



# Work and common psychiatric disorders

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## DECLARATIONS

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None declared

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## Summary

Psychiatric disorders are now the most common reason for long-term sickness absence. The associated loss in productivity and the payment of disability benefits places a substantial burden on the economies of many developed countries. The occupational dysfunction associated with psychiatric disorders can also lead to poverty and social isolation. As a result the area of work and psychiatric disorders is a high priority for policymakers.

There are two main agendas: for many researchers and clinicians the focus is on the need to overcome stigma and ensure people with severe psychiatric disorders have meaningful work; however the public health agenda predominantly relates to the more common disorders such as depression and anxiety, which contribute a greater burden of disability benefits and pensions. In this review we attempt to address this second agenda.

The relatively sparse evidence available reveals a complex field with significant interplay between medical, psychological social and cultural factors. Sick leave can be a 'process' as well as an 'event'. In this review we propose a staged model where different risk and protective factors contribute to the onset of psychiatric disorders in the working population, the onset of short-term sickness absence, and the transition from short- to long-term absence. We also examine strategies to manage psychiatric disorder in the workforce with a view towards returning the employee to work.

Our aim in this review is to highlight the complexity of the area, to stimulate debate and to identify important gaps in knowledge where further research might benefit both patients and wider society.

## Introduction

One of the most powerful ways in which psychiatric disorders lead to social exclusion is via their

impact on occupational function.<sup>1</sup> Psychiatric disorders account for one-third of all disability benefits across the OECD member countries<sup>2</sup> and significantly reduce the ability of people with

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other disorders to work.<sup>3,4</sup> While low rates of employment among patients with severe psychiatric disorders remains a major concern,<sup>5</sup> this review will focus on the increasing number of individuals on disability benefits whose long-term absence is attributed to common psychiatric disorders, such as anxiety and depression.

The literature on occupation and psychiatric disorders often focuses on work as a potentially harmful 'exposure'.<sup>6</sup> We suggest that, while such risk factors are important, for most people, most of the time, good work is beneficial for mental health.<sup>7</sup> Being in work is associated with lower prevalence of depression and lower incidence of suicide,<sup>8,9</sup> while longstanding worklessness carries its own risks.<sup>10</sup>

In this review we examine the relationship between work and common psychiatric disorders across the process of becoming ill at work, going off sick, staying off sick and returning to work. We also examine the evidence for interventions to assist individuals to either remain in or return to work.

## Stages of symptom development

Going off work sick and returning to work are complex behaviours in which individual perceptions, beliefs and decisions are crucial. We suggest it is helpful to divide this process into stages, in a model akin to Goldberg and Huxley's model of levels of psychiatric care.<sup>11</sup> They described the pathway from being symptomatic; seeking help; having a psychiatric disorder recognized in primary care; being referred to secondary care; and finally, inpatient treatment. Between each level 'filters' operate, and the chance of passing through these filters is influenced by different sets of risk factors. We propose a similar model for the progress of employees from the development of symptoms at work and through any sickness absence (Figure 1). On rare occasions, some employees may 'skip' stages, for example if an individual is involved in an accident and is injured to the point that they pass straight from being a healthy worker to a having medically and culturally endorsed period of long-term sickness absence (fourth filter). However, such instances are unusual and for most workers on long-term

sickness absence, their progression towards increasing occupational incapacity has occurred in stages, each of which has a unique set of contributing factors.

## The development of symptoms: the job

Using UK Office for National Statistics data, Stansfeld found higher rates of psychiatric disorders among teachers, sales staff and managers in government organizations, and lower rates in plant operatives and health-associated professions.<sup>12</sup> Other sources of routinely collected data have shown similar results – nurses, teachers, welfare officers and policemen had higher levels of psychiatric disorders while construction workers had low rates of illness.<sup>13</sup> Similar studies from Norway identified farmers at particular risk for anxiety and depression.<sup>14</sup> Although a wide range of 'good' and 'bad' jobs have been identified there is no obvious common 'toxic' link. Furthermore the direction of causation is unclear. Certain people are drawn to certain jobs and the observed effect may be due to self-selection.

## The development of symptoms: the individual and his background

Most research into work and psychiatric disorder has focused on the nature of the work or the nature of the disorder.<sup>15</sup> Relatively little interest has been shown on the link between the two – the individual. Individual factors must play a role in the development of symptoms and any decision to take time off work. Not all employees in a 'toxic' workplace go off sick, and, in the UK, there are about 3 million 'disabled' people in work,<sup>16</sup> more than claim Incapacity Benefit. Karasek,<sup>17</sup> Marmot<sup>18</sup> and Stansfeld<sup>19</sup> have all alluded to the role of individual perceptions as the mediator between external factors and occupational dysfunction but what might influence such perceptions is difficult to study.

One mechanism to investigate this area involves examining potential early life risk factors. Henderson used data from the Aberdeen Children of the 1950s study to show an association between teachers' ratings of temperament in childhood and being permanently sick or disabled 40 years later.<sup>20</sup>

### The development of symptoms: psychosocial work environment

Two major models have emerged to describe the broader 'psychosocial work environment'. In the 'Job Strain' model, described by Karasek and Theorell, the 'demands' of work are contrasted with the level of control over that work.<sup>17</sup> 'Job strain' is said to occur when high demands are associated with low decision latitude and is an independent predictor of psychiatric morbidity.<sup>21</sup> The 'effort-reward imbalance' model was proposed by Siegrist. Stress responses occur when effort expended at work is not matched by rewards in terms of pay, self-esteem and sense of achievement.<sup>22</sup> This too has been shown to be associated with psychiatric disorder.<sup>21</sup>

While the study of the psychosocial work environment has deepened our understanding of the nature of the relationship between the individual and his work, the models have limitations. Mostly they rely on self-reported data thus incorporating beliefs, perceptions and attitudes to work. When supervisors report, rather than self-reported assessments, of work demands were included in one analysis of Whitehall II data the association between the psychosocial work environment and psychological morbidity disappeared.<sup>23</sup> There have been two methodologically stronger studies more recently that have used objective measures of the psychosocial work environment. In Virtanen's study<sup>24</sup> overcrowding in hospital wards was used as a proxy for the psychosocial work environment of the doctors and nurses working there. On this objective measure greater overcrowding was associated with an increased consumption of antidepressant medication. Occupational function, e.g. sick leave, was not assessed. While an important study, it is not clear whether 'overcrowding' is a 'demand' or 'control' issue. The question as to why some staff on overcrowded wards became depressed and some did not remains unanswered. Iennaco studied a cohort of workers in heavy industrial settings.<sup>25</sup> Job demand and job control were rated externally by a safety and hygiene manager. Externally rated control was not associated with subsequent depression. Externally rated job demands were associated with depression in multivariable analyses although this association was lost following adjustment for

location. The conflicting results of these two studies highlight the need for further research in this area.

### Presenteeism

Presenteeism describes a situation where an employee is symptomatic and under-performing, but remains at work.<sup>26</sup> Many employees come to work with symptoms suggestive of physical disease, but being less productive due to ill health (presenteeism) is most strongly associated with psychiatric disorders.<sup>27</sup> Those whose psychiatric disorder has developed insidiously may not realize how ill they are. There may be a belief that taking time off with psychological symptoms will invite scorn from colleagues and discrimination from managers. The Sainsbury Centre for Mental Health suggested that up to 20% of workers experience psychological symptoms in any one day and that 60% of the costs of psychiatric disorder at work arise from reduced productivity.<sup>28</sup> Other studies confirm that depression, of all conditions, has the greatest negative impact on time management and productivity and is equivalent to rheumatoid arthritis in its impact on physical tasks.<sup>29</sup>

What is it about psychiatric disorder that impairs occupational function? Fatigue might be one of the occupationally toxic elements of depression.<sup>30-33</sup> More studies, though, have concentrated on cognitive dysfunction.<sup>34</sup> There is relatively little association between the objective level of psychiatric severity and occupational function. One study found that only half of the impairment reported by those who were out of the workforce could be explained by mental and physical symptoms or illnesses.<sup>35</sup> More work is needed on identifying which aspects of psychiatric illness are associated with occupational dysfunction.

### Short-term sickness absence

Short-term absences are by far the most common type of absence episode and the 'causes' appear to be different to longer-term sick leave. The Whitehall II study found respiratory and gastrointestinal disorders were the most common causes of short-term absences,<sup>36</sup> although it is likely the role played by psychiatric disorders is underestimated.

Psychiatric disorders may present as physical symptoms and those assessing may not recognize or be confident to diagnose a psychiatric illness or may see labelling the patient's difficulty as 'physical' as being in their best interest.<sup>37</sup>

### Long-term sickness absence

There is no agreed demarcation between short- and long-term sickness absence,<sup>38</sup> complicating comparisons between studies and countries.<sup>39</sup> Although long-term absence makes up only a small proportion of absences, it accounts for up to one-third of days off and 75% of absence costs.<sup>40–42</sup>

Compared to the literature on risk factors for sickness absence, the literature on its outcomes is very sparse.<sup>43</sup> A recent systematic review of long-term sickness absence identified five cohort studies investigating 77 risk factors. All 16 significant risk factors were predisposing rather than perpetuating factors, and the level of evidence for these was weak at best. The authors concluded that there are no published studies on perpetuating factors for long-term sickness absence.<sup>44</sup> We suggest that distinguishing precipitating and perpetuating factors may be an essential step prior to developing interventions. Perpetuating factors may include a wide range of social operants (receipt of disability payments, fulfilment of the sick role, family support, and so on) all of which potentially reduce the chance that the individual will return to work.

### Ill health retirement

Less work still has been done on ill health retirement. As with sickness absence, the most common 'causes' are psychiatric disorders and musculoskeletal problems. Again, the true impact of psychiatric symptoms may be underestimated. A large prospective study found that anxiety and depression were strong predictors of ill health retirement even for non-psychiatric attributions.<sup>45–47</sup> The same was found for insomnia, which only in rare cases is denoted as a cause for disability pensions.<sup>48</sup>

The health impact of ill health retirement is unclear – some studies show an improvement over time.<sup>49</sup> However, this apparent improvement

might instead be a return to normal after a temporarily increased level of symptoms around the time of being awarded the disability pension.<sup>50</sup> Given the potential harmful social and individual effects, it is surprising that many of those awarded ill health retirement for psychiatric illness report having received minimal treatment<sup>51</sup> often without a trial of more than one antidepressant.<sup>52,53</sup> Nonetheless several studies, most notably of health service employees and teachers in the UK, identify that a high proportion of ill health retired employees (up to 36%) are back in work a year later.<sup>54,55</sup>

### Returning to work

A successful return to work is the desired outcome for most episodes of sick leave. There has been little research on ways to secure this. The longer someone is off sick the less likely he or she is to return to work. This relates partly to factors surrounding the decision to take time off, but also to obstacles implementing a return to work. Fear-avoidant and catastrophizing coping strategies<sup>56</sup> impact on the decision to leave work and are also likely to play a role in decisions on returning to work. Particularly in workers who believe that their work has either caused their health problem or made it worse,<sup>57</sup> there may be a fear that symptoms will be made worse by going back to work. Other concerns will include how to re-establish relationships with both colleagues and managers after a period away.

A commonly used technique to overcome some of these problems is a phased return to work. The employee starts back to work initially part-time and gradually builds up the hours and/or days over several weeks. While apparently sensible, there is little evidence to support its use. There is also no standard way in which an individual moves through the 'stages' or 'phases'. Recovery from psychiatric disorders is difficult to predict and might not fit into a rigid protocol. However, adjusting time at work based on symptom levels may exacerbate avoidant coping.

Decisions about when to return to work are made more difficult by issues of timing. In depression improvements in functional or occupational ability lag behind standard markers of clinical improvement.<sup>58</sup> As such, even though an



employee may have been passed fit to return to work, he or she is unlikely to be able rapidly to attain previous levels of productivity. Such situations can produce conflict and difficulty between managers and employees. The person returning to work may realize he is not able to perform effectively, and may become vigilant for any symptoms which might confirm his belief that he is starting to become ill again. The attitudes of the individual's co-workers might also play a role, positive or negative, in making the return to work a success.<sup>59</sup>

## Health and occupational function

### Physical symptoms and mental symptoms

Psychiatric disorders are often co-morbid with physical illness.<sup>60</sup> While it might be apparent from the outside that it is the psychiatric disorder that has 'tipped the scales' and led to sick leave being taken, this may not be so obvious to the individual who might not seek help for the psychiatric disorder. This then persists and acts as a barrier to recovery and return to work.<sup>3</sup> Attributing sickness absence to a single 'cause' ignores the multiple factors that contribute to the process and the fact that both physical and mental functioning exist on a continuum rather than discrete categories.<sup>61</sup> The propensity for those with psychiatric disorders to have periods of absence, '... not necessarily the type diagnosed as nervous' has been recognized for at least 80 years.<sup>62</sup> The significant effect of co-morbidity has been demonstrated both ways round<sup>4</sup> – a study of women with psychiatric disorders showed elevated levels of sickness absence labelled as 'musculoskeletal' and 'gastrointestinal'<sup>63</sup> while a large study of those off work with musculoskeletal disorders found that 20% had a co-morbid psychiatric diagnosis.<sup>64</sup>

### What can be done?

The public health impact of psychiatric symptoms on occupational outcomes is substantial but it is unclear how governments, insurers, employers, and health services should respond and there is a paucity of high quality studies to guide them.<sup>65</sup> There is an urgent need to provide appropriate services, including reducing potential workplace exposures, improving detection and developing

treatments for workers with psychiatric disorders. Care must be taken though as campaigns which screen for psychiatric symptoms, attempt to reduce stigma and raise awareness may lead many individuals with otherwise transient minor symptoms having their distress medicalized. An analogy is provided by Coggon who in a review of interventions for back pain<sup>66</sup> suggested that the back pain epidemic of the 1970s and 1980s was partly a result of the very interventions which aimed to make workers aware of the risk of harm to their backs.

### Prevention

While there have been some examples of simple changes in the workplace leading to lower levels of distress,<sup>67</sup> a recent systematic review concluded there was insufficient evidence to judge the effectiveness of any specific organizational programme of prevention.<sup>68</sup> Educating and training individual managers does not seem to reduce job strain or psychiatric illness.<sup>69,70</sup> Alternative preventative approaches have focused on increasing the resilience of individual workers. Two separate systematic reviews have concluded that the heterogeneity of individually focused prevention programmes and the limited methodological quality prevent any definite recommendations being made.<sup>68,71</sup> Nevertheless, both reviews reported that stress management programmes might have a modest or short-term impact on a range of variables associated with individual distress.<sup>68,71</sup> Other reviews have concluded that interventions which reduce psychological distress among workers will also reduce levels of sickness absence.<sup>72</sup> A meta-analysis of 48 experimental studies agreed that individually focused interventions tended to be more effective than organizational interventions<sup>74</sup> and cognitive behavioural approaches had the best evidence for effectiveness.<sup>71,73</sup>

Several employers have instigated general 'healthy lifestyle' programmes to improve employee health and work attendance.<sup>74</sup> Undertaking regular exercise and maintaining a healthy weight may help prevent psychiatric disorders<sup>75,76</sup> but no reliable studies have been able to demonstrate that exercise programmes in the workplace reduce levels of psychiatric illness.<sup>71</sup>

## Screening

A large trial of screening for depression in the workplace<sup>77</sup> demonstrated that screening, followed by a systematic programme of telephone outreach and care management (encouraging employees to enter appropriate treatment and monitoring treatment quality) resulted in decreased symptoms, higher job retention and more hours worked. There is also some theoretical evidence that screening programmes may be cost-effective for purchasers,<sup>78</sup> however this should be tempered by a body of evidence from medical settings indicating screening for depression is not associated with improved outcomes.<sup>79</sup>

## Preventing or reducing short-term sickness absence

Established guidelines on the treatment of depression and anxiety<sup>80,81</sup> are based on the broad research evidence from primary and secondary care trials, few of which have measured occupational outcomes. It is therefore difficult to assess the occupational benefits of interventions recommended in such guidelines, particularly as symptom improvement does not necessarily correlate with return to work.

The Cochrane Collaboration has published a systematic review of all randomized controlled trials of work or worker-directed interventions for depression.<sup>82</sup> The authors identified 11 studies, involving 2556 individuals, and concluded there was no evidence that either medication, enhanced primary care, or psychological interventions have any impact on the amount of sickness absence taken by depressed individuals.<sup>82</sup> A recent meta-analysis showed that while a range of different treatments can produce significant reductions in symptom severity, the associated gain in labour output was only one-third as large as the reductions in symptoms.<sup>83</sup> The lack of an effect of standard treatments on occupational outcomes suggests that additional specific interventions addressing return to work issues may be needed.

Once an employee begins an episode of sickness absence a range of healthcare professionals may become involved in their management. A small number of trials of primary care-based interventions have shown that providing primary care

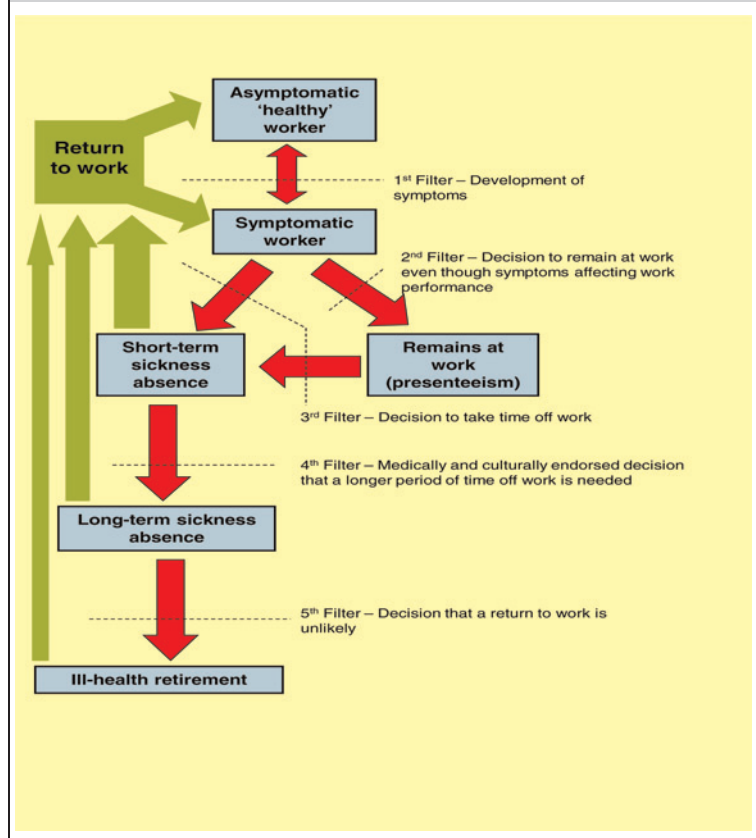
clinicians with the skills and resources to treat psychiatric disorders is effective in helping people to retain employment.<sup>84</sup> There will, however, be a proportion of those suffering from psychiatric disorders who do not respond to treatment in the primary care setting or whose cases are too complex to be managed by their general practitioner alone. As most secondary care psychiatric services are focused on caring for those with psychosis, there is currently a gap between primary and secondary services for those with complex or more severe episodes of depression and anxiety.<sup>85</sup> When occupational health practitioners are available, training them in cognitive behavioural approaches such as graded activity, can result in employees returning to work more rapidly.<sup>86</sup> This approach highlights the advantages of both early intervention and of keeping an individual, and their treatment, as close to the workplace as possible. Our current approach of taking an ill person away from work, trying to make them better, then guessing at when they may be ready to return seems inflexible and unhelpful in comparison.

Employee Assistance Programmes (EAPs) and counselling are common workplace interventions which usually use relatively unstructured psychological support, delivered by individuals from a range of professional backgrounds. There has been a dramatic rise in the number of organizations offering workplace counselling. An English Appeal Court ruling in 2002 suggested the provision of a counselling service was likely to satisfy an employer's duty of care, which may have led many employers to implement a counselling scheme as a form of 'insurance'<sup>87</sup> against stress at work claims. In a 2001 systematic review, the British Association of Counselling and Psychotherapy claimed counselling could reduce sickness absence.<sup>88</sup> Others have suggested these conclusions were not justified owing to the poor quality of studies involved.<sup>89</sup> Workplace counselling may be helpful for some, but better quality evidence is needed to guide its use.

## Managing long-term sickness absence

The longer an employee is absent from work, the less likely they are to return.<sup>90</sup> The UK National Institute for Health and Clinical Excellence

**Figure 1**  
Proposed model of the 'journey' from symptom development to ill health retirement, highlighting the key stages, barriers and decisions involved (in colour online)



(NICE) recently published preliminary guidance on the management of individual on long-term sickness absence, which they defined as an absence of four or more weeks.<sup>91</sup> This recommended that all employees should undergo an assessment within 12 weeks (ideally 2–6 weeks) of starting an episode of sick leave and highlights the evidence for specific interventions that should be considered, such as cognitive behavioural therapy.<sup>91</sup>

Psychiatric disorders often occur co-morbidly in those with chronic physical health problems,<sup>60</sup> and when present, increases the risk of long-term sickness absence progressing to permanent disability.<sup>46</sup> The presence of a psychiatric disorder should therefore be considered in almost all individuals on long-term sickness absence, regardless of the initial reason for the period of absence. A study based within a large French organization

(EDF – Gaz de France) suggests that when a simple psychiatric screening programme is added to the usual care of those already on long-term sickness absence, significant numbers of previously undiagnosed psychiatric disorders can be identified and effectively treated.<sup>92</sup> However, it remains unclear whether the symptomatic improvements seen in such programmes translate into improved occupational outcomes.

### Population-based interventions

Public information campaigns may have a role in tackling the occupational consequences of psychiatric disorders. In 1997 a public health campaign was undertaken in Victoria, Australia, which aimed to educate the population on the importance of staying active and remaining at work when they suffered back pain.<sup>93</sup> A research project conducted at the time of this campaign showed progressive changes in attitudes to back pain, with a clear decline in the numbers of workers' compensation claims.<sup>94</sup> Although campaigns to reduce stigma associated with psychiatric disorders may improve public attitudes,<sup>95</sup> there is a risk that reduced stigma might lead to a greater tendency for distress to be medicalized and false labelling of distress as a psychiatric disorder.

### Conclusions

The relationship between work and psychiatric disorder is complex but of increasing interest and importance. It is becoming clear that the decision of some individuals to go on sick leave or seek benefits is the result of a complicated set of factors to which individual perceptions, beliefs and other psycho-social influences contribute.

Secondary care psychiatry has not prioritized the role of work and the nature of impaired occupational function, especially outside psychotic illnesses, and there is too little interface between occupational medicine and psychiatry. A gap in service provision exists whereby a proportion of working age patients with common psychiatric disorders and/or functional somatic syndromes cannot be managed successfully in primary care, yet services which focus largely on psychotic

illness have little to offer them. Many of these will languish on long-term benefits at great personal and economic cost.

The psycho-social determinants of the pathway from healthy working to long-term sickness absence are under-researched. Better information is needed on the impact of individual depressive symptoms on work and on individual non-work risk factors for sick leave. More studies are needed on the changing way in which known risk factors impact on occupational impairment over time.

There remains much to be done to develop effective strategies to return, and subsequently retain, an employee who has been off sick with a psychiatric disorder. Getting managers and colleagues to 'buy in' to these approaches will in many ways define their success.

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