# Social determinants and public health surveillance

Seppo Koskinen
KTL, National Public Health Institute
Finland

# Social determinants include e.g.

## 1) Socioeconomic position

- Education affects knowledge and values related with health and one's occupational career
- Occupation and employment status influence working and living conditions, shape behaviour and affect income
- Income and economic position influence e.g. housing conditions and possibilities to make healthy choices

• High socioeconomic position improves the knowledge and economic prerequisites – as well as motivation – to choose healthy behaviour patterns

# Social determinants include e.g.

## 2) Family issues

- Marital status (single, married, in consensual union, divorced, widow)
- Number of children
- Living arrangements (living alone, with spouse, with spouse and children, with children, with others)
- Quality of the relationships

• Family and living arrangements reflect e.g. social bonds, social control, being a role model, subjective purpose for (leading a healthy) life. Consequently, they are strongly connected with health and survival

# Social determinants include e.g.

## 3) Social capital

- Trust
- Support
- Participation

- Many other social factors, whether considered to contribute to social capital or not, and whether measured on the individual or local/societal level, appear to have a strong effects on health behaviour and health

# Social determinants and health monitoring

## Monitoring of social determinants

- In many countries including Finland, the general welfare monitoring systems provide detailed information on the distribution and time trends in different aspects of socioeconomic position, family structures and other dimensions of wellbeing, based on both national registers and complementary surveys

## Monitoring of health and health behaviour in subgroups defined according to social determinants

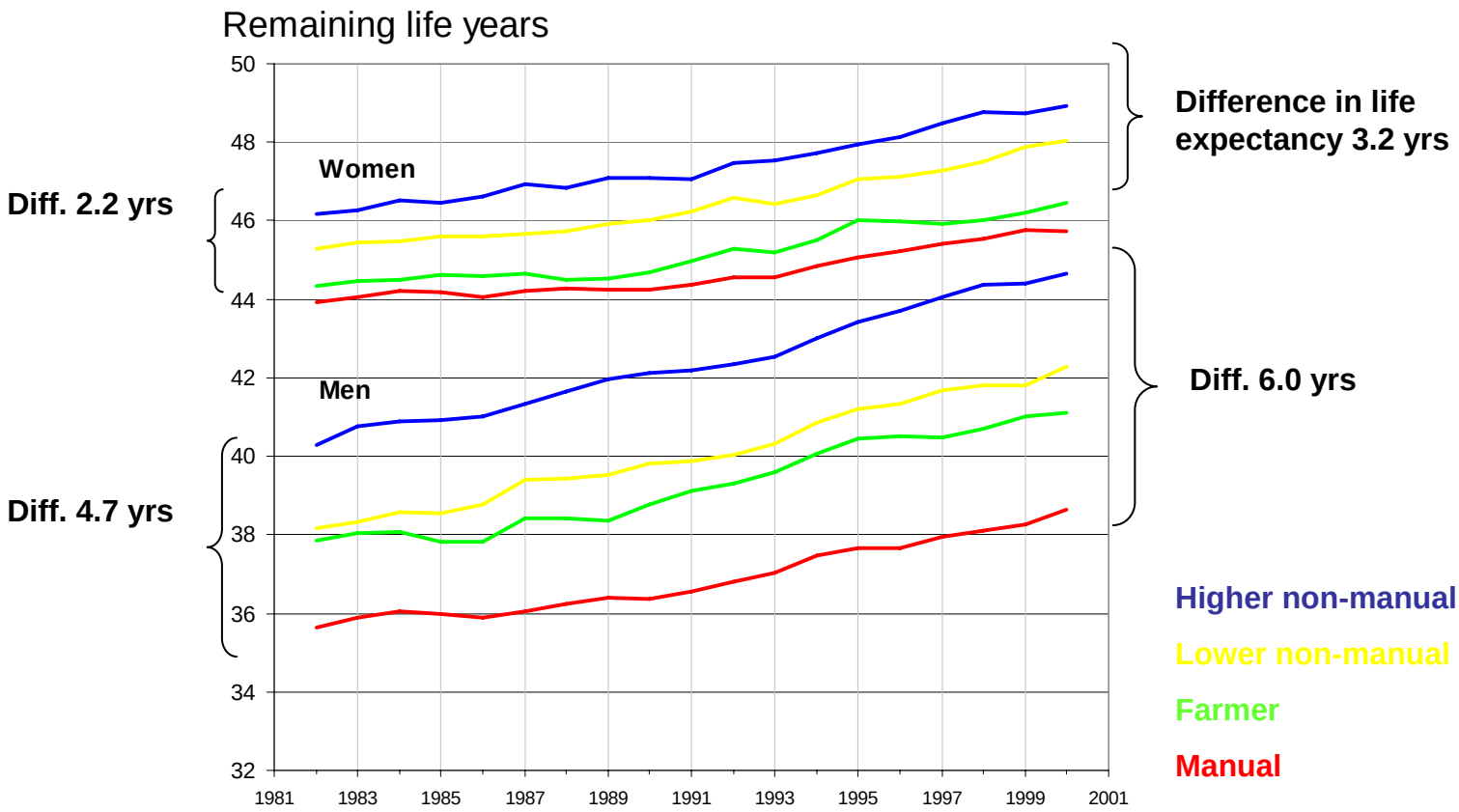
- Health monitoring systems, on the other hand, are responsible for monitoring time trends in health and health behaviour in groups defined according to socioeconomic position, marital status, living arrangements etc.

# Patterns of health inequalities

- In several countries, striving for higher level of health for the whole population has been successful; striving to affect the distribution of health has not been successful
- There is a strong and consistent link between social position and health:
  - the higher a person's socioeconomic position, the better their health
  - married persons as well as those living with a spouse and having children are much healthier on average than the divorced, those with no children and persons living alone

# Striking differences in life expectancy between occupational classes

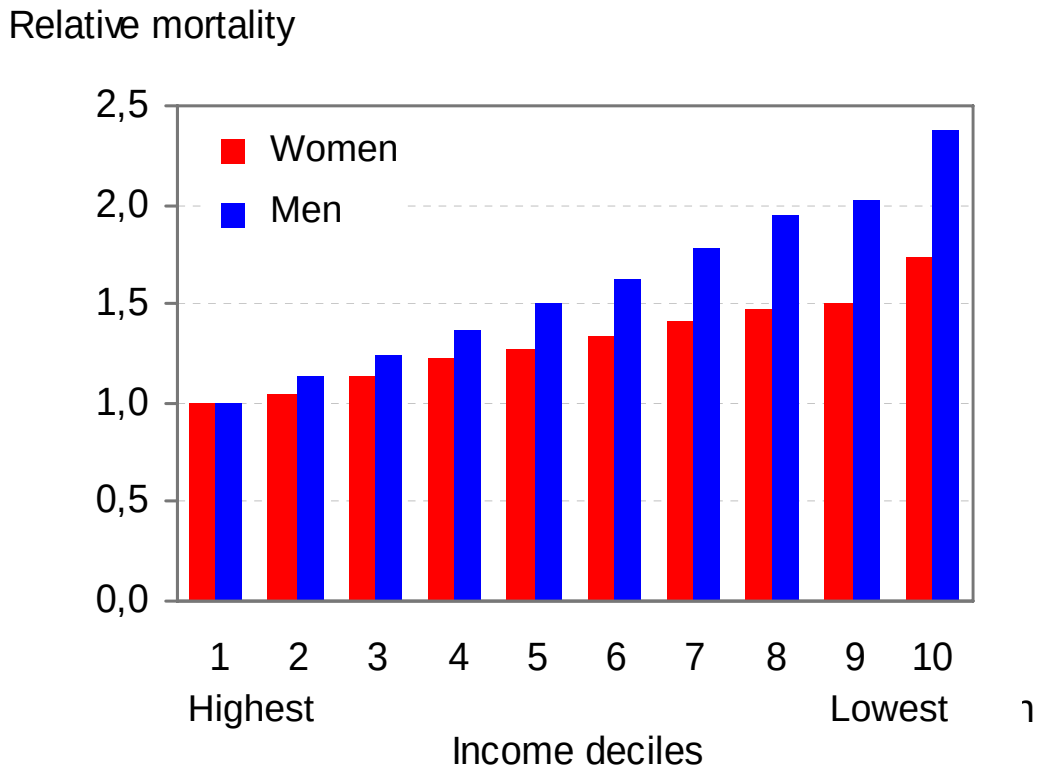
## Life expectancy of a 35-year-old in 1981-2000 in Finland




Source: Valkonen et al. 2003

# Mortality increases continuously as income diminishes

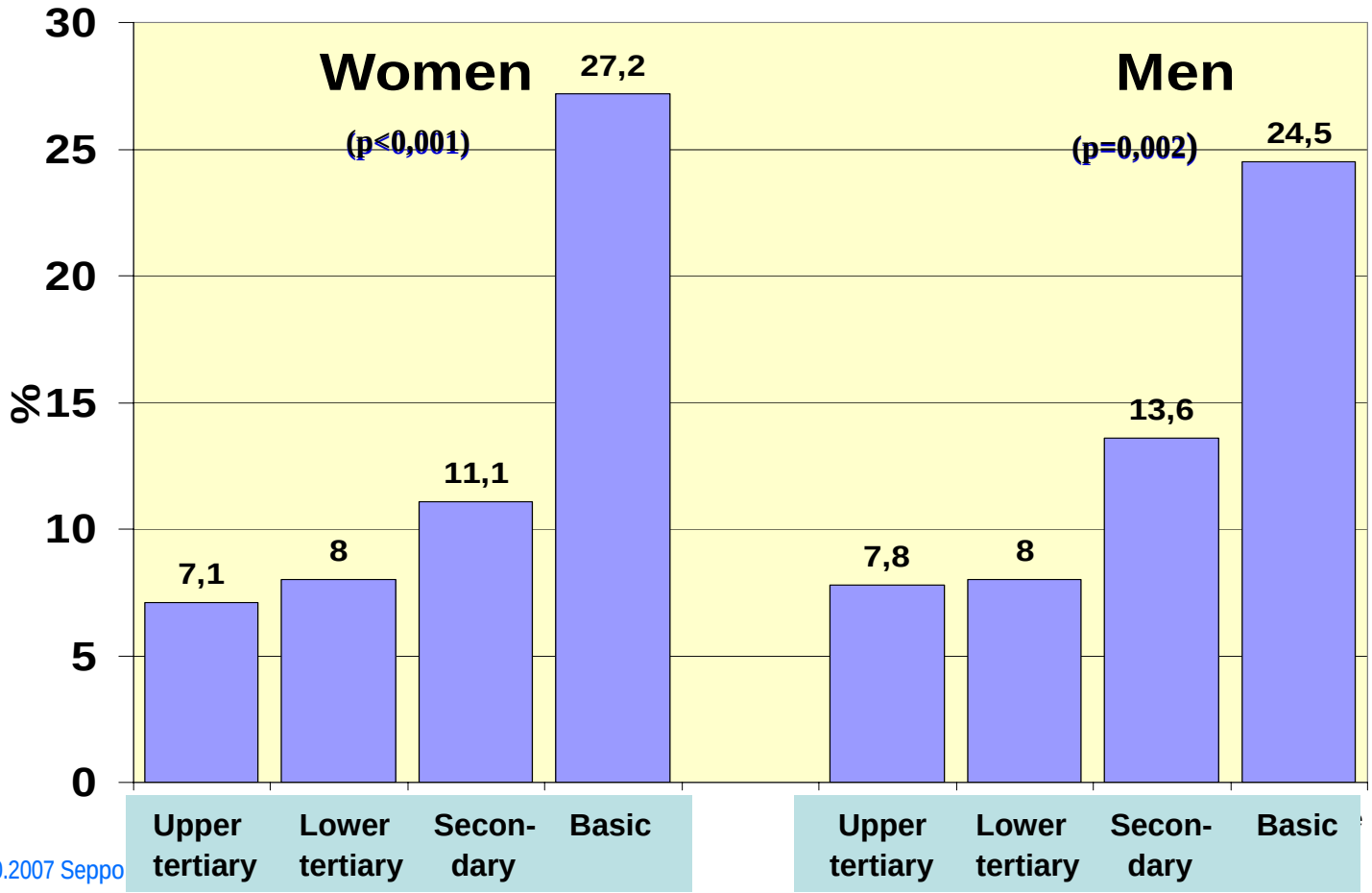
Mortality of men aged 30 or over in the lowest income decile is 2.4 times higher than in the highest decile, among women the difference is 1.7-fold (numbers have been adjusted for age in order to eliminate the effect of different age structures)




(Source: Martikainen P. et al. Int J Epid 2001;30:1397-1405)

# Self-rated health is also strongly associated with socioeconomic position

Self-rated health average or worse, 18–29-years-olds by level of education



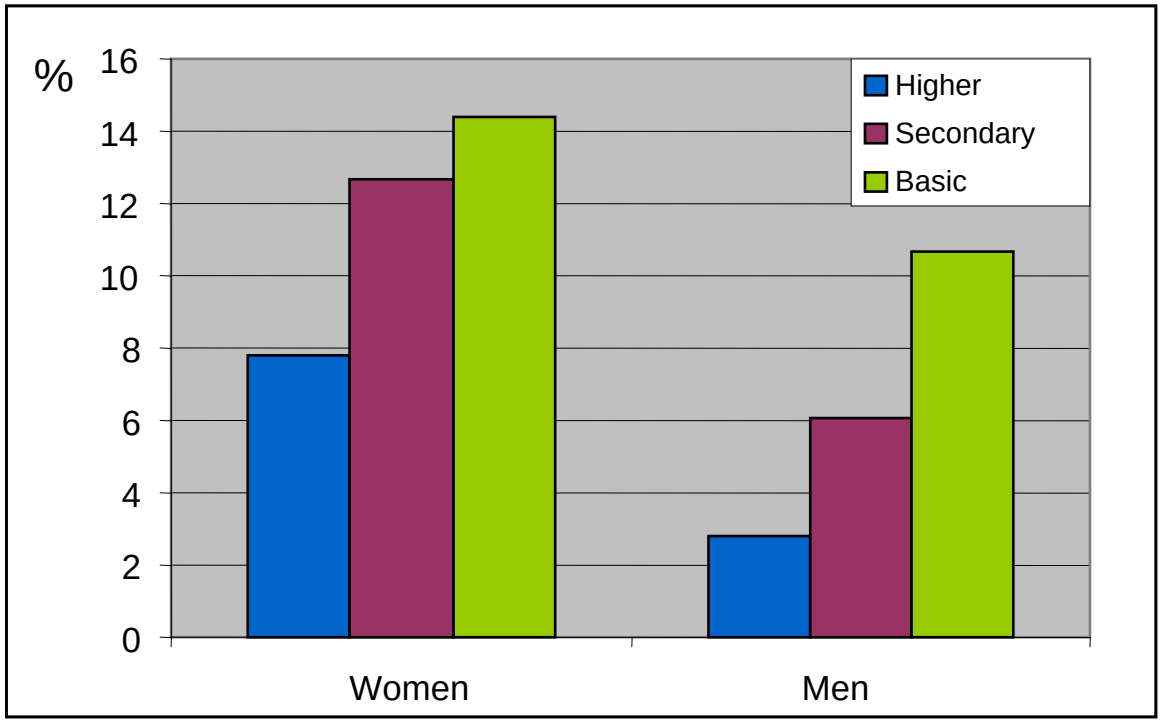

(Source: Martelin et al. 2005)

# Wide inequalities in functional capacity according to level of education

For instance moving difficulties are more common among those with lower educatio~

Below is the proportion (%) of those experiencing difficulties in walking 500 m by education among those aged 30 and over.

(numbers have been adjusted for age in order to eliminate the effect of different age structures).




(Source: Martelin T. et al., in: Aromaa & Koskinen, eds. Health and functional capacity. Publications of KTL B12/2002, pp. 100–107)

# Why should inequalities in health be reduced? (1)

- Inequalities in health are not inevitable, and therefore, not acceptable ethically

  Health inequalities present a major problem for any modern welfare state committed to values of equality

- Public health will improve more effectively when the health of the (large) groups with accumulating problems is promoted

  If health of other population groups could be raised to the same level as those who are in the best position, the nation as a whole would be in significantly better health

# Proportion (%) of selected public health problems that would be avoided in Finland if the prevalence of the problem in the rest of the population would be as low as among those with tertiary level of education

| Health problem | Proportion (%) of cases avoided |
|---|---|
| Cancer deaths | ~ 20–30 |
| Alcohol deaths | ~ 50–60 |
| Coronary heart disease deaths | ~ 30–50 |
| Stroke deaths | ~ 20–40 |
| Respiratory deaths | ~ 50–75 |
| Accidental/violent deaths | ~ 20–45 |
| Diabetes | ~ 30 |
| Disturbing allergy | ~ 10 |
| Back disorders | ~ 30 |
| Osteoarthritis of knee/hip | ~ 30 |
| Impaired vision/hearing | ~ 20 |
| Need for daily help due to restrictions in functional capacity | ~ 50 |

(source: Koskinen and Martelin 2007)

# Why should inequalities in health be reduced? (2)

- Health inequalities endanger the sufficiency of labour force in the near future
- Persisting large inequalities imply a great need for services which the nation may not be able to supply as population ages
- Poor health is a factor in social exclusion
- Health inequalities have negative economic effects

(Source: TEROKA Memorandum for the Socio-political Group of Ministers, 2006)

# National Action Plan to Tackle HI

- Preparation in process at the Ministry of Social Affairs and Health; draft due by the end of 2007
- Preparation started at the multisectoral Advisory Board of Public Health in 2006 (within MSAH)
- Task: proposals for strategic policy definitions, proposals for the most important measures, identifying major stakeholders, defining time schedule and a proposal for monitoring
- Mainly intended for the current four-year government term, but the perspective for structural changes is of course longer than that

# Aims of monitoring health inequalities

- Making health inequalities and their time trends visible
- Providing information needed for decision making: targeting activities according to need
- Evaluation of the effects of efforts to reduce health inequalities
- Promoting research into causes and ways to reduce health inequalities
- Production of up-to-date information on
  - different dimensions of health and functional capacity across age groups
  - living and working conditions and behavioral factors affecting health
  - need for care
  - coverage, contents and effects of treatment and prevention of diseases as well as health promotion and health-related social security
  - attempts to reduce health inequalities and the effects of these attempts

# Characteristics of a good monitoring system

- regularity
- up-to-date information
- comparability over time
- coverage of essential phenomena
- user-friendliness (easy to use, free-of-charge, one homepage leading to different types of information)
- expert help in interpretation of the numbers available

# Examples of specific proposals

Up-to-date information on level of education and occupation (and on other relevant social factors when feasible) to be linked from the registers of Statistics Finland to

- other registers used in health monitoring, annually
- client information systems of the health sector, annually
- surveys used for health monitoring, at the stage when the sample is drawn