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Submission on unemployment and health

Your letter of 6 May 1999 sought input from the Australian Institute of Health and Welfare on the available evidence linking unemployment with poorer health outcomes, particularly in relation to people over 45 years of age.

Enclosed is a written submission based on work recently carried out by AIHW to review recent literature on the relationship between unemployment and health, the evidence that unemployment causes ill health, and mechanisms by which unemployment causes adverse health outcomes. The submission also summarises recent Australian evidence and presents some unpublished analyses of the health of unemployed Australians from the most recent ABS National Health Survey, carried out in 1995.

If you have any queries in relation to this request, please contact me on (02) 6241101 or Colin Mathers on (02) 62441138.

Yours sincerely,

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Director

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Health consequences of unemployment: a review of the evidence.

Australian Institute of Health and Welfare
June 1999

Introduction

This review has been prepared at the request of the House of Representatives Standing Committee on Employment Education and Workplace Relations in order to provide the Committee with a review of recent literature on the the relationship between unemployment and health, the evidence that unemployment causes ill health, and mechanisms by which unemployment causes adverse health outcomes. This paper also summarises recent Australian evidence and presents some unpublished analyses of the health of unemployed Australians from the most recent ABS National Health Survey, carried out in 1995.
This review is based largely on a recent review of the literature on unemployment and health carried out by the Australian Institute of Health and Welfare[1]. That review concluded that the relationship between unemployment and health is complex and mediated by social and individual conditions. Nonetheless, evidence was found for a consistent association between unemployment and poorer health based on an examination of biological risk markers, physical and mental ill-health, suicide and increased mortality. While ill health can cause unemployment, longitudinal studies in several countries and with a range of designs, have provided reasonably good evidence that unemployment itself causes adverse health outcomes.

Although many studies had observed associations between unemployment and health, the first convincing evidence for a causal relationship was provided in the mid-1980s from the British longitudinal study of census records[2-3]. An influential series of reviews in the British Medical Journal in 1985, and a related book. drew widespread attention to the effects of unemployment on health[4]. Australian studies during the 1980s and early 1990s demonstrated adverse effects of unemployment on the mental health of young people[5] and in the last few years, the National Health Strategy and a series of reports from the Australian Institute of Health and Welfare (A1HW) documented worse health among unemployed Australians using a wide range of health indicators[6-8].

Since associations between unemployment and health were first observed there has been vigorous debate about the direction of causality: does unemployment cause a deterioration in health; are the sick more likely to become unemployed (health selection effects); or are both associated with another underlying causal factor such as socioeconomic disadvantage. This paper reviews international and Australian evidence about the association of unemployment with adverse health outcomes and potential causal mechanisms for this association. Evidence for the health consequences of youth unemployment was reviewed recently by Morrell et al in the Medical Journal of Australia[5] and is not discussed in detail here.

In assessing the evidence, it is important to keep in mind that unemployment is a complex and diverse experience, rather than an easily categorised exposure variable like tobacco smoking, and that its effects will be mediated by a large number of social and individual factors.

Mortality

Analyses of aggregated population data from the 1930s onwards have demonstrated correlations between unemployment levels and various indicators of mortality[4]. Time series analyses in the 1970s found correlations at the population level between unemployment levels and mortality rates in a range of countries[9-11]. However, these studies have been seriously criticised and cannot be used to infer causation,[4,12]. Other studies have correlated variations in unemployment levels with death rates for geographical regions[13-14]. While generally consistent in their findings, such studies cannot be used to infer causation, since it is possible that unemployment is correlated at the population level with other factors causing increased mortality.

Much more convincing evidence for causality was obtained from longitudinal studies in several countries in the 1980s. These studies were not specifically set up to examine unemployment and health. A 1% sample of census records has been retained for England and Wales since the 1971 census., known as the Longitudinal Study. The UK Office for National Statistics has recently reviewed the Study and decided to continue it. The Longitudinal Study has been used to analyse the subsequent mortality experience of unemployed men aged 15 to 64 in England and Wales in 1971 and 1981[2-3]. For both census samples, the employed had lower mortality than the average (the healthy worker effect). Those unemployed who had a pre-existing illness or disability had mortality rates over three times higher than the average. Those who were unemployed but not ill at census time showed an excess of 37% mortality over the following 10 years.

In all social classes, the mortality rate of the unemployed was higher than that of the employed, particularly for cardiovascular deaths, lung cancer, accidents and suicide. If the higher mortality rate was due to greater unemployment occuring among already sick workers, then we would expect to see the difference fall progressively with time as some sick workers recovered. This pattern is exactly that observed among the group chronically ill at the beginning of the follow-up period (there is a strong incentive for the unemployed to declare illness to obtain additional benefits in the UK). In fact, the excess mortality risk for the not-ill unemployed rose slightly over the 10 year follow-up period, leading to the conclusion that health selection occurring at the time of becoming unemployed was not responsible for the mortality differences observed.

These findings were confirmed and extended by other large longitudinal studies in Europe[15-17]. A census-linked study in Denmark found a 40-50% excess death rate among the unemployed after adjustment for occupation, housing category, geographical region and marital status[15], with suicides and accidents prominent causes of excess mortality. Excess mortality was also found among unemployed women, although the relative mortality was somewhat higher for unemployed men. The study also found an inverse association between relative mortality and the level of local unemployment.

A Finnish longitudinal study using linked census data for persons aged 25-59 years found that the unemployed had a higher mortality rate than those who were employed, after controlling for age, education, occupational class and marital status[17]. Mortality ratios for men and women unemployed for the first time in 1990, at a time of low national unemployment were 2.11 and 1.61 respectively. The comparable ratios for those unemployed for the first time in 1992 when the national unemployment rate was very high were much lower (men 1.35, women 1.30).

A recent prospective cohort study of over 6000 British men aged 40-59, continuously employed for the five years prior to initial screening, found that men who experienced

some unemployment or retired during the five years after screening experienced double the mortality of those who remained continuously employed18. After excluding those who became unemployed or retired because of ill-health, and adjusting for the effects of social class, smoking, alcohol consumption, body weight and health indicators, the mortality ratio was 1.47 for the unemployed group and 1.86 (1.34-2.59) for the retired group.

Australia

An early Australian study[19] correlated ischaemic heart disease mortality with aggregate unemployment trends. A more recent study of correlations between annual suicide and unemployment rates was reviewed by Morell et al[5]. Serious limitations in the information recorded on Australian death certificates has prevented analysis of mortality rates for the unemployed at the individual leve1[7].

The Institute strongly supports efforts in Australia to construct longitudinal data by linking population census and survey data to subsequent health data, notably mortality. Such data would enable informed study of a range of health issues, including links between unemployment and mortality.

Mental health

Cross-sectional and longitudinal studies have consistently found that the psychological health of the unemployed is worse than that of the employed[4,12,20-21]. A number of longitudinal studies have shown that these mental health differences emerge after entry into the labour market in young people who showed no such differences while still at school. and that mental health improves when unemployed young people find j obs[20-22]. A prospective US study clearly showed that men aged 35-60 who became unemployed had higher levels of depression and anxiety than those who remained employed[23]. A study of unemployed German men over the age of 45 found higher levels of psychological distress and that these regressed with reemployment or formal retirement[24].

As with mortality. it is likely that the impact of unemployment on mental health is dependent on general social conditions. An earlier British study found lower levels of psychological distress among men from areas of chronically high unemployment than among men for areas of low unemployment[25] - perhaps reflecting better adaptation through networks, communitary solidarity and lower cost of living in areas with higher unemployment.

Australia

Australian longitudinal studies of the mental health of young Australians have demonstrated causal associations with unemployment[20-21].

Disease and disability

A number of cross-sectional population studies have documented higher levels of illness and worse perceived health in the unemployed after adjusting for the effects of social status and other variables[7,26-28]. For example, an analysis of population survey data for Britain in 1991-92 found that unemployed men and women had over twice the odds of limiting chronic illness compared to employed men and 60-80% higher odds of reporting poor health after controlling for education level and occupational class[28].

Factory closure studies, which minimise the effects of health selection, have found increased levels of medically diagnosed health problems, particularly in the area of cardiovascular disease and its risk factors, including high serum cholesterol and blood pressure[29-31].

Despite the occasional study finding no association between unemployment and ill-health[32], the balance of evidence suggests that unemployment, at least among adult males, has an association with physical health, and in particular with cardiovascular disease.

Australia

Mathers[7] found that unemployed men and women aged 25-64 years were about twice as likely to report being in poor or fair health (as opposed to good or excellent health), and reported 30-40% more serious chronic illnesses and 20-30% more recent health problems than their employed counterparts (see Figure 1). Differences in levels of smoking, risk drinking, physical inactivity and overweight did not account for the differences in health reported by the unemployed.

Lifestyle risk factors

A number of studies have found higher rates of smoking and alcohol use, and poorer diet amongst the unemployed[33-36], although other studies have failed to confirm a causal link[37-38]. A prospective study of British men aged 40-59 found no evidence that men increased their smoking or drinking on becoming unemployed, but that they were more likely to gain weight[37]. The men who became unemployed had higher levels of smoking and alcohol consumption at initial screen, emphasising the importance of controlling for lifestyle factors (and social class).

Australia

Analyses of 1989-90 survey data found that unemployed Australians were about 40 to 50% more likely to be smokers, but were less inactive than the employed7,39. MatherS7 also found that unemployed men were 57% more likely to have measured hypertension than employed men.

Figure 1. Ratio of rates for unemployed versus employed Australians aged 25-64 years: selected health indicators, 1989-90. For definitions and sources refer to reference 11.

[Not Reproduced]

Health service use

Cross-sectional studies and factory closure studies have documented higher levels of hospital admissions, doctor visits and outpatient visits among the unemployed[29,40]. This is usually interpreted as another indicator of poorer health. Few studies have attempted to determine whether the higher level of utilisation by the unemployed is commensurate with increased need.

Australia

Analyses of 1989-90 survey data found that unemployed men visited the doctor significantly more often, unemployed women reported significantly more hospital outpatient visits, and that the unemployed used more pharmaceuticals[7,41]. A multivariate analysis suggested that reported health status largely accounted for reported differentials in health service use[7].

Unemployment and health among older workers

Unemployment falls disproportionately on younger and older workers and on already disadvantaged groups such as low income earners, recent migrants, Indigenous people and the low skilled [1,27,28,42]. Arber[28] found a greater class gradient in health status amongst the unemployed than amongst the employed. This may be a result of lower re-employment prospects among the unskilled or their fewer financial resources to cushion the effects of unemployment.

Excess mortality caused by unemployment is highest for middle aged men, and there is also some evidence that unemployment affects mental health more for this group than others. Health status and health risk factors reported by unemployed women tend not to be as poor as for unemployed men[7,28,39]. These studies emphasise that the health consequences of unemployment are not the same for all groups in the population. This point is also underlined by a small number of studies that have found groups of employed people whose health is worse than that of the unemployed[21].

The incidence of chronic diseases such as cardiovascular disease, diabetes, cancers, chronic respiratory problems and other chronic health problems rise with age and so excess physical health problems caused by unemployment are greatest for middle aged and older workers. Among younger workers, the mental health consequences of unemployment are of most concern.

Figure 2 compares the proportion of unemployed men and women who report that their health is fair or poor (as opposed to excellent, very good, or good) with the similar proportion for employed men and women. These data are derived from interviews with a large random sample of Australians conducted for the Australian Bureau of Statistics National Health Survey in 1995.

These analyses have been carried out by AIHW and are otherwise unpublished. It can be seen from Figure 2 that the proportion of unemployed men whose health is fair or poor is double that of employed men for all age groups except the 55-64 year age group, where the proportions are similar. The difference in perceived health status is greatest for 45-54 year old males. In contrast, the differential among women is smaller at younger age groups and rises dramatically in the 55-64 year age group, where unemployed women are almost three and a half times more likely to report that their health is fair or poor. The lack of a similar differential for older male workers may

reflect the greater access of men to superannuation retirement schemes and thus a greater likelihood for men over 55 with poorer health to retire from the workforce.

Figure 2. Per cent of employed and unemployed Australians reporting fair or poor health by age and sex, 1995

[Not reproduced]

Interpersonal effects

There have been surprisingly few studies of the effects of unemployment on the health of others in the family. The England and Wales Longitudinal Study found a 20% excess mortality among wives of unemployed men[3]. Other adverse effects on family life associated with unemployment include higher risk of separation and divorce, domestic violence, unwanted pregnancy, increased perinatal and infant mortality, poorer infant growth and increased health service use of family members[4,12,318,43].

Australia

Mathers[44] compared the reported health status of children with no employed parent with those with one or more employed parents. Children without an employed parent were reported to have around 26% more serious chronic illnesses, visited the doctor 20-30% more often, and had around twice as many outpatient visits.

How does unemployment cause poorer health?

Few studies of unemployment and health have advanced beyond questions of the causal nature of the association or the size of health effects in order to investigate etiological issues. At the individual level, three main types of explanation have been favoured: (1) poverty, (2) psychological impacts and (3) health-related behaviours and lifestyle changes.

Poverty

Poverty has been suggested as an important mechanism by which unemployment causes ill health[35]. Low income associated with unemployment may directly affect health through an inability to purchase goods and services that influence health (such as adequate nutrition, housing and health care) or indirectly through reduced participation in society or psychological stress resulting from financial strain..

Psychological impacts

Employment offers people psychological benefits[45]. Psychosocial impacts of unemployment include loss of a sense of identity, lower self esteem, marginalisation and alienation from society, reduced social contact and support, loss of networks and social stigma[17,35].

Support for the importance of psychosocial mechanisms comes from the strong health gradients observed among employed British civil servants, thought to be associated with aspects of the work environment such as degree of control and satisfaction[46], the observation of adverse health effects in anticipation of factory closure[31], and the observation that health impacts of unemployment are greater in areas or times of low overall unemployment rates [17,25].

Unhealthy lifestyle and behaviour

Evidence showing that unemployment causes adverse changes in lifestyle and health-related behaviours is conflicting. A recent British longitudinal study found that neither health related behaviour nor social factors could account for the higher mortality risk of the unemployed [18]. It is generally agreed that health-related behaviour change, either as a confounding factor or as an intervening variable, does not account for the impact of unemployment on health[7,12].

Conclusions

Although the relationship between unemployment and health is complex and varies for different population groups, there is consistent evidence from a range of different types of studies that unemployment is generally associated with adverse health outcomes including biological risk markers, physical and mental ill-health, suicide and increased mortality. Health selection effects do occur, but longitudinal studies provide reasonably convincing evidence that unemployment also has a direct effect on health over and above the effects of class, poverty, risk factors, or prior ill health. The most convincing studies have followed people over a prolonged period of time, controlled for characteristics prior to unemployment and have taken account of other confounding. factors such as social class and health behaviours.

This review highlights a number of priorities for further research. Longitudinal studies will play a key role in educating these mechanisms. Unlike other countries, Australia has not carried out longitudinal national health studies or had the capability to undertake census-linked studies. The health consequences of unemployment for women has become an important area for further study with the growing prominence of female earnings in determining the standard of living of Australian families and the rise in female labour force participation[39]. The Australian Longitudinal Study of Women may provide an opportunity to elucidate some of these issues in Australia; recent developments in record linkage may provide other opportunities.

There is also a need for studies which clearly discriminate between different groups of unemployed rather than treating them as a homogeneous group. The health impacts of job loss and prolonged unemployment amongst older workers, who have little prospect of finding new employment, have not been studied in any detail in Australia yet. Unemployment generally impacts most strongly on the already disadvantaged, and the health effects of unemployment compound underlying health inequalities in our society and in turn entrench socio-economic disadvantage. Along with poverty, unemployment is a significant social determinant of ill health in Australia in the 1990s.

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