HEALTH, WORK AND WELLBEING

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Summary

This chapter discusses the health benefits of work, the health effects of long-term worklessness, and the diminishing success of attempted return to work as time passes. The text also discusses strategies to return people to work, and the concept of "good work".

Given the heavy burden on employers from non-communicable diseases in the workplace, particularly in the context of an ageing workforce, it also discusses the efficacy of health promotion programmes.

1. The Health of Individuals in Relation to their Work

For many generations, there has been a recognised association between the health status of an individual, their occupation, and their general wellbeing.

For most of this time, in keeping with the general needs of industry and the working population, the main focus has been upon identifying diseases or impaired health

resulting from specific workplace exposures or occupations, in order to control or eradicate them; only relatively recently have the health *benefits* of work been more widely and formally appreciated.

1.1. General Health Impacts of Working and Not Working

A recent review by United Kingdom(UK)-based researchers Gordon Waddell and Kim Burton, addressing the question "*Is work good for your health and well-being?*", stated that (in general), the health benefits of work outweigh the potential harmful effects of long-term unemployment, or of prolonged sickness absence. In summary, they assert that working is better for a person than not working – measurable over a number of different health axes.

In addition, working has been shown to have therapeutic effects for people with existing physical and mental health problems, and may help promote recovery from both physical and mental illness. Working reduces the risk of the biopsychosocial effects of long-term unemployment (or *worklessness*), reduces poverty (itself independently associated with poor health outcomes), and can improve quality of life and well-being.
In contrast, there is evidence that being out of work long term can raise mortality rates by over 20%; however, it also results in 2-3 times the risk of poor physical and mental health, and predicts higher rates of medical consultations, consumption of medication, and admission to hospital.

It was concluded in this review that working is good for health and well-being in most people - not just for able-bodied people, but also for individuals with existing disabilities, and for most people with "common health problems" (a term encompassing conditions such as back pain, stress, anxiety and depression).

This UK-based view is similar to that emanating from other comparable world regions; the Australasian Faculty of Occupational and Environmental Medicine (AFOEM) Position Statement "*Realising the Health Benefits of Work"*, in addition to concurring with Burton and Waddell, also asserts that work may confer benefits such as ensuring some physical activity is undertaken on work days, providing a sense of community and social inclusion, allowing workers to feel they are making a contribution to their family and society, providing structure to days and weeks, promoting financial security, and reducing the likelihood of risk-taking behaviour (such as excessive alcohol consumption).

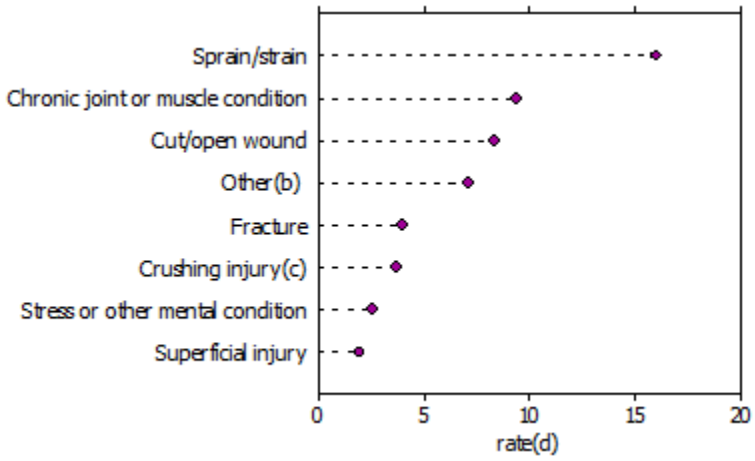
1.2. Is Work *Always* Good For You? Some Adverse Effects of Work on Health

The UK Health and Safety Executive's annual statistics report a provisional figure for the number of workers fatally injured in 2011 to 2012 as 173 (a rate of 0.6 deaths per 100,000 workers). This appears to be dropping steadily year-on-year. Half of all fatalities were in 3 categories – being struck by vehicles, being struck by falling objects, or falling from a height.

During the same period, over 600,000 workers had an accident reported at work, a third of these leading to over 3 days' absence: the majority were off over 7 days. Of the

accidents that were reported by employers (118,000), 26,000 were reported as "major" injuries under RIDDOR Regulations (Health & Safety legislation statutory reporting regulations). This figure was noted to have fallen on average by 3% annually for 9 of the last 10 years. Manual handling accidents were the most commonly reported causes of injury. Slips and falls made up more than half of all reported major injuries and almost one-third of injury-related absences lasting over 3 days. Approximately 2 million working days were estimated to have been lost due to handling injuries and slips and trips. Accidents involving electricity, fire, explosion, drowning or asphyxiation accounted for 1 in 8 fatalities, but only 1 in 100 non-fatal injuries.
In comparison, in Australia, of the 12 million people employed during 2009-2010, 5.3% (640,700 people) experienced at least one work-related injury or illness. As in the UK, this rate is also dropping. Of those injured, 56% were men. Injury rates were similar from ages 15-44, highest in men aged 45-54 and lowest in men aged over 55. In women, the injury rate was similar, regardless of age.

Injuries were highest amongst the "blue-collar" occupational groups such as labourers, machinery operators and drivers (as compared to "white collar" clerical workers and professionals). Blue-collar workers were predominantly male: clerical workers had a higher preponderance of women – however those women who worked in "blue-collar" occupations had just as high a rate of injury as the men. Conversely, women who worked in "white collar" jobs (such as managers, professionals, and sales), had a substantially higher rate of work-related injuries, including a higher rate of chronic joint or muscle conditions. In 2009-10, one-third of injuries were acute sprains and strains, in both men and women (Fig 1). Other common pathology comprised chronic joint or muscle conditions, and cuts or open wounds.



(a) Most recent injury during the 12 months to June 2010
(b) Includes burns
(c) Includes injuries resulting in internal organ damage
(d) Injuries per 1,000 workers

Figure 1. Type of injury suffered (a) - 2009-10
Source: *ABS 2009-10 Multipurpose Household Survey*

In Australia, injuries via work are generally treated through Worker Compensation schemes. In 2007-8 there were 134800 "*serious*" claims – i.e. 13.8/1000 employed people; it is estimated that *serious* claims only represent one-fifth of all work-related injuries.

Over the last ten years the claim rate has dropped by 15% but the median time off work has risen slightly. Two-thirds of claimants were male. In spite of a lower claim rate, women spent slightly more time off work due to serious claims.

In terms of lost working time, almost half of both men and women did not miss any work; almost a quarter missed upto 4 days, and another quarter missed 5 days or more. The longest absences were due to fractures and to stress.

Rarely, work results in death: as in the UK, the fatality rate in Australia has been steadily dropping. The vast majority was male, and peak incidence was in the over-55's (double that of 15-34-year-old workers). Agriculture, fishing and forestry were the most dangerous occupations. The predominant causes of death are similar to the UK.

These are, of course, statistics published by economically-developed countries: in developing countries the rate of injury (and work-related illness) is likely to be much higher, and the burden of disease relatively greater due to poorer treatment facilities; injury-reporting systems are often lacking; in 1999 the World Health Organisation (WHO) stated that global numbers are difficult to quantify due to a lack of information, but postulated that an estimated 1.1m people worldwide die from work-related diseases or injuries (which roughly equals the death-rate from malaria). Of these deaths, approximately one-quarter were injuries, one-third cancers, one-fifth respiratory and 15% cardiovascular. There were reported to be approximately 160m new cases of occupation-related disease appearing each year. The International Labour Organisation (ILO) is less conservative, estimating 2.3m occupation-related deaths worldwide annually, of which 360,000 were from accidents: in other words, the ILO predicts 1m accidents and 5500 workers' deaths per day.

1.3. The State of the Nations: Sickness Absence in the UK, Europe, Australasia, and Other Sectors

Despite the rather gloomy work-related injury and disease statistics above – particularly in respect of developing countries, workers' health issues (and sickness absence) in *developed* countries more frequently relate to acquired health conditions which adversely affect work ability but are not caused by work.

In the UK, sickness absence rates remained constant through the 1990's until 2003 and have steadily fallen since then: in 1993, 7.2 days on average were lost per worker per year, reducing to approximately 4.9 days by 2011 (i.e. 2.2%). Women are noted to have higher sickness absence rates than men, but both have fallen over the previous 20 years. Overall, the most common reasons given for sickness absence in 2011 were minor illnesses such as coughs, colds, flu and gastroenteritis. The single category resulting in the largest number of days lost was musculoskeletal problems, making up just over a quarter.

Of the *short*-term absences from work, by far the most common are minor illnesses and viral infections. The next most common reasons in *manual* workers comprise musculoskeletal disorders, followed closely by stress. In *non-manual* workers, the position is reversed, stress now having overtaken musculoskeletal disorders as the most common cause of short-term sickness absence.

The most common causes of *long-term* absence include strokes, cancers and myocardial infarction, followed by musculoskeletal injuries and mental ill-health.

Sickness absence was noted to increase with age until the age of 65: it was concluded that the lower percentage of hours lost to sickness in the over-65's bracket (compared to the younger age group of 50-64) was due to those with health problems having already exited the workforce. There were noted to be lower sickness absence rates for the private sector (compared with public) and for the self-employed, employees of smaller organisations, and those working in London (the highest absence rates being in North-East England and Wales). Being a manager, director or senior official was associated with less than half the sickness absence rate of those working in "caring, leisure, or other service" (occupations).

In comparison, in Australia and New Zealand, the average annual absence rate for 2009 was 4% (or 9.3 days per employee), which was an *increase* of 0.7% from the 2008 levels. This increase was largely driven by rises in common health problems such as musculoskeletal disorders, and people with mild to moderate mental health problems being certified permanently unfit for work. It has also been shown that return-to-work rates six months' post-injury in both Australia and New Zealand had *dropped* from 2005/2006 to 2008/2009, from almost 80% to just under 75% for Australia. In 2010, 28% of Australian employees and 25% of New Zealand employees had not returned to work in the 6 months following lodging a Workers' Compensation / Accident Compensation claim.

There was also noted to have been a 70% *increase* in requests for sickness absence certificates from 2002 to 2011, despite there being little change in morbidity or industrial relations.

Across Europe, there have been few comparisons: many countries do not have adequate national recording mechanisms. In a 2004 questionnaire-based study (absence) being defined as being absent from work at least one day in the last 12 months, it was concluded that southern European countries have a lower sickness absence rate than their Central and Northern counterparts, with the exception of the UK, Ireland and Denmark. Overall, the EU sickness absence rate was 14.5%, with a range of 6.75% (Greece) to 24.5% (Finland). In contrast with the UK (showing a higher absence rate in women), men were more likely to take sickness absence (for example, in Greece being 3.5% in women and 8.9% in men).

Black and Frost estimated that France, Germany, the Netherlands and the US have similar absence rates to that of the UK.

For other regions of the world, information is patchy at best. According to Landstad, Olsson et al, employees in private companies in Singapore in 2010 had a reported sickness absence rate of 3.2 days per year (less than 1.5%), compared to Sweden's nadir in 2004 of 14%.

1.4. Being off Work – The Health Effects of Long-Term Unemployment

"*Long term worklessness is one of the greatest known risks to public health"*

Professor Sir Mansel Aylward

There is good evidence that the longer an individual stays away from work, the less likely they are to return: it has been asserted that if a person is off work for 20 days, the chances of getting back to work is 70%; at 45 days, the chance is 50%; and at 70 days, 35%. Extrapolating this further, those who are off work for a year or more have very little chance of returning, even if the symptoms of the original health complaint have resolved. This may relate, at least in part, to workers' confidence in their ability to make a return to working; becoming comfortable in a sick role; and other psychosocial barriers to return.

There is also strong evidence showing that those who are off work and claiming Workers' Compensation have longer periods of absence, and have significantly poorer outcomes for similar injuries and diseases overall than those whose injury or disease does not occur via work.

Long-term unemployment (alternately termed worklessness) has been shown to lead to adverse consequences for physical health, in part via an association with negative lifestyle choices including inactivity, heavier tobacco, alcohol and drug use, as well as suicides and accidents, and also in part by location and social habitat.

There is strong evidence to indicate that long-term unemployment is generally harmful to health, in the context of long-standing physically limiting illness resulting in higher mortality, poorer general health, and the presence of long-term illness. There is also evidence of poorer mental health, increased psychological distress, and minor psychological and psychiatric morbidity. There is also a higher rate of medical consultation, medication consumption and admission to hospital.

The health effects of work and unemployment are generally most marked in middle-aged men. These effects also have knock-on consequences on their families: children of the long-term unemployed show a higher likelihood of chronic illness, psychosomatic symptoms and lower overall well-being. Further, in families where neither parent has worked in the previous 6 months, their children are more likely to be out of work in the future (often for long periods, and sometimes for the whole of their lives). Moreover, psychological distress may occur in children whose parents are under increased economic pressure; this can result in withdrawal, anxiety and depression, or aggressive/delinquent behaviour and substance misuse. Therefore, on a larger scale, not only does worklessness affect the individual and their families, but society as a whole.

To further cement this association, there is be a "dose-response" relationship of sorts: it is widely recognised that *re-employment* is associated with improved self-esteem, improved general mental health and reduced psychological distress and minor psychiatric morbidity. In general terms, the improvement in these elements through returning to work is comparable to the deterioration due to job loss. Furthermore, it has been proven that people who move off social security benefits and successfully re-enter work go on to experience improvements in income (which also independently improves health), socioeconomic status, mental and general health and well-being. In contrast, those who come off social security benefits, but do *not* re-enter work, are more likely to report deterioration in health and well-being.

Waddell and Burton, however, warned that the work must be of the right type to achieve these outcomes - although overall the beneficial effects of working outweigh the risks, also being greater than the harmful effects of long-term unemployment or of prolonged sickness absence, there is evidence to suggest that *inappropriate or meaningless work* has harmful health effects. This is explored in more depth later in this chapter, in the section on "good work".

Waddell and Burton concluded that, as well as the strong evidence for *able-bodied* individuals that work was generally good for physical, mental health and well-being (and conversely that worklessness was associated with poor physical and mental health and well-being), the same applies to many *disabled* people, and those with *common health problems*.

However, the situation is not completely clear-cut; much of the negative health effect of worklessness may come down to finance: unemployment alone does not necessarily damage health - in approximately 5-10% of the population, unemployment leads to *improved* health and well-being: such improvements are generally observed in people who have established financial security or have planned for the situation; these are the exception, rather than the norm.

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Biographical Sketch

Dr Euan Thompson is a Specialist in both Occupational Medicine and Primary Care, originally training and working in the UK, and currently based in Western Australia.

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He contributes to a number of industry committees, including the Cancer Council Australia Occupational and Environmental Cancers Committee, the AFOEM Ethics Committee, and the WA Faculty council of the AFOEM, and is a regular contributor to academic journals.