

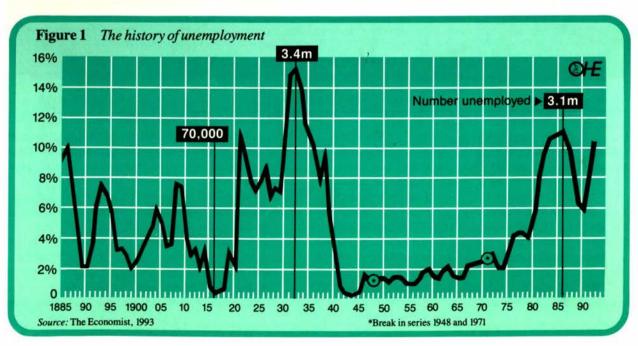
Introduction

That there is a positive association between unemployment and a variety of measures of ill health is clear. What is less clear is how this association arises. Two questions summarise much of the debate which has concerned researchers for many years. Firstly, does unemployment cause a deterioration in health or, conversely, are the sick more likely to become unemployed? If the latter, then the association is merely a statistical artefact. As unemployment starts to rise, employers lay of the relatively sick first, rather than the fit. There may be no overall decline in health states but rather those in employment, on average, will be fitter than those unemployed. Secondly, does unemployment lead to poverty and other forms of social disadvantage, which are known to be associated with poor health, or are unemployment and poor health related because they are both associated with a previous low socioeconomic state, poorer education and worse housing conditions (Moser et al, 1986).

Changes in the level of unemployment are likely to

have had a direct effect on the findings of research into issues that are relevant to these questions. "Where there is a lot going on almost everyone can find a job, when there is little, almost everyone can lose the job he has. It follows that those who are unemployed at a time of low unemployment are likely to have special problems, for whatever reasons; while in a period of high unemployment the unemployed will consist in increasing numbers of essentially 'ordinary' people down on their luck" (Kelvin & Jarrett, 1985).

In the 1930's when unemployment first became of interest to researchers it is beyond question that unemployment fell disproportionately on those of low socio-economic status. Unemployment also tended to be concentrated in depressed industrial areas and inner cities. However, in the 1980's and 1990's these differences have become less marked, although, certain groups in society continue to be overrepresented among the unemployed (Smith, 1987). Figure 1 shows the trends in unemployment in the United Kingdom over the last 100 years.



Our assessment of the evidence is that, whilst the sick are more likely to become unemployed, and unemployment continues to fall disproportionately on those of low socio-economic status who tend already to suffer from poorer health, unemployment is itself causing a deterioration in the health of those out of work and of their families.

In this briefing we:

- look at the overall incidence of unemployment and its impact on different groups within the community;
- set out why being in employment is important for most peoples wellbeing, for reasons over and above the need to earn money;
- examine critically, in turn, the evidence for a link between unemployment and deteriorating mental health and between unemployment and deteriorating physical health;
- estimate the potential costs to the NHS of unemployment;
- summarise our assessment, concluding with the implications for employment and health policy.

Unemployment statistics

Approximately three million people in Britain are officially registered as unemployed, around 10 per cent of the workforce. Of these, over a million people (unemployed claimants—that is 18 years and over) have been unemployed for more than a year (Department of Employment, 1993) (see Table 1). These figures are derived from calculating all those claiming unemployment benefit, thus those who are receiving sickness benefit will not be included in the figures. The official methods of counting the numbers of unemployed underestimate the true numbers because many people seeking work, particularly parttime work, do not register as unemployed as they are

not entitled to unemployment benefit. It has also been suggested that as unemployment rises the number of people who do not register increases since they see little point in so doing (Smith, 1987). In the mid 1980's it was estimated that only about 71 per cent of those seeking work registered as unemployed; which, if it still holds true, inflates the actual number of unemployed to approximately four million (The Warwick Institute for Employment Research, 1985). Economists have traditionally classified unemployment into three types: frictional, structural and cyclical. Frictional unemployment is a result of the time spent by people between jobs within a given skill category. Structural unemployment occurs where there is a discrepancy between the jobs available and the skills of unemployed people. It implies that if unemployed people develop new skills then they will find employment. This is the area of unemployment at which government employment policies have largely been directed. Cyclical unemployment is caused by economic recession and a substantial proportion of today's unemployment falls into this

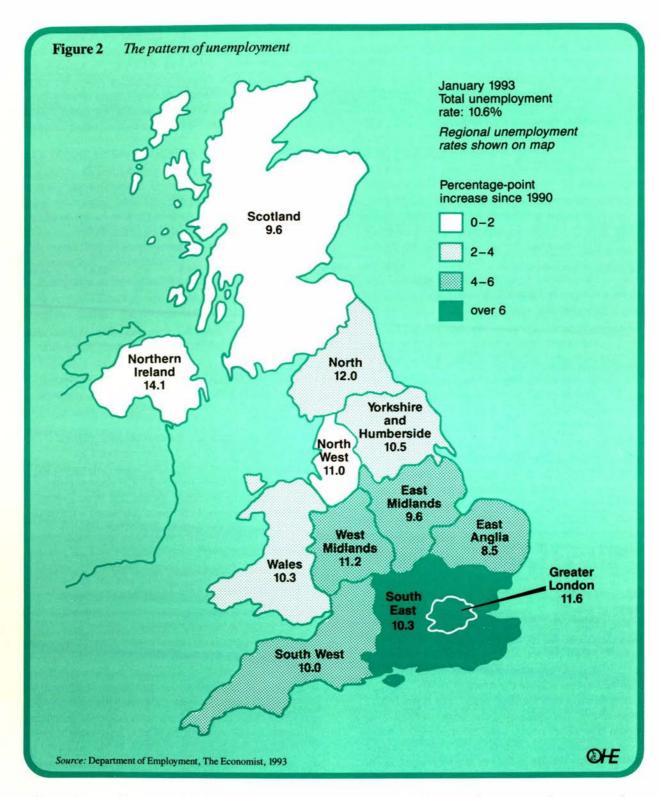
Unemployment rates vary regionally, although as mentioned, these are becoming less marked. During the 1930's unemployment in Wales was five times higher than in London and the South-East and three times higher in Scotland, the North-East and the North-West. Now, as can be seen from Figure 2, the lowest unemployment rates are in East Anglia (8.5 per cent), the East Midlands (9.6 per cent) and the South-East (10.3 per cent), the highest in Northern Ireland (14.1 per cent). However, those regions with the lowest unemployment appear to have experienced high rises in unemployment during the previous two years (over six per cent in the South-East) while areas of high unemployment experienced a low rise (less than 2 per cent in Northern Ireland).

Table 1 Unemployed claimants: by duration, sex and age, Great Britain 1991

| | Percentages and thousands | | | | | | | | |
|------------------------------|--|------------------------------|------------------------------|-------------------------------|--------------------------------|-------------------|---------------------------------|--|--|
| | Duration of unemployment (percentages) | | | | | | | | |
| | Up to 13 weeks | Over 13 up to 26 weeks | Over 26 up to 52 weeks | Over 52 up to 104 weeks | Over 104 up to 156 weeks | Over 156 weeks | Total (= 100%) (thousands | | |
| Males aged: | | | | | | | | | |
| 18-19 | 48.2 | 24.3 | 20.7 | 6.8 | | | 119.6 | | |
| 20-24 | 38.4 | 22.1 | 20.9 | 11.9 | 3.8 | 2.8 | 345.4 | | |
| 25-34 | 34.4 | 20.1 | 19.6 | 13.5 | 4.8 | 7.6 | 502.8 | | |
| 35-49 | 32.6 | 18.7 | 17.5 | 12.9 | 4.7 | 13.5 | 417.9 | | |
| 50-59 | 25.4 | 14.8 | 14.5 | 11.6 | 5.8 | 28.0 | 240.7 | | |
| 60 and over | 38.8 | 23.0 | 23.5 | 8.5 | 1.4 | 4.9 | 40.2 | | |
| All males aged 18 and over | 34.6 | 19.8 | 18.8 | 12.2 | 4.3 | 10.4 | 1,666.6 | | |
| Females aged: | | | | | | | | | |
| 18-19 | 51.3 | 23.1 | 19.9 | 5.6 | | | 65.8 | | |
| 20-24 | 45.2 | 21.6 | 19.1 | 9.0 | 2.6 | 2.6 | 128.3 | | |
| 25-34 | 43.2 | 20.8 | 20.5 | 8.9 | 2.5 | 4.2 | 136.4 | | |
| 35-49 | 40.7 | 18.4 | 17.8 | 11.6 | 3.9 | 7.6 | 120.0 | | |
| 50-59 | 25.1 | 13.3 | 15.1 | 12.4 | 6.5 | 27.6 | 77.8 | | |
| 60 and over | 5.6 | 4.7 | 4.6 | 6.1 | 8.1 | 71.0 | 0.6 | | |
| All females aged 18 and over | 41.4 | 19.6 | 18.6 | 9.6 | 3.1 | 7.6 | 528.8 | | |

¹ At April

Source: Social Trends, 1992



Unemployment is not equally distributed among the population. The young, the old, the unskilled, the disabled, the socially disadvantaged and members of ethnic minorities are all over-represented amongst the unemployed, particularly the long-term unemployed. However, since 1979, when unemployment began to grow very rapidly, other groups in society have been affected by unemployment including skilled workers and those in the middle of their working careers. Table 2 shows the percentage of unemployed by sex and previous occupational group. As can be seen, the rate of unemployment has been rising more rapidly among those in non-manual occupations, especially managerial and professional, than among manual

workers. Whilst unemployment continues to remain highest amongst unskilled manual workers, the increasing proportion of non-manual workers becoming unemployed is an important development of the late 1980's and early 1990's.

An important group which is over-represented among the unemployed is that of men aged between 50 and 59; they are more likely to be made redundant and also find it more difficult to find another job. The financial and family commitments which this group is likely to have may add to the stress of being made unemployed. In the 1970's, a third of those who had been unemployed for more than a year were aged between 50 and 59 but, as can be seen from Table 1,

Table 2 The unemployed: by sex and previous occupation group¹, Great Britain 1984 and 1990

| | Percentages and thousands | | | | | |
|---|---------------------------|-------|---------|------|-------|-------|
| | Males | | Females | | All | |
| | 1984 | 1990 | 1984 | 1990 | 1984 | 1990 |
| Percentage of the unemployed aged 16 and over in each previous occupation group | | | | | | |
| Managerial and professional | 8.4 | 11.1 | 8.0 | 9.9 | 8.2 | 10.6 |
| Clerical and related | 1.7 | 3.5 | 14.7 | 15.8 | 7.0 | 8.6 |
| Other non-manual | 3.6 | 4.2 | 7.3 | 8.1 | 5.1 | 5.8 |
| All non-manual previous occupations | 13.7 | 18.8 | 30.0 | 33.7 | 20.3 | 25.0 |
| Craft and similar | 18.8 | 17.9 | 30.0 | 33.7 | 20.3 | 25.0 |
| General labourers | 4.0 | 2.6 | _ | _ | 2.5 | 1.6 |
| Other manual | 27.8 | 28.9 | 21.7 | 24.8 | 25.3 | 27.2 |
| All manual previous occupations | 50.6 | 49.4 | 25.6 | 29.3 | 40.4 | 41.0 |
| All those with previous occupation stated | 64.2 | 68.3 | 55.7 | 63.1 | 60.8 | 66.1 |
| No previous occupation stated ² | 35.8 | 31.7 | 44.3 | 36.9 | 39.2 | 33.9 |
| Total unemployed (= 100%) (thousands) | 1,838 | 1,089 | 1,256 | 780 | 3,094 | 1,869 |

Previous occupation of those who had left their last job within the last 3 years

Source: Social Trends, 1992

the percentage of people in this age group who have been unemployed for more than a year has increased to 45 per cent with 28 per cent having been unemployed for more than three years. A similar trend emerges for women, but figures are affected by women's entitlement to unemployment benefit. Many married women, for example, stop signing on at the Unemployment Benefit Office after one year because they exhaust their entitlement to unemployment benefit and are often not entitled to income support in their own right if their husband is working or claiming benefit.

The young are also disproportionately affected by unemployment. In 1990 the unemployment rate was highest among those under the age of 20; for males 13 per cent and for females 10 per cent. For both sexes, rates are almost double the average 1990 unemployment rate for their sex; 7 and 6 per cent respectively. The concern is that some of these young people may never obtain work as the longer a person remains unemployed the less likely they are to get a job. This may be due to loss of inter-personal skills, technology overtaking existing knowledge and loss of self esteem.

In addition to age and sex, studies suggest that race influences unemployment. Unemployment rates are higher among ethnic minorities than among whites (see Table 3). Although, among West Indian and Guyanese males unemployment fell from 26 per cent in 1986 to 13 per cent in 1990 this was still higher than the unemployment among white males which was only 7 per cent in 1990. It is likely that ethnic minorities will continue to bear a disproportionate share of the burden of unemployment.

Our analysis of the impact of unemployment on health seeks to draw on studies carried out on the groups most affected by unemployment. However, it has not been possible to look at the impact of unemployment on black Britons because official censuses and surveys have rarely included an assessment of racial origin. One study conducted by Balarajan et al (1989), found that GP consultation rates in people of Pakistani, Indian and West Indian origin were higher in both sexes compared with white patients, and that the difference was particularly

 Table 3
 Unemployment rates: by sex and ethnic origin, Great Britain

| | Percentages | | | | | |
|--------------------------|-------------|------|------|------|------|--|
| | 1984 | 1986 | 1988 | 1989 | 1990 | |
| Males: | | | | | | |
| White | 11 | 11 | 9 | 7 | 7 | |
| West Indian or Guyanese | 30 | 26 | 18 | 15 | 13 | |
| Indian | 13 | 16 | 11 | 10 | 8 | |
| Pakistani/Bangladeshi | 33 | 27 | 24 | 18 | 15 | |
| Other ¹ | 19 | 17 | 9 | 8 | 12 | |
| All males ² | 12 | 11 | 9 | 7 | 7 | |
| Females: | | | | | | |
| White | 11 | 10 | 8 | 7 | 6 | |
| West Indian or Guyanese | 18 | 19 | 11 | 14 | - | |
| Indian | 20 | 19 | 13 | 9 | 11 | |
| Pakistani/Bangladeshi | $(-1)^{n}$ | - | - | | - | |
| Other 1 | 19 | 17 | 10 | 8 | 9 | |
| All females ² | 12 | 11 | 8 | 7 | 7 | |
| All persons: | and the | | 14. | | | |
| White | 11 | 11 | 9 | 7 | 7 | |
| West Indian or Guyanese | 24 | 23 | 15 | 14 | 11 | |
| Indian | 16 | 17 | 12 | 9 | 9 | |
| Pakistani/Bangladeshi | 34 | 28 | 24 | 22 | 17 | |
| Other ¹ | 19 | 17 | 10 | 8 | 11 | |
| All persons ² | 12 | 11 | 9 | 7 | 7 | |

¹ Includes those of mixed origins

Source: Social Trends, 1992

² Includes a small number of people who did not know or who inadequately described their previous occupation

³ Includes those who have never been in employment and those who have been unemployed for 3 years or more

² Includes those who did not state their ethnic origin

pronounced in the age group 45 to 64. Gillam et al (1989) also found higher than average consultation rates among Asian males, but, it was noted that they were less likely to leave the surgery with a follow up appointment, prescription or a certificate. It is to be hoped that the results of the 1991 census enable more research to be carried out in this area.

The importance of employment

Whilst the overwhelming conscious reason for seeking employment is to make a living, both for those who enjoy what they are doing and those who dislike it, on an individual level, Jahoda (1979) suggests, employment has secondary consequences. She states that all employment involves the following psychological experiences:

- it imposes a time structure on the waking day;
- it compels contacts and shared experiences with others outside the nuclear family;
- it demonstrates that there are goals and purposes which are beyond the scope of the individual, but require a collectivity;
- it imposes status and social identity through the division of labour in modern employment;
- it enforces activity.

Subjectively, each of these secondary consequences of employment may or may not be pleasant for the individual, but some experience in each of these areas must occur. It is, Jahoda states, this 'must' which sharply distinguishes between the employed and those not employed, whether voluntary or involuntary. Although, one or more of these consequences of employment may be obtained through other forms of activity, such as voluntary organisations and leisure activities no other institution in modern society combines all the five experiences with the necessary sense of social compulsion.

It is these secondary consequences of employment which help explain society's widespread belief that paid employment is necessary. Work may be psychologically supportive even when working conditions are bad, and unemployment may therefore be harmful to psychological wellbeing.

Most research has concentrated on psychological wellbeing and examined the psychological stages that many unemployed people go through. These stages, an initial period of denial, a period of pessimism followed by bitterness and hopelessness have been likened to those described in the person who has experienced a major loss, for example the death of a spouse. This concept of loss has been described by Jahoda and Rush (1980) who stress that the benefits of employment go beyond the economic, that is simply earning a living. Fagin (see Bartley, 1992) argues that although the loss of a job could be like a bereavement, the problem with unemployment is that people are not supposed to learn to accept it and 'recover' from the experience of loss. This, he suggests, produces the risk of prolonged stress with its implications for physical and mental health.

The impact of unemployment on mental health

Research into job loss and continuing unemployment has clearly established that unemployment

significantly impairs mental health. Unemployment has been associated with low self-esteem, humiliation and depression in the individual, and a damaged family and social life. Conversely, obtaining a job has been found to quickly lead to improvement (Warr, 1987).

Warr has identified nine ways in which unemployment may affect psychological health, many of them related to Jahoda's ideas. They are:

- the fall in income, financial worries predict strongly overall distress scores;
- the restrictive environment faced by unemployed people, partly because they have no job to go to and partly because of lack of funds to get out, so losing the opportunity for contacts with other people;
- employment provides a structure to the day, without it time has to be filled;
- loss of control over decision making in their own lives. Even though they may have more time to make decisions they lack material resources;
- loss of opportunities to gain new skills and the satisfaction of using existing ones;
- an increase in humiliating and threatening experiences, for example applying for jobs and being rejected and perhaps being regarded by society as a failure;
- anxiety about the future, of becoming unemployable, about money and a general loss of self respect;
- a reduced quality of interpersonal contacts, for example at work, people may have sought their advice and skills;
- a decline in social position, the unemployed tend to see themselves as having failed in some way and the fact that in society their status is low compounds the problem.

Although research has yet to be done to firmly establish which groups in society are most likely to be psychologically damaged by unemployment, one factor which has been found to consistently correlate with distress is the level of commitment to wanting a job. Those who most want a job suffer most without one. This may explain why the impact on age groups differs. Middle-aged people who often have heavy financial commitments and other responsibilities tend to suffer more than either younger or older age groups (Daniel, 1974). The mental health of middle-aged people also seems to deteriorate steadily during the first six months of unemployment (Brinkman, 1983). No study has shown a similar correlation between the length of time spent unemployed and the level of mental health amongst those who are older or younger (Smith, 1987).

The financial commitments of middle aged men are likely to be particularly great, as many will have children to support. In addition, some men in this group suffer a particularly large drop in income. Other factors will also be important, for example their social position will be strongly affected by unemployment since they lose their valued role as provider for the family as well as their position as contributors to a working group and member of the wider work force (Warr, 1987).

In an analysis of 38 previous studies Warr and Parry (1982) found that for married (interpreted to include those living with partner, whether or not legally married) women there was no significant difference in affective wellbeing between those with and without paid employment, given that their partner was the principal wage earner. Subsequent studies have supported this finding (Parry, 1986; Ross et al, 1983; Shehan, 1984). The fact that women, in most households, carry out the vast proportion of the domestic duties, and therefore have plenty of work to do regardless of whether they have paid employment may partly explain this finding. For mothers, responsibilities to their children can provide a sense of purpose and may be perceived to be of greater importance than any other committment, this might in itself be protective of psychological distress (Krause & Markides, 1985). However, single women, who are therefore principal wage earners, are as affected by unemployment as men (Warr and Parry, 1982).

The position of teenagers is rather different. As a group they tend to show significantly less impairment in wellbeing than do the middle aged (Warr, 1987). This may be explained by four factors. Firstly, the income differential between having a job and being unemployed may be relatively small, especially for teenagers with few qualifications. Money and material assistance are often provided by parents and the financial commitments of teenagers are generally less than for older groups. Associated with this, the second factor, physical security is often unchanged by the transition from school into unemployment, many continuing to live with their families.

Thirdly, opportunities for interpersonal contact are usually good as teenagers often carry forward from school a set of friends and an established pattern of leisure activities. In studies of unemployed school leavers it has been found that there is a marked increase in social activities (Stokes, 1983; Martin & Wallace, 1985).

Fourthly, whilst teenagers may experience the lack of valued social position, common to all aged groups, they may see themselves as part of a large group of unemployed youth at the mercy of economic conditions. With unemployment so widespread amongst teenagers in recent years the social stigma is likely to be less strongly felt (Roberts et al, 1982).

However, unemployment does have a negative impact on teenagers affective wellbeing (Banks & Jackson, 1982) particularly with regard to those aspects of mental health relating to social roles, that is the growth in independence and personal autonomy, and the development of competence through the acquisition of new skills and knowledge. In a study by Stafford et al (1980) teenagers in their last year of school were interviewed and were followed up for the next two years. The group was divided according to their employment status after leaving school. Using the General Health Questionnaire, the study found a significant increase in wellbeing for those who moved into jobs and a significant deterioration in mental health for those who became unemployed. No difference in the mental health status of the two groups had been present whilst at school.

The threat of redundancy may also have

implications for mental health: In a prospective study of journalists on a national newspaper, the effect of the threat of redundancy on minor psychological morbidity was examined (Jenkins et al, 1987). It was found that once the threat of redundancy was lifted there was a considerable reduction in minor symptomology. Other studies have also concluded that the threat of redundancy may actually be more stressful and damaging to mental health than unemployment itself (Gore, 1978; Kasl et al, 1975).

In contrast, some people actually seem to benefit from unemployment. Some appear to have left an unrewarding, poorly paid, stressful job, others have managed to respond positively to becoming unemployed. In a study by Fryer and Payne (1984) it was found that those people who coped well with unemployment were those who were able to draw a distinction between work and employment—they were interested in their work for which they were not paid, and less interested in the paid employment that they had had in the past. They were very active and all had goals—usually political, religious or personal—towards which they were striving. Most had been active throughout their lives and were good at organising their time.

This last point returns to Jahoda's ideas, which Fryer and Payne used to analyse their results. As well as imposing a time structure on their day, these people all participated in shared experience outside the home and were able to find goals and purposes outside paid employment. Thus they were able to find other ways of fulfilling the needs that for most people employment satisfies. Unfortunately, most people are not like this.

For some people, the distress caused by unemployment is so severe that it moves beyond general feelings of stress and anxiety to a crisis point at which, it has been suggested, they may attempt suicide.

Brenner (1973) found a strong correlation between economic activity and mental hospital admissions in New York State between 1841 and 1971 and suggested that high rates of unemployment are soon followed by high rates of admission to psychiatric hospitals, suicide and mortality in general. However, it is not clear from Brenner's work whether the increases in mental hospital admissions are of unemployed people or those still in jobs but who become more vulnerable during recession. As Brenner indicated himself, the effects of economic recession on health may be masked by comparing the employed with the unemployed since both groups may be experiencing the effects.

Many UK studies have confirmed an association between suicide, parasuicide (non-fatal, deliberate self harm) and unemployment. Platt and Kreitman (1984) found that in every year since 1977 the unemployment rate in Great Britain had been positively and significantly correlated with the total suicide rate. A study in Edinburgh between 1968 and 1982 (Platt & Kreitman, 1984; 1985) found that unemployed men had a much greater risk of attempted suicide than employed men; of the order of 11:1. The risk ratio increased sharply with the length of the spell of unemployment, over a year

unemployed and the risk ratio was 19:1. Hawton and Rose (1986) in a study in Oxford between 1979 and 1982 also found that the attempted suicide rates were higher for unemployed men. Unemployed men were 12 to 15 times more likely to attempt suicide than employed men, and again the rates increased for the long term unemployed.

This being said, many unemployed people attempting suicide have been found to have a previous history of psychiatric treatment and/or alcoholism. It is not clear whether these factors are more responsible for the attempted suicide than the current unemployment. In interviews with people who have made attempts on their lives, unemployment is rarely given as a major precipitating factor (Platt, 1984). Problems with relationships are generally identified as being the trigger. However, unemployment is frequently accompanied by financial and social pressures which may increase difficulties in relationships. The results of these studies are consistent with the thesis that parasuicide is causally related to unemployment.

The impact of unemployment on physical health

What about those illnesses which are primarily physical with little or no psychological causes? Heart disease, the cancers and stroke might all be taken as examples of such primarily physical illnesses. If unemployment has a role in causing physical illness, the causal mechanisms are likely to be different from those yielding poor mental health. Most probable is an increase in poverty, leading to deficiencies in food intake, heating, clothing or sanitation, or to a harmful change in lifestyle (Warr, 1987).

In a series of aggregate studies, Brenner examined the relationship between the overall mortality rates and several economic variables including unemployment, for the United States, between 1909 and 1976 (Brenner, 1980a,) for England and Wales, between 1936 and 1976 (Brenner, 1979;1980b), and for England, Wales and Scotland between 1954 and 1976 (Brenner, 1983). He found that for all these countries that, after controlling for other factors, national mortality rates were significantly associated with earlier unemployment levels. Brenner does not suggest that all the excess deaths occur amongst the unemployed. Many he argues do occur among those who are left in unstable employment and those who lose one job and find another which may be less well paid and more hazardous. However, the econometric model used by Brenner in his studies has been

Gravelle et al (1981) were amongst the strongest critics. Using Brenner's own methodology they argued that whilst his studies supported the notion of a correlation between measures of unemployment and mortality in different geographical areas a number of other variables such as income, occupational structure, educational levels, dietary and other consumption patterns and housing are also associated with mortality and that these variables are also strongly correlated with unemployment rates. Gravelle et al suggested that if these other variables were included in the analysis the reliability (in terms

of standard errors) of the estimates of the effects of unemployment would be reduced. Equally if these variables were omitted the estimates would be biased in that some of the effects of omitted variables on mortality will be wrongly attributed to unemployment.

Due to the nature of unemployment and the way in which the body responds to stress, it is likely that there will be a time lag between job loss and the emergence of ill-health. Wagstaff (1986) suggests that it is therefore improbable that any statistical association between current health and current employment status reflects any genuine effects of unemployment on health. Clearly the duration of unemployment will also need to be taken into consideration. To establish a relationship between unemployment and ill-health it is therefore necessary to relate employment status (employment duration) at any one point in time to health status at a subsequent date (Wagstaff, 1986).

This strategy was adopted by Moser et al (1984) in their analysis of data from the Office of Population Censuses and Surveys (OPCS) Longitudinal Study. They related health changes over the ten year period 1971-81 to employment status in the week prior to the baseline date (April 1971). Clearly employment status is an imperfect indicator of unemployment since it is unable to distinguish between individuals who have been out of work for a matter of days and those who have been unemployed for an extended period. However, Moser et al found that those who were unemployed in April 1971 recorded a standardized mortality ratio (SMR) of 136 for the period 1971-81. That is, actual deaths among the unemployed were 136 per cent of those which would have been expected if each of the group's members had exactly the same chance of dying at his current age as the population as a whole.

Wagstaff (1986) and Gravelle (1985) have highlighted a number of difficulties with this study. Firstly, the SMR found by Moser et al need not be entirely due to the effects of unemployment on health since those who are unemployed are likely to be disadvantaged in other respects, such as low income when in work and poor housing, factors which are recognised to contribute to poor health (Black Report, 1980). Moser et al attempted to take account of these factors by controlling for social class and found that this reduced the SMR for the unemployed group to 121. However, social class is not adequate to cover the large number of factors affecting health and employment status and if social class only partially captures the effects of these factors, the above average SMR may still be partially attributable to their ommission.

Secondly, ill-health at one point in time tends to suggest an increased probability of ill-health at subsequent dates. This would be particularly true of chronic health conditions. Since in this study Moser et al do not control for past health in their analysis, and because health affects employment opportunities it has been argued that the above average SMR in the unemployed group is partly due to them already being in poorer health (Gravelle, 1985).

Moser et al (1987) followed up this study and tried

to address the above criticisms. They specifically excluded from the study those men who reported themselves as unable to seek work due to temporary sickness or that were permanently sick. The study also controlled for factors such as housing tenure, region of residence and marital state, in addition to social class. Particularly high SMRs were noted for suicide (241), lung cancer (209) and ischaemic heart disease (182).

With regard to lung cancer, a risk factor prior to 1971 probably should have been invoked, since lung

cancer develops slowly over a number of years. However, it is of note that other researchers have suggested that unemployment may be accompanied by an increase in smoking among working class men (Bradshaw et al, 1983; Cook et al, 1982; Warr & Payne, 1983; Westcott 1985).

Moser et al also found that the mortality of the wives of unemployed men was higher than that of other married women. This finding persisted even when allowance was made for their own economic activity and housing tenure. The findings from this

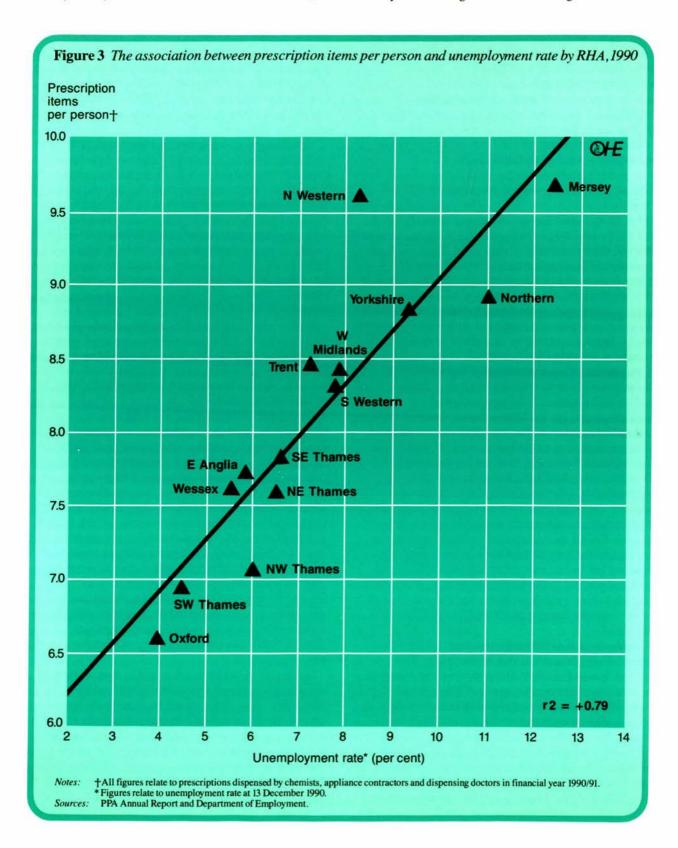


Table 4 Estimated unemployment by RHA, 1991

| | Unemployed as % work force | Unemployed persons '000 |
|----------------|----------------------------------|-------------------------------|
| United Kingdom | 9.1 | 2,530 |
| England | 8.8 | 2,077 |
| Northern | 9.7 | 129 |
| Yorkshire | 9.7 | 223 |
| Trent | 8.6 | 139 |
| E Anglia | 6.7 | 68 |
| N W Thames | 8.5 | 144 |
| N E Thames | 9.1 | 216 |
| S E Thames | 9.1 | 181 |
| S W Thames | 6.2 | 95 |
| Wessex | 7.7 | 101 |
| Oxford | 6.2 | 81 |
| S Western | 9.1 | 146 |
| W Midlands | 9.9 | 247 |
| Mersey | 12.8 | 129 |
| N Western | 9.3 | 178 |
| Wales | 9.5 | 123 |
| Scotland | 9.2 | 229 |
| N Ireland | 14.0 | 101 |

study showing raised mortality among the 'well' unemployed and their wives would appear to counter Gravelle's (1985) suggestion that the high death rates of unemployed men may result from their poor health before they became unemployed.

The health costs of unemployment

Since 1980, studies conducted in Britain have conclusively proved that unemployment causes a deterioration in mental health. Whilst the evidence that unemployment causes physical ill-health is less conclusive, due to the difficulty in separating it from other forms of social deprivation, there is evidence to suggest that unemployment causes excess mortality (Moser et al, 1984;1986). Precisely how unemployment kills is still not known, but it is likely to be through a combination of stress, poverty and unhealthy lifestyle.

There does seem to be an association between unemployment and the consumption of health care resources. The burden of unemployment can clearly be seen in Table 4 and Figures 3 and 4 which show the relationship between unemployment, the GP consultation rate and the number of prescriptions dispensed in Scotland, Wales, Northern Ireland and in each Regional Health Authority in England. As can be seen those regions with the highest levels of unemployment are also those regions with the highest number of GP consultations and dispensed prescriptions. Of course, this association is only partly accounted for by an effect on the health of the unemployed. Other factors which may damage health in regions such as Mersey and North Western, and Northern Ireland have to be taken into consideration, notably social deprivation.

In a British longitudinal study of a factory closure in Calne, Wiltshire (Beale and Nethercott, 1985), it was shown that the unemployed and those threatened with unemployment are more frequent users of GP services than those in stable employment.

Table 5 The cost of unemployment to the National Health Service, United Kingdom, 1992*

| Health Service sector | Cost attributed to unemployment £ million | Total cost £ million | % attributed to unemployment |
|--------------------------|---|-------------------------|---------------------------------|
| General Practice | 28.29 | 2,336 | 1.2 |
| Pharmaceutical services | 11.85 | 3,343 | 0.4 |
| Total | 40.14 | 5,679 | 0.7 |

^{*} The estimates are based on a figure of three million unemployed and are calculated as follows:

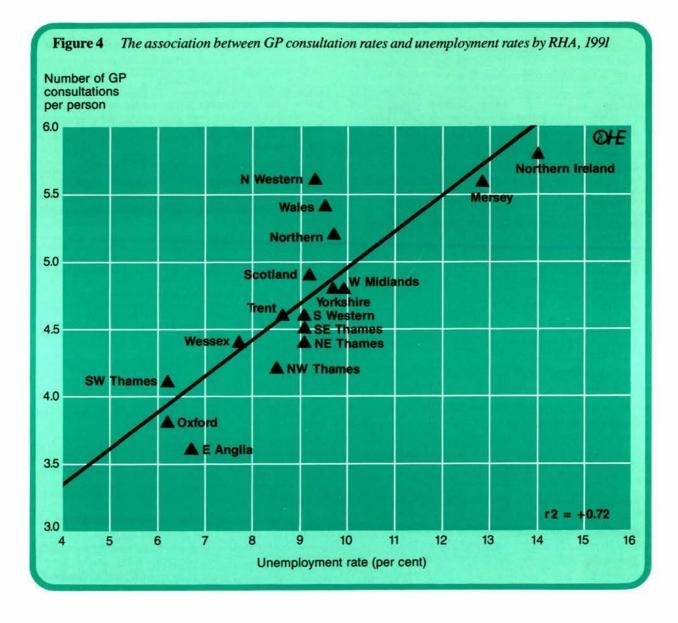
General practice: The average number of GP consultations for the working population is five per annum. If it is accepted that unemployment leads to a 20 per cent increase in consultation rates this increases the number to six for those individual affected. The excess cost being the one consultation per unemployed person.

Pharmaceutical services: It is calculated that for the working population for every five consultations they receive 2.4 prescriptions. Therefore for every additional consultation there will be approximately 0.5 prescriptions. Whilst for the entire population only 87 per cent of prescriptions are dispensed it is reasonable to expect that since the majority of unemployed are exempt from charges virtually 100 per cent of prescriptions for this group will be dispensed.

In analysing the medical records of those who had worked at the factory they found that job loss did not lead to an increase in illness episodes. However, it did give rise to more frequent medical consultations, both in general practice and hospital out-patients, not only for the individual concerned but also for their families. The authors found an increase in consultations two years prior to actual redundancy occurring, when management first announced the possibility indicating that the anticipation of job loss may be important in determining ill-health. In the following four years the consultation rates of the study group was 20 per cent higher than matched controls and for those who failed to find work after four years, consultations were 57 per cent higher than their controls. In general, the effects were more pronounced for female former employees than for men. The General Household Survey (1989 & 1990) supports Beale and Nethercott's findings in so far as an analysis of GP consultation rates by economic activity would also suggest an increased consultation rate of 20 per cent for the unemployed, for both sexes.

In 1992, in the UK, it is estimated that the average cost of a GP consultation was £9.43 and the average number of consultations for a person aged between 18 and 60 (for women)/65 (for men) was approximately five (OHE, 1992). It is estimated that 72 per cent of all GP consultations result in a prescription being written (87 per cent of which are dispensed) and the average cost of a prescription in 1992 was £7.90 (OHE,1992).

Clearly, therefore, substantial numbers of unemployed people are going to result in increased NHS expenditure. The excess burden of ill-health caused by 3 million unemployed could result in a cost to the NHS for GP and pharmaceutical services of £40.14 million (see Table 5). This figure compares, for example, with a cost to the NHS for GP and pharmaceutical services (these figures do not include hospital in-patient or out-patient treatment) of



£34 million for epilepsy, £77 million for diabetes and £27 million for Parkinson's disease (1991 prices) (Office of Health Economics data).

In addition to the expense of £40.14 million for GP and pharmaceutical services, the NHS loses revenue from prescription charges, since the unemployed are entitled to free prescriptions. This adds a further £30.6 million to the equation, giving a total cost of nearly £71 million (an excess of approximately £24 per unemployed person). It should be noted that the families of the unemployed also consume more GP services than those of the employed and that spouses are also entitled to free prescriptions.

Use of hospital services have not been included in these costings but have also been found to be increased for the unemployed (Beale & Nethercott, 1985-87). Given Moser et al's findings of increased mortality amongst unemployed people from conditions such as lung cancer and ischaemic heart disease this is to be expected and it is likely that it will represent a considerable burden to the NHS.

Conclusion

In 1991, Norman Lamont, then Chancellor of the Exchequer, stated that the rising numbers of

unemployed and the recession were prices "well worth paying" to get inflation down. In 1993, with economic forecasts suggesting that the recession is at an end, inflation below 2 per cent and indications that unemployment is beginning to fall it will be easy to forget the problems and distress caused to over three million of the population and their families. Yet, Treasury projections indicate that the numbers of people out of work will not fall below 2.4 million, at least until 1995, and many economists believe a return to "full employment" will leave one million people out of work.

The cost to the economy of unemployment per year in terms of benefits paid and foregone tax revenue is estimated to be £24 billion and this excludes the cost of lost production output. The total cost will therefore exceed the total cost of the NHS, which in 1992 was in the region of £36 billion. As stated, the cost to the NHS, in terms of GP consultations and prescriptions, of the ill health caused by unemployment is of the order of £70 million, thus pushing up the medicines bill and increasing pressure on GPs. However, the greatest price is paid by those who are out of work and their families.

The findings from Brenner's work on mental health

and Moser et al's (1984-87) research on physical health in the early 1980's would suggest that we can expect to see increased mortality rates among unemployed people and their families, and until the economy is fully recovered, amongst those who whilst in employment feel at risk of redundancy. A recent survey (Employment in Britain Survey, 1993) revealed a growth in job insecurity since 1988, particularly among professionals, managers and skilled manual workers. This finding underlines how Britain's recession has made an impact across a wide range of occupational groups.

More research is clearly required in order that we might fully understand how unemployment damages health, but, perhaps more important, and more urgently needed, are changes in government policy and attitudes towards the unemployed. There would appear to be two possible, and in some ways complimentary, directions in which policy might be altered.

Firstly, general practitioners should be encouraged to provide "well unemployed" sessions, addressing the mental, dietary and lifestyle pressures faced by those out of work. Whilst, in the short term this would require pump priming funds, in the longer term, in preventing ill health amongst unemployed people NHS resources will be saved.

Secondly, government should recognise that training courses, "job clubs" and other initiatives to help people get employment will have important intrinsic benefits to those participating by, for example, providing a time structure to their day and enabling them to develop contacts and share experiences with people outside of their immediate family. It is important to encourage people to develop the skills they need to return to work, but encouraging unrealistic expectations about the success of attaining work is likely to leave participants in a worse health state.

If as Jahoda and Rush (1980) have suggested, losing ones job is comparable to a bereavement government and employers should be offering counselling to newly unemployed people. Responsible employers making people redundant should counsel workers on the potential impact of job loss and unemployment on their mental and physical health. Many employers now provide financial advice and advice on seeking alternative work-health impact counselling should be added. In addition, the Department of Social Security should recognise the health value that voluntary work and education can provide unemployed people, and ensure that its "available for work" criteria do not prevent unemployed people from undertaking activities that improve their mental wellbeing and social skills.

However, neither of these policy directions will have much effect unless society recognises the health impact on unemployed people of an attitude that if you "get on your bike" the work is always there to be found. The vast majority of the unemployed do wish to obtain work and, as stated at the beginning of this briefing, during a recession anybody can lose their job.

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