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Hard times or Good times? Inequalities in the health effects of economic recession

Editorial for the International Journal of Public Health

Since the banking crisis in 2007, there has been a deepening economic recession with global reductions in economic growth and rising unemployment. This has led to renewed discussions about the effects of the economic cycle on population health both in the popular media and in academia (a partial revival of the Brenner-Ruhm debate). However, whilst the media coverage tends to speculate on the negative health effects of recession, there appears to be an emerging consensus in the academic literature that the relationship between macroeconomic fluctuations and health is generally pro-cyclical. In other words, that, for example, mortality increases when the economy is growing and reduces during periods of economic recession (Ruhm 2000; Laporte 2004; Neumayer 2004; Tapia Granados 2005; Gerdtham and Ruhm 2006; Tapia Granados and Ionides 2008): that economic recessions are good for health. Many mechanisms have been put forward to explain this, including an increase in work demands and working hours during periods of growth, more traffic accidents, a higher consumption of alcohol (Ruhm and Black 2002) and tobacco (Ruhm 2000), as well as reductions in physical activity levels (Ruhm 2000), leisure time and social interactions. However, in this editorial, we unpick this academic “consensus” on the basis that not only do the health effects of the macroeconomic cycle vary in respect to how key factors are measured (i.e. the lag effect, competing measures of the economic cycle, variation by health outcome), but that they also depend on who you are and where you live. The debate to date has been largely dominated by a few US studies using aggregate population data, which has been analysed at large geographical levels, with little consideration of demographic, socio-economic and spatial inequalities in the health effects of economic recessions.

Demographic and socio-economic inequalities in susceptibility and health effects

Probing beneath the surface shows that the relationship between the macroeconomic cycle and health is not evenly distributed across the population. Some studies report that men are more affected than women by changes in the economic cycle. So for example, a Swedish study found that during recessions, mortality increased for men but not for women (Gerdtham and Johannesson 2005). In

contrast, a USA study found that a higher state unemployment rate is associated with procyclical mortality among working age men and older men and women, but not with any increased mortality in working age women (Edwards 2008). Health inequalities by sex could be explained by differences between men and women in the type and industry of work, with men more likely to work in the private sector and in parts of the economy conventionally more vulnerable to economic downturns (such as finance and business services, manufacturing, construction, (Office for National Statistics 2009)).

The impact of economic fluctuations also varies by age groups, with greater risk of mortality observed among younger Americans (Ruhm 2000; Tapia Granados 2005); these studies did not test whether estimates are statistically significant different between age groups (and that historically, younger people have had low employment rates compared to prime-age workers). In addition, negative impacts of economic contractions appear to extend beyond those of working age to affect the health of older adults (Ruhm 2007) but also the health of children (Tapia Granados 2005; Miller, Page et al. 2009) suggesting that the negative effects of economic change are not only attributable to people's employment experiences but that they stretch over the life course.

Further health inequalities in the impact of the recession have been observed among different socioeconomic groups. For example, in the US, Edwards (Edwards 2008) observed that increasing state unemployment levels were associated with increased mortality risk among people with low education and with lower risks among those with a higher education whereas others have reported more weight related issues and mental health problems among African-Americans but not among Whites or Hispanics (Charles and DeCicca 2008). Socio-economic inequalities have also been observed in Japan where, following the economic crisis of the 1990's, overall population health status improved but non-manual workers were more likely to report poor health, especially in men (Kondo, Subramanian et al. 2008).

THE SCALE AND GEOGRAPHIC AREA OF ANALYSIS

Most of the studies examining the impact of economic expansion/recession (often measured using change in employment/unemployment rates) have used aggregated data on both health and economic indicators. These ecological associations are most often measured at a broad geographical scale, e.g. at the national (Tapia Granados 2005; Gerdtham and Ruhm 2006) or state/regional levels (Ruhm 2000) levels, although some have examined the impact of local labour market fluctuations on health at the metropolitan area level (Charles and DeCicca 2008). Observing that, at the ecological level, increasing employment rates is associated with increasing mortality cannot be inferred to operate in similar fashion at the individual level. That would be committing an ecological fallacy. In fact these ecological studies tell us nothing about individuals' experiences of economic recession growth/recession, e.g. job losses, job insecurity, and how these experiences influence health. They are inconsistent with findings from 'individual-level' epidemiological studies on the relation between work and health where longstanding evidence demonstrate that for people, being unemployed or experiencing job insecurity is associated with poor physical and mental health (Martikainen and Valkonen 1996; Valkonen and Martikainen 1996).

In addition, little is known about differential spatial impacts whereby some local areas may bear the brunt of economic crisis more than others. In deprived urban areas, although lower employment rates might always prevail, decline of employment rates might be more rapid than in more affluent areas (Equality and Human Rights Commission, Department for work and pensions et al. 2009), therefore increasing spatial inequalities. An increasing body of research demonstrates that the socioeconomic conditions of small local areas influence a range of health outcomes, independently of individuals' own socioeconomic circumstances (Stafford, Martikainen et al. 2004; Cummins, Macintyre et al. 2005; Stafford, Cummins et al. 2005)(Fone, Dunstan et al. 2007; Fone, Lloyd et al. 2007; Riva, Bambra et al. In Press) (Bosma, van de Mheen et al. 2001).

NATIONAL SOCIAL POLICIES AND SAFETY NETS

Yet social policies and safety nets in a country are likely to alleviate the negative health impacts of a changing economy. Examining the relationship between macroeconomic conditions and deaths in countries of the Organisation for Economic Co-operation and Development (OECD), Grundtham and

Rhum (2006) observed that all-cause and cause-specific mortality increase when labour markets strengthen, but that the procyclical fluctuation in mortality is much stronger in countries with lower public social expenditures (Gerdtham and Ruhm 2006). Stuckler and colleagues observed similar findings across the 26 countries of the European Union (Stuckler, Basu et al. 2009).

Concluding comments

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