# The effects of income inequality on health

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#### **Abstract**

Much of the discussion about individual and group differences in illness and life expectancy has focused on the effects of individual characteristics, both status and behavioural. This is also characteristic of much of the literature, which attempts to explain why men have higher rates of disease and lower life expectancy than women.

After a period in which 'social policy was no longer such an important part of preventive health policy', there is now renewed interest in the influence of the socioeconomic environment on health. Indeed, recently compiled evidence indicates that increasing income inequality is likely to have adverse effects on the community's health. These findings highlight the potential dangers of policy changes which accelerate social and economic divisions.

## Increasing inequality and health outcomes

A great many studies from all parts of the world have documented the strong association between a person's socioeconomic status and mortality (Adler et al. 1994). Indeed, it has been described by Kaplan et al. (1996, p 999) as 'one of the most pervasive and enduring observations in public health'.

The relationship has been observed for most diseases and for most measures of socioeconomic status. Generally speaking, socioeconomic status has been regarded as a property of the individual which determines access to economic resources and hence the availability and quality of food, housing, medical care and other resources critical for health and well-being.

Australian research confirms these relationships. The 1992 study undertaken as part of the National Health Strategy (1992) clearly showed that the most disadvantaged in the community had the poorest health, including more

disabilities and chronic illnesses, and the highest mortality rates. In Australia, as elsewhere, low socioeconomic status has also been found to be associated with a higher incidence of risk factors, such as smoking, obesity and inactivity, which are predictive of diseases such as lung cancer, heart disease and cerebrovascular disease. However, the data also show that low income earners still have poorer health status even when their higher prevalence of risk factors is taken into account.

Less well-researched, but possibly as important for a relatively affluent society such as Australia, is the effect of the overall *distribution* of income. Recent crossnational and intra-nation studies have suggested a relationship, not just between income levels and life expectancy, but also between income distribution and life expectancy: the greater the gap in income between the rich and the poor in a given society, the lower the life expectancy and the greater the incidence of illness.

For example, in his study of national income inequality among 11 industrialised countries, Wilkinson (1992) reported a correlation of –0.81 between indices of inequality and life expectancy after controlling for gross national product per capita. He illustrates this point with the contrasting experiences of Britain and Japan, which in 1970 had similar income distribution and life expectancy but since then have diverged significantly. Japan now has the highest life expectancy in the world and the most egalitarian distribution of any country on record. Conversely, in Britain income distribution has widened since the Thatcher experiment in the mid-1980s and mortality among men and women between 15–44 years has actually increased.

Comparable research within the United States using state level data (Kaplan et al., p 1003) has also revealed a significant correlation between the percentage of total household income received by the less well-off 50% in each state and all cause mortality, unaffected by state median incomes. The researchers also found that income inequality was significantly associated with age-specific mortalities and rates of low birth weight, homicide, violent crime, work disability, expenditure on medical care and police protection, smoking and sedentary activity. They also found that declines in mortality in the 1980s, experienced by all the states, were smaller in states that had greater inequality at the beginning of the decade.

These differences in equality were paralleled by relative investments in human and social capital and the authors concluded that 'economic policies that increase income inequality may have a deleterious effect on population health'. In an interview with the *New York Times* announcing the key findings of his research, Kaplan said that 'The evidence...suggests that the increased death rates in those states are not due simply to their having more poor people. Income inequality

seems to be increasing mortality rates among non-poor people as well, and we are investigating that possibility' (Pear 1996).

A similar study also undertaken in the United Sates at much the same time used a different methodology to determine the effect of income inequality on all cause and cause-specific mortality (Kennedy, Kawachi & Prothrow-Smith 1996, pp 1004–7). Their index of income inequality, the Robin Hood Index, was positively correlated with age-adjusted mortality and, as with the Kaplan study, this association remained after adjustment for poverty. The effects were also evident for infant mortality, coronary heart disease, malignant neoplasms and homicides, and strong associations were generally found between the inequality index and causes of death amenable to prevention and medical intervention. In interpreting the data, the authors concluded that 'the size of the gap between the wealthy and the less well off – as distinct from the absolute standard of living enjoyed by the poor – seems to matter in its own right' and suggest that 'policies which deal with the growing inequities in income distribution may have an impact on the health of the population'.

What are the likely explanations for these relationships between income inequality and poor health? It may be, as Kennedy, Kawachi and Prothrow (1996, p 1006) suggest, that 'income distribution may be a proxy for other social indicators, such as the degree of investment in human capital'. The authors further speculate that communities which tolerate gross inequalities in income may be the same ones which undermine social goods such as public education and health care.

Reinforcing this interpretation is Kaplan and associates' (1996) demonstration that in the United States those states with the greatest income inequality are also the ones with more violence, more disability, more people without health insurance, lower spending on education and literacy programs and poorer educational outcomes. In other words, people in these communities lead more difficult lives.

A related but somewhat different explanation is advanced by Waldmann (1992, pp 1283–1302) in accounting for differences in infant mortality associated with greater wealth dispersal between different countries. After eliminating a range of possible causes for the differences in infant mortality, he concluded that government policies generally may be one of the keys to the differences observed. As Wilkinson (1992, p 168) concludes, results such as these may explain why in many countries 'social class differentials have not narrowed despite growing affluence and the fall of absolute poverty'.

Clearly it is also important to ascertain the behavioural, psychosocial and biological pathways by which inequality produces these effects on the health of the population. We need to understand which sectors of the population are most affected by the health burden of inequality and how that effect is mediated. However, it is tempting to conclude, as do Kaplan et al. (1996, pp 1002–3), that 'from a prevention point of view, it may be more important to deal with these structural features than their psychosocial consequences' and that 'it would be prudent to consider the health effects and the costs associated with them when the impact of economic policies is evaluated'.

## Increasing inequality in Australian society

We might ask whether this matters in Australia, the allegedly egalitarian paradise. It matters principally because there is increasing evidence of growing inequality in the developed world, including Australia (Gregory & Hunter 1995). This is a phenomenon that is now receiving greater attention, including from those who see it as an unfortunate, but necessary, consequence of economic globalisation. In most studies the key indicator of inequality has been income inequality, with Withers, Clarke and Johnston (1995) concluding that during the 1980s and 1990s there was 'an increase in measured inequality of incomes in most developed countries'.

A recent OECD report (1995) on income distribution in OECD countries (the Luxembourg Study) showed a general (although not universal) trend towards greater income inequality – in the case of Australia notably in market incomes (wages, interest, rents, and so on). Similarly, the National Centre for Social and Economic Modelling calculated that in 1990 the richest 10% of Australian families received 23% of the national income (up 1.7% from 1982), while the poorest 10% received less than 3% (down 0.2%) (Harding 1994).

Gregory and Hunter's (1995) analysis of the economic distance between different parts of Australian cities showed that from 1976 to 1991 the mean income of households in the top 5% of census districts increased by 25%, while in the lowest 5% it fell by 23%. For the period between 1976 and 1981, they attributed this change to growing levels of unemployment, but from 1981 to 1991 it appeared to result from a marked increase in incomes in the higher status areas. They concluded that we were confronting an increasingly polarised society in which, they claimed, 'it may be increasingly true to say that one half of Australia does not know how the other half lives'.

This conclusion, however, should be tempered by the fact that the available evidence does not support the simple view that 'the rich are getting richer and

the poor are getting poorer' since, on average, most groups experienced increased real incomes in the 1980s. However, as Saunders (1993) points out, the data on household income do support the view that the increases for those on higher incomes have been greater than for those on middle and low incomes.

This interpretation is reinforced by Harding's 1997 analysis which reveals that there was a growing market-based inequality in earnings and private income between 1982 and 1993–94. While this was fully offset by government policies ensuring progressivity of the tax system and the government cash transfer system, any policy changes which reduce tax progressivity or such benefits could expose this underlying inequality. The Luxembourg study revealed that, of the OECD countries, Australia had the most targeted system of cash transfers, that is, the proportion received is highest for those on lowest incomes and declines as earnings increase.

Non-cash benefits in the form of government-funded services in areas such as health, housing and education also have an equalising effect on income distribution. Substantial assistance to families has been provided in the form of government-subsidised services which increase the amount of income families have to devote to other consumption. For example, Medicare rebates, subsidised hospital treatment and pharmaceuticals significantly reduce family expenditure in these areas. Such services have frequently been ignored in assessments of income distribution and poverty, which have focused almost exclusively on disposable income.

This does not provide a complete picture of the relative living standards of different types of families who are the recipients of non-cash benefits. Harding's (1995) microsimulation model analysis of 1990 final income – private income plus all government cash and selected non-cash benefits minus all taxes – is revealing. The amount of non-cash benefits varied greatly by stages in the life cycle, with families with children and the elderly deriving the greatest benefits, primarily from education and health expenditure.

Non-cash benefits were also found to be progressive in their impact, with the bottom 60% of the population increasing their share of income. These benefits were particularly important for the 30% of Australians in the bottom three deciles, since it increased their after-housing final income by at least 30%.

The forces driving the underlying growth in income inequality are difficult to pinpoint with any precision and vary from place to place, but include higher levels of unemployment, changes in earnings patterns, reduction of progressivity in taxation and transfer payments, and differential growth in various market sectors. Walmsley and Weinand (1997) propose that the principal reason lies in changes to the labour force. Both persistent high unemployment and the rise in

the number of two-income households are identified as significant. Also noted is the downward pressure on wages, particularly for the low-skilled and those starting employment, and increases in poorly paid casual and part-time work. Pressures towards greater competitiveness (including 'downsizing'), privatisation and contracting out of government services may be seen as contributing to increased unemployment.

Inequality is also fed by regional differences in economic opportunities, particularly in rural Australia. Impediments to participation in the workforce, including a non-English-speaking background or poor education, also underlie inequality. Harding found that, while the ageing of the population did not contribute to aggregate inequality, changes in family structure (such as the proportion of couples with children) together with changes in labour force participation (including female participation and rising unemployment) had a measurable effect on inequality. Of interest to policy-makers is her finding that increases in female labour force participation 'appeared to have reduced the inequality of equivalent gross family incomes between 1982 and 1990' (Harding 1994, p 25).

To provide a broader picture of differences in well-being, Walmsley and Weinand (1997) used a range of social indicators to identify regions with significant proportions of people who might face difficulties or incur costs in coping with life: those with no qualifications, limited schooling, non-English-speaking backgrounds and/or childcare needs; the unemployed; the frail aged; single-parent families and those in the private rental market. They found an increasing differentiation of their well-being index both within metropolitan areas and between metropolitan and remote Australia. They did not, however, give any indication of the extent to which access to government services and benefits ameliorated or aggravated these differences.

In aggregate, these studies reveal significant income inequality in Australia, which will almost certainly accelerate if government intervention is reduced. Pressures on some communities are clearly greater than others, with significant disadvantage evident in outer metropolitan and regional Australia in particular.

## The role of government

At the same time as there is evidence of growing market income inequality in Australia, previously ameliorated by cash and non-cash benefits provided as deliberate government policy, we are seeing changes to economic and social policy which threaten to widen the gap between rich and poor. These policy shifts are resonant of those which have occurred in other countries such as the

United Kingdom and the United States. They reflect one side of the argument, still current in economic and political circles, about the ideal nature and extent of government services in our lives. Conservative forces continue to advocate a reduced role for government and its replacement by individual decisions effected in the market place, despite the cautions now being expressed by some of the former champions of smaller government.

In the eyes of some, the sole criterion for assessing government performance should be the extent of reduction in the government sector deficit with commensurate cuts to government programs. Associated with an insistence on the superiority of the private sector and the virtues of competition and deregulation is the crude rhetoric of 'getting government off the people's backs' and reducing the costs to taxpayers. However, as Galbraith (1992, pp 22–3) points out, this is often a highly selective admonition by the 'contented majority' to cut programs to the less well-off, but with 'significant and costly exceptions' for those in positions of wealth and influence.

Associated with these prescriptions for smaller government and the largely unfettered operation of the market is the proposition that individual gain, and not collective good, should determine which services are paid for from taxes and which from personal incomes. Recent decisions and pronouncements from the current government endorse the view that those on higher incomes should 'provide for themselves', for example, by purchasing private health insurance and sending their children to private schools rather than meeting their taxation liabilities and pooling these resources with others to create universal, quality services which are then available to everybody regardless of means.

Galbraith (1996) has warned that 'policies of this kind lead to private opulence and public squalor'. He refers to a more humane and decent philosophy, 'the good society', in which we work together for the greater and common good.

Much of the discussion about smaller government and private provision is conveyed in the rhetoric of 'choice' to disguise the shift away from collective provision: funds which are removed from childcare, health and higher education institutions are alleged to give people greater 'choice' to purchase these services with their own resources in the private sector. The prospect of exercising such choice, however, depends on having sufficient wealth to do so. The predictable outcome of this removal of collective funding and its replacement by individual purchase is the development of a two-tiered system of service provision: a private, high quality system for those who can afford to purchase access and a residual or marginalised system for the poor and indigent.

In the last two Federal budgets, and in many recent State budgets, there have been significant cuts to both the cash and non-cash benefits to the poorer members of our community: reduced entitlements of young people for unemployment benefits, cuts to rent assistance for the unemployed, cuts to childcare funding, increases in the costs of pharmaceuticals, increased charges for nursing home care, lowering of the threshold for Higher Education Contribution Scheme repayments, elimination of the Commonwealth dental program, tax rebates for the privately insured at the expense of funding for public hospitals, discriminatory tax treatment of two-income families, reductions in the availability of publicly funded housing, cuts to labour market programs for the unemployed and so on. These trends are not unique to Australia, but they threaten both the fairness of our society and, given the evidence now available, our health and our physical and mental well-being.

In addition to the cuts to government funding in areas which directly and indirectly affect income inequality, changes to industrial relations legislation and the decentralisation of wages negotiation are adding to the pressures toward inequality. Since those in low-skilled and non-unionised workplaces (often women) are typically less able to negotiate improved wages and conditions, recent data from the Australian Bureau of Statistics (1997) indicating that wages growth has slowed over the last three quarters and actually reversed in the last quarter (–0.1) are of great concern. Data on executive salaries, on the other hand, indicate continuing and robust growth of 5.8% over the year to June (Reserve Bank 1997).

Kapstein (1996), formerly an enthusiast for expanding the role of the market, has remarked that 'restrictive fiscal policy is undermining the bargaining structure of workers in every industrial country'. Even George Soros (1997), who has benefited markedly from the deregulation of financial markets, is aware of the threats to western societies from the uninhibited pursuit of self-interest. He claims that we need to recognise that our 'common interest ought to take precedence over our particular interest' otherwise 'our present system is liable to break down'.

Calls for greater equity in income and wealth are often met with the rejoinder that measures which reduce inequality are inimical to economic growth and that the best way to increase prosperity for all is to forget the differentials and pursue the most rapid growth possible; to enlarge the economic cake rather than worry about how it is cut up. This response ignores the growing evidence from timeseries and cross-sectional studies that greater equity is associated with *faster* economic growth (Persson & Tabellini 1994). All eight of the high performing Asian economies also reduced their income differentials between 1960 and 1980 (Birdsall, Ross & Sabot 1994). Other studies have found that investment tends to be higher and productivity growth faster in countries where income differences are smaller (Alesina & Perotti 1993; Glyn & Milibrand 1994).

In his recent review of the literature on health and income inequalities, Wilkinson (1996, p 1) concludes that 'life expectancy in different countries is dramatically improved when income differences are smaller and societies are more socially cohesive' and that 'social, rather than material, factors are now the limiting component in the quality of life in developed societies'. The lessons are obvious: those decisions which increase inequality in our society are not only likely to create a great sense of unfairness and injustice, but also to make us all sick.

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