

Health, Employment and Recession

The Impact of the Global Crisis on Health Inequities in New Zealand

Introduction

New Zealand entered a period of economic recession in early 2008, intensified by the global economic crisis of September 2008. Gross domestic product (GDP) fell consistently during 2008,¹ and that year saw the economy's worst performance in over a decade (The Treasury, 2010a). Real per capita GDP contracted through 2009 and, despite some market optimism in early 2010, economic indicators remain sluggish. Unemployment rates have risen and remain the highest seen since the last recession in 1997–98. The Treasury recently stated that 'the current recovery is likely to remain muted relative to past recoveries' (The Treasury, 2010b).

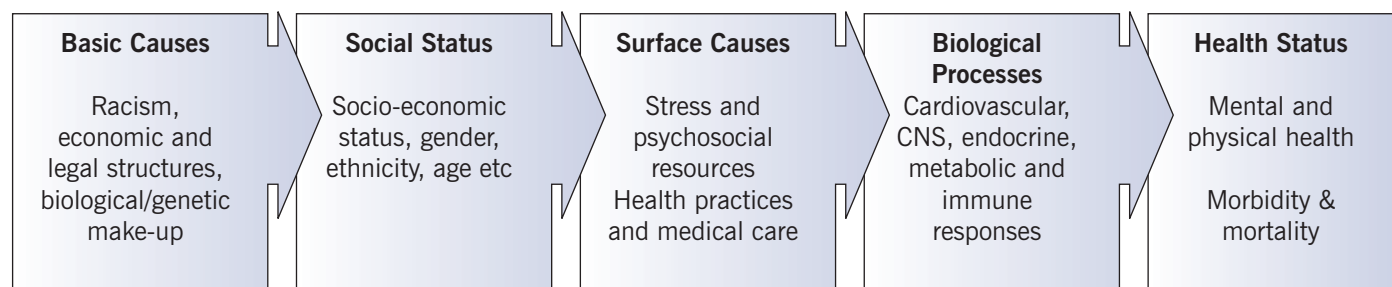
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The recession has given rise to debate in the public health literature over the effect of such economic changes on population health (McLeod and Blakely, 2009; Horton, 2009; Bambra, 2010; Bartley and Ferrie, 2010). However, there has been less focus on its potential impact on health inequities (defined here as inequalities in health between population groups that are preventable, can be considered unfair and that are amenable to policy intervention (Whitehead, 1991; World Health Organisation, 2008)). This article discusses the relationships between economic recession, determinants of population health and health inequities. A conceptual framework is proposed to explain why health inequities may increase in times of recession. The limited evidence for public policies and strategies that may protect or promote equity in health is reviewed and, from this, priority areas for intervention during recession outlined.

Effects of recession on population health and inequities in health

Since the beginning of the 20th century mortality rates in developed countries have consistently declined, with an oscillating pattern around that downward trend line. This trend appears resistant to even major

Figure 1: Model – ‘basic causes’ of inequities in health (adapted from Williams, 1997)



shocks, such as recession or conflict. International evidence also suggests that economic recession is associated, somewhat counter-intuitively, with short-term decreases in total population mortality. The largest recession effect on mortality appears to be a decrease in road traffic deaths, with smaller reductions seen in child mortality, cardiovascular deaths and cancer deaths (Tapia Granados, 2005; Gerdtham and Ruhm, 2006; Bezruchka, 2009; Stuckler et al., 2009).

However, the *differential* distribution of the impact of economic recession on differing population groups is not as well studied. Effects have been shown to vary for different age groups and diseases, by sex, and by method of measurement of economic change (Brenner, 1983; Brenner, 1987; Edwards, 2008; Stuckler et al., 2009). Importantly, from an equity perspective, a net positive effect of economic recession on life expectancy could occur despite some groups being negatively affected.

Evidence from New Zealand research also suggests that if past trends and policy responses to economic recession are replicated, relative and in some cases absolute, inequities in health have the potential to increase during this current economic downturn, despite ongoing decline in overall mortality (Pearce et al., 2006; Blakely et al., 2007; Blakely, Tobias and Atkinson, 2008; Tobias et al., 2009). During the period of economic recession and major economic reforms in New Zealand from 1984 to the mid-1990s, unemployment became a structural feature of the economy, median income levels declined, and income inequality increased dramatically. Even by 2009, the incomes of the bottom 30% of the population were on average only a little better in real terms than those of their counterparts two decades earlier in 1988, while the upper income quintile was

proportionately much better off (Ministry of Social Development, 2010).

In parallel, health inequalities increased from 1984 to the mid-1990s: relative inequalities in child mortality by income group (Shaw et al., 2005) increased, as did relative inequalities in adult mortality. These were particularly evident in low-income young men, in whom rates of suicide, and absolute and relative mortality inequities, increased (Blakely et al., 2007; Blakely, Tobias and Atkinson, 2008). Geographical and ethnic inequalities also widened in the period 1984–1996, and for Māori men life expectancy stagnated (Pearce et al., 2006; Blakely, et al., 2008). Overall, relative inequalities in mortality and life expectancy gaps between Māori and non-Māori widened in the mid-1980s–1990s, in parallel with trends in social inequalities; these were most noticeable in the period 1991–94, and in men (Tobias et al., 2009).

How does economic recession affect population health and equity?

A conceptual framework or theory must be able to satisfactorily explain the long-term decline in mortality; the *relative* (and sometimes absolute) inequalities in mortality between socio-economic and ethnic groups, which have largely persisted or even increased over time; and the effects of economic recession on both population health and inequities.

Three dominant theories for the consistent reduction in mortality are postulated in the literature (Murray and Chen, 1993). McKeown (1976) argued that declining trends in mortality preceded major medical advances, and that economic growth, resulting in improved incomes and standards of living, improved housing, sanitary engineering and nutritional status (i.e. the ‘social’ determinants of health), were

largely responsible for the impressive fall in mortality seen since the end of the 19th century. The impact of modern health care and technology, and changes in culture and in societal and personal health behaviour, such as tobacco use or the increased autonomy of women, are the other theories proposed. All three have likely contributed to mortality decline, with debate continuing over the proportion and importance of each over different time periods. What is well established is that population health is significantly influenced by broader social determinants, rather than solely by genetics, personal behaviours or access to medical care (Marmot and Wilkinson, 2006; World Health Organisation, 2008; Adler and Stewart, 2010). But although these mortality declines and ‘determinants of health’ models may explain how improvements in population health have occurred, they generally fail to make explicit the key drivers of inequities in health: that is, what has created, and maintains, inequities between socio-economic and ethnic groups.

Williams (1997) identifies these drivers as the ‘basic causes’: those factors that require change to fundamentally create changes in population health outcomes, and thus address inequities (Figure 1).

In this conceptual model, ‘surface’ causes are related to the outcome, but altering these factors alone does not produce corresponding changes in the outcome (i.e. health inequalities persist). As long as the ‘basic’ causal forces driving inequities are in operation, the inequitable distribution of socio-economic factors such as income, employment and education will remain, and alteration of surface factors alone will give rise to new intervening mechanisms to maintain the same outcome (Williams, 1997). The persistence of socio-economic and ethnic

Table 1: Unemployment trends in New Zealand 1992–2009

Population Group	1992 ⁽ⁱ⁾	1998 ⁽ⁱⁱ⁾	June 2008	December 2009	June 2010
Unemployment rate (total)	10.9%	7.1% ⁽ⁱⁱⁱ⁾	3.9%	7.3%	6.8%
Youth (15-24 years)	n.a.	17.4%	15.8%	26.5% (15-19yrs)	24.7% (15-19yrs)
				12.2% (20-24yrs)	13.7% (20-25yrs)
Pākehā	8.1%	5.5%	2.8%	4.6%	4.4%
Māori ^(iv)	26.1%	18.3%	6.3%	14.8%	14.3%
Pacific ^(iv)	28.8%	16.4%	6.7%	14.0%	14.1%
Total Unemployed	100,000+	129,000	87,500	168,000	159,000
Total "Jobless"	n.a.	208,300	170,500	275,900	255,700

Notes: Data from Statistics NZ Household Labour Force surveys or Department of Labour unless otherwise stated.

(i) The peak period of unemployment during the 1980-1990s recessions.

(ii) The last economic recession in New Zealand was in 1998-1999

(iii) Statistics That Matter: Employment and Unemployment in NZ May 1998 See: <http://www.jobsletter.org.nz/stt/stathome078.htm#age>

(iv) Ethnicity collection methods have changed since September 2008 so direct comparisons over time from published data are not possible. "Total response" data are presented for Māori for 2009 & 2010. See: http://www.stats.govt.nz/browse_for_stats/work_income_and_spending/Employment/HouseholdLabourForceSurvey_HOTPDec09qtr/Technical%20Notes.aspx

inequalities in health during this past century, despite the overall mortality decline, changes in the major causes of death and in their underlying risk factors, is consistent with this analysis (Krieger, 2000).

When economic recession occurs, Williams' model predicts that although there may be a range of factors contributing to ongoing overall population mortality decline, the power and structural factors in society that determine access to these socio-economic and 'surface' elements (e.g. income, employment, access to health care) are not random, and will continue to operate differentially. It is thus highly plausible that there will be differential health impacts of economic recession. This may then result in an *increase* in relative and/or absolute inequities in health, despite overall reductions in mortality.

How might this play out in the New Zealand context? As demonstrated above, health outcomes in New Zealand closely mirror socio-economic and ethnic inequalities in income, employment and other social determinants of health. There are significant Māori: non-Māori inequities in a range of child and youth illness and injury outcomes (Craig et al., 2007). Ethnic and socio-economic inequities in most major causes of adult morbidity and mortality persist; after generally widening in relative terms from

the mid-1980s to 1996, there has been some narrowing since 1996–99, in parallel with increasing median income levels and lessening income inequalities from 2001 to 2007 (Ministry of Social Development, 2010, p.65).

As Williams' model predicts, the impact of economic recession on two key determinants of health, employment status and income, is not equally distributed across population groups in New Zealand (McLeod and Blakely, 2009). The effect of unemployment on health and health inequities will be used here to illustrate further Williams' model, and propose potential policy interventions for reducing inequity.

Unemployment increased steadily over 2008–09, peaked in December 2009 at 7.3% (a ten-year high) and remains elevated (Statistics New Zealand, 2010). Unemployment is highly differentiated by age, ethnicity and place. Youth (15–24 years), Māori, Pacific people and those living outside major urban centres have the highest rates and are most affected (see Table 1). As in previous recessions, increased unemployment is expected to be prolonged, well beyond the return of positive GDP growth.

Increasing unemployment is associated with a wide range of adverse social outcomes, particularly when prolonged (Welfare Working Group, 2010). Low socio-economic status and unskilled men

in the United Kingdom, especially those who had illness, never regained the employment rates seen before the 1990s recession (Bartley and Owen, 1996), and a similar pattern has been seen in New Zealand, with rises in the rates of long-term unemployed, sickness and invalid beneficiaries. Secure employment increases the likelihood of recovery from limiting illness, and deterioration in job security may be an important factor in the increasing prevalence of limiting illness in the community (Bartley and Ferrie, 2010).

Unemployment also has significant acute impacts on health, particularly poorer mental health status and parasuicide (Platt, 1984; Bartley and Owen, 1996; Morrell, et al, 1998; Keefe et al., 2002; Blakely et al., 2003; Gunnell et al, 2009; Stuckler et al., 2009). Those with mental illness are at greater risk of losing jobs, but even where there is no history of serious mental illness, longitudinal studies show a 70% greater suicide risk and evidence for a causal influence of unemployment on depression and suicidal thinking (Jin et al., 1995; Mathers and Schofield, 1998; Lundin et al., 2010). New Zealand already has the highest youth suicide rate in the OECD and Māori rates of youth suicide remain 1.5 times higher than non-Māori (Te Rōpū Rangahau Hauora a Eru Pōmare, 2007). Increasing unemployment rates in young adults, particularly given their unequal distribution by ethnicity and region, should therefore be a grave concern, not least for mental health equity.

Reduction in income associated with increased unemployment is likely to be another key mediator of the effect of economic recession on health (McLeod and Blakely, 2009). Income is a marker of tangible material resources, and may indicate limited access to basic needs like adequate housing and nutrition. Recent adjustments to social benefit levels have not aligned with increases in the net average wage (Work and Income, 2010), and as increasing numbers of households rely on unemployment benefits, this will likely contribute to increased numbers of households on lower incomes, as well as resulting in greater income inequality.

In addition, changes in individual and societal behaviour such as changes in tobacco and alcohol use or decreased access to health care are thought to be likely mediators of the effect of recession on health (Tapia Granados, 2005; Stuckler et al., 2009). Tobacco and alcohol use is already highly patterned by socio-economic status and ethnicity in New Zealand. Reforms to primary care have increased access over the last decade, but reversal due to restrained health sector funding, increased fees or cuts in services would have a deleterious impact on those already worst off, as was shown in the 1980s–1990s (Malcolm, 1996).

Williams’ model predicts that, given the unequal impact of unemployment and related reduction in household incomes outlined above, already existing inequities in health may increase – at least in relative terms – unless the ‘basic’ structural causes are also addressed.

Implications for policy

Addressing health inequities remains a ‘wicked problem’ in public policy (Petticrew et al., 2009); that is, a complex challenge unsuited to evaluation by randomised trials, and one that requires different sectors to work together, often with inadequate evidence for how positive outcomes can be best achieved. Despite considerable national and international research describing and analysing health inequalities over the last three decades, our understanding of the potential pathways between socio-economic determinants and their distribution, their intersection with ethnicity, and health status remains incomplete. There are also many fewer studies that examine the equity effects of public policies than studies *describing* inequity. Although descriptive studies frequently draw associations between policy interventions and outcomes, there is a lack of strong evidence that *implementing* such an intervention will be effective in reducing social inequities in health, and even less specifically during economic recession. A recent ‘umbrella’² review found that relatively few interventions beyond those aimed at modifying lifestyle factors, such as smoking, had been developed with the aim of reducing inequalities, and of

Table 2: Strategies to protect and promote equity in health

Level of intervention	Potential interventions to protect/promote equity in health during recession
‘Basic causes’	<p>Macroeconomic policy: balance focus on growth with equity concerns:</p> <ul style="list-style-type: none"> • Monitor monetary policy for employment and equity effects. • Progressive taxation policy to address income thresholds; extend ‘Working for Families’ approach to reduce wage-benefit gap and proportion of families/children living in poverty. • Crown to meet Treaty of Waitangi obligations, and promote Māori economic development and educational achievement, especially in regions of high unemployment. • Enhance economic and legal rights of workers to ensure adequate job security.
Social status	<p>A comprehensive employment strategy with an equity focus, including:</p> <ul style="list-style-type: none"> • Alternatives to early entry to the job market (e.g. increased quality apprenticeships and tertiary places). Lift current caps on tertiary funding and enhance skills-based, industry-based training. • Maintain an adequate minimum wage and social benefit levels in line with wages; develop active labour market policies including support for those choosing to move off non-unemployment benefits (e.g. childcare, training and removing other barriers to paid work) (Martin, 2000). • Address the ‘demand’ side: promotion of job creation in regions most affected by unemployment, for example through evidence-based housing interventions (environmental and rent/income/loan assistance interventions, construction of social housing, improvements to existing housing, etc); small business support; relevant public works. • Given the importance of the early childhood years in establishing social and health inequities (Poulton et al., 2002), increase funding for evidence-based quality parenting and early childhood interventions, especially in areas of high unemployment/deprivation.
‘Surface causes’	<ul style="list-style-type: none"> • Implement and monitor strategies to increase access to and utilisation of primary health care in relation to need (e.g. free primary health care access for children, including after-hours care). • Enhance mental health, domestic violence and drug and alcohol services in areas of high unemployment. • Avoid stigmatisation of unemployed.
Biological processes	<ul style="list-style-type: none"> • Monitor and improve equity of access to, and utilisation of, quality treatment, e.g. for hypertension, diabetes, heart disease, cancers, especially in areas of high unemployment and deprivation.

those, few were well evaluated. Perhaps unsurprisingly given the methodological difficulties, there were no systematic reviews found of macroeconomic, cultural or environmental interventions and their effect on health equity, and a paucity of evidence on educational interventions. This review found that interventions relating to health services, education and transport policies were inconclusive in terms of their impact on health inequities (Bambra et al., 2009).

However, there was consistent international evidence for positive effects on health equity in some areas of social policy, which may equally apply during recessionary periods. Housing interventions, such as rental assistance

and structural improvements, have the potential to positively impact on health and equity (Anderson et al., 2003; Bambra et al., 2009). The significant evidence base established in New Zealand on housing and health supports this (Baker et al., 2000; Howden-Chapman et al., 2007; Howden-Chapman et al., 2008). Interventions in the work environment, such as increased employee participation in organisational and task changes, also showed improved safety and enhanced self-reported mental and physical health (Bambra et al., 2009). Given the limits of this current evidence, further strategies to protect and promote equity in health during recession are proposed below, operating at the different intervention

levels conceptualised in Williams' model (see Table 2).

The rationale for these interventions is primarily based on evidence from policy interventions in previous recessions and well-established associations, but monitoring and evaluation is needed to assess their impact on inequities in practice, as well as for possible unintended consequences. Additionally, addressing inequities at the 'basic causes' level often requires opposing the most entrenched, politically contentious and structurally embedded factors in our society (World Health Organisation, 2008; Navarro, 2009) – a shift in paradigm not without challenge.

Unemployment is a major contributor to reduced incomes, and is itself related to significant adverse social and health outcomes. A major strategic focus on unemployment is needed, underpinned by an equity perspective. Priorities that have the potential to promote equity in health during this period of economic stagnation are identified below:

- Active intervention in the labour market is important, given the consistent evidence for the

significant negative associations of unemployment with health outcomes. There is evidence that these types of interventions, although not a panacea, can be partially successful in addressing both structural and cyclical unemployment (Martin, 2000; Betcherman et al., 2004; USAID, 2009). Evidence from the 1980–90s in Finland and New Zealand – the former experiencing greater increases in unemployment – suggests that higher social spending in Finland on active labour market interventions was associated with lower male suicide rates (Howden-Chapman et al., 2005). Stuckler et al.'s analysis (2009) across 26 European Union countries supports this finding, as do other studies (Gunnell et al., 2009). In the United Kingdom, temporary youth unemployment schemes in the 1980s were almost as detrimental to mental health as unemployment, and quality apprenticeships and tertiary education opportunities provided much better mid-term outcomes (Dorling, 2009).

- Interventions addressing the 'demand' side (especially in regions of high

unemployment). These could include social housing and infrastructure improvements, which would stimulate the construction sector and which have been shown to have positive effects on health inequity, as well as other social outcomes. New Zealand has very low levels of social housing by OECD standards, with high entry costs. Strategies to stimulate the housing market and increase access to housing, such as extending the 'Welcome Home Loan' scheme (including review of the maximum loan amount) and low-interest government-backed 'first home' loans, could also be implemented. Other public works and small business support schemes should also be considered, despite less positive evidence for their impact, balanced against the immediate and future costs of non-intervention.

- Support for the unemployed and those partially employed includes maintaining adequate household incomes, especially social benefit levels. The 'Working for Families' package has had a significant positive impact on low-income working

Ethnicity, Identity and Public Policy

Critical Perspectives on Multiculturalism

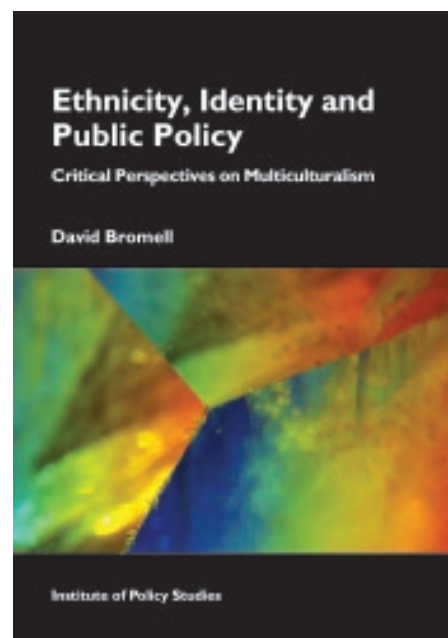
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In *Ethnicity, Identity and Public Policy*, David Bromell evaluates theory developed in other national contexts against challenges for public policy

arising from ethno-cultural diversity in New Zealand. He concludes that this is a time to refine – and complicate – our thinking, and that the task of developing normative theory in relation to diversity and public life is still a work in progress.



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household incomes, and a similar level of support should be extended to other low-income households. Tax policy and social benefit changes need to be critically analysed and monitored not only for their potential for economic stimulus or reduction in government spending, but for their effect on low-income families and income inequality. Increases in income inequality have been strongly associated with greater inequities in health *and* poorer total population health outcomes (Wilkinson and Pickett, 2009; Kondo et al., 2009).

- Finally, the potential importance of the health sector in alleviating and addressing health inequities during recession must be recognised (Tobias and Yeh, 2009). Population health interventions and clinical health services should be strengthened to respond adequately to increased unemployment and its consequences. Mental health, youth health, and drug and alcohol services are already the ‘poor cousins’ of the health sector but need to be prioritised and reinforced to address the current and future impacts of unemployment. Funding constraints in the health sector should not reduce quality or access to services, particularly those delivering

health care to Māori, Pacific, children and youth.

Conclusion

International evidence indicates that economic recessions are associated with short-term decreases in total population mortality. However, evidence from the 1980s–90s recessions in New Zealand and from international studies suggests that, conversely, inequities in health may increase. Williams’ model may explain this conundrum: the negative effects of economic recession, especially on key determinants of health such as employment and income, impact differentially on population groups, and predominantly on those already less privileged.

There is some evidence for macroeconomic and social policy interventions which can moderate unemployment and its consequences, and potentially reduce health inequalities even during periods of economic recession. These include active labour market strategies, housing policies and maintaining adequate household incomes. The health sector has an important role in monitoring equity in health, to ensure it remains a priority and is not rapidly undermined during recession. It is also critical to address inequities in access to health services so that these do not

further exacerbate inequity in health outcomes.

Without changes in the ‘determinants of inequity’ – the structural features of society which drive the unequal distribution of determinants of health – Williams predicts that health inequities will persist or widen, even while total mortality falls. There is little to suggest that a return to positive GDP growth alone – especially with current high levels of unemployment – will reduce relative health inequities. The reversal during the post-1996 period of the trend in increasing health inequities indicates that health outcomes are very sensitive markers of social inequality, and remarkably rapid, positive effects on health inequities can be achieved. However, this positive trend will be in part dependent on the economic and social policy responses to recession. A concerted focus on equity and appropriate policy interventions is needed, alongside a return to economic growth.

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- 1 Real GDP per capita fell from the last quarter of 2008, and the annual average percentage change remains negative.
 - 2 ‘Umbrella’ reviews identify, appraise and synthesise systematic review evidence on a given topic.

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