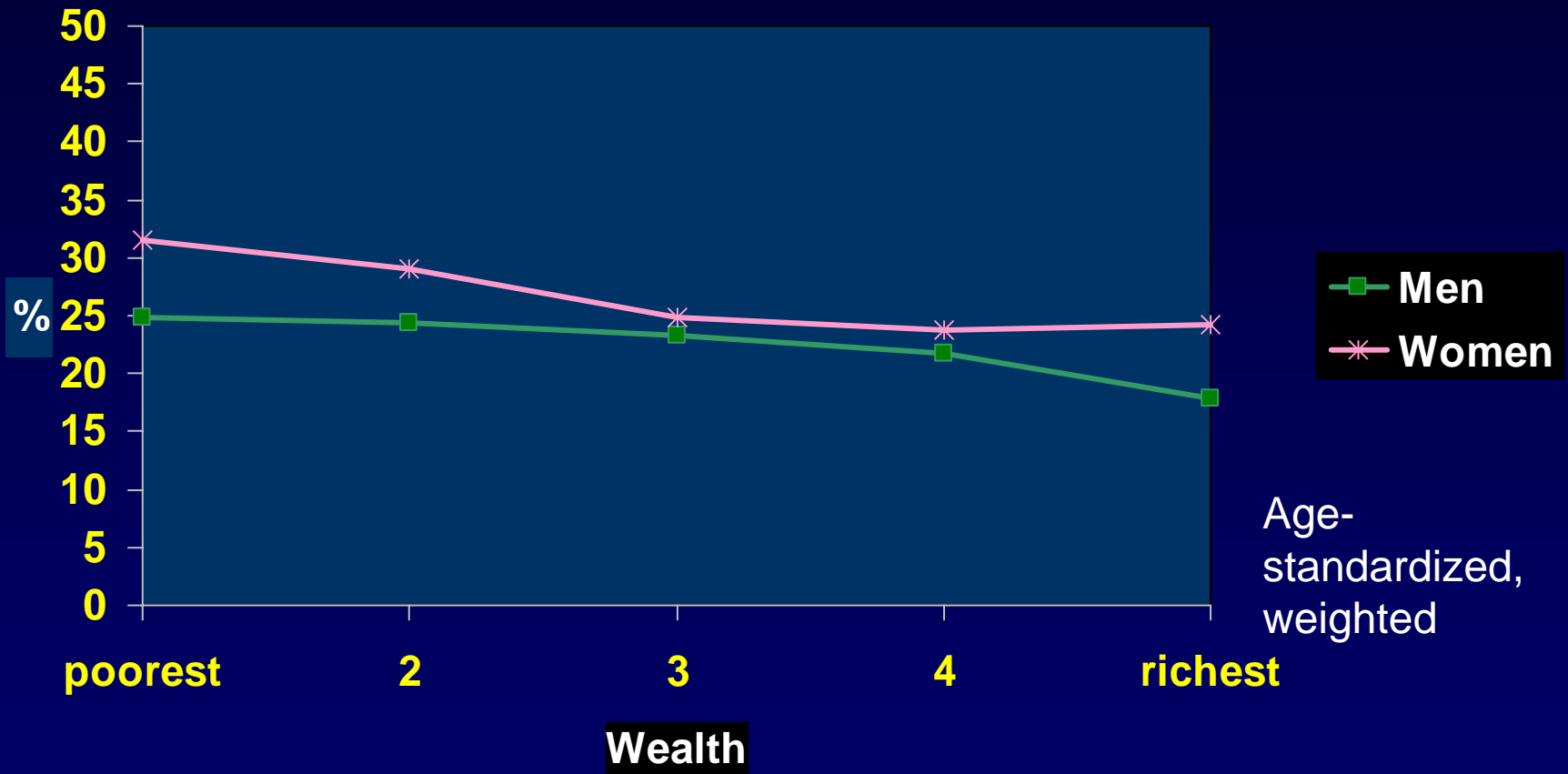
# Diagnosed chronic disease

- Respondents asked if a doctor has ever diagnosed a disease
- Reported on 17 chronic physical diseases
  - 7 cardiovascular-related disease
  - 4 eye diseases
  - 6 others : 2 sets respiratory, 2 sets musculoskeletal, cancers, Parkinson's disease
- All have potential to cause difficulties in daily living
- Confining results to ever diagnosed

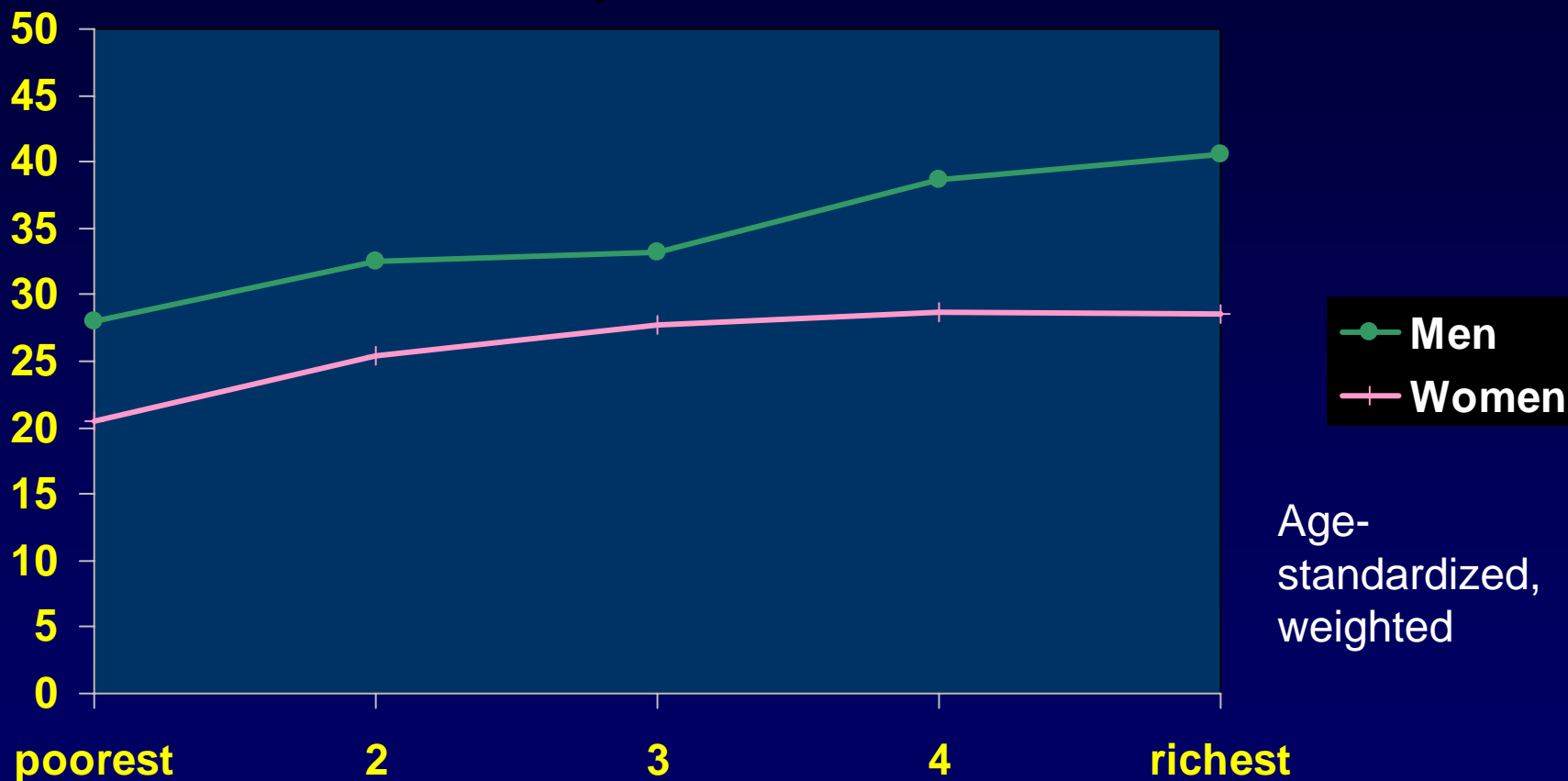
# Percentage reporting additional diagnosis at wave 2, by age in 2002-3



# Percentage reporting one or more new diagnoses at wave 2, by sex & wealth

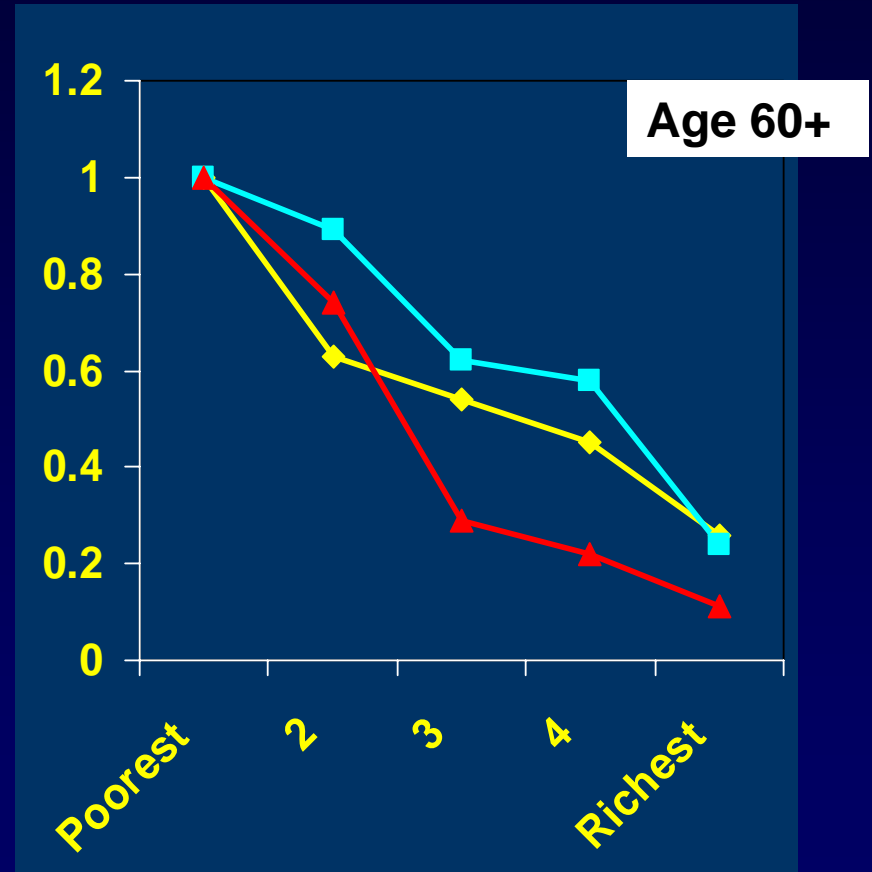
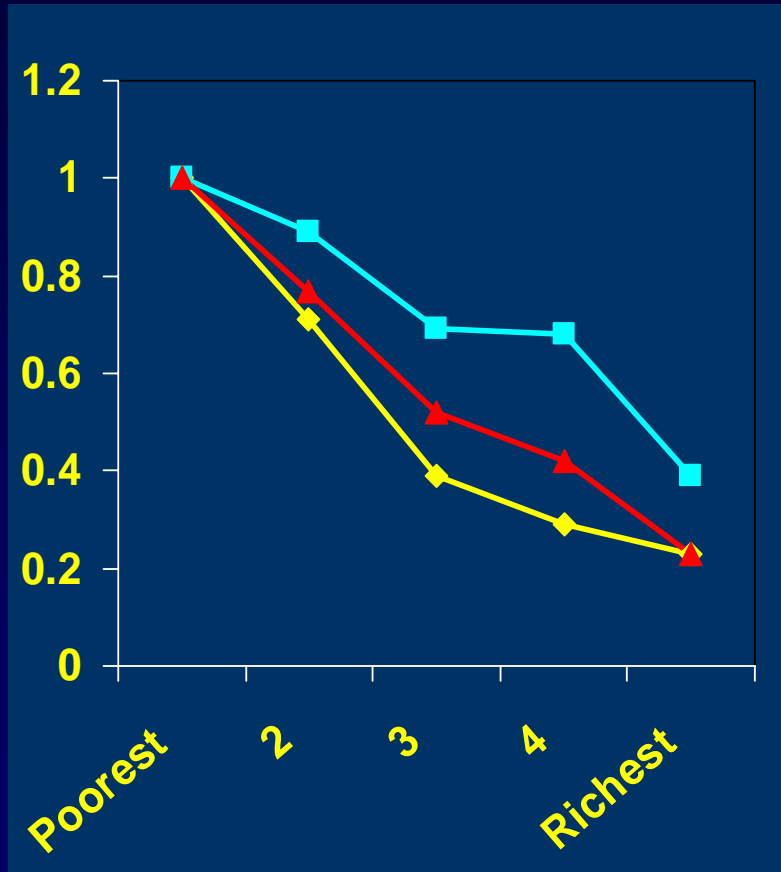


# Percentages without diagnoses of any of 17 chronic diseases by sex & wealth





# Odds ratios for i) self-reported walking difficulty ii) poor gait speed, by wealth



# Change-conclusions

- 17 chronic conditions studied – all capable of contributing to disability
- Substantial percentages had additional diagnoses even in 2 years
- New diagnoses were more common among the poorer than the richer; stronger gradient at younger ages
- Self-reported and measured walking showed similar wealth patterns
  - Strong gradient for being seriously impaired both times
  - Richest 20% least likely to become seriously impaired in 2 year period

# Symptoms

## Pain as an example

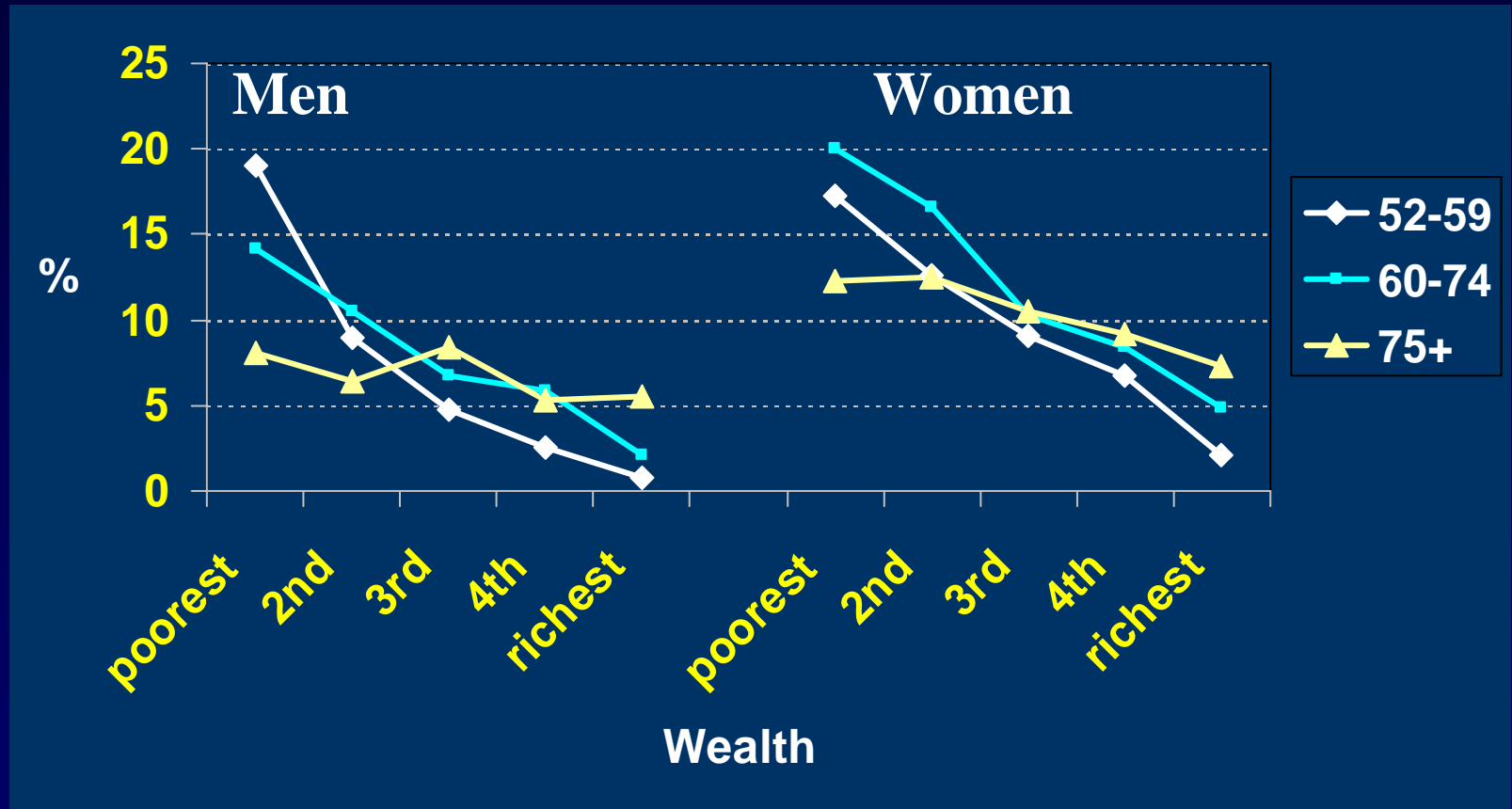
- Measure

  - Often troubled by pain

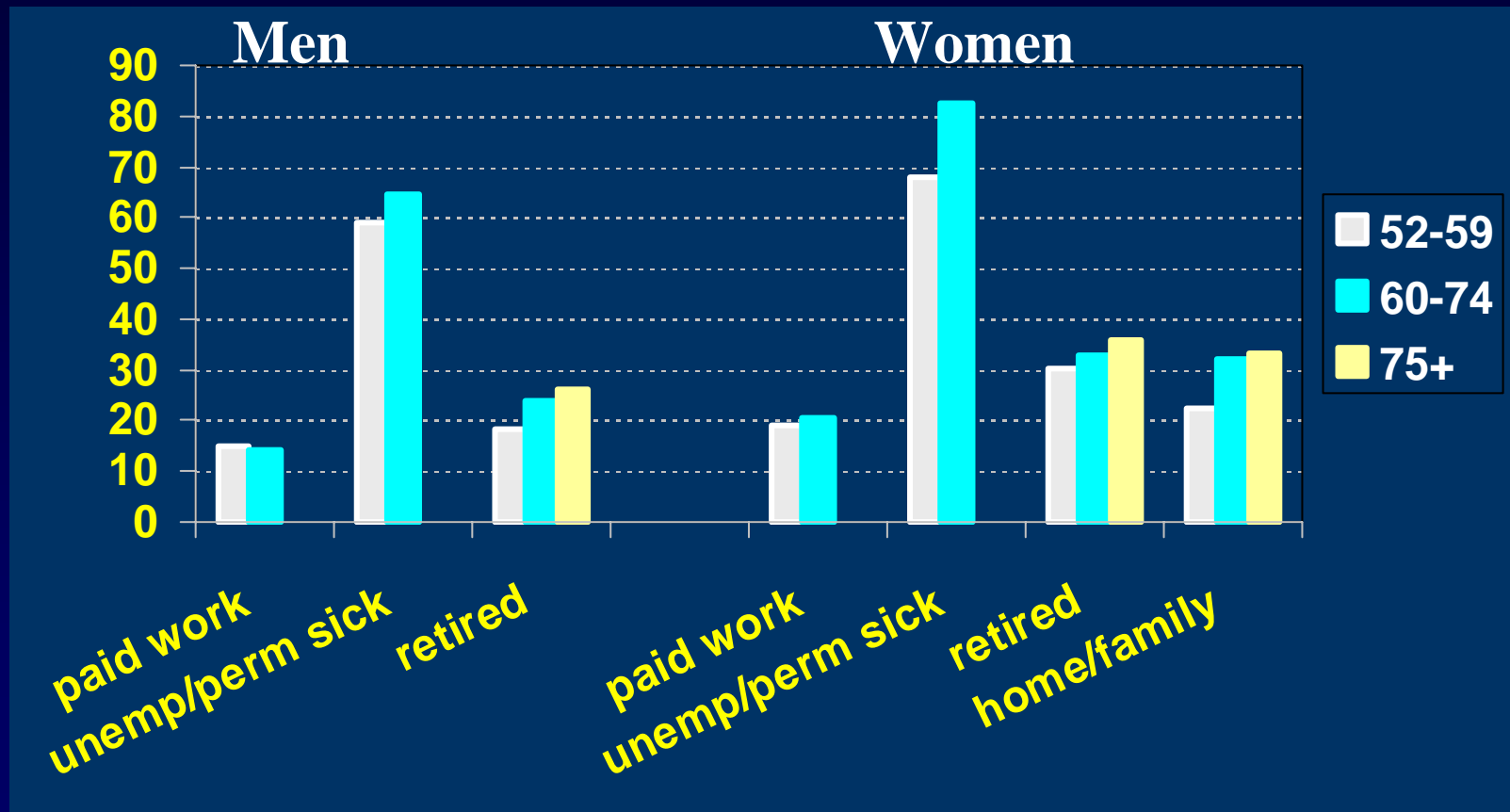
    - AND rates pain when walking on a level surface as 6+/10 at two or more of hip, knee, foot, back

- Likely to be handicapping in daily life.
- Notably worse quality of life compared to those who did not have severe pain at any of the four parts of the body

# Percentage reporting severe pain at two or more of back, hip, knee, foot by wealth quintile



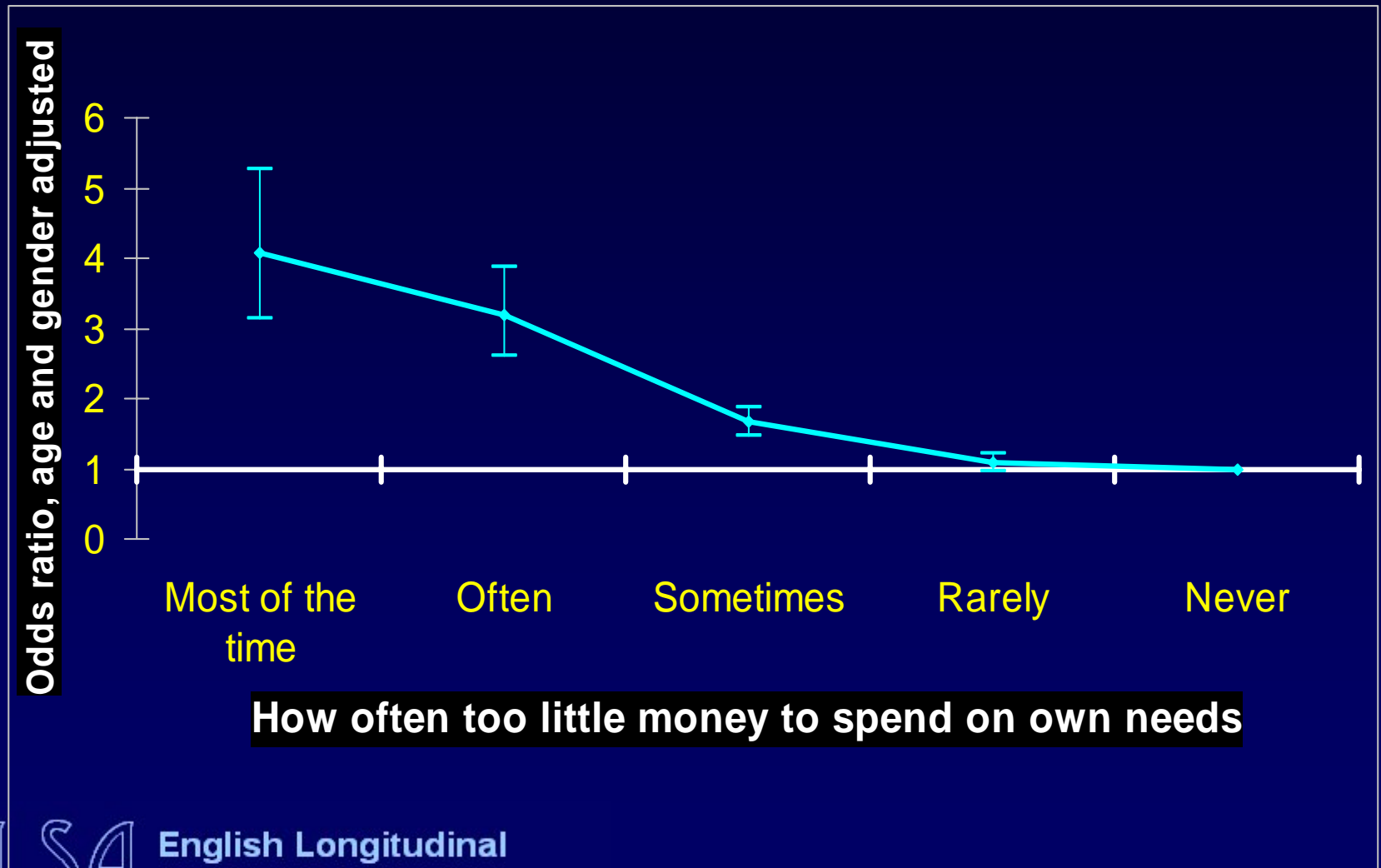
# Percentage reporting severe pain at two or more of back, hip, knee, foot by work status in 2004-5



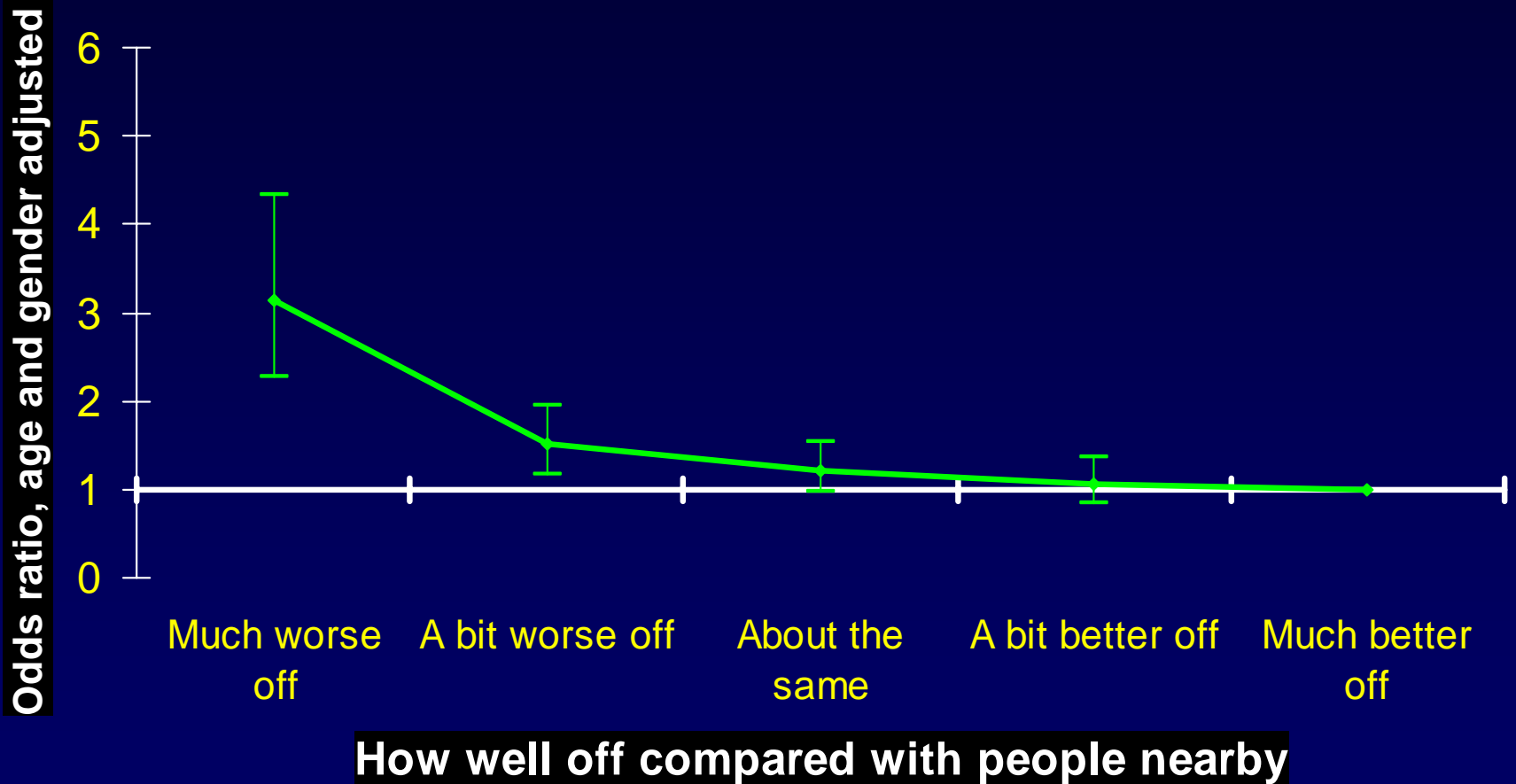
# Self-perception of financial status

- How often have too little money to spend on needs
  - 5 point scale
  - LESS likely to be reported as a problem as grow older, especially if poor
- How well off feel compared with people nearby
  - 5 point scale
  - % saying “about the same” increases with age
  - Those in their 50s responded most favourably

# Relative deprivation and fair/poor self reported health (1)

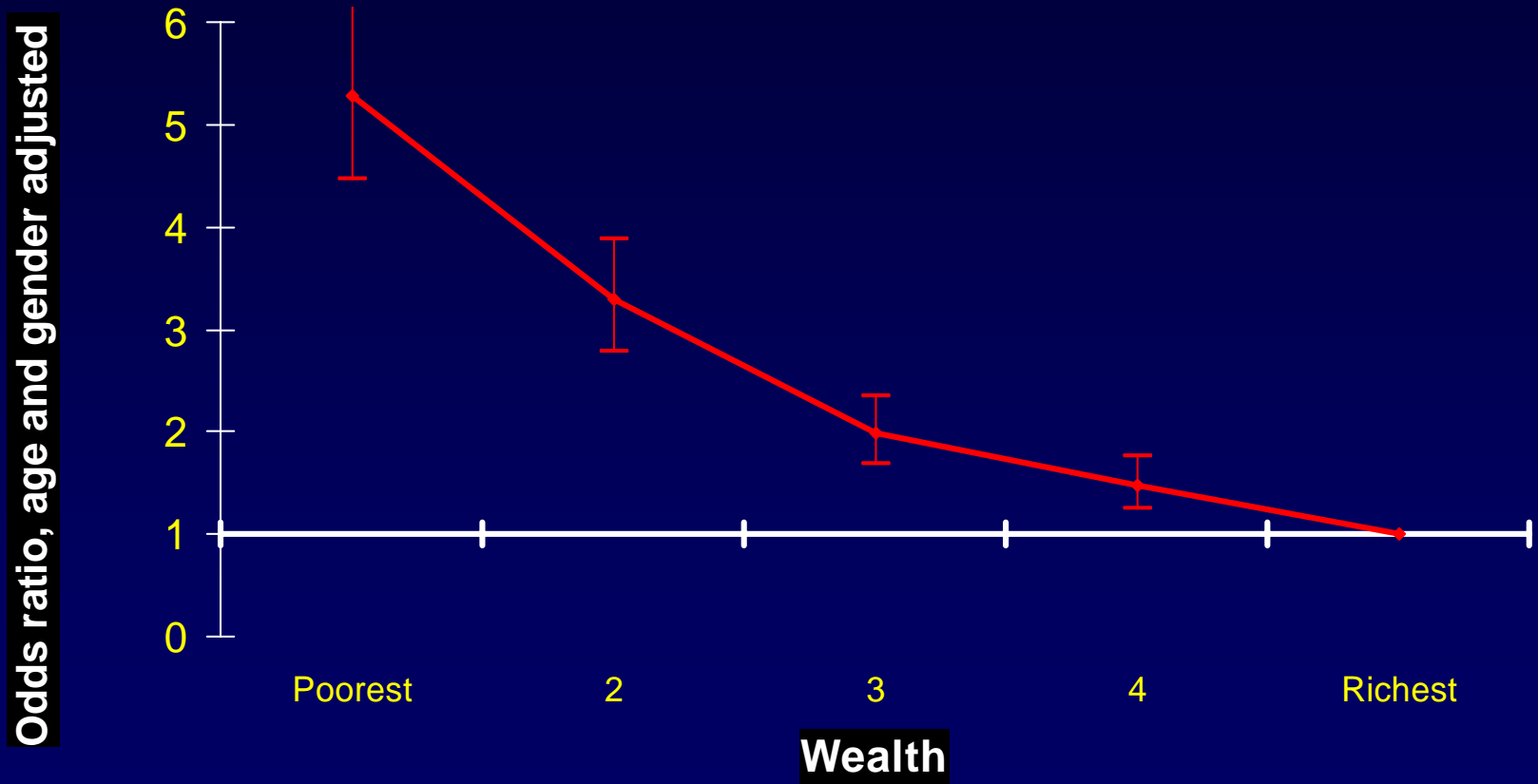


# Relative deprivation and fair/poor self reported health (2)



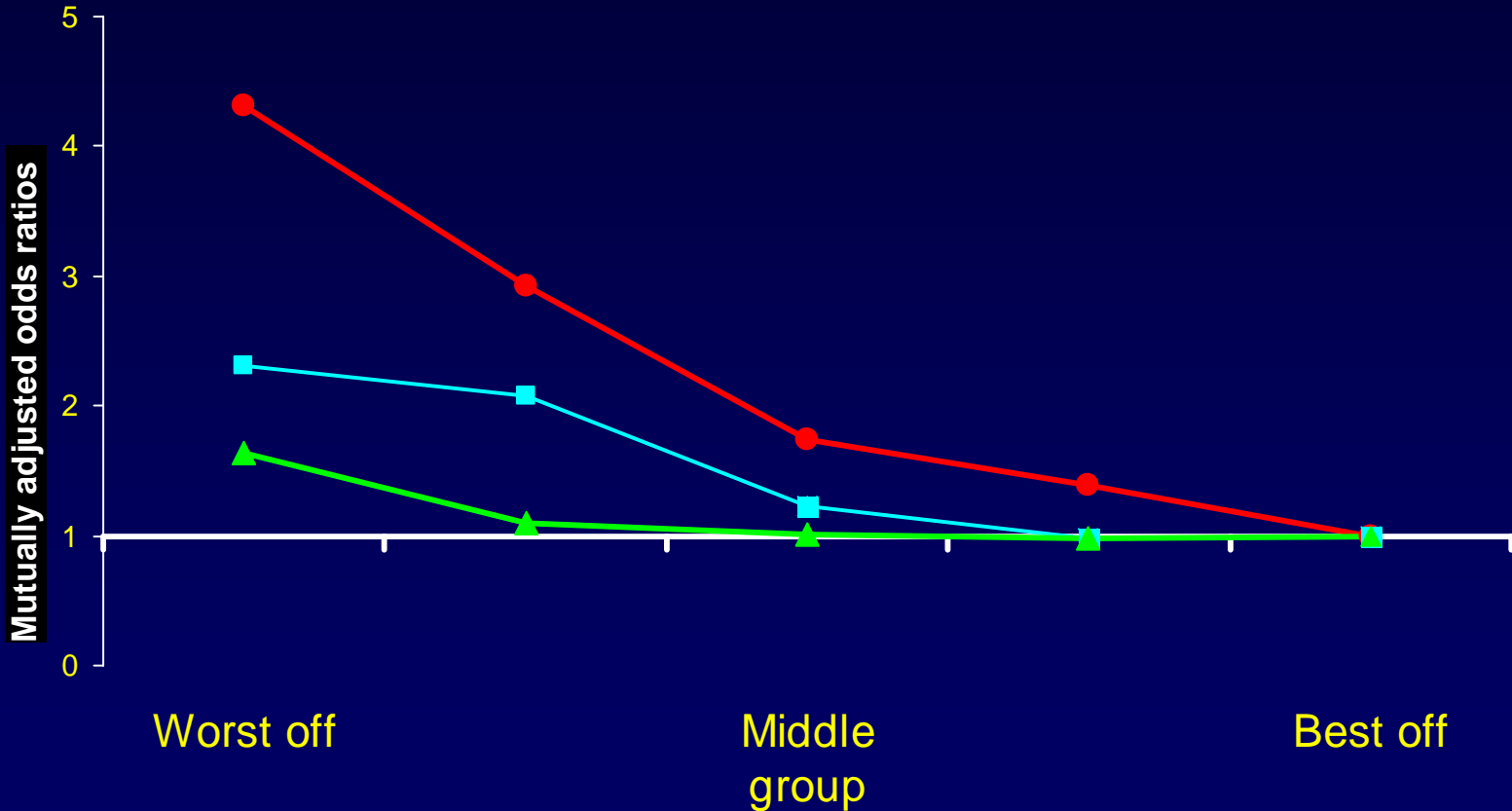


# Wealth and fair/poor self reported health



# Relative deprivation, wealth and fair/poor self reported health

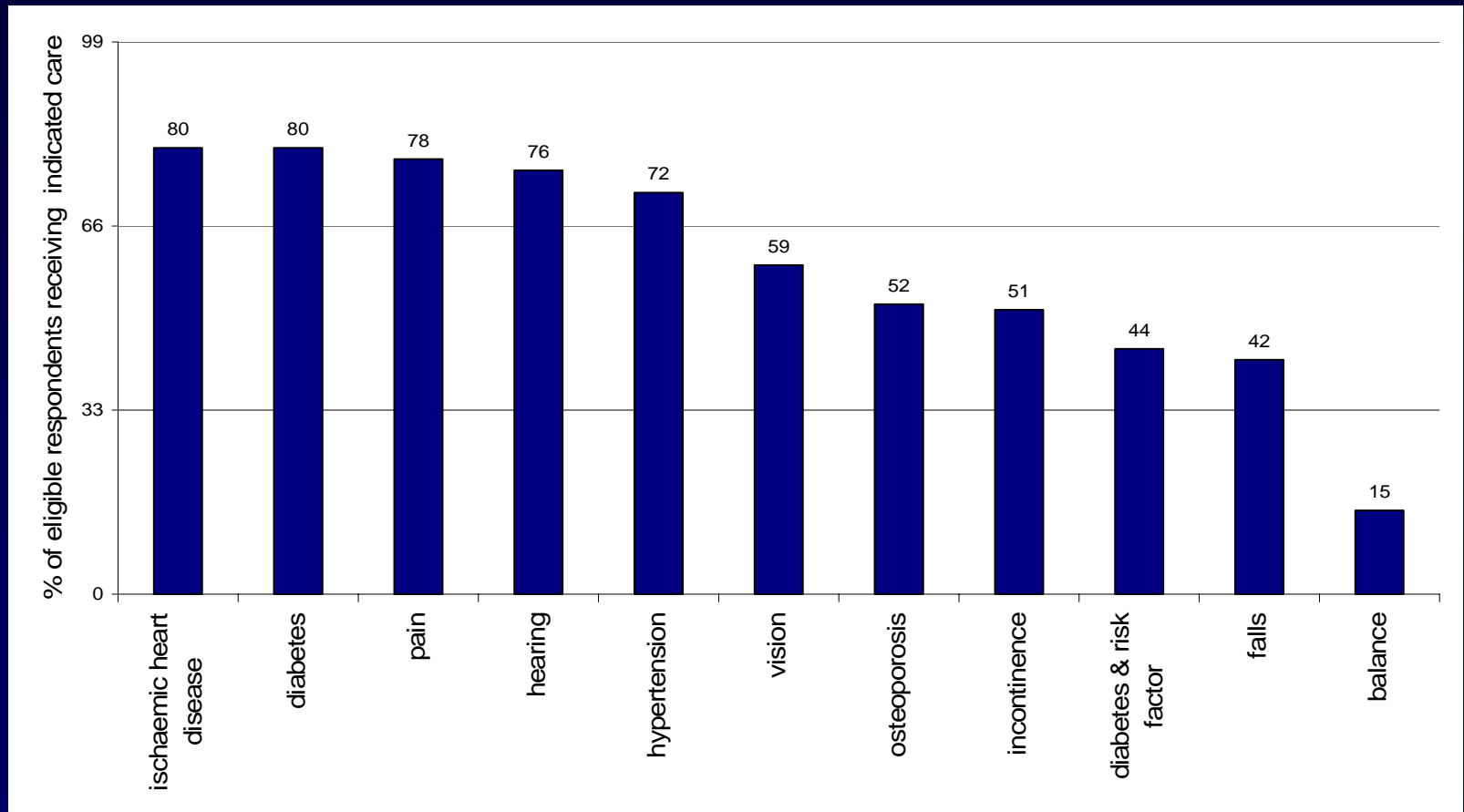
● Wealth quintile   ■ Money to meet needs   ▲ Compared with others nearby



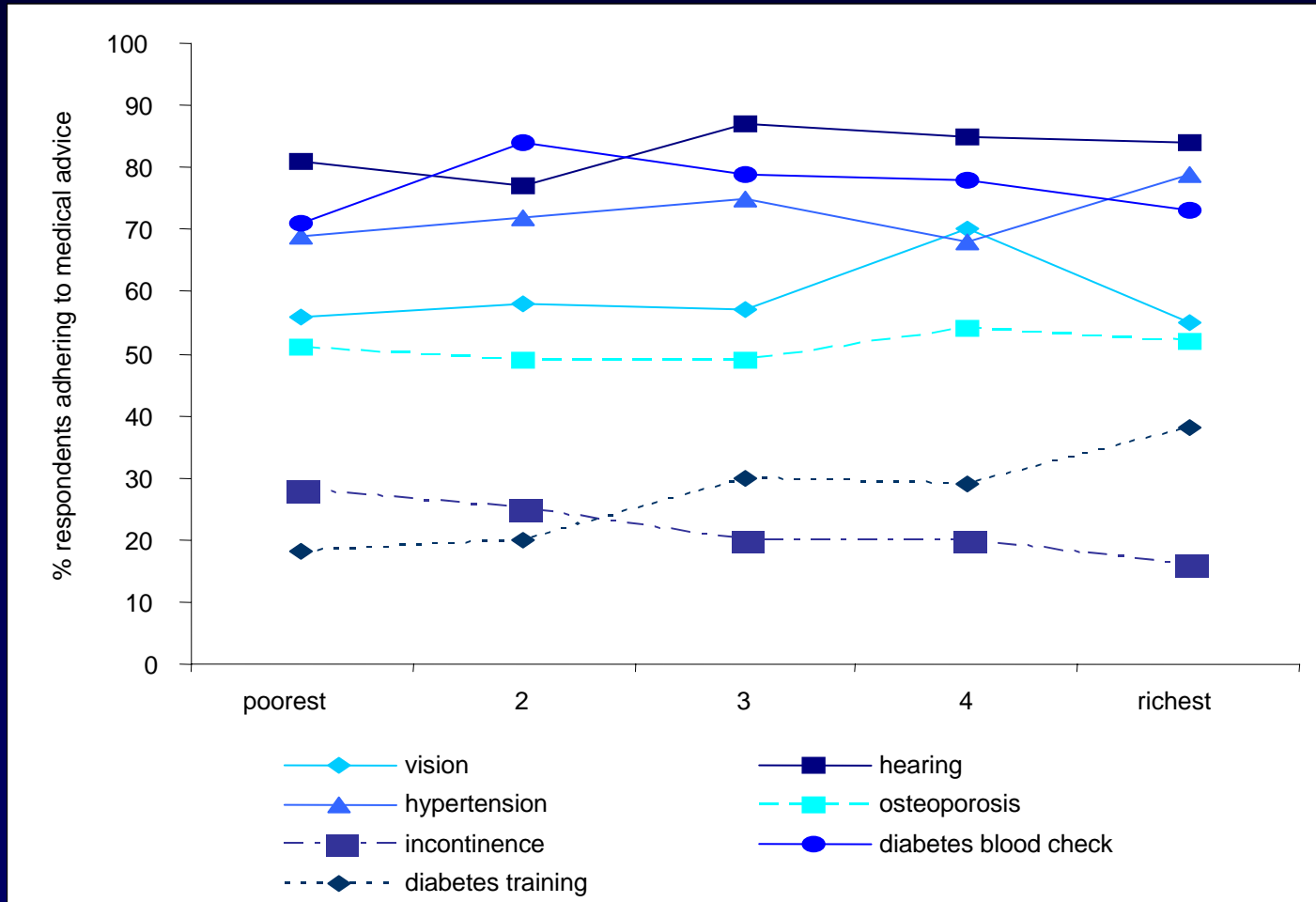
# Quality of Care

- Applied to medical conditions that either common or important cause of disability
- Criteria applied to treatment received, not outcomes
- Selection based on evidence that these forms of treatment are effective
- Indicators developed from RAND “Assessing the care of vulnerable elders” (ACOVE)
- Adapted for ELSA questionnaire after assessment for relevance by panel of 10 clinical experts in England

# Receipt of indicated care by health condition



# Trends in quality of care, by wealth



## Round up

### **Exciting new measures**

**The oldest groups in the community are not always the ones with the worst health indicators**

**While the richest have many health advantages over the poorest, there are exceptions**

- differences seem to moderate with age**
- the picture is not always straightforward**

**Self-report, symptom and objective measures all needed to understand the ageing trajectory**

# The English Longitudinal Study of Ageing

## Research team

- International Institute for Society and Health, UCL
- Institute for Fiscal Studies
- National Centre for Social Research
- plus researchers from Cambridge, Exeter, University of East Anglia

## Funding from NIA and UK government