

**Lots of stuff about wellbeing**

**Dr Derek Cox**

**Director of Public Health**

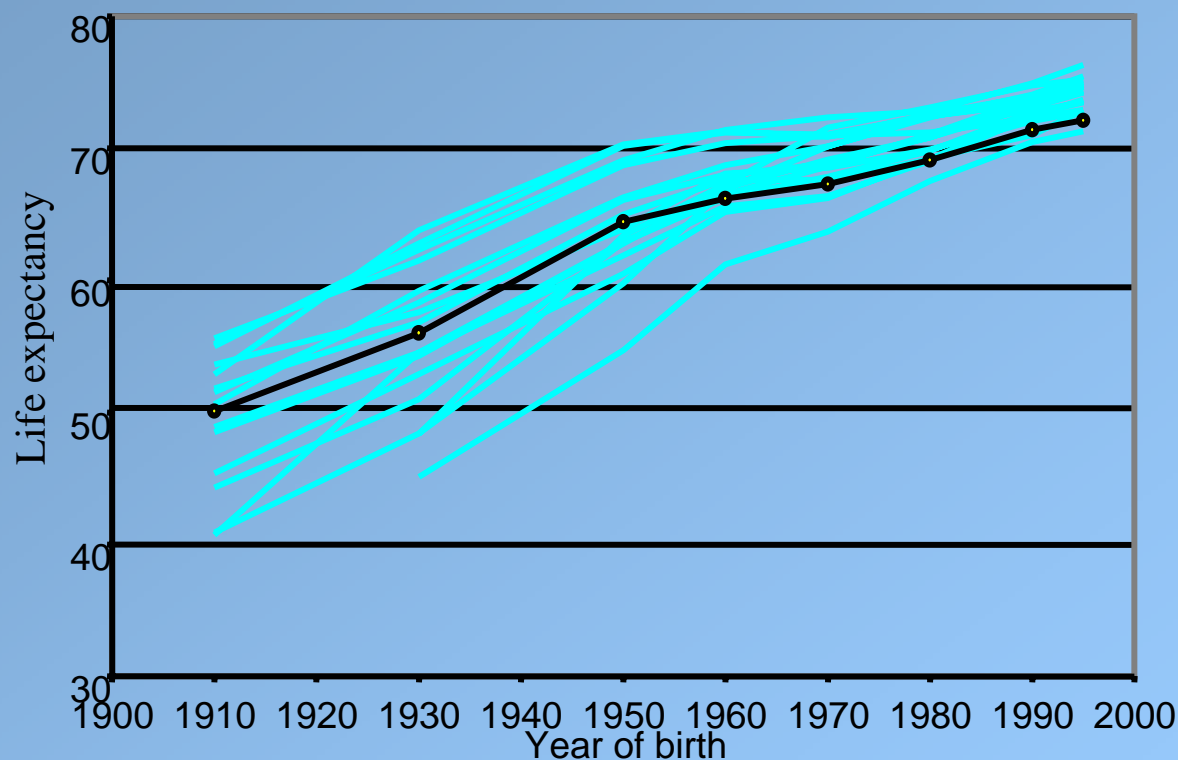
**Dumfries and Galloway**

# Summary

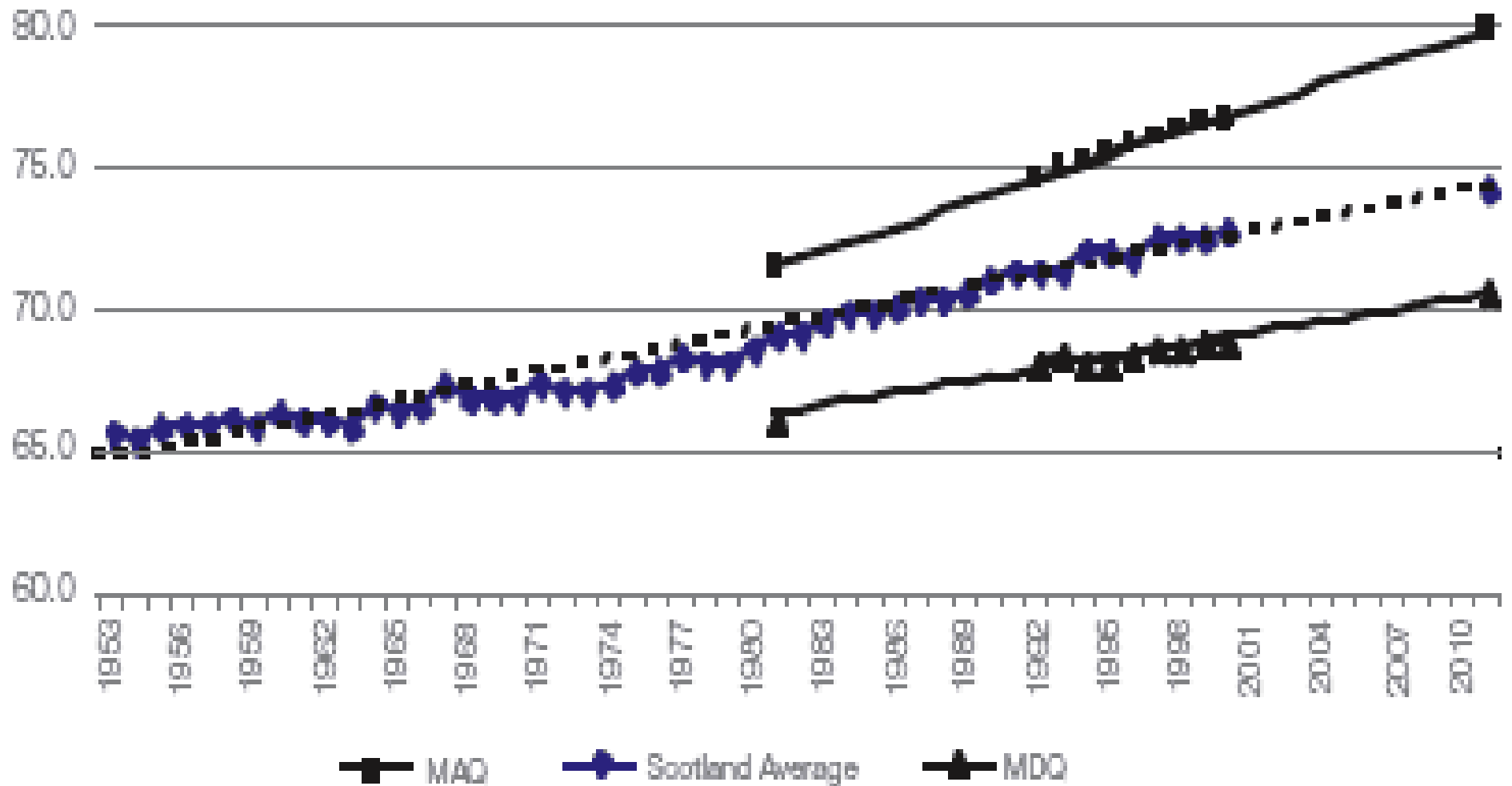
- **Why wellbeing?**
- **What is wellbeing?**
- **What have we done?**
- **What's next?**

# 20<sup>th</sup> century trends in life expectancy in Scotland and 16 other Western European countries

Males



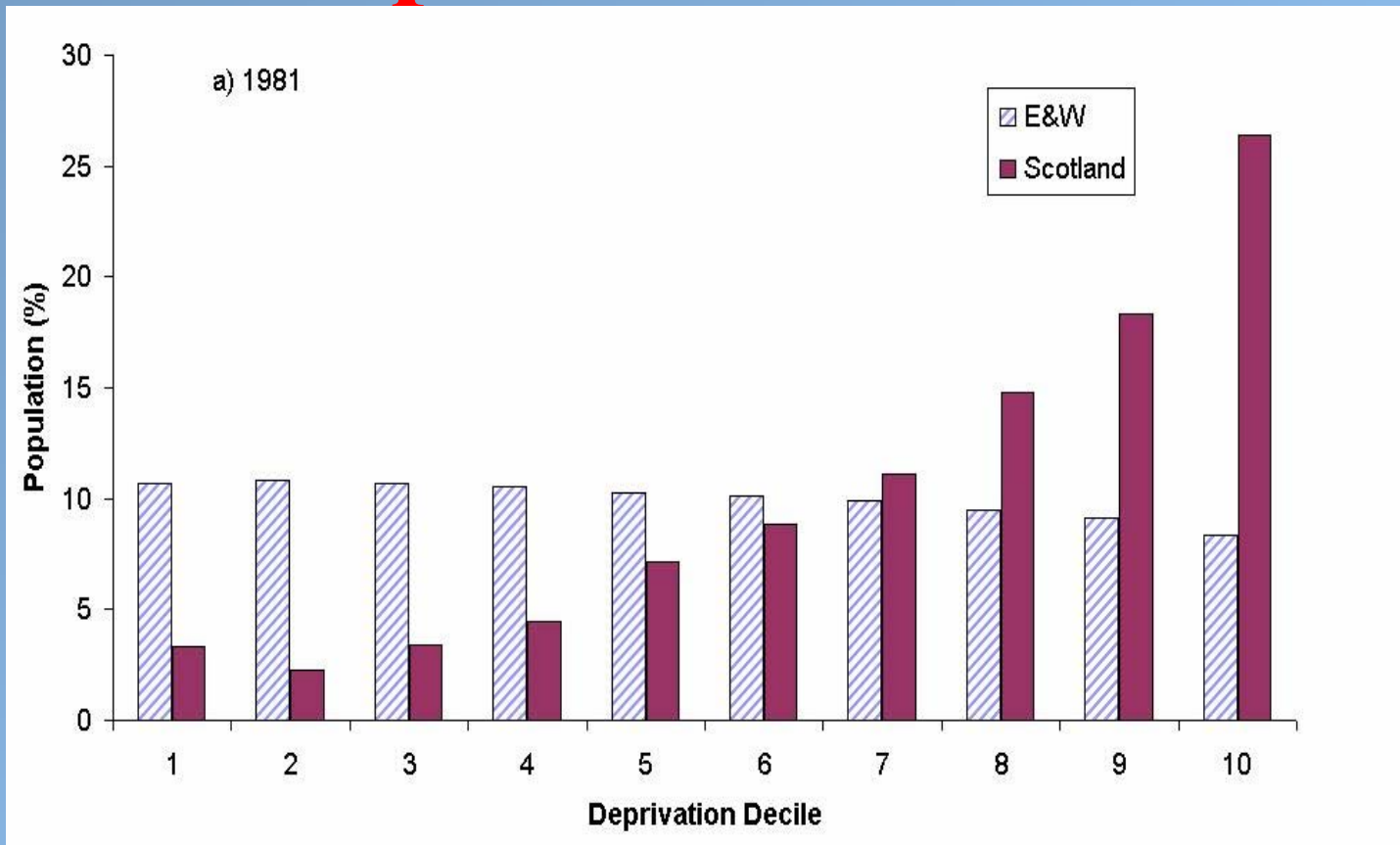
# Trends in life expectancy - males



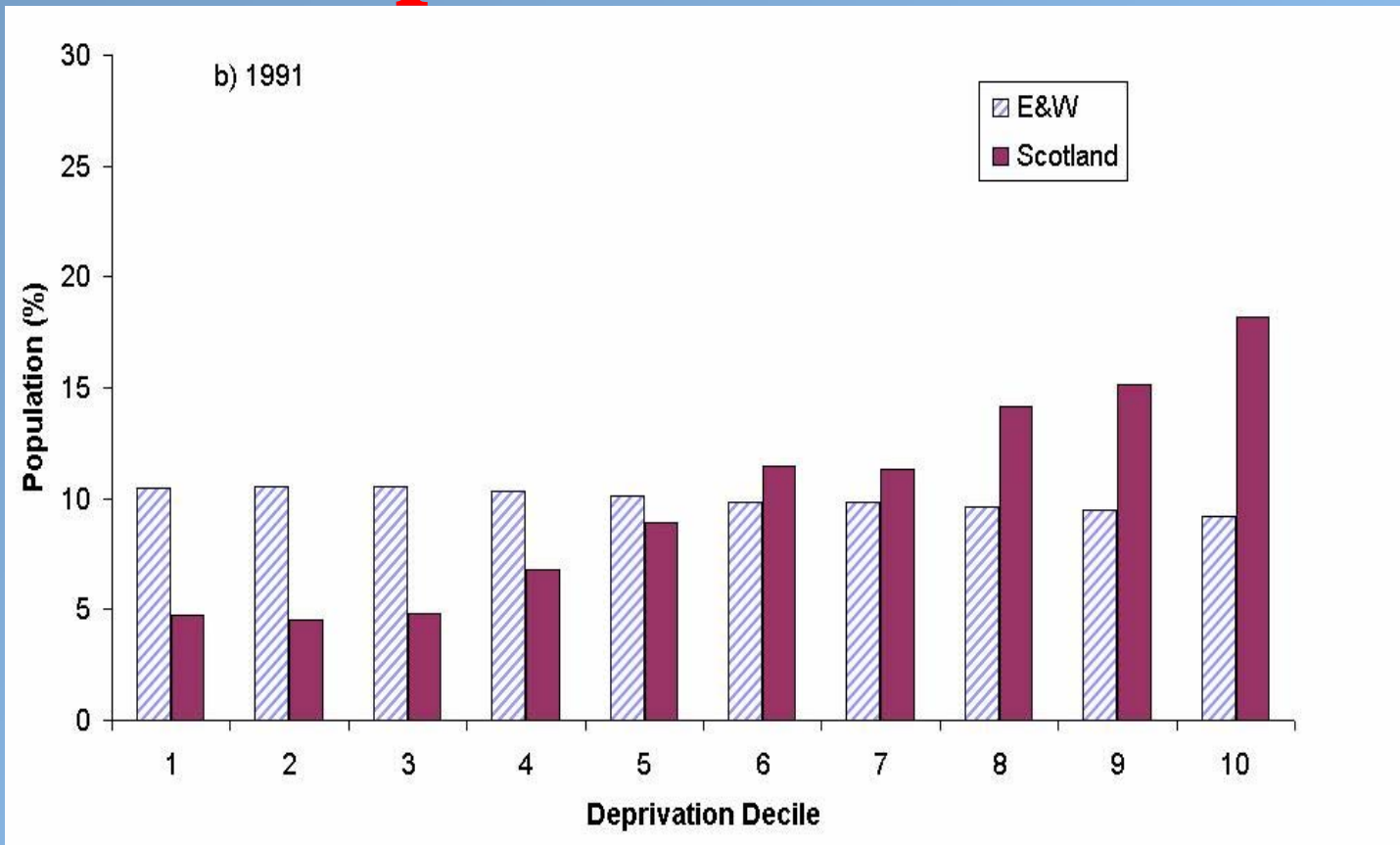
# The determinants of illness?

- **Income inequality**
- **Smoking**
- **Diet**

# Deprivation in 1981

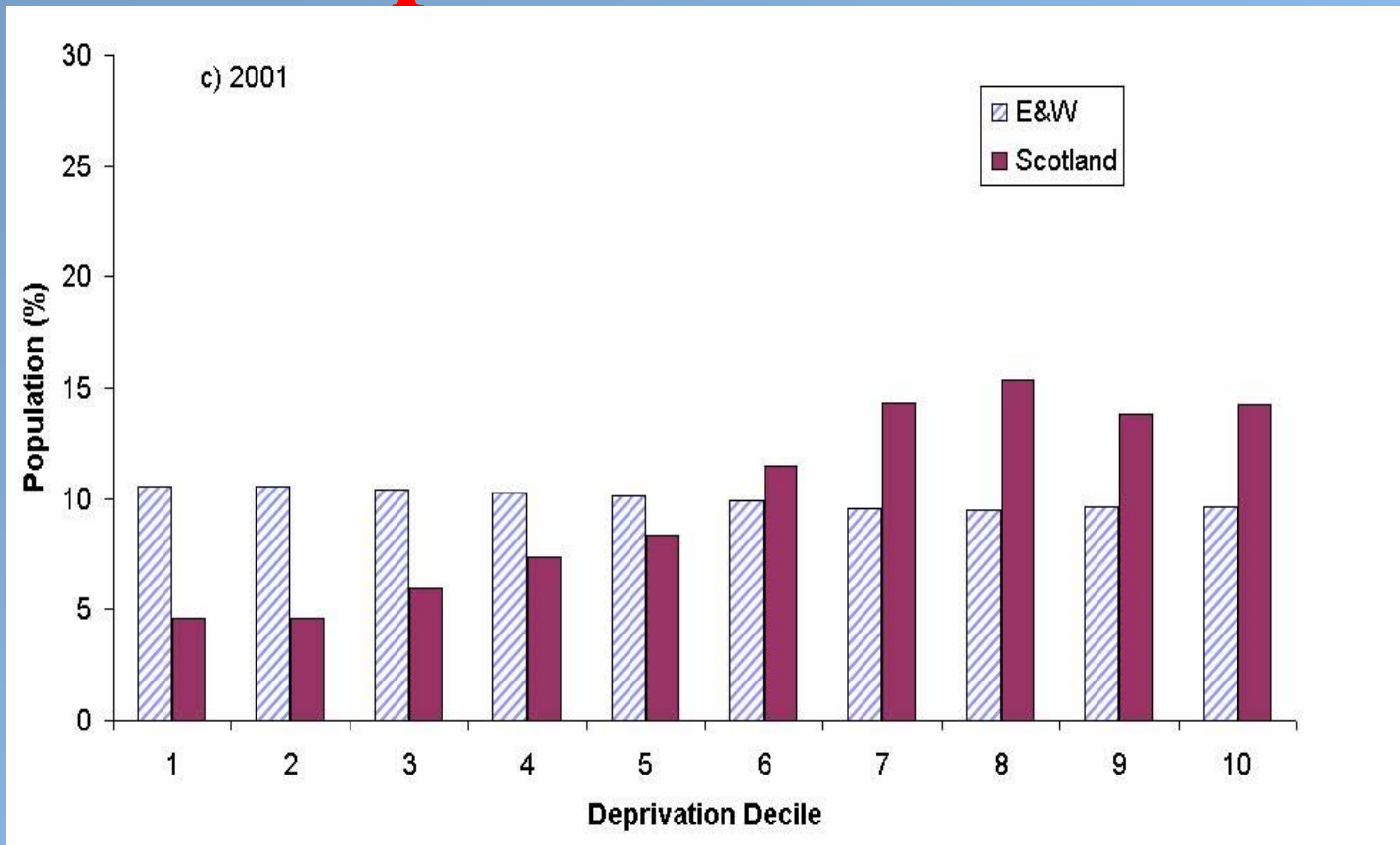


# Deprivation in 1991

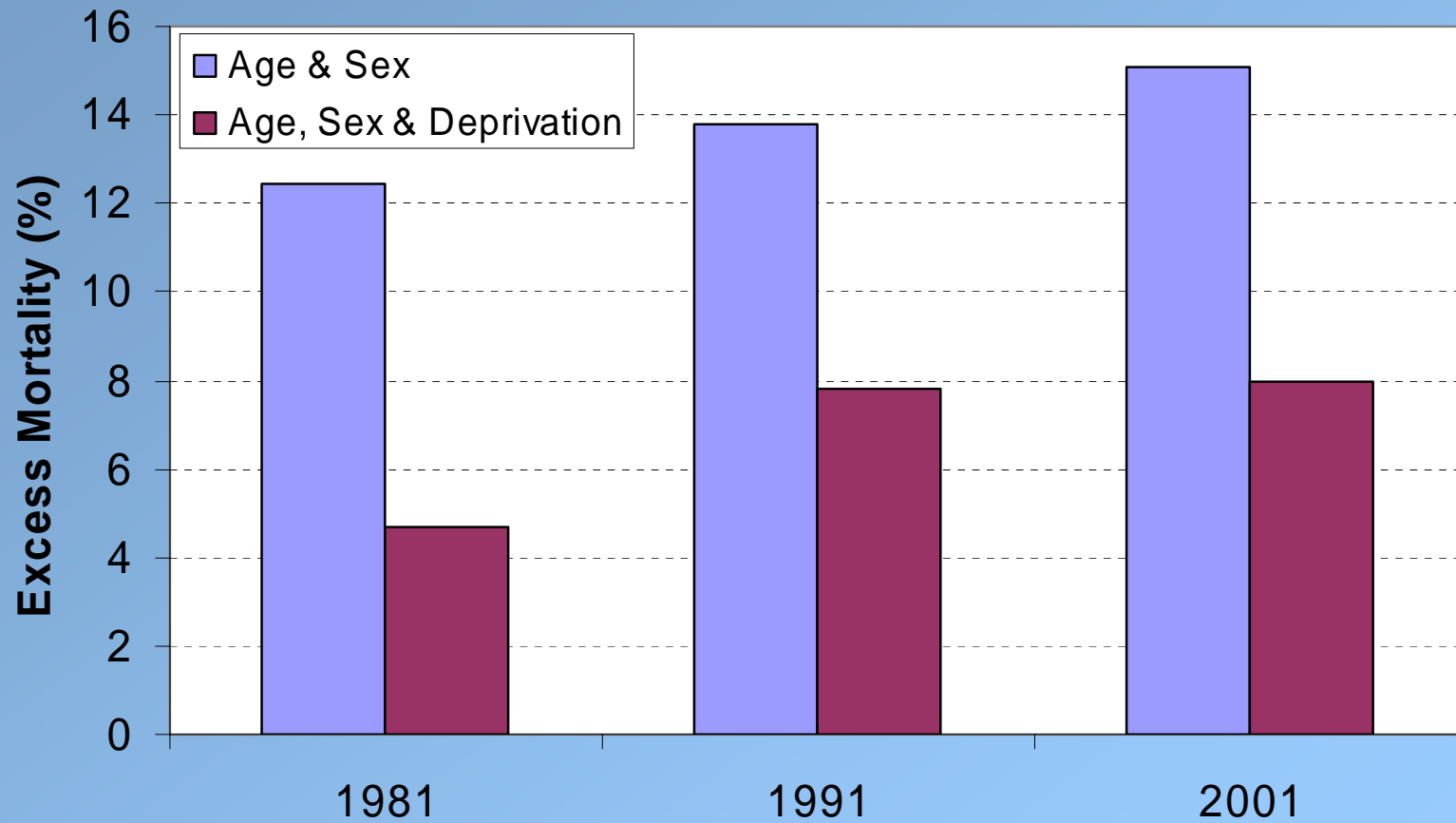




# Deprivation in 2001



# Excess Standardised Mortality (Scotland v. E&W)

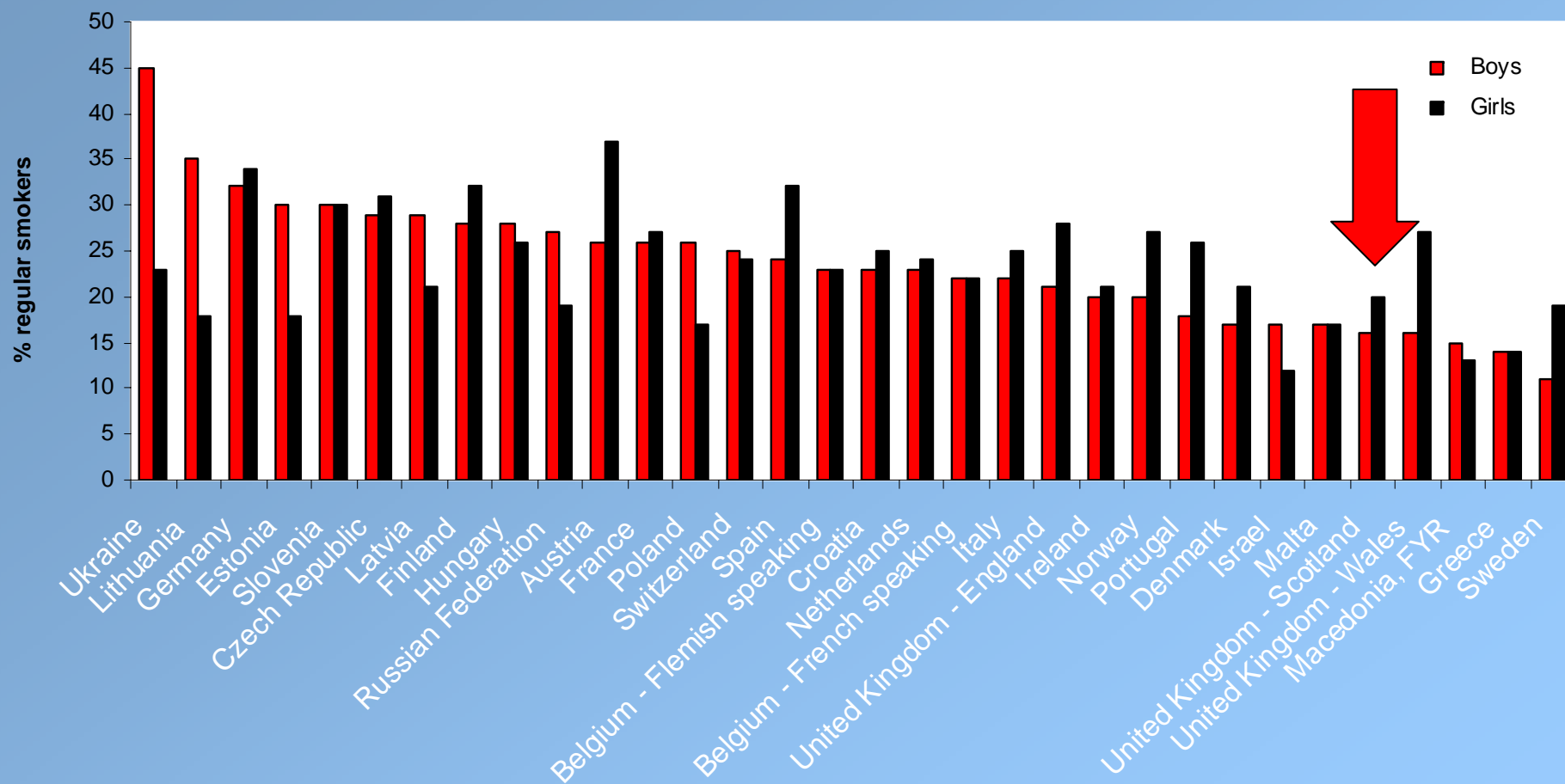


# **How to improve health**

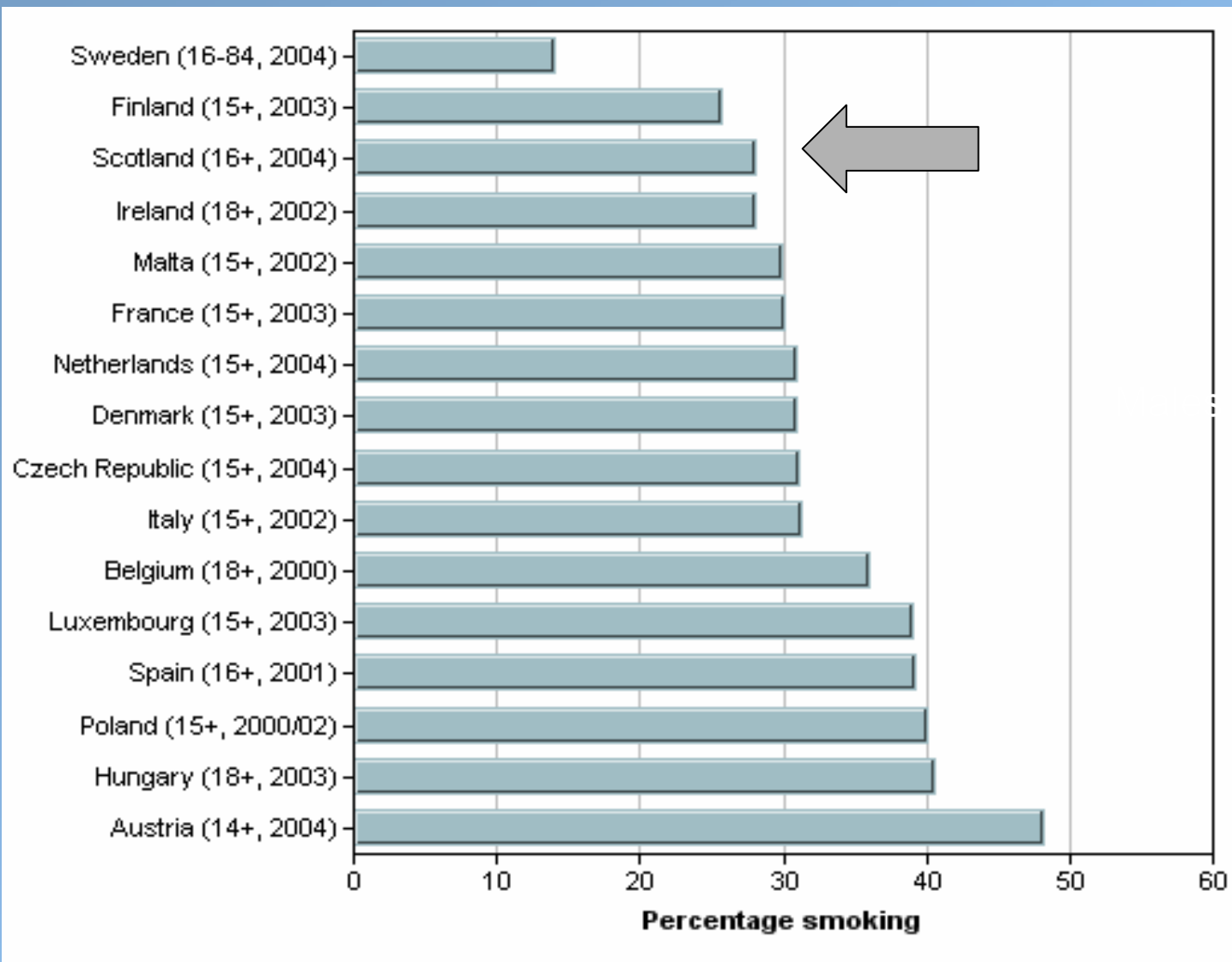
**The redistribution of wealth and resources for the sole purpose of reducing inequalities in health would be a long term strategy of uncertain success.'**

**J Bunker 1995**

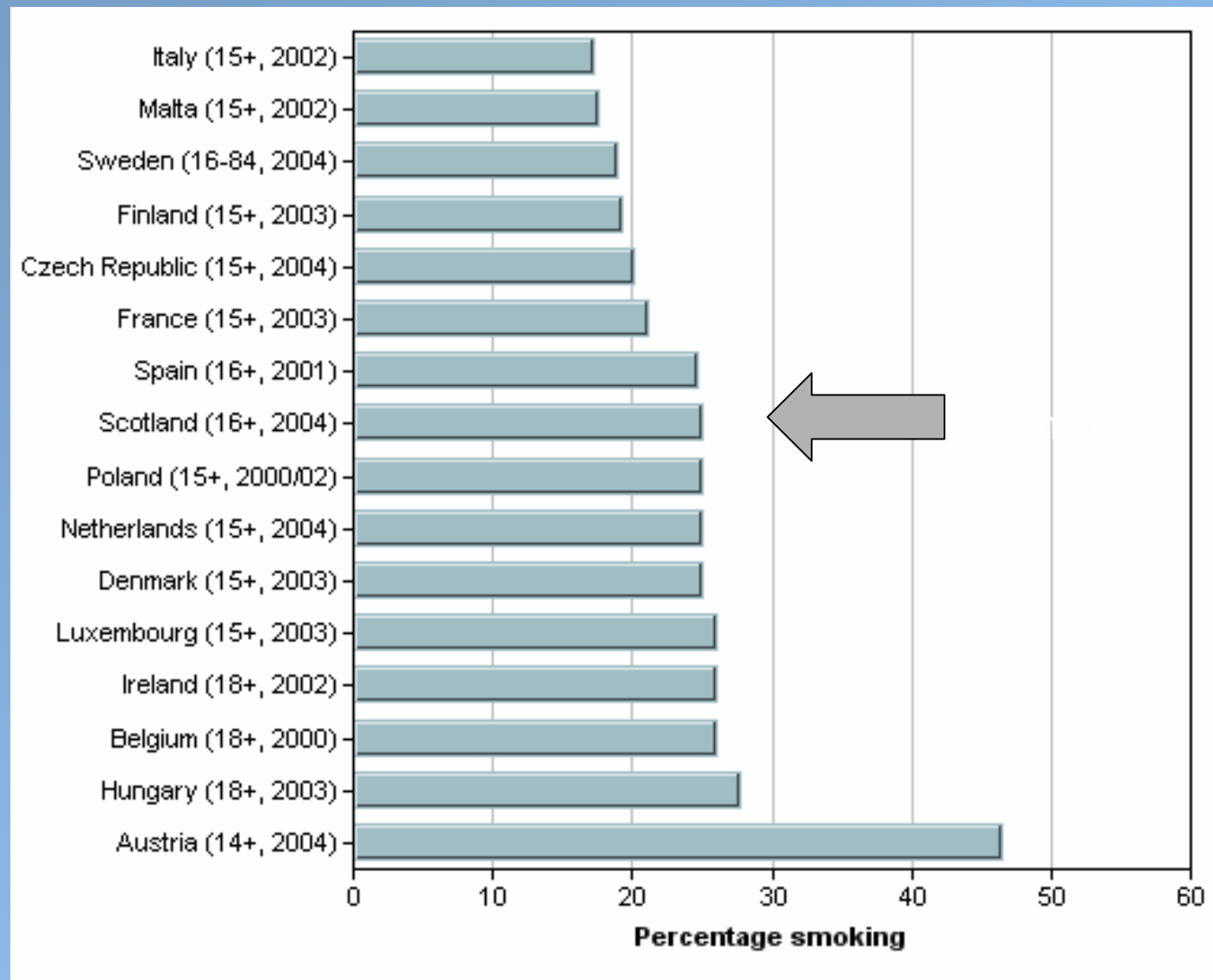
## Prevalence of smoking by country, in 15 year olds by sex, 2000/01, Europe



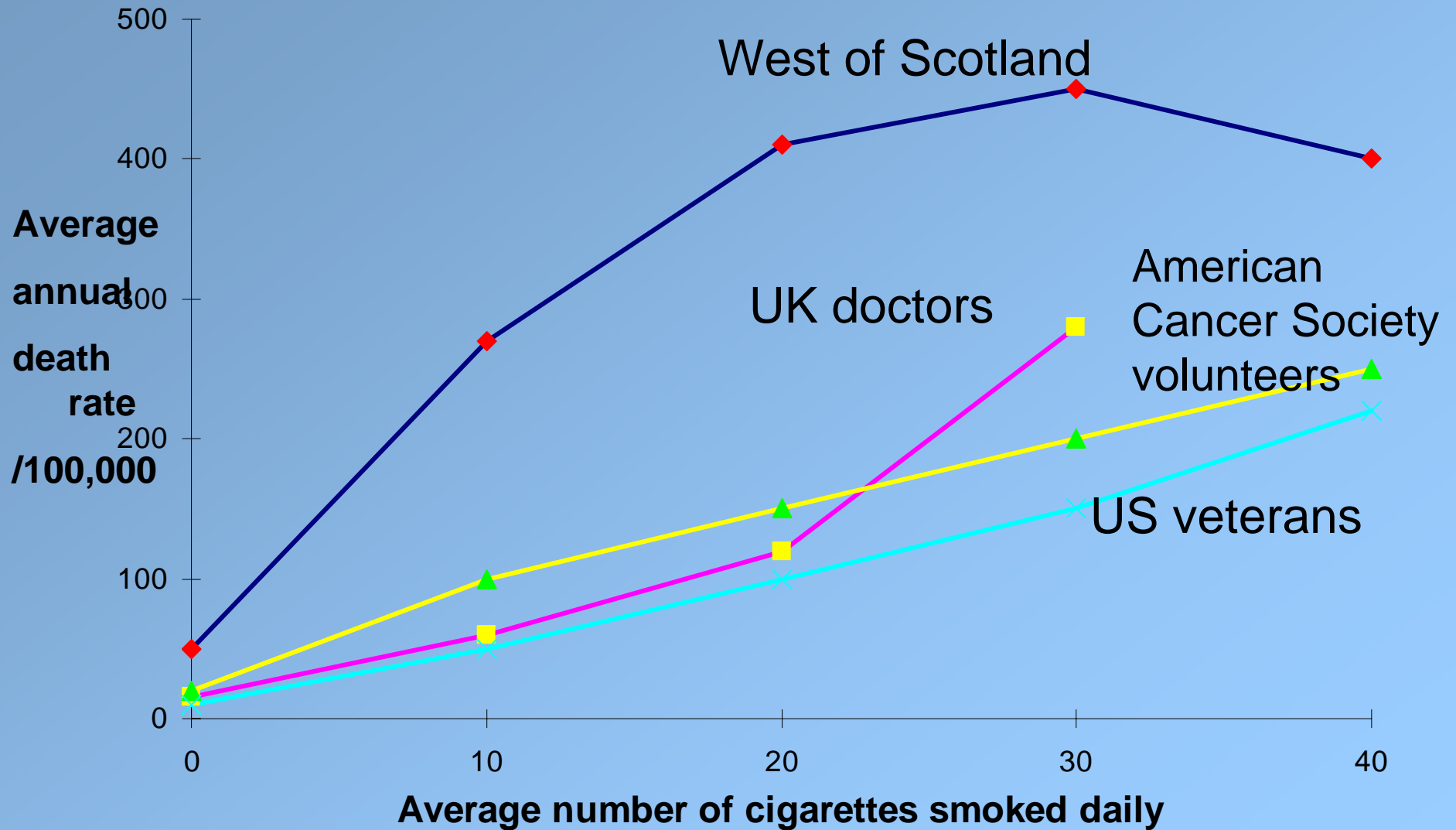
# Male smoking prevalence - Europe



# Female smoking prevalence - Europe

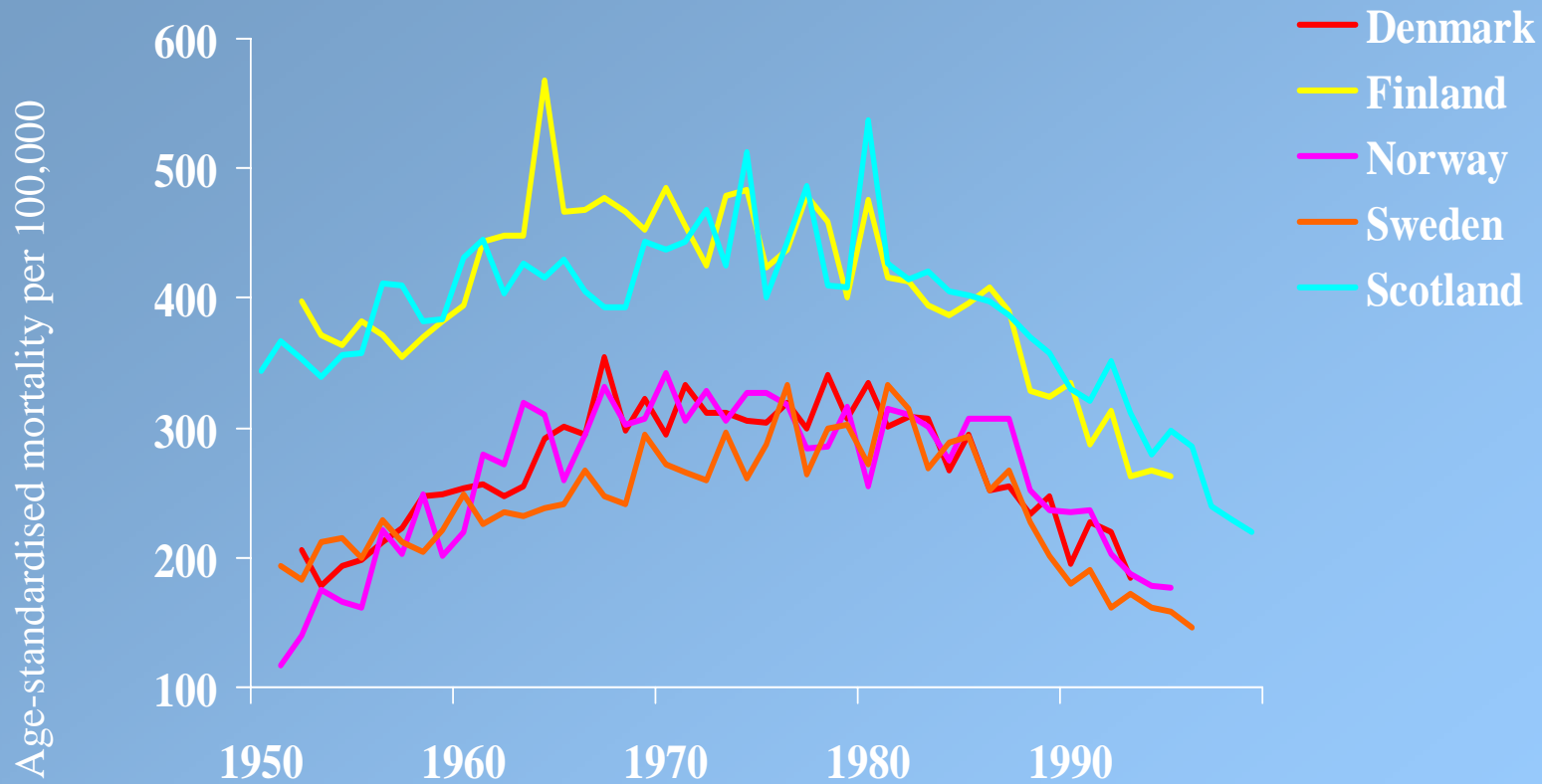


# Comparison of lung cancer mortality in West of Scotland and 3 major cohorts



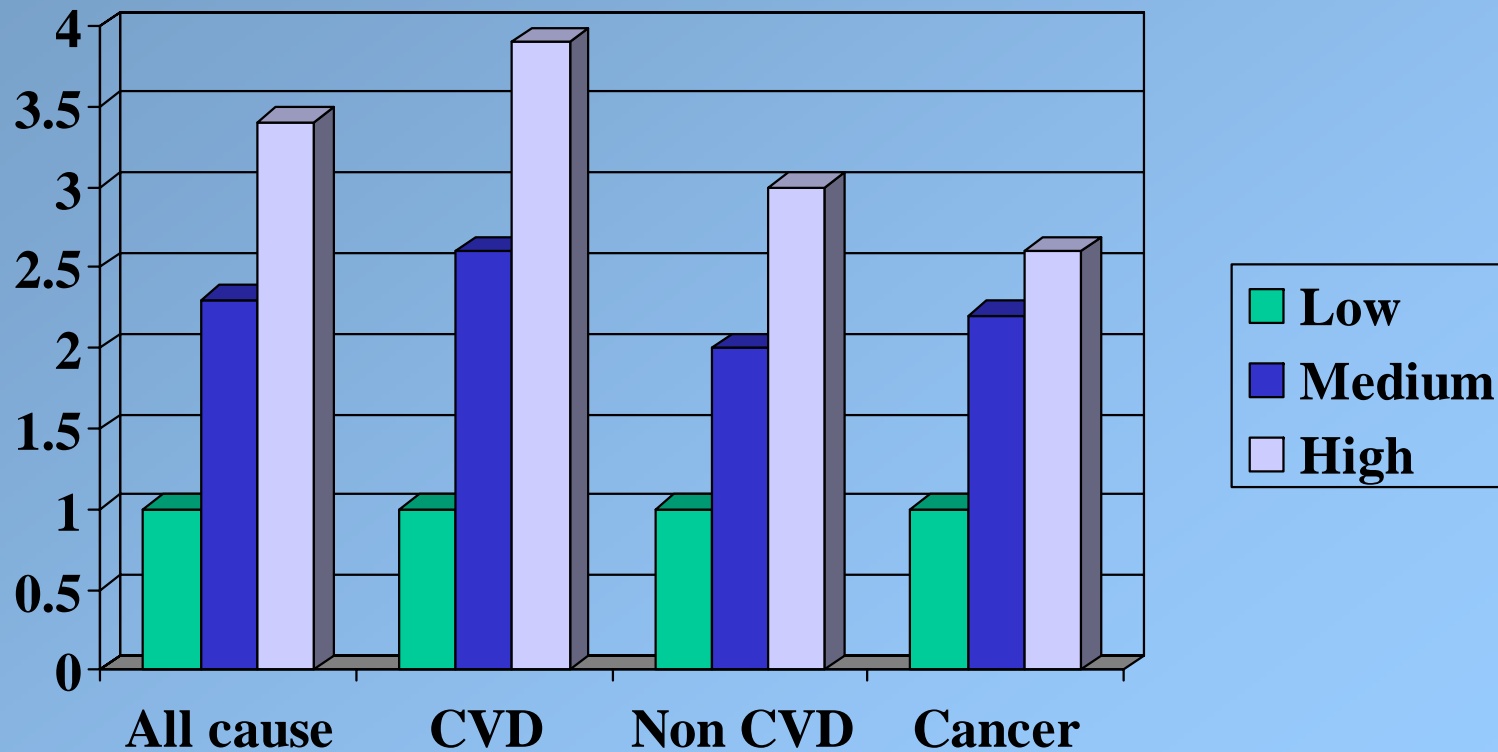
# Coronary heart disease mortality

## Men aged 15-74 years

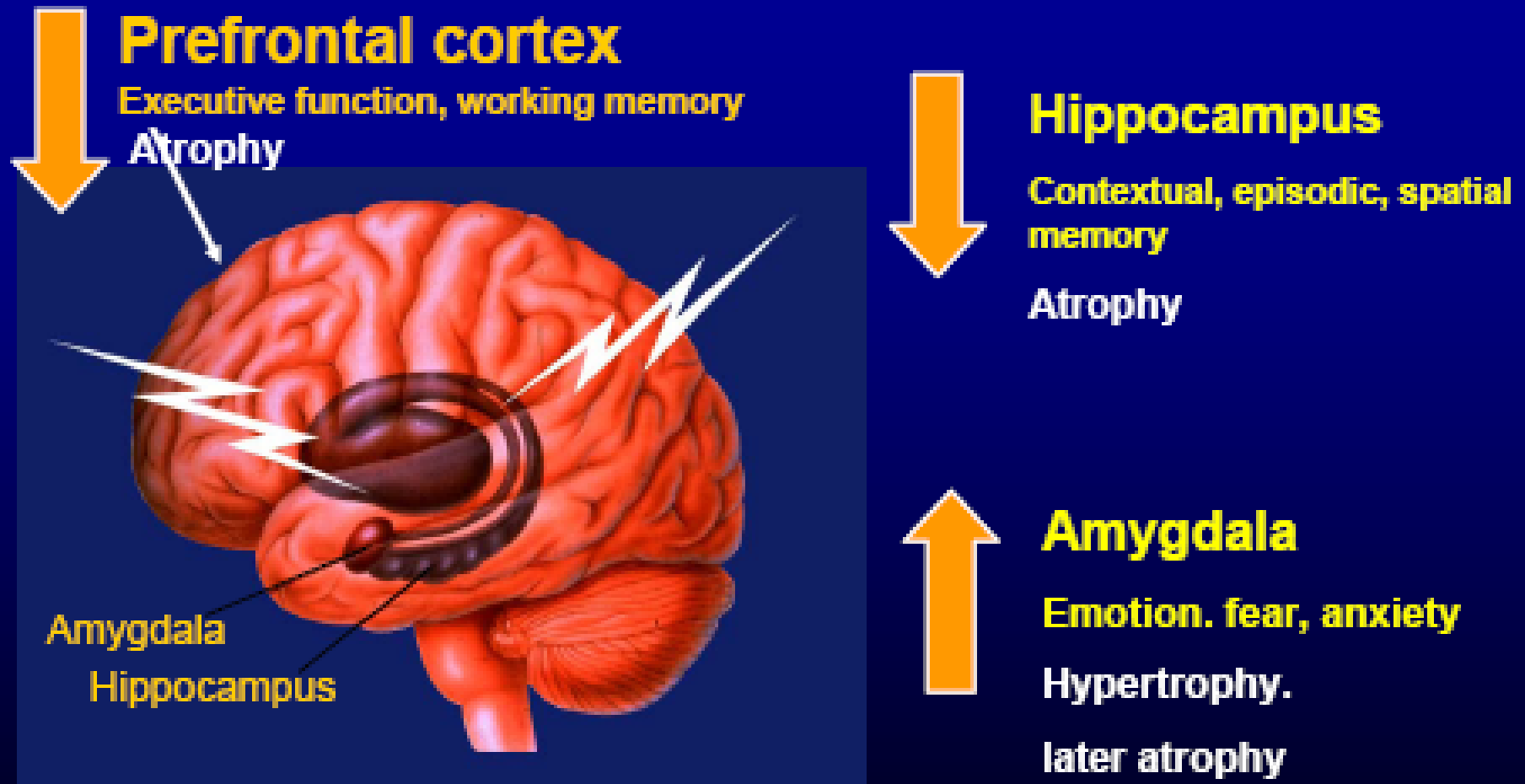




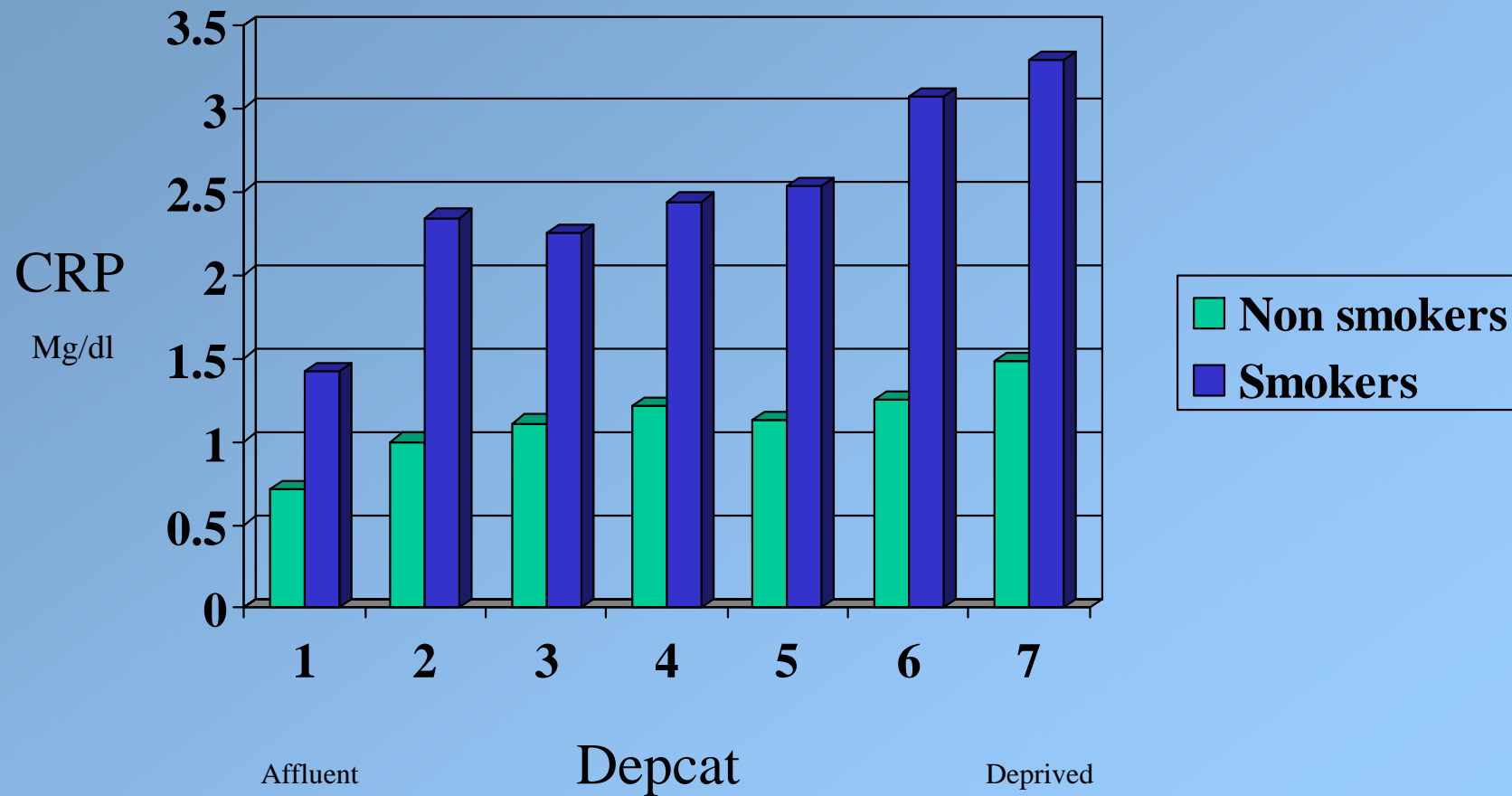
# Risk of death by level of hopelessness



# The Human Brain Under Stress: key brain regions



# Deprivation and inflammatory status







- **What do we mean by wellbeing?**
- **Do we know how to measure it?**
- **Would measuring it help us to know how to advance it?**

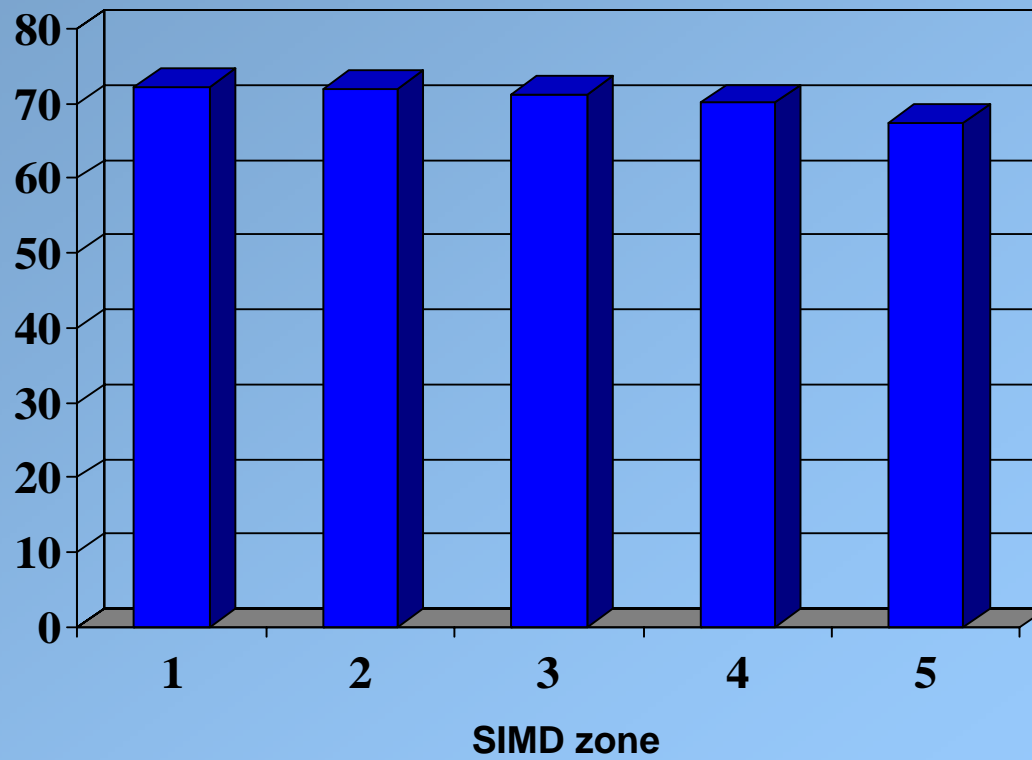
- **Subsistence**
- **Protection/security**
- **Affection**
- **Understanding**
- **Participation**
- **Leisure/idleness**
- **Creativity**
- **Identity**
- **Freedom**
- **(Transcendence)**

# The survey

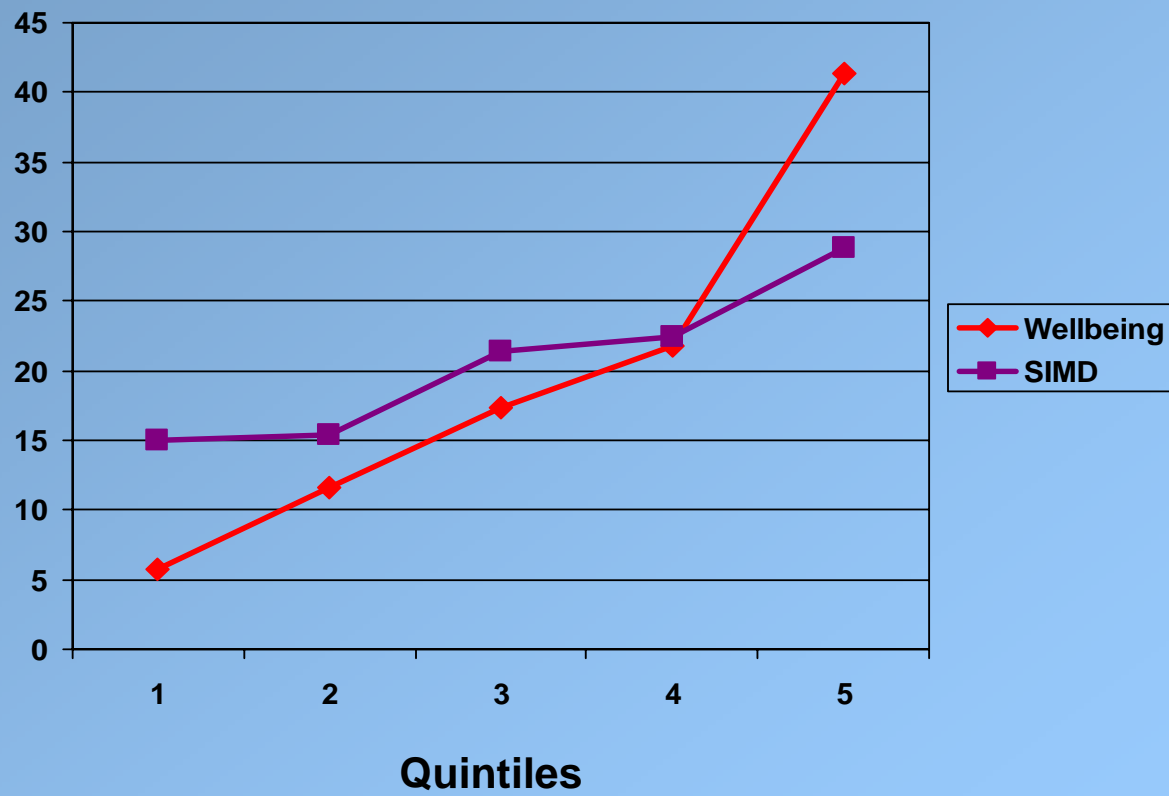
- **2502 people**
- **16 years and upwards**
- **Representative sample**
- **Postal questionnaire**
- **Internet option**
- **Home visit option**
- **51.2% response**
- **Poor response in young men**
- **Poor response from deprived areas**



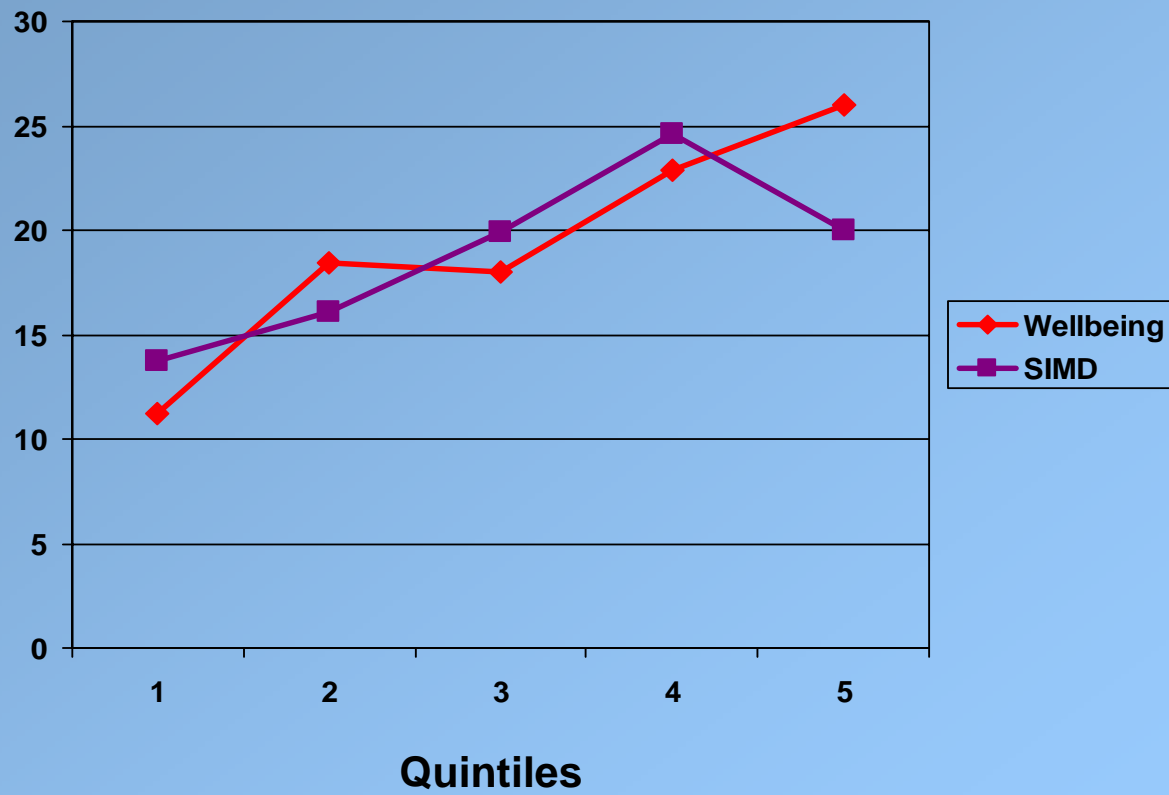
## Wellbeing and SIMD Zone



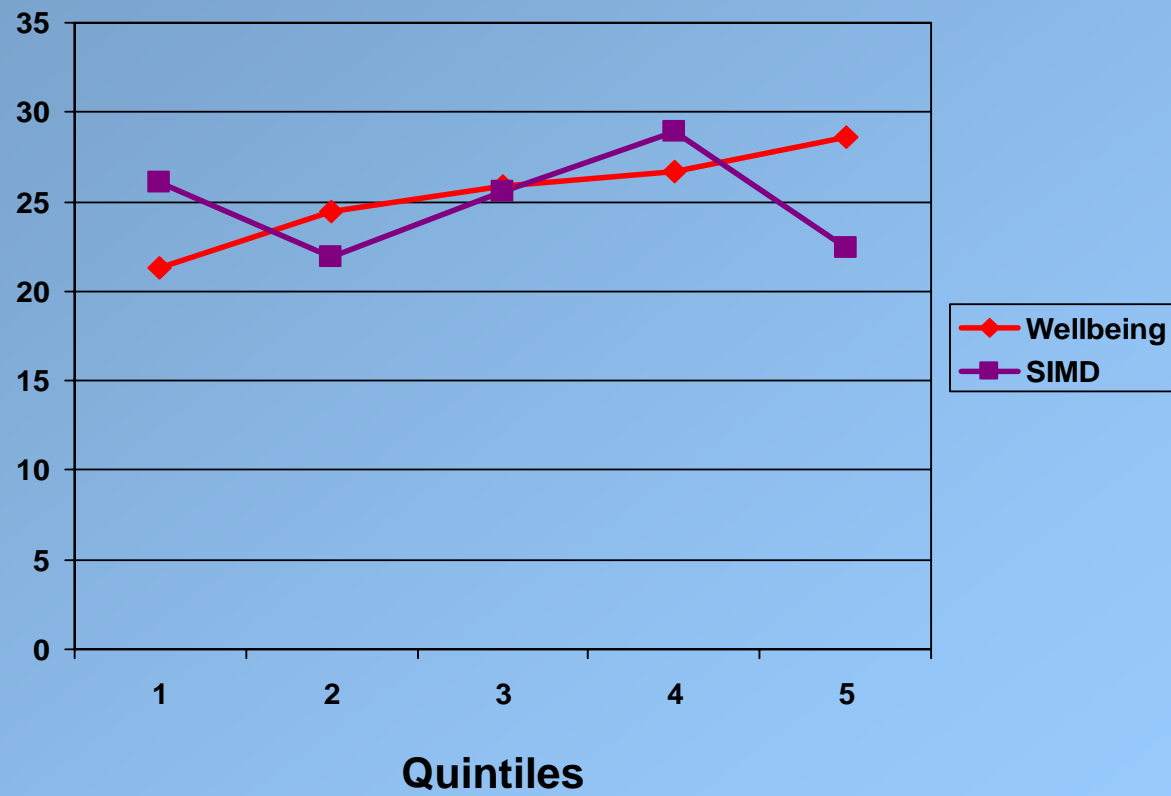
## Self reported health Percentage worse than expected



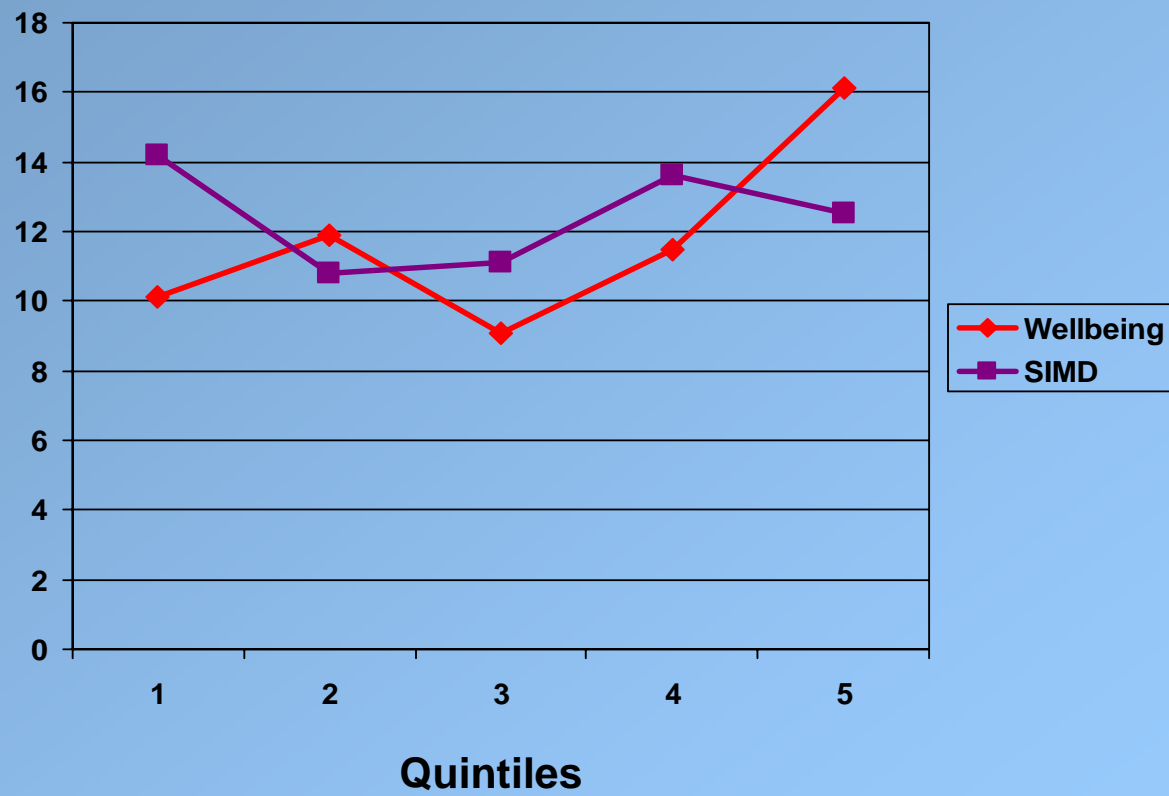
# Weight Percentage obese



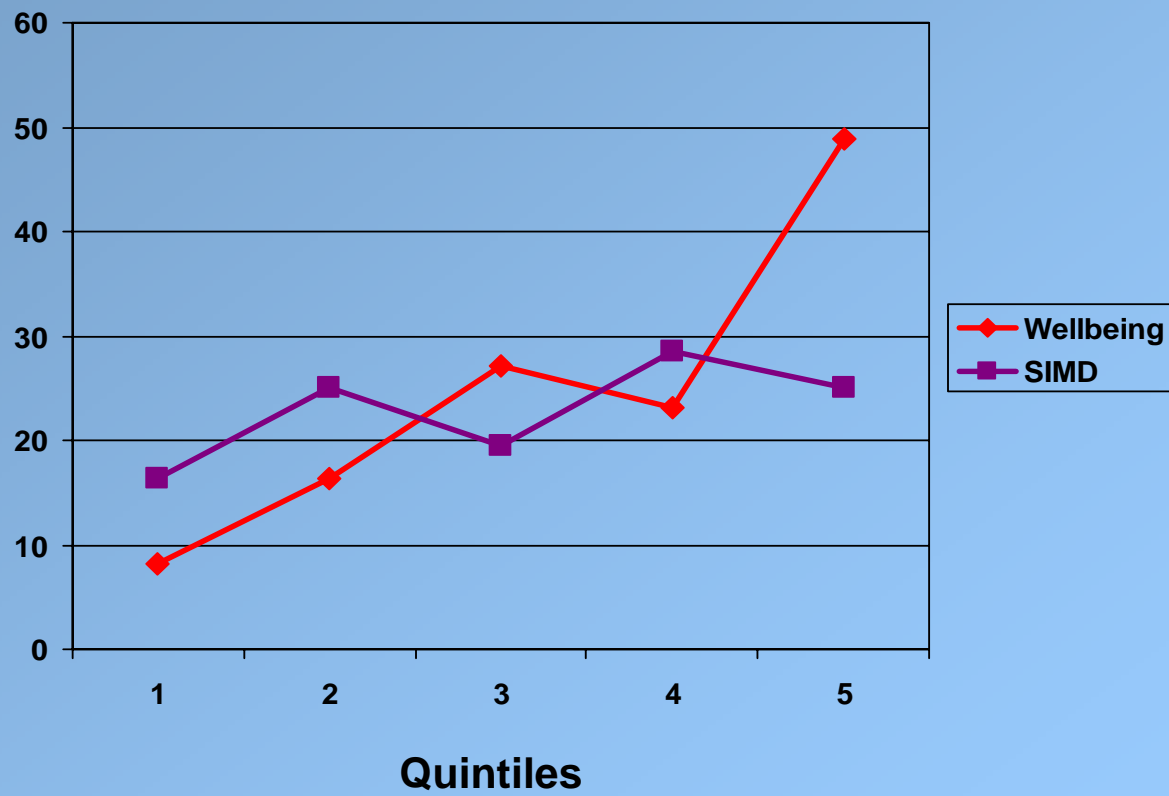
## Waist circumference Percentage over threshold



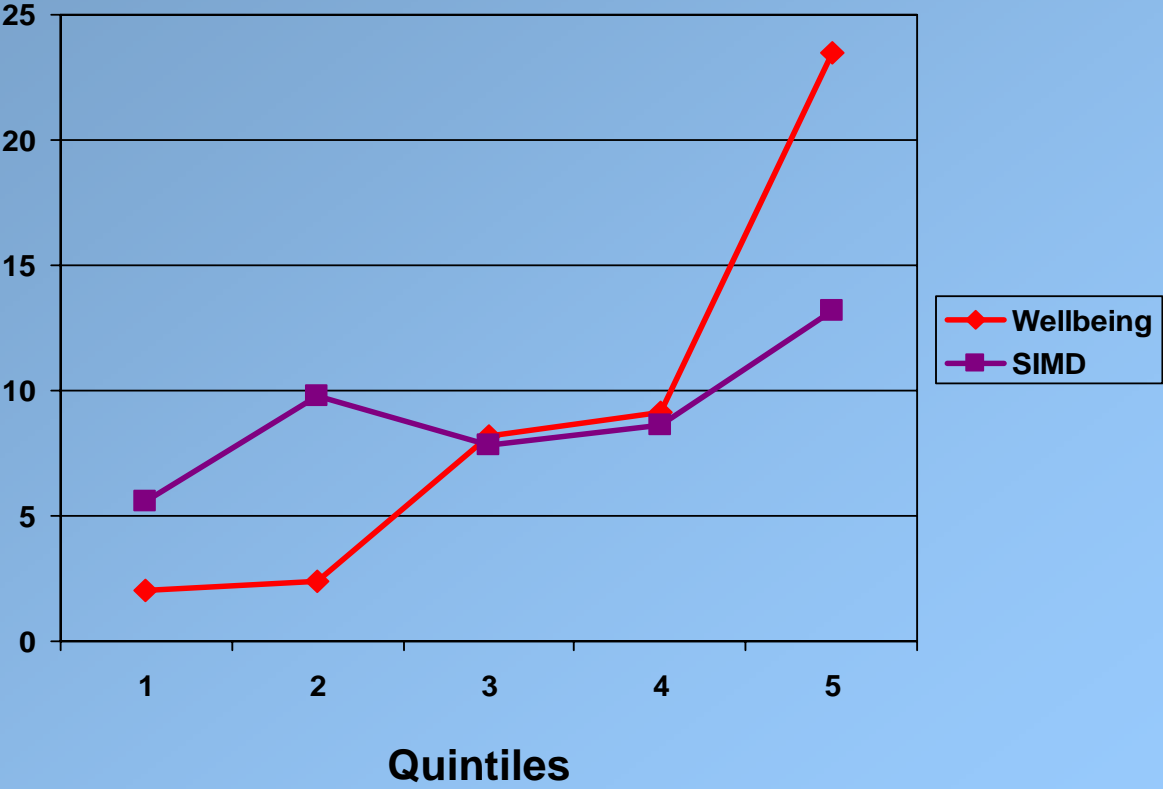
## Percentage problem drinkers



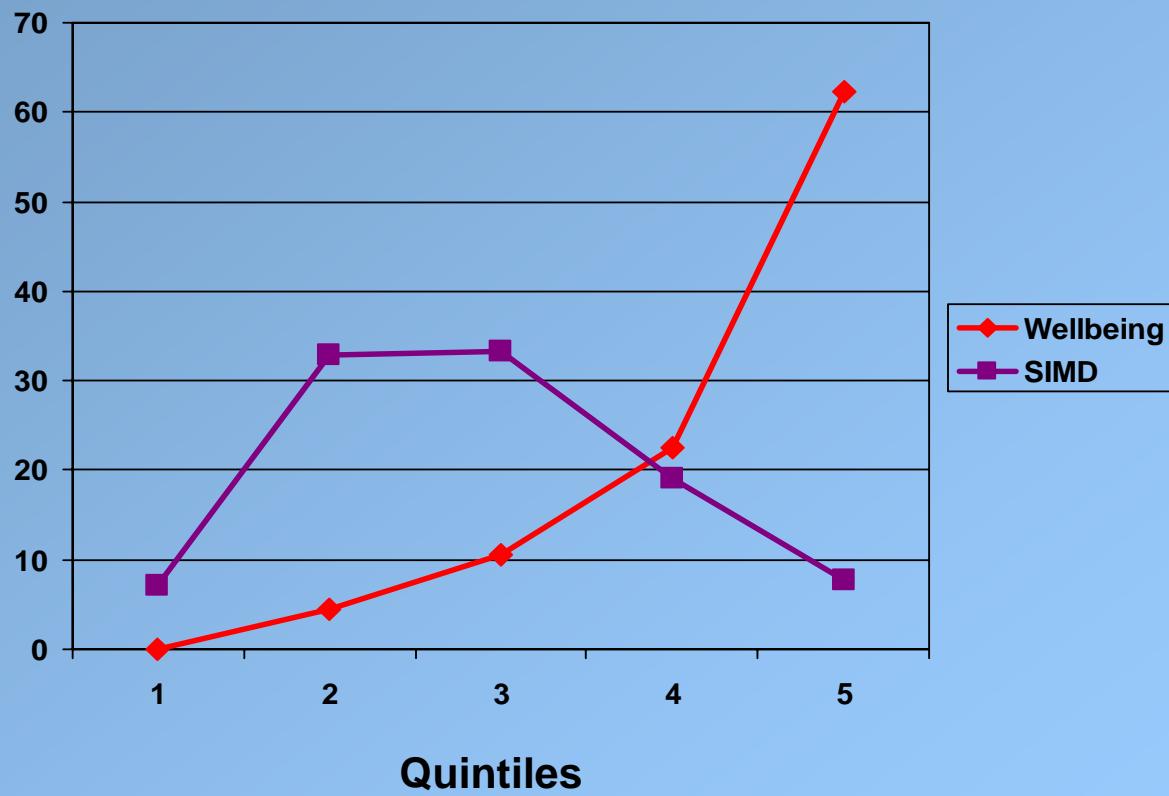
## Job control Percentage low



**Moderate exercise  
Percentage never**

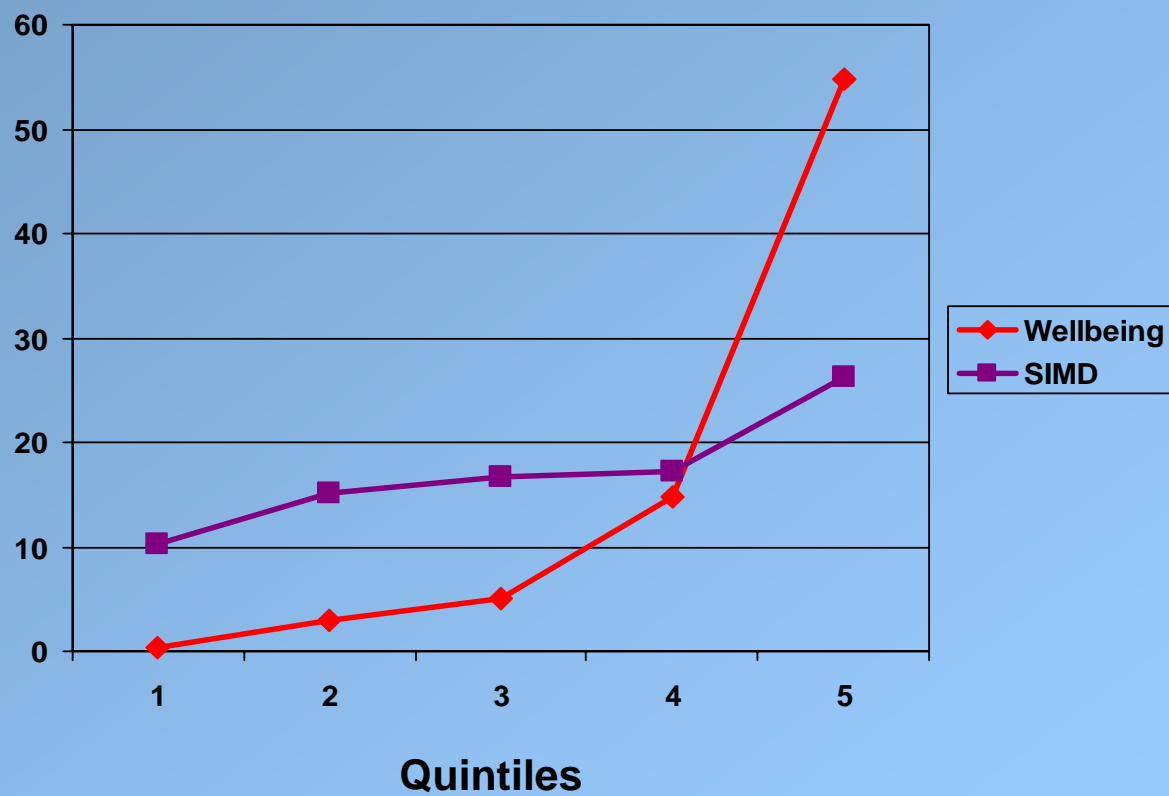


## Ability to cope with stress Percentage negative



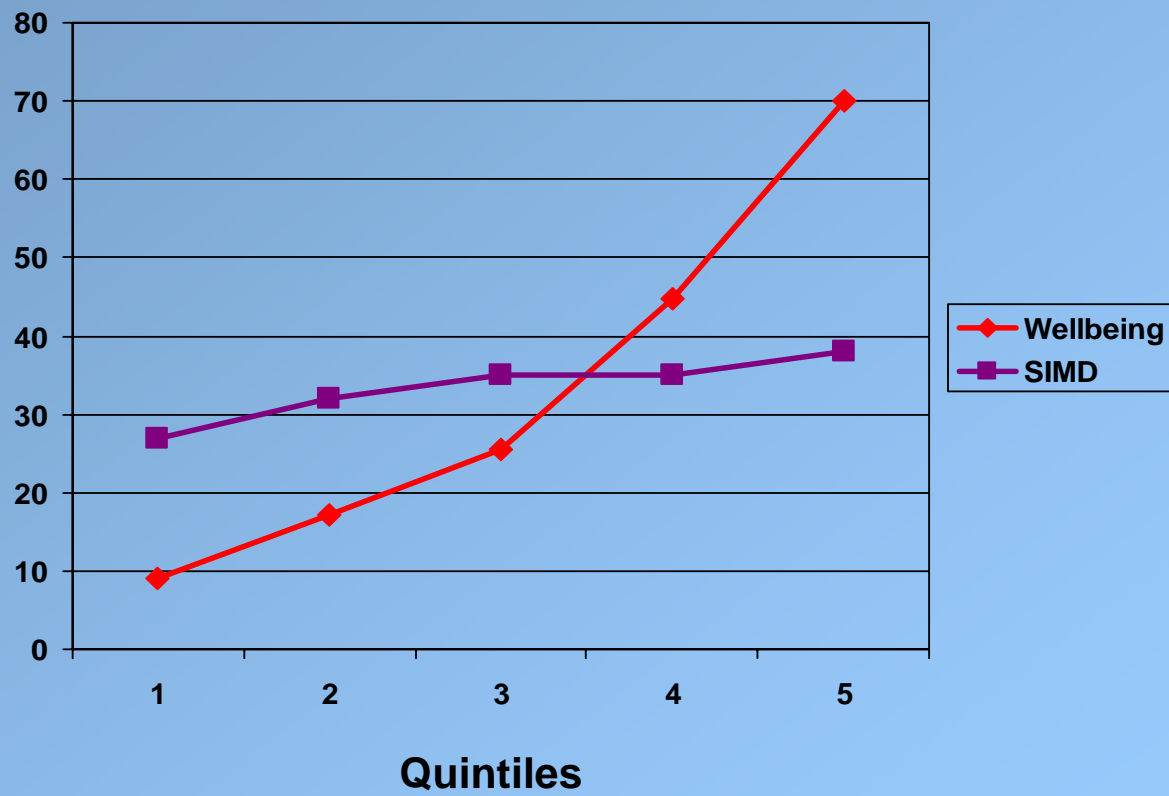


## Depression Percentage with any level



# Anxiety

## Percentage with any level



# Conclusions

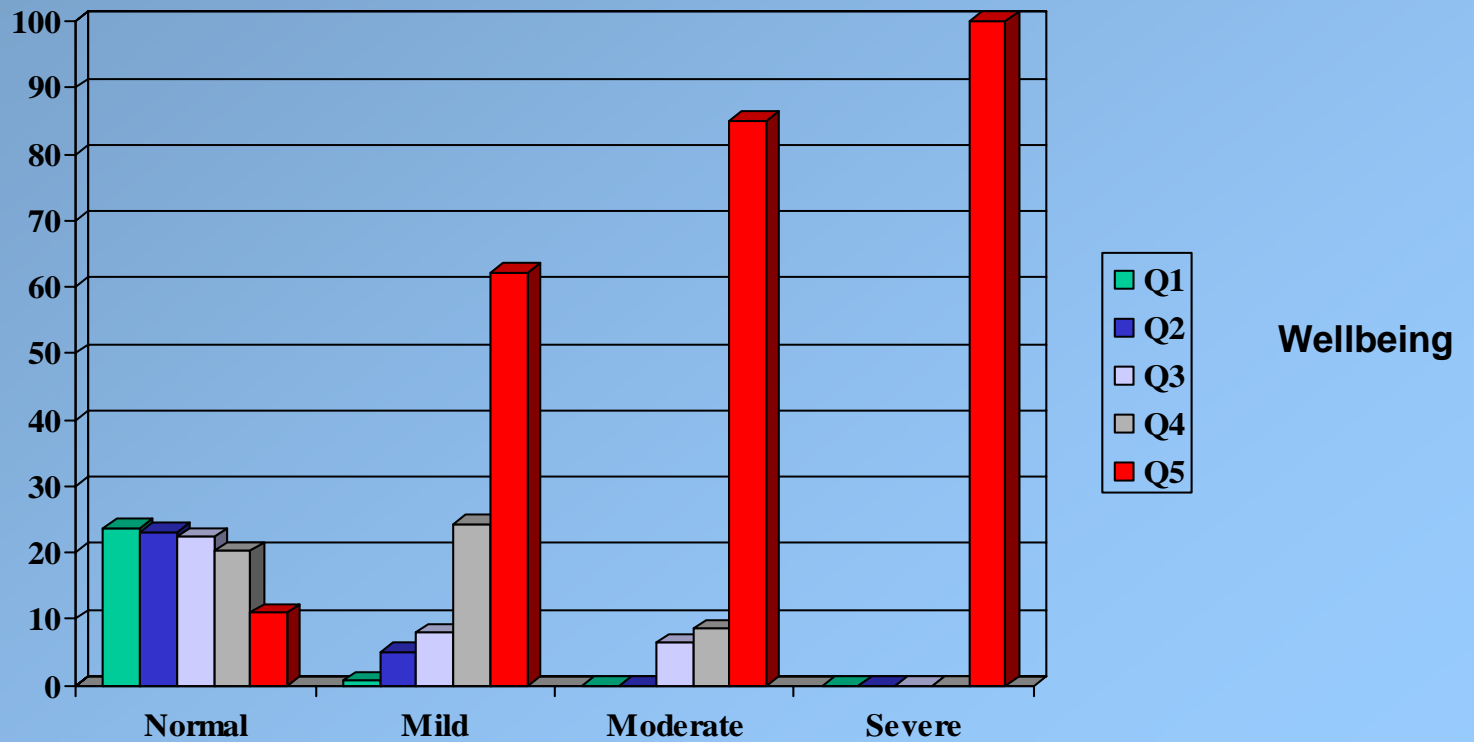
- **Physical regeneration projects are doomed to failure if they do not go hand in hand with addressing the psycho-social environment**
- **At least in rural areas, target people not places**

# Next steps

- **CRP, Interleukin-6 and cortisol study**
- **Randomised intervention trial**
- **Depression/anxiety project**

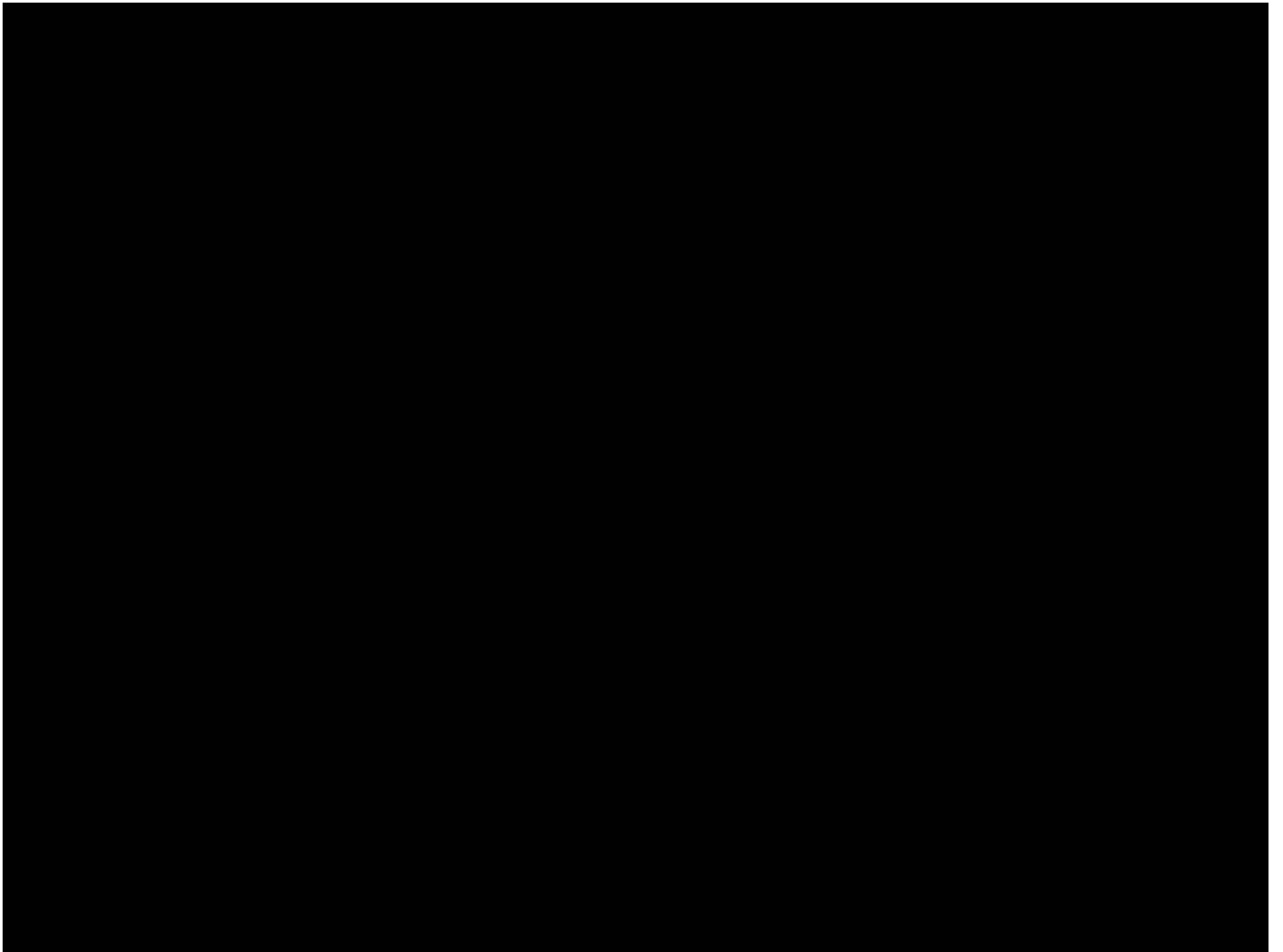
# Depression and Wellbeing

%



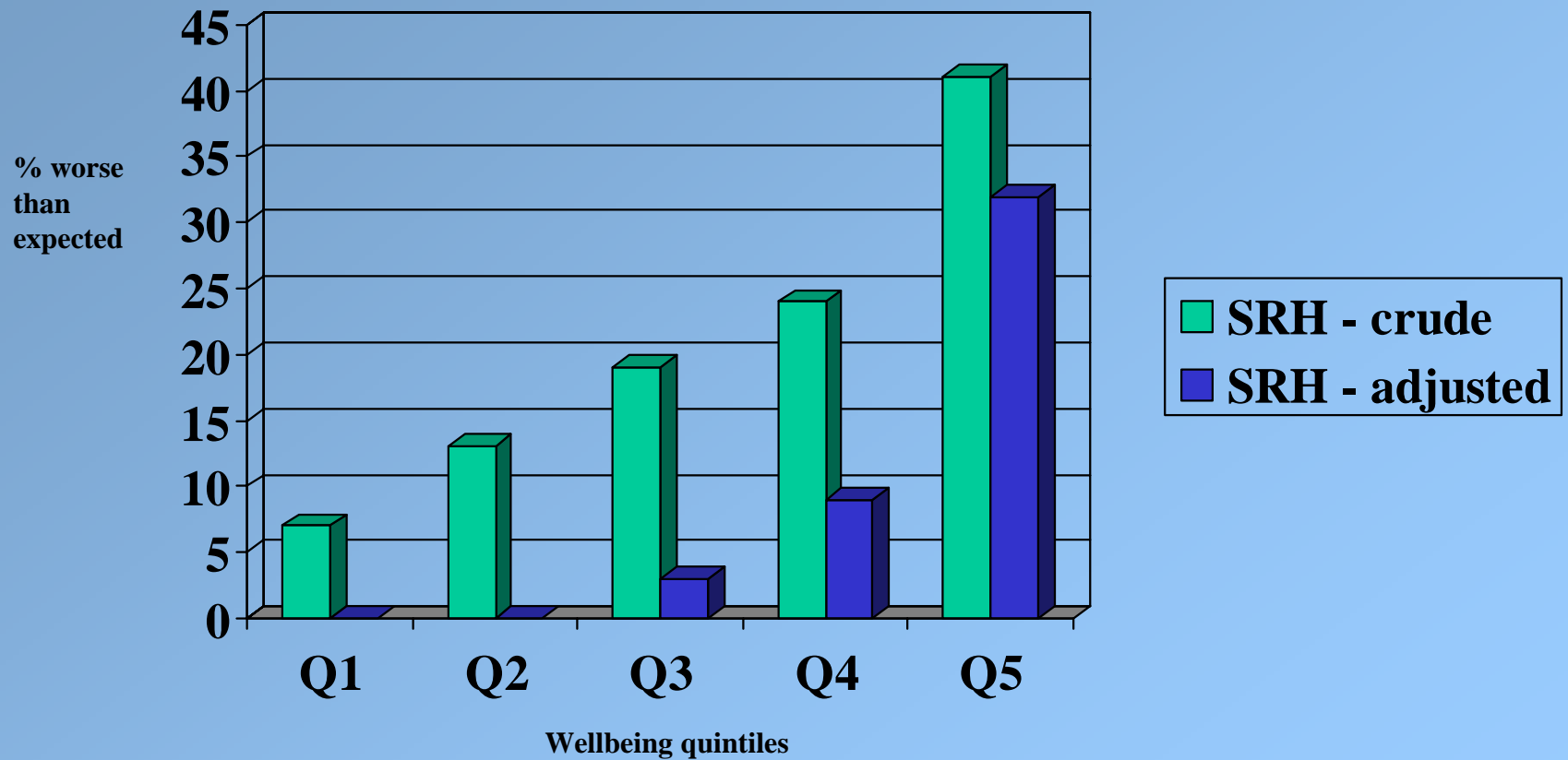
- **John Witherspoon**
- **American Declaration of Independence**
- **The pursuit of happiness**



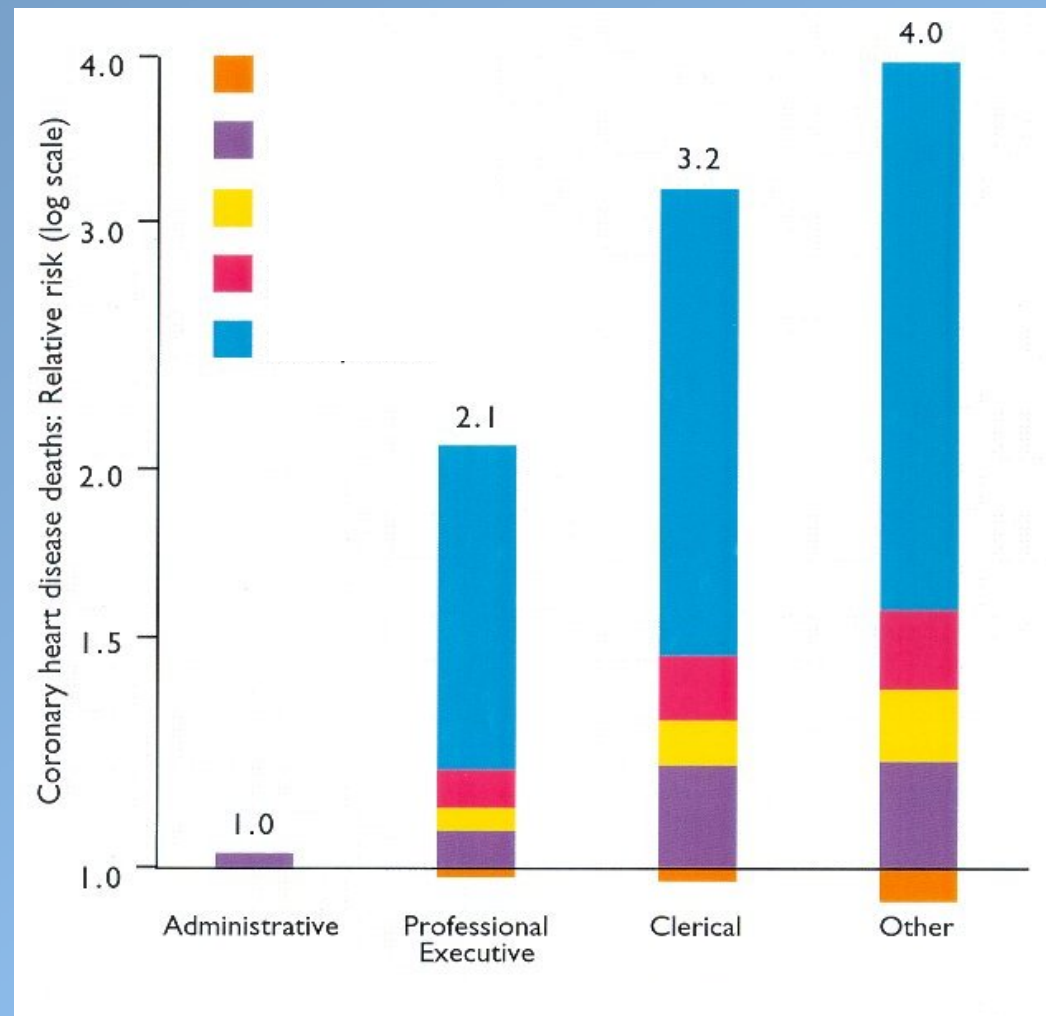




# Self rated health (SRH)

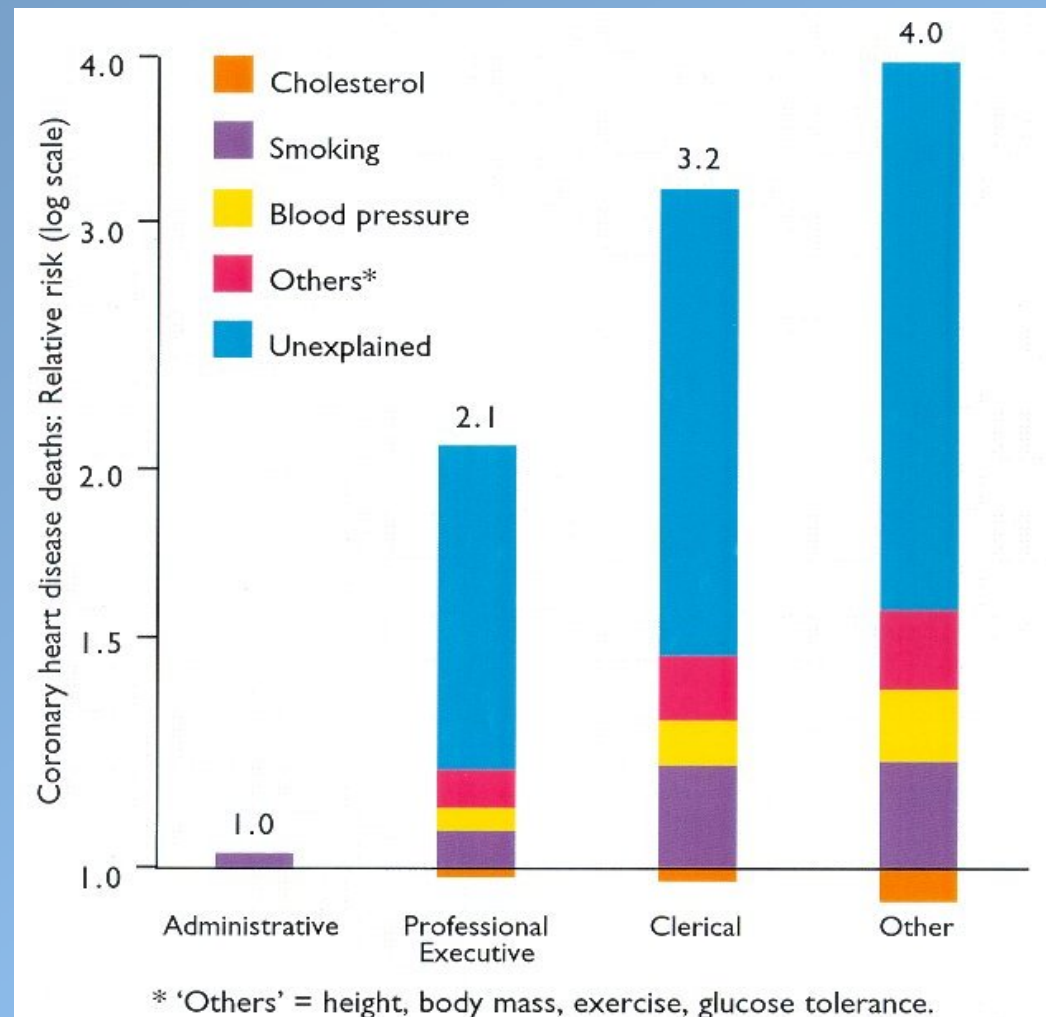


## Relative risk of death from coronary heart disease among civil servants according to employment grade (Proportions of differences explained by risk factors)



Source: Rose G, Marmot M. Social class and coronary heart disease. *British Heart Journal*. 1981; 13-19

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