Monitoring of trends in socioeconomic inequalities in mortality

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Background

• A widening of socioeconomic inequalities in mortality is observed in many studies

• A shift in attention is needed from direction of change, towards tempo of change

• This requires
  (a) more detailed descriptions
  (b) more careful assessment of methodology
Objectives

- To present new estimates of changes in inequalities in mortality between the 1980s and the early 1990s in different European countries.

- To illustrate (i) large variations in the tempo of change, both within and between countries (ii) large sensitivity to data problems and to the methods used.
Material and methods

- Health Monitoring Program of the EC
- Both mortality and self-reported morbidity
- Mortality: longitudinal and cross-sectional studies
- Occupational class and educational level
- Both simple and sophisticated “inequality indices”
1. Large variations between countries

Rate ratio’s comparing manual to non-manual classes.

Men 30-59 years

<table>
<thead>
<tr>
<th>Country</th>
<th>80-84</th>
<th>'85-89</th>
<th>'90-94</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finland</td>
<td>1.8</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Sweden</td>
<td>1.6</td>
<td>1.8</td>
<td>1.8</td>
</tr>
<tr>
<td>Norway</td>
<td>1.4</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>Denmark</td>
<td>1.4</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>England</td>
<td>1.2</td>
<td>1.4</td>
<td>1.4</td>
</tr>
<tr>
<td>Turin</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
</tbody>
</table>
2. Large variations within countries

Rate ratio’s comparing low to high education. Finland.

![Bar chart showing rate ratios for men and women in different age groups and education levels in Finland from 1980-84 and 1990-94.](chart.png)
3. Variations in terms of the absolute trends

Partial life expectancy between 30th and 75th birthday. Women.
4a: Problems with using ‘unlinked’ studies

Rate ratio’s comparing manual to non-manual classes.
Men 30-59 years

England | Ireland
--- | ---
1.2 | 1.8
1.4 | 2.0
1.6 |
1.8 |
2.0 |
4b: Problems with using ‘unlinked’ studies

New denominator data from Ireland

4c: Problems with using ‘unlinked’ studies

Estimates for Spain and Portugal

![Bar chart showing estimates for Spain and Portugal between 1980-82 and 1988-90](chart.png)
5. The effect of excluding ‘inactive’ men

Rate ratio’s comparing manual to non-manual classes.
Men 30-59 years. Finland

![Bar chart showing rate ratios for all men and active men in two time periods: 81-85 and 91-95. The chart indicates a higher rate ratio for active men in the 91-95 period compared to the 81-85 period.]
6. Sensitivity to alternative social class schemes

Rate ratio’s comparing manual to non-manual classes.
Turin, men 35-59 years.

![Graph showing rate ratios for Italian and E-A schemes in two time periods.](image-url)
Summary of findings

• A generalised tendency of inequalities to widen
  - also from the 1980s until the early 1990s
  - but large variations in the tempo of change

• Often, it is difficult to determine the tempo of change
  - unpredictable effects of data problems
  - sensitivity to the methods chosen
Improving the data basis for monitoring

- Key: national longitudinal studies linking cause-of-death registries to population census / registries

- Challenges
  - North: develop and apply new socioeconomic indicators and classifications
  - South west: develop and utilise new longitudinal data bases for monitoring purposes
  - South east: if necessary, apply other study designs
Life expectancy at 25th birthday by education.
Estonia, men.