



European regional and city comparisons: how does the health of Greater Glasgow and the West of Scotland compare with other cities and post-industrial regions of Europe?

KEY FINDINGS

Note. This briefing paper summarises the work of two separate, although related, projects: the first compared trends in mortality between the West of Scotland and other comparable post-industrial regions of the UK and Europe; the second used recent health survey data to compare health-related behaviours between Greater Glasgow and other European urban settings.

Comparisons of mortality trends between the West of Scotland and other post-industrial European regions showed that:

- Mortality rates are generally lower and – crucially – appear to be improving at a faster rate in the other post-industrial regions compared to the West of Scotland. This finding is complicated by the fact that the West of Scotland appears to compare relatively favourably with the other regions in terms of socio-economic factors such as wealth, unemployment and educational attainment.
- The relative poor rates of improvement in mortality in the West of Scotland appear to be particularly driven by mortality among the younger (especially male) and middle-aged female Scottish populations.
- Striking differences in mortality trends between Scotland and the other regions were observed for a number of specific causes of death including certain cancers, suicide, and chronic liver disease and cirrhosis.

Comparisons in health behaviours between Greater Glasgow and a selection of other urban areas in Europe showed that:

- Greater Glasgow compared particularly poorly in relation to levels of smoking and obesity. Smoking prevalence was higher than in the majority of the European areas analysed (and this was especially true of females); similarly, the majority of European areas included in the analysis had significantly lower levels of obesity among both men and women.
- More limited comparisons (with other areas within the UK only) showed little difference in levels of alcohol consumption, but suggested levels of physical activity appeared to be significantly higher in Greater Glasgow compared to some other UK settings.
- Greater Glasgow did not stand out as having a particularly worse socio-economic profile than the other areas analysed.

INTRODUCTION

Post-industrial decline (and its many associated factors) is frequently cited as one of the major underlying reasons behind the poor health profile of Scotland and, especially, the West of Scotland. This begs the obvious question ‘how have other, similar post-industrial areas in Europe fared in respect of recent health trends?’ The first project reported in this briefing paper sought to answer this question.

Within the West of Scotland, the population of Greater Glasgow experiences the worst levels of ill-health. The second project reported here sought to cast light on some of the potential reasons for poorer health in the area by comparing health-related behaviours (and some other health measures) between Greater Glasgow and other UK and European urban settings.

AIMS AND PURPOSE

To enhance our understanding of the role of post-industrial decline on the health of Scotland, the aims of the first (mortality-based) project were to:

1. identify comparable post-industrial European regions; and
2. analyse long term trends in mortality in these regions for a range of causes.

The aims of the second (health survey-based) project were to help build a deeper understanding of Greater Glasgow’s health by comparing health-related behaviours and health measures in the area with other UK and European settings. Comparisons were made with areas in England, Northern Ireland, the Republic of Ireland, Wales, Sweden, Finland, Norway, Spain, Belgium and Germany. The extent to which differences were due to variation in socio-economic circumstances was investigated.

APPROACH AND METHODS

The post-industrial regions analysed as part of the mortality-based project were identified through extensive consultation with experts in the fields of European public health and European history, backed up by analysis of regional industrial employment loss over the past thirty years.

For each region identified, detailed population and mortality data for the past 20-25 years were requested from national and local statistical agencies, from which comparable mortality rates and other related statistics were calculated. A detailed comparison of male and female life expectancy between the West of Scotland and the other twenty regions identified was undertaken. More detailed analyses of age, sex, and cause-specific standardised mortality rates were then carried out for the West of Scotland and a subset of ten comparable regions, selected principally on a one-region-per-country basis.

Additional analyses of potentially influential factors (e.g. socio-economic measures, severity of deindustrialisation) were also undertaken.

For the Greater Glasgow health survey based analysis, comparable health survey data were obtained for urban settings within the countries listed above. Comparisons of a range of measures between Greater Glasgow and the other locations were carried out separately for men and women. Analyses were undertaken adjusting first for age alone, and then for both age and socio-economic status (in terms of social class and educational attainment measures).

FINDINGS AND CONCLUSIONS

Comparisons between the West of Scotland and other post-industrial regions in Europe

- Twenty post-industrial regions were identified, thirteen in mainland Europe (within Germany, France, Belgium, Netherlands, Poland, Czech Republic) and seven within the UK. Data were obtained for all but one of the regions, and in most cases for a 20-25 year period.
- Just as the West of Scotland's mortality rates are the highest in Scotland, mortality levels in each of the selected regions tended to be the highest, or among the highest, of all regions in the respective parent countries.
- A simple analysis of a handful of socio-economic indicators (GDP, unemployment, worklessness, economic activity, educational attainment) suggests that the West of Scotland currently fares relatively well in these terms, especially compared to parts of Eastern (ex-Communist) Europe. However, a different story emerged from the analyses of trends in life expectancy and cause-specific mortality.
- Life expectancy in the other twenty post-industrial regions tends to be higher, and in virtually all cases is improving faster than in the West of Scotland. West of Scotland females currently have lower life expectancy than every selected region, while males currently have lower life expectancy than every region except Katowice in Poland and Northern Moravia in the Czech Republic – however, projections suggest that these regions will overtake the West of Scotland in around ten years time if current trends continue.
- In-depth analysis of cause-specific mortality trends for the West of Scotland and a subset of ten key post-industrial regions (the Ruhr area and Saxony in west and east Germany respectively; Katowice in Poland; Northern Moravia in the Czech Republic; Nord Pas de Calais in France; Wallonia in Belgium; Limburg in the Netherlands; Northern Ireland; Swansea & the South Wales Coalfields; and Merseyside) showed that:
 - the higher levels of mortality experienced in the West of Scotland compared to elsewhere appear to be driven especially by rising levels of mortality in the 15-44 age group (especially among men) and significantly higher rates among middle-aged (45-64) females;
 - the pattern of rising male and, to a lesser extent, female mortality rates in the 15-44 age group is in sharp contrast to the experience of the other regions. In the majority of regions rates in this age band have, as with all other age groups, fallen consistently over time;
 - the increases in WoS mortality rates in the 15-44 age band are driven especially by 'external causes' (in particular, suicide) and chronic liver disease and cirrhosis;
 - the higher level of mortality among 45-64 year-old women in the WoS seems to be particularly attributable to: cancer (especially lung cancer, breast cancer and oesophageal cancer); IHD and stroke; COPD; and chronic liver disease and cirrhosis.
- More detailed comparison of mortality rates between the West of Scotland and the two regions included in the analysis with the 'best' health – Northern Ireland and Saxony – showed that, on average, the West of Scotland would have around 5,000 fewer deaths per year if it experienced the same mortality profile as these two other post-industrial European areas.

Comparisons between Greater Glasgow and other European urban settings

- In comparisons of health behaviours made with a wide range of UK and European urban areas, smoking prevalence rates among men and – especially – women were significantly higher in Greater Glasgow.
- Similarly, levels of obesity among both males and females were higher in Greater Glasgow than in the majority of the 32 other areas analysed.
- The number of areas for which comparisons could be made on levels of alcohol consumption, binge-drinking and physical activity were much more limited: analyses could only be carried out between Greater Glasgow and certain parts of the UK. Findings were mixed: excess weekly alcohol consumption was significantly higher in Greater Glasgow compared to part of Northern Ireland but not compared to parts of England such as Greater Manchester and Cheshire & Merseyside, while – with one or two exceptions – there was little difference in levels of binge drinking between Greater Glasgow and parts of England and Wales. However, levels of physical activity in Greater Glasgow were significantly higher compared to parts of Northern Ireland, and Wales (Cardiff).
- A surprising finding was the fact that Greater Glasgow did not stand out as having a particularly worse socio-economic profile than the other 32 areas studied: it was similar in terms of social class to many of the other areas, and although it had the highest proportion of its adult population with no educational qualifications, there were a number of other areas with comparable education profiles.
- Although this briefing paper has focussed primarily on the results of health behavioural factors, a number of other self-reported health outcome measures were also analysed. In general, these showed higher levels of long-standing illness, self-reported bad or very bad general health, and psychological morbidity (as defined by a GHQ12 score of 4 or more ¹) among Greater Glasgow respondents than those in the other European areas.

General conclusions

Both reports confirm Glasgow's and the West of Scotland's poor health profile compared to other parts of the UK and Europe. The comparisons between post-industrial regions are perhaps particularly relevant and striking given that post-industrial decline and related factors, such as material deprivation, are often cited as the underlying reason for Scotland's – and particularly the West of Scotland's – poor health outcomes. The fact that health in other comparable regions in Europe is better and/or improving faster is a major concern.

The health survey comparisons work points to particular behavioural issues (e.g. smoking, obesity) which are certainly relevant, but are only one of a range of possible explanatory factors. The 'Aftershock of Deindustrialisation' report briefly explores a number of such potential explanations including not only health behaviours, but also deprivation, income inequalities, and the severity of deindustrialisation experienced in West Central Scotland. However, it is clear that more work and more detailed information are required to advance our understanding of what lies behind these trends. This is work that the Glasgow Centre and its partners will now be taking forward.

¹ GHQ12: this is the 12-item version of the General Health Questionnaire which is widely used as a standard measure of mental distress and psychological ill-health. A score of four or more is used to indicate the presence of a possible psychiatric disorder.

ACKNOWLEDGEMENTS

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REFERENCES

David Walsh, Martin Taulbut and Phil Hanlon. The Aftershock of Deindustrialisation: trends in mortality in Scotland and other parts of post-industrial Europe. Glasgow Centre for Population Health, 2008.

Linsay Gray. Comparisons of health-related behaviours and health measures in Greater Glasgow with other regional areas in Europe. Glasgow Centre for Population Health, 2008.

Both reports are available from: <http://www.gcph.co.uk/content/view/19/36/>.

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