

# The economics of mental health in the workplace: what do we know and where do we go?

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**Abstract.** To provide an overview of the economic impact of poor mental health in the workplace and assess the extent to which economic evaluation has been used to further the case for investment in workplace based mental health programmes. Rapid scoping review of published and grey literature. The socio-economic costs of poor mental health in the workplace are substantial but conservative, as few studies have included productivity losses from work cutback, as well as absenteeism. While few economic evaluations of workplace based mental health interventions were identified, the available evidence base suggests that they have the potential to be highly cost effective. Much of this evidence may be from the US and be less applicable elsewhere; it may also have been solely published in company documents making assessment of methodological quality difficult. The potential economic case for workplace based mental health interventions appears good. More collaboration between policy makers and the private sector would help facilitate rigorous and transparent economic evaluations. A number of evaluations are planned. The challenge is to build on these initiatives, in order to address what remains a major gap in our knowledge on the economics of mental health.

## INTRODUCTION

Much of the work undertaken by health economists looking at the relationship between employment and poor mental health has focused on the important issue of labour force participation by people with severe mental health problems. There have been a number of economic evaluations (admittedly US dominated) of different interventions that seek to help this group return to work, including comparisons between vocational rehabilitation and supported employment schemes (Anderson *et al.*, 2007). In contrast, much less attention appears to have been given towards assessing the economic case for investment in the prevention, and/or early recognition and treatment in the workplace of depressive and anxiety related disorders, as well what are more commonly referred to as stress related problems.

In many respects this lack of attention is remarkable; the socio-economic impacts of poor mental health in the workplace are substantial and increasing. This article provides a brief overview of these economic conse-

quences, looks at the recent European policy response, assesses the extent to which workplace based interventions to prevent or alleviate these problems have been the subject of economic evaluation and outlines ways in which the evidence base might be further strengthened.

## ECONOMIC IMPACT

Upward trends in the levels of depression and stress related absenteeism from work can be seen right across Europe. Permanent withdrawal from the labour force is also on the rise, increasing disability and sickness benefit payments that have now become a major drain on several European social welfare systems (Curran *et al.*, 2007). For example, around 25% of all illness-related social security expenditure in France is due to work related stress (Bejean & Sultan-Taieb, 2005). In Finland 20% of all sickness benefits and 42% of all disability pensions are now paid out for people with mental health problems; overall around 50% of all people recorded as suffering from depression are now on long-term disability pensions (Jarvisalo *et al.*, 2005).

The short-term impacts on business can also be substantial. One English survey of human resource professionals conducted by the *Chartered Institute of Personnel and Development* (CIPD) reported that 40% of all companies identified had rising levels of stress-related absenteeism. These rates were at their highest in the public sector, where 76% of respondents cited stress as a leading cause of absence in their workplace, compared with 49.6% of those based in the private sector. The average

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cost of absence, per employee per year, rose to €1021 compared with €927 in 2006 (Chartered Institute of Personnel and Development, 2007).

At population level, the economic costs of common mental health problems far outweigh their health system costs. Typically cost of illness studies of depression and anxiety related disorders report that productivity losses, due in the main to the absenteeism and lost opportunity to work, account for between 60% and 80% of all costs. One English study estimated that the total costs of adult depression in 2002 were €15.46 billion or €309.2 per head of population; treatment costs accounted for only €636 million of these costs, the vast majority of additional costs were due to lost employment because of absenteeism and premature retirement from the labour force (Thomas & Morris, 2003).

While the costs of absenteeism and withdrawal from the workplace are relatively straightforward to identify, they may in fact be a highly conservative estimate of total productivity losses. There is a growing body of literature on the impact of 'presenteeism' or 'work cutback', whereby individuals remain at work but do not function effectively (Sanderson & Andrews, 2006). One US study suggested that this may be five times or more greater than the costs of absenteeism (Kessler & Frank, 1997), whilst another US study of workers with depression found that this was associated with 7.2 hours per worker per week of lost productive time, or 86% of total time losses including absenteeism (Stewart *et al.*, 2003).

Workers experiencing stress and mental health problems are also more likely to seek early retirement (Harkonmaki *et al.*, 2006). In Finland, Karpansalo *et al.* (2005) reported that employed men with depression retired almost two years earlier than their non-depressed colleagues. This increased risk of early retirement is becoming ever more critical as workforces across most of Europe age rapidly. In the absence of new additions to the labour pool, for instance through migration, those left in the workforce will potentially have to pay greater premiums and work for a longer period of time in order to fund and sustain social welfare systems. To counter this at an EU level a goal of raising the participation rate of older workers from a level of 38.5% to more than 50% has now been set (Gould & Laitinen-Kuikka, 2003). Clearly, promoting and protecting the mental health of employees will help this goal be achieved.

## **POLICY RESPONSE**

Employment has many obvious benefits. For the individual it provides an opportunity to earn a regular income and thus obtain greater long-term financial security. It can

also provide social status and a sense of achievement, helping bind local communities together (Jahoda, 1981). For governments employment reduces the need for the provision of additional financial support to individuals through social welfare payments. It also helps sustain economic growth, which in turn raises tax-based revenues that can be used to support public services. Maintaining a high level of employment is also central to the key EU goal, set out in its Lisbon agenda, of ensuring that Europe remains competitive in a global marketplace, where the revitalised Russia and the newly emerging economies of China and India represent fresh challenges.

For employers too, protecting the mental health of their workforce is integral to both remaining efficient and maintaining a good work environment. Changing working practices, which have seen a shift away from heavy industry in Europe towards a more high technology and service sector dominated economy, can create much uncertainty for workers. Patterns of working are changing: in a world of instantaneous communication consumer demands have risen inexorably; technological innovation also means that the notion of being able to hold one job for life has all but disappeared, most individuals can now expect not only to change employers but also sector of work during their lifetime.

These benefits to the health of workers, business productivity and European economic performance have increased interest in measures to tackle poor mental health in the workplace (McDaid *et al.*, 2005). At EU level, a voluntary Framework Agreement on Work-Related Stress was signed by the European Social Partners (European associations of trades unions and employers organisations) in October 2004 (Monks *et al.*, 2004). Its principle objective was to increase awareness among employers and employees of the signs of work related stress and to provide guidance on how to combat the issue. Early indications suggest that significant progress in introducing measures and legislation has been achieved in several EU countries, including the Czech Republic where the Agreement was put into law under 2006 Labour Code, while in some others such as Norway existing legislation already covers the areas set out in the Agreement (European Trade Union Confederation, 2007).

Another sign of the growing attention placed on mental health in the workplace has been the inclusion within the WHO Action Plan on Mental Health for Europe for work towards the creation of "healthy workplaces by introducing measures such as exercise, changes to work patterns, sensible hours and healthy management styles" and the inclusion of "mental health in programmes dealing with occupational health and safety" (World Health Organization, 2005).

## ARE WORKPLACE MENTAL HEALTH PROMOTING AND PROTECTING INTERVENTIONS COST EFFECTIVE?

It is clear that the economic impacts in the workplace of poor mental health are substantial and that there is growing interest from policy makers, business and other stakeholders in the implementation of promotion and protection strategies. It is thus important that we increase our knowledge, not only of what works and in what settings, but also at what cost. This is a question currently being addressed in detail by the 32 Country EC Supported Mental Health Economics European Network (MHEEN).

Actions taken include identification strategies to determine vulnerability in the workplace, management programmes including modifications to job structure and environment in order to tackle problems, and a range of strategies to help those who have had longer periods of time away from work reintegrate back into their workplace. However an initial scoping review suggests that, despite all the rhetoric about the economic case, there still is very little formal evaluation of the cost-effectiveness of such interventions.

Much of what is available has been conducted in the United States. This is perhaps unsurprising given that US employers are usually responsible for the health care costs of their employees (Dewa *et al.*, 2007). For instance, one Employee Assistance Programme run by the McDonnell-Douglas company managed to reduce both work loss days by 25% and turnover by 8% of people with mental health problems (McDonnell Douglas, 1990). A number of other US based programmes focusing on promoting health as a whole, rather than mental health alone, have also been shown to be cost effective (Pelletier, 2005).

Some evaluations of effectiveness and/or cost effectiveness have taken place in Europe; measures have usually focused on traditional occupational safety and health measures, although public and private sector companies have also begun to take action to tackle stress and depression related problems in the workplace (Berkels *et al.*, 2004). The recent CIPD survey in England, suggests that 42% of employers assert that they are developing schemes to protect mental health, acknowledging that this, in addition to the obvious health benefits, can also help improve their companies economic performance (Chartered Institute of Personnel and Development, 2007).

For example, looking at the effectiveness of screening measures in the workplace, Electricite de France and Gaz de France have implemented the APRAND programme (*Action de Prévention des Rechutes des troubles Anxieux*

*et Dépressifs*) for its 140,000 employees. The programme is designed to help in the early identification of anxiety and depressive disorders by company occupational health physicians, as well as by primary care doctors and social workers. Results indicate that, of those workers on long term sick leave identified as having anxiety or depressive disorders, the cohort that subsequently participated in additional preventative activities had an increased 10% to 20% probability of recovery or remission at twelve months, compared with those who received usual care alone. Work is now planned to determine the impact of this intervention on absenteeism rates (Godard *et al.*, 2006).

There are also some reports documenting the economic impact of investing in programmes to tackle stress. In England, London Underground has instigated a stress reduction programme for its 13,000 employees. Internal evaluation suggests that in the first two years of the scheme's operation, a reduction in employee absence avoided costs of more than €705,000. This was eight times greater than the level of investment into the scheme. In addition there was also evidence of improved productivity by those at work and some positive healthy lifestyle changes by employees (Business in the Community, 2005).

An older evaluation took place in a Belgian pharmaceutical company, where high levels of stress related absence were linked to the prevailing economic climate, which fuelled a sense of job insecurity. The company invested in a stress management course for those employees identified as being at risk, while also setting up training for company management on how to recognise the signs of stress. Although this evaluation concluded that gains achieved by the scheme in terms of a reduction in absenteeism were just 1%, the costs avoided by the company from stress-related absenteeism were so substantial that a net gain of 600,000 was still realised (Polemans *et al.*, 1999). This is just one of a number of company produced studies that suggest workplace mental health promoting strategies are likely to generate much greater gains than the costs of programme implementation.

Another area which has been the subject of economic evaluation in an employment context is the use of psychological therapies, particularly, cognitive behavioural therapy (CBT) for people with anxiety and depressive related disorders. One study in England concluded that the use of a computerised version of CBT would be cost effective, even at low levels of effectiveness gain, because of the positive impact treatment would have in reducing productivity losses due to absenteeism from work (McCrone *et al.*, 2004). More recently, as part of



the Improving Access to Psychological Therapy (IAPT) Programme launched in England in 2006, two pilot psychological therapy projects are now being evaluated in terms of effectiveness and cost effectiveness, whereby return to employment is a key outcome measure.

A slightly different but related area where research has been more longstanding is the use of mental health promoting interventions to help those who are unemployed, and who typically are then at greater risk of problems such as anxiety and depression, return to employment. One of the most well known of these schemes is the JOBS programme. Developed in the US in the late 1980s, the intervention consists of a small number of training workshops that involve active learning and self-efficacy to help empower individuals to take more control over the job-search process and cope with difficulties and disappointments in this process. The programme was found to help promote reemployment and generate a positive return on investment, as the costs avoided and additional income gained were much greater than the costs of investing in the programme (Vinokur *et al* 1991). Subsequently it has been implemented, with some success and in different contexts, in other high-income countries around the world, including Finland, and the Netherlands. It is now the subject of ongoing evaluation in a cross border region of Ireland; again initial findings suggest that the programme has been effective. (Barry *et al.*, 2006).

## CHALLENGES AND FUTURE OPPORTUNITIES

The nature of the workplace has meant that there has often been very little incentive to put the results of economic evaluations of workplace mental health schemes into the public domain. Assessment of mental health in the workplace is clearly a sensitive issue; the stigma associated with poor mental health means that employers may be reluctant to publicise work in this area; employees and trade unions may also be guarded about participation in any evaluation for fear of individual workers being labelled as having a mental health problem and perhaps then at risk of losing their jobs.

Another continuing challenge is the difficulty in assessing the methodological quality of much of the available evidence. Studies are often reported solely in company publications. There is often little incentive to publish findings in peer-reviewed journals. Moreover, many evaluations of interventions to tackle stress available in the grey literature that suggest that they have significant net benefits, are produced by organisations

which may stand to gain commercially from their more widespread use.

It is therefore in the interest of policy makers, as well as employers, to carefully consider providing financial support for workplace based mental health interventions. One option is to retrospectively add an economic dimension to existing studies of the effectiveness of interventions. Careful consideration of how interventions can be adapted to work in different settings and contexts should also be built into this analysis. The scope for more partnership work between the private and public sectors, so as to provide for support for additional rigorous and transparent effectiveness and economic evaluation of workplace interventions, is also well merited. Indeed, in many European countries the public sector is itself a major employer where interventions, including adaptations of schemes used in the private sector, could be evaluated.

There are some encouraging signs: a number of ongoing and planned economic evaluations have already been identified by MHEEN. These include economic assessment of an early intervention scheme to help prevent major depression and long-term sickness absence in the labour force in the Netherlands, assessment of the economic costs of absenteeism to a major employer in Malta and a focus on the work related consequences of poor mental health as part of mental health impact assessment developments in Portugal. The challenge now is to build on these and other initiatives, including measures targeted at small and medium sized enterprises as well as big business, in order to address what remains a major gap in our knowledge on the economics of mental health.

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