

History, politics and vulnerability: explaining excess mortality in Scotland and Glasgow

Executive summary

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EXECUTIVE SUMMARY

The poor health profiles of Scotland, and especially that of its largest city, Glasgow, are well known. Much of this is explained by recent experiences of deindustrialisation, deprivation and poverty: the latter are the root causes of poor health in all societies, not just Scotland. However, in addition, high levels of *excess mortality* – that is, higher mortality *over and above that* explained by differences in socioeconomic deprivation – have been observed for Scotland compared with England & Wales, as well as for Glasgow compared with similar post-industrial UK cities such as Liverpool, Manchester and Belfast.

The scale of this excess is considerable. It accounts for approximately 5,000 extra, ‘unexplained’, deaths per year in Scotland, and makes a substantial contribution to the other principal mortality ‘phenomena’ associated with Scotland in recent times: the lowest, and most slowly improving, life expectancy in Western Europe; the widest mortality inequalities in Western Europe; and the persistently high rates of mortality among those of younger working ages. After adjustment for differences in deprivation, premature mortality (<65 years) in Scotland is 20% higher than in England & Wales (10% higher for deaths at all ages); similarly, the excess for Glasgow compared with Liverpool, Manchester and Belfast has been shown to be approximately 30% for premature mortality, and around 15% for deaths at all ages.

The key features of this excess are:

- it is observed in all parts of Scotland compared with the rest of Great Britain, but is greatest in and around the post-industrial West Central Scotland (WCS) conurbation and, in particular, Glasgow
- it is increasing over time
- it is seen across all adult age groups, but is highest among those of working age (especially younger working age)
- it is observed across all social classes, although for premature mortality, it is more pronounced in comparisons of the poorest populations
- it is observed for a broad range of causes of death, although with important distinctions between excess *premature* mortality (particularly influenced by higher rates of death from alcohol, drugs and suicide) and excess mortality *at all ages* (driven particularly by higher numbers of deaths from cancer, heart disease and stroke)
- and given the relationship between socioeconomic factors and health behaviours, the excess persists even after statistical adjustment for differences in behaviours such as smoking, physical activity, diet etc.

A great many potential explanations have been proposed to explain this extremely complex phenomenon. A previous report published in 2011 summarised and assessed a range of potential explanations, and attempted a synthesis of the most likely causes. That synthesis, however, was hindered by a lack of available evidence for many of the proposed theories. Since then a considerable amount of further research has been carried out, including a number of new projects undertaken in support of the *new* synthesis of evidence which is the focus of this report. The ultimate aim of this new work is to provide a much greater understanding of the causes of, and therefore the most appropriate responses to, Scotland's and Glasgow's high levels of excess mortality.

A total of 40 potential explanations for Scottish excess mortality have been examined, based on an assessment of evidence that has been gathered over many years. On the basis of these assessments, two explanatory models have been developed: one for Glasgow (based on comparison with Liverpool and Manchester – both having been shown to be excellent comparator cities), and one for Scotland (based on comparison with England & Wales).

Both models are 'anchored' in important contextual knowledge. This includes the importance of key exposures for adverse population health in terms of poverty, deprivation and deindustrialisation. These sit alongside, and are related to, UK economic and social policies since the late 1970s which have resulted in a widening of inequalities across the UK in terms of both socioeconomic and – as a consequence – health characteristics. As part of that process, post-industrial, deprived cities such as Glasgow, Liverpool and Manchester are placed at the 'wrong' end of that spectrum of inequality, exhibiting the highest rates of both poverty and mortality. However, over the same decades, two further, less easily explained, outcomes have been observed. The first is that differences in poverty and deprivation no longer explain the mortality gap between Scotland and the rest of Britain. Second, there has been a similarly unexplained divergence in mortality between Glasgow and the two English comparator cities. The explanatory models in the report are, therefore, focused upon identifying the factors (so-called 'effect modifiers') which are likely to have brought about these additional adverse outcomes.

Key to **the explanatory model for Glasgow** is that the city, over time, was made **more vulnerable** to the particular socioeconomic and political exposures mentioned above. The concept of vulnerability has been shown to be important in understanding differences in health between populations (and across different sections of populations). For Glasgow, the heightened vulnerability has been generated by a series of historical processes which have cumulatively impacted on the city's population. These include:

- The **lagged effect of high historical levels of deprivation**: although analyses of historical income and employment based measures of deprivation show few differences between Glasgow, Liverpool and Manchester over many decades, compared with these English cities, Glasgow (alongside other Scottish areas) endured notably higher levels of deprivation, as evidenced by overcrowding, from at least the middle of the 20th century. This may represent an underlying vulnerability.

- A further level of vulnerability resulted from **Scottish Office regional policy from the later 1950s**, including the **socially selective New Town programme**. Policy was aimed at relocating both industry and a section of the population (generally younger, skilled workers, in employment, and often with families) to New Towns and other growth areas across central Scotland, away from what had been designated a 'declining' city, as part of a wider regional 'modernisation' agenda focused on attracting lighter industries. These other areas became the key priority in terms of investment, and this policy was extended and expedited over the ensuing decades despite awareness of the negative consequences (both socioeconomic and also ultimately health-related) for Glasgow.
- Closely related to this evolving regional policy agenda, **the nature (and scale) of urban change** experienced within Glasgow in the post-war period (1945-1980) was different to that in the comparator cities. This is relevant to population health in terms of social determinants such as housing, living conditions and social and community networks. Glasgow differed from the comparator cities in terms of: larger-scale slum clearances and demolitions; larger within-city (poor quality) peripheral council house estates; greater emphasis on high-rise development; and crucially, much lower per capita investment in housing repairs and maintenance of the public housing stock.
- Differences in **local government responses to UK government economic policy in the 1980s** also had impacts. Research suggests that in Glasgow, local responses, in their early prioritisation of inner-city gentrification and commercial development, potentially exacerbated the damaging impacts of UK policy on what was already a vulnerable population. In the other cities, however, responses were more likely to have mitigated these damaging impacts, either by slowing them (Manchester) or by mobilising local opposition against them (Liverpool). In the latter case, the city-level response fostered widespread participation and politicisation of the Liverpool public and, as a consequence, local government gave greater priority at an important stage to dealing with important social issues (e.g. addressing poverty, building new council housing and public amenities) than was the case in Glasgow. Thus, differences in responses brought about **protective factors in the comparator populations** relative to Glasgow.
- A further resulting protective factor (related to these historical processes of politicisation, participation and associated factors such as strengthening of community ties) is higher levels of what is often referred to as **social capital** (or social fabric) in Liverpool as compared with Glasgow.
- More speculatively, the research suggests that other **protective factors** may be operating in **Manchester** e.g. in terms of the city having a greater level of ethnic diversity (and the healthy migrant effects with which that is likely to be associated).
- Alongside, and entwined with, the 1980s processes highlighted above, the vulnerability of the Scottish (including Glaswegian) population was potentially

enhanced by the negative impact of the so-called '**democratic deficit**' of that period, characterised by feelings of despondency, disempowerment, and lack of sense of control (recognised 'psychosocial' risk factors with links to adverse health outcomes).

- A further major component of the model (although one that is more a core determinant of health rather than an 'effect modifier') is the **inadequate measurement of poverty and deprivation**: that is, that despite many different measures of deprivation and socioeconomic circumstances having been used in analyses of excess mortality to date, these measures fail to capture sufficiently differences in the complex, multi-dimensional, 'lived reality' of deprivation and poverty in Scotland, and especially in Glasgow, compared with elsewhere in Great Britain and the UK. It seems likely that aspects of the vulnerability-inducing historical processes described above are highly relevant to this.
- It is likely that unmeasured aspects of deprivation potentially also include **a more negative physical environment** (specifically in relation to levels of vacant and derelict land), as well as aspects of **educational attainment** (although the contribution of the latter in particular is small).
- The synthesis also points to a number of **smaller, additional factors**, the individual impacts of which are likely to be very small, but which cumulatively may be relevant to particular aspects of population health.

The **explanatory model for Scotland** as a whole is made up of various components, including:

- the model for Glasgow in its entirety, given the extent to which that impacts on the national level of excess mortality.
- particular elements of the Glasgow model which are also highly (in some cases more) relevant to Scotland as a whole. These include: the inadequate measurement of deprivation; the lagged effects of deprivation (in particular higher levels of overcrowding historically); and key vulnerabilities, including the so-called democratic deficit, as well as other aspects of Scottish Office regional economic policy in the post-war period which not only had a detrimental effect on Glasgow, but failed to deliver anticipated benefits elsewhere in the country.
- Additional factors including a more profound experience of deindustrialisation compared with England & Wales, and some differences in (potentially culturally-influenced) 'downstream' health determinants such as diet.

Implications for policy

A key point emphasised throughout the report, and elsewhere, is that **economic policies matter for population health**. In response to the evidence presented in the report, therefore, a number of recommendations for policy (in particular economic policy) are listed. These emphasise the need to address three issues simultaneously:

- to protect against key exposures (e.g. poverty, deprivation) which impact detrimentally across the whole UK (but especially in places like Glasgow, Liverpool and Manchester)
- to address the *existing* consequences of Glasgow's vulnerability
- and further, to mitigate against the effects of *future* vulnerabilities which are likely to emerge from UK government changes to social security and reduced public spending.

The important factors which emerge from this analysis – **poverty and deprivation**, and **exacerbated inequality** linked to current, past and future **vulnerabilities** – are intractably entwined. Thus the policy recommendations in the report seek to address all these issues in unison, including – specifically – the need to narrow inequalities in income and wealth in order to narrow inequalities in health in Scottish society. The recommendations are drawn from different sources: some follow directly from specific research findings; some reflect existing evidence of appropriate responses to issues highlighted in the report; and others have been proposed by others with expertise in the relevant policy areas. They are listed under four headings:

1. **National (Scottish) economic and social policy.** Given all the evidence that economic policies have profound implications for population health, the report urges that all opportunities available within Scotland are taken to redistribute income and wealth across Scottish society. Specific measures relating to ownership of capital, income and corporate taxation, wealth and asset taxation, 'fair work' (including adequate wage levels), industrial policy, social security, addressing the cost of living, and 'poverty-proofing' Scottish Government policies are all set out.
2. **Housing and the physical environment.** These include recommendations in relation to: expanding the social housing building programme; extending the Scottish Housing Quality Standard; targeting cold and damp housing and fuel poverty; strengthening the impact of the Place Standard for Scotland; and improving greenspace access and quality in deprived areas.
3. **Local government actions.** These include: the need to recognise, and act upon – at the highest levels of local government – the impact of local decision making on population health; the role of local government in redistributing resources towards areas of greater need; a review of the boundaries and/or the funding allocation system for local government; a 'poverty proofing' approach to local government policy-making; further actions to narrow inequalities at the local level; and specific to Glasgow (and a number of other local authorities), consideration should be given

as to how to maximise the potential of the recent 'City Deals' investment to mitigate against the effects of vulnerability in the population.

4. **Understanding deprivation:** specifically, that there is an urgent need to prioritise further research on the true nature and experience of deprivation in Scotland that does not seem to be captured by existing data and measurements.

A number of weaknesses associated with the synthesis, and resulting explanatory models, are acknowledged in the report. These principally relate to the fact that assessment of some hypotheses is still hindered by a lack of robust evidence and data. A greater number of these 'unknowns' relate to comparisons of Scotland with England & Wales, meaning that there is less certainty around whether and how far some of the important vulnerabilities highlighted in the Glasgow model also apply to areas that lie outside the West Central Scotland conurbation. Despite these, and other weaknesses, however, we believe the report has helped to further our understanding of the underlying causes of Scotland's and Glasgow's excess mortality. What is important now is that there is an appropriate response to that evidence in order to improve the health of Scotland's population. This must be done alongside, and entwined with, ever more urgent actions to address the key drivers of overall poor health in the country – poverty and deprivation – and to seek to narrow the widening gap in wealth and, therefore, health in Scottish society.

