

Depression and Work Related Disability: an introduction

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Background

In the decade since the publication of the Global Burden of Disease (GBD) report by the World Bank and World Health Organisation (WHO) (1), the disability associated with depression has received considerable attention. The underlying message was that mental disorders comprised nearly 10% of global disability and in high-income countries they comprised 23% of all years lost to disability. Recent revisions have done little to alter this alarming statistic (2). A major component of the economic effects of this disability is in work related disability – an area of concern to governments, insurance companies and other agencies everywhere as compensating people for not working swallows an ever larger portion of GDP. In Australia over the past decade, despite objective advances in population health, the numbers claiming Disability Support Pension (DSP) have risen by 45% from 500,000 to 723,000. Further, in most OECD countries common mental disorders, predominantly labelled depression, have now overtaken musculoskeletal disorders as the main reasons for claiming work related disability. Recent work by our group looking at Scandinavian data has shown that psychological conditions including depression (3) and sleep disorders (4) are actually under-reported as causes of this disability, with many receiving other official labels for their work disability. Understanding, assessing and managing the work related disability associated with depression and other common mental disorders is a complex task

What is work related disability?

Although this seems simply defined as an individual being unable to work, the reality is more complex, given each individual's unique set of characteristics and circumstances, along with organisational and job-related considerations. The Australian Public Service Commission's better practice guide, *Fostering an Attendance Culture: A Guide for APS Agencies* succinctly outlines three major influences on attendance at work:

- Ability to attend—ill-health and injury can affect an employee's ability to attend work and can be involuntary and unavoidable.
- Barriers to attend—a range of non-related work factors such as emergencies and family responsibilities may contribute to an employee's workplace absence.
- Motivation to attend—the work context (how the work is organised) and the work content (what the job involves) contribute to stress levels, job satisfaction, commitment and motivation, which in turn affect an employee's attendance. Good working conditions and job design can impact positively on an employee's morale and engagement with their work, encouraging them to come to work.

The first of these is referred to in the World Health Organisation and Australian Institute of Health and Welfare schema of disability as "impairment" or "activity limitation" and is considered to arise from the condition. The second area comprises factors outside of the workplace that may drive (or attract) the individual from working or "participation" in

employment. The third is in many ways a product of the first two and the interface between individual psychological factors such as how work is viewed and to what degree the individual derives their self image from work, and environmental factors such as workplace stressors. Each will be considered in turn.

Depression and Impairment

That depression is associated with a degree of impairment will come as no surprise to any sufferer, family member or clinician. The modern workplace demands place stresses on precisely those qualities that are impaired by depressive symptoms; concentration, attention, working memory, motivation, interpersonal skills, etc. Numerous well conducted studies from the RAND study onwards have shown that the impairment of clinically defined major depressive disorder is as great, if not greater than many chronic physical disorders such as arthritis, cardiovascular disease and asthma (5-8). The recent World Health Survey has confirmed that this is the case across numerous cultures and countries (9).

More recent studies have demonstrated that depression is associated with more concrete measures of impairment reflected in higher rates of sickness absence (10), reduced earnings (11), poorer performance at work (“presenteeism”) (12), and earlier retirement rates for every reason (13). A recent study commissioned by Medibank Private found that on average six working days of productivity are lost for each employee annually as a result of presenteeism (14).

An important issue for clinicians and those practising insurance medicine is the mismatch between the symptoms of depression and the impairment sometimes found. Although from a public health view there is a reasonable correlation (15) for individual people the picture is far less clear cut. Simply toting up numbers of symptoms over and above the core depressive symptoms of a low mood and loss of interest lasting for more than two weeks may be useful in classifying people into diagnostic boxes but doesn’t necessarily identify those who are impaired. Interestingly the few studies to have looked at the temporal nature of these have also shown that the impairment can last some time longer than does resolution of symptoms e.g. (16;17)

It must also be borne in mind that, for many, depression is a chronic relapsing and remitting condition (18). Up to 50% of those with a single depressive disorder will have a second episode and the level of impairment often mirrors the course of the condition(19). Much work is now going into identifying predictors of a poorer course. In general those with more severe initial episode, poorer treatment response and symptoms failing to respond completely are more likely to have further episodes (20) although in those whose first episode was several years previously these factors are less important t(21). Poorer initial function and specific symptoms such as hopelessness have also been lined to a greater likelihood to progress to work disability status.

Comorbidity

An emerging area is that of comorbidity. About 25-30% of people with a chronic physical illness have depression as well (about two to three times the level of those without such conditions). The extra presence of depression increases the amount of health service use, disability and sickness absence (22). This has a knock on effect on increasing the risk of work

disability. For instance we have recently shown that, in the 20% of people who have a stroke who are under 65, the presence of depression one month after the stroke more than halves the likelihood that the person will return to work, regardless of the level of physical impairment. After a heart attack virtually all the factors influencing whether the person becomes work disabled occur above the neck.

Barriers to working

A primary cause of the disability associated with depression arises from stigma and discriminating attitudes. These attitudes are widespread in Australia (23). Attitudes such as personal blame, potential dangerousness and the depressed being untreatable are surprisingly common (24). For those with depression and other mental illnesses stigma and discrimination are all too common in the workplace (25). Anti-discrimination laws such as the Disability Discrimination Act 1992 in Australia and the Americans with Disabilities Act (ADA, 1990) have recognised this and mental disorders now comprise the most common cause of impairments for cases under the ADA.

Other elements of the workplace have been highlighted in both the development of depression and in occasioning its recurrence. In particular what is known as “work stress” has an increasing body of supportive evidence. A recent review showed how high levels of psychological demands and minimal opportunities for control over ones work have consistent effects upon development of psychological problems across countries and different work organisations(26). Other factors such as organisational injustice, seen at their extreme in whistleblowers or those accusing others of bullying can also be major barriers to work(27)

Motivation

The third aspect is more difficult to identify, in part because lack of motivation is a common symptom of depression. However higher levels job satisfaction (28) and more support (29) are both associated with a greater likelihood of staying at work when ill. A range of internal and external factors act as motivators, from financial rewards to beliefs about causation of illness. The increase in numbers on disability pension in OECD countries has been mirrored by a decrease in those on unemployment benefits(30), a fact attributed in part to the change in compensation over the same time period. For individuals beliefs in the impact of work upon the condition are strong determinants of returning to work e.g. after a heart attack or amongst those with lower back pain(31), and interestingly amenable to intervention(32)

Treatment

Many countries now issue evidence based treatment guidelines for depression such as NICE in the UK. Clinician compliance with these is variable, especially where there is other comorbidity such as cardiovascular disease. Given that several of the predictors of poor outcome are linked to inappropriate or under-treatment any assessment of an individual must include one of the treatments undergone. Data from an Australian National Survey of Mental Health and Wellbeing showed that only two thirds of those with depression had had a mental health consultation in the previous year (33) Work by our team and others in OECD countries has shown that many pensioned out of the workforce for depression have not even had basic adequate trials of treatment such as CBT or antidepressants and are often dealt with entirely in primary care(34).

Summary

The apparently simple link of depression equals disability masks a complex set of interacting factors. In assessing the work-related disability of any one individual the clinician must be aware of their clinical history and presentation, risks for future relapse and recurrence, treatment response as well as evaluating the impairment associated with the condition. Further disentangling the effect of barriers to returning to work as well as gaining an understanding of the motivating factors in the context of the individual and their impairment is required. A simple algorithm or set of tick boxes cannot capture this complexity. An understanding of clinical, legal, organisational and psychosocial factors requires a professional and rigorous assessment in the best interests of all parties.

Reference List

- (1) The Global Burden of Disease. A comprehensive assessment of mortality and disability from diseases, injuries and risk factors in 1990 and projected to 2020. The Harvard School of Public Health, Harvard University Press; 1996.
- (2) Ustun TB, Ayuso-Mateos JL, Chatterji S, Mathers C, Murray CJL. Global burden of depressive disorders in the year 2000. *Br J Psychiatry* 2004 May 1;184(5):386-92.
- (3) Mykletun A, Overland S, Dahl AA, Krokstad S, Bjerkeset O, Glozier N, et al. A population-based cohort study of the effect of common mental disorders on disability pension awards. *American Journal of Psychiatry* 2006;163(8):1412-8.
- (4) Sivertsen B, Overland S, Neckelmann D, Glozier N, Krokstad S, Pallesen S, et al. The Long-term Effect of Insomnia on Work Disability: The HUNT-2 Historical Cohort Study. *Am J Epidemiol* 2006 Jun 1;163(11):1018-24.
- (5) Wells KB, Stewart A, Hays RD, Burnam MA, Rogers W, Daniels M, et al. The functioning and well-being of depressed patients. Results from the Medical Outcomes Study [see comments]. *Journal of the American Medical Association* 1989;262:914-9.
- (6) Kessler RC, Barber C, Birnbaum HG, Frank RG, Greenberg PE, Rose RM, et al. Depression in the workplace: effects on short-term disability. *Health Aff* 1999 Sep 1;18(5):163-71.
- (7) Blazer DG, Kessler RC, McGonagle KA, Swartz MS. The prevalence and distribution of major depression in a national community sample: the National Comorbidity Survey. *American Journal of Psychiatry* 1994 Jul;151(7):979-86.
- (8) Kessler RC, DuPont RL, Berglund P, Wittchen HU. Impairment in Pure and Comorbid Generalized Anxiety Disorder and Major Depression at 12 Months in Two National Surveys. *Am J Psychiatry* 1999 Dec 1;156(12):1915-23.
- (9) Moussavi S, Chatterji S, Verdes E, Tandon A, Patel V, Ustun TB. Depression, chronic diseases, and decrements in health: results from the World Health Surveys. *The Lancet* 2007;370:851-8.
- (10) Kessler RC, Frank RG. The impact of psychiatric disorder on work loss days. *Psychol Med* 1997;27:861-73.
- (11) Kessler RC, Heeringa S, Lakoma MD, Petukhova M, Rupp AE, Schoenbaum M, et al. Individual and Societal Effects of Mental Disorders on Earnings in the United States: Results From the National Comorbidity Survey Replication. *Am J Psychiatry* 2008 Jun 1;165(6):703-11.
- (12) Wang PS, Beck AL, Berglund P, McKenas DK, Pronk NP, Simon GE, et al. Effects of Major Depression on Moment-in-Time Work Performance. *Am J Psychiatry* 2004 Oct 1;161(10):1885-91.
- (13) Karpansalo M, Kauhanen J, Lakka TA, Manninen P, Kaplan GA, Salonen JT. Depression and early retirement: prospective population based study in middle aged men. *J Epidemiol Community Health* 2005 Jan 1;59(1):70-4.
- (14) Medibank Private. *Sick at Work-The Cost of Presenteeism to Your Business, Employees and the Economy*. 2007.
- (15) Das-Munshi J, Goldberg D, Bebbington PE, Bhugra DK, Brugha TS, Dewey ME, et al. Public health significance of mixed anxiety and depression: beyond current classification. *Br J Psychiatry* 2008 Mar 1;192(3):171-7.

- (16) Mintz J, Mintz, LI, Arruda MJ, Hwang SS. Treatments of Depression and the functional capacity to work. *Arch Gen Psychiatry* 1992 Oct;49:761-8.
- (17) Adler DA, McLaughlin TJ, Rogers WH, Chang H, Lapitsky L, Lerner D. Job Performance Deficits Due to Depression. *Am J Psychiatry* 2006 Sep 1;163(9):1569-76.
- (18) Kennedy N, Abbott R, Paykel ES. Longitudinal syndromal and sub-syndromal symptoms after severe depression: 10-year follow-up study. *Br J Psychiatry* 2004 Apr 1;184(4):330-6.
- (19) Ormel J, Von Korff M, Van den Brink W, Katon W, Brilman E, Oldehinkel T. Depression, anxiety, and social disability show synchrony of change in primary care patients. *Am J Public Health* 1993;83:385-90.
- (20) Eaton WW, Shao H, Nestadt G, Lee BH, Bienvenu OJ, Zandi P. Population-Based Study of First Onset and Chronicity in Major Depressive Disorder. *Arch Gen Psychiatry* 2008 May 1;65(5):513-20.
- (21) Mueller TI, et al. **Recurrence after recovery from major depressive disorder during 15 years of observational follow-up.** *Am J Psychiatry* 1999;156:1000-6.
- (22) Stein M, Cox B, Afifi T, Belik S, Sareen J. Does co-morbid depressive illness magnify the impact of chronic physical illness ? A population-based perspective. *Psychol Med* 2006;36:587-96.
- (23) Jorm AF, Korten AE, Jacomb PA, Christensen H, Henderson S. Attitudes towards people with a mental disorder: a survey of the Australian public and health professionals. *Australian and New Zealand Journal of Psychiatry* 1999;33(1):77-83.
- (24) Crisp AH, Gelder MG, Rix S, Meltzer HI, Rowlands OJ. Stigmatisation of people with mental illnesses. *Br J Psychiatry* 2000 Jul 1;177(1):4-7.
- (25) Glozier N. Workplace effects of the stigmatization of depression. *Journal of Occupational and Environmental Medicine* 1998;40(9):793-800.
- (26) Stansfeld S, Candy B. Psychosocial work environment and mental health- a meta analytic review. *Scandinavian Journal of Work, Environment and Health* 2006;32(6):443-62.
- (27) Ferrie JE, Head J, Shipley MJ, Vahtera J, Marmot MG, Kivimaki M. Injustice at work and incidence of psychiatric morbidity: the Whitehall II study. *Occup Environ Med* 2006 Jul 1;63(7):443-50.
- (28) Mohren DCL, Swaen GMH, Kant IJ, van Schayck CP, Galama JMD. Fatigue and Job Stress as Predictors for Sickness Absence During Common Infections. *International Journal of Behavioral Medicine* 2005;12(1):11-20.
- (29) Stansfeld S, Feeney A, Head J, Canner R, North F, Marmot M. Sickness absence for psychiatric illness: The Whitehall II study. *Social Science & Medicine* 1995 Jan;40(2):189-97.
- (30) OECD. Transforming Disability into Policy. Policies to promote work and income support for disabled people. Paris: ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT; 2003.
- (31) Iles RA, Davidson M, Taylor NF. Psychosocial predictors of failure to return to work in non-chronic non-specific low back pain: a systematic review. *Occup Environ Med* 2008 Aug 1;65(8):507-17.
- (32) Petrie KJ, Cameron LD, Ellis CJ, Buick D, Weinman J. Changing illness perceptions after myocardial infarction: an early intervention randomized controlled trial. *Psychosom Med* 2002;(4).
- (33) Andrews G, Henderson S, Hall W. Prevalence, comorbidity, disability and service utilisation. Overview of the Australian National Mental Health Survey. [erratum appears in *Br J Psychiatry* 2001 Dec;179:561-2.]. *British Journal of Psychiatry* 2001 Feb;178:145-53.

- (34) Overland S, Glozier N, Krokstad S, Mykletun A. Under-treatment of mental illness among people granted disability pension: the HUNT study, Norway. *European Journal of Public Health* 2006;16:55.