

Psychology Service Providers

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Work Impairment and Limitations Associated with Depression

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The impact of depression

World-wide, Major Depressive Disorder is the fourth leading cause of Disability Adjusted Life Years (DALY – measured by lost years of healthy life to disability and/or premature death), and is second only to heart disease in “developed” countries (Murray & Lopez, 1996). It is also the world’s leading cause of Years Lost to Disability (YLD - measured by the number of years *lived* with a disabling condition).

Estimates of the economic cost of depression in Canada have ranged from \$14.4 billion for medical and work absence/disability costs alone to \$33 billion including lost productivity at work (Stephens & Joubert, 2001; Global Business And Economic Roundtable On Addiction And Mental Health, 2006a). A recent survey noted that psychological claims (primarily for depression) have now become the leading cause of both short-term and long-term disability costs in Canada (Watson Wyatt Worldwide, 2005). In addition, depression is the most prevalent mental disorder to cause absenteeism from work: on average, depression is generally associated with a doubling of annual sick days from approximately 1 day per month for most workers to approximately 2 days per month among depressed workers (Wells et al., 1989; Kessler et al., 1999; 2001; 2003; Wang et al., 2003).

Other associations between depression and various work-related measures have also been found including: a) increased job loss and unemployment; b) higher likelihood of changing jobs; c) greater probability of moving from full-time to part-time work, and from part-time to casual/temporary work; d) greater likelihood of moving to a lower paying job; and e) higher probability of stopping work for longer than 30 days (Lerner et al., 2004a; Adler et al., 2006).

Effect on work performance

While studies found that many depressed workers were taking time off from their job, it soon became clear that a substantial number of other workers were remaining at work while depressed. For instance, a recent Canadian study noted that two thirds of workers with mental health problems stayed at work rather than taking time off (Desjardins Financial Security, 2006). In addition, it has recently been discovered that lost work productivity from reduced work performance was substantially higher than lost productivity from work absences (Burton et al., 1999; Druss et al., 2001; Stewart et al., 2003; Wang et al., 2004). Therefore, research into the effect of depression on work has increasingly investigated reduced productivity and performance on the job (termed “presenteeism”), as well as absences from work.

A number of studies utilizing general self-reports of work performance found that depressed individuals had significantly reduced work performance in comparison to control groups and other health conditions, coming second only to heart disease (Wells et al., 1989; Aronsson et al., 2000; Druss et al., 2001; Aslam et al., 2003; Wang et al., 2004). In an attempt to provide a more reliable and validated self-report measure of work performance, the Work Limitations Questionnaire (WLQ) was developed, which has been shown to be associated with objectively measured criteria including employee work productivity, adverse work events (such as injuries), and income loss (Lerner et al., 2004b). Studies using the WLQ obtained very similar results, finding that depressed workers were more likely to be impaired in performing mental and interpersonal tasks, time management, work output, physical tasks, and total productivity than controls or workers with other medical conditions (Lerner et al., 2000; 2004a; 2004b) Burton et al., 2004; Adler et al., 2004, 2006). Longitudinal studies have found that work performance was negatively related to severity of depression (i.e. more severe depression led to greater self-rated impairment in work performance), and that a reduction of depressive symptoms over time improved work performance (Mintz et al., 1992; Berndt et al., 1998; Lerner et al., 2004a; 2004b; Adler et al., 2004). Nonetheless, despite improvement, depressed workers still displayed significantly reduced work functioning after two years than control and medical groups (Hays et al., 1995).

In summary, there appears to be good evidence from multiple studies using various methodologies that depression is associated with a reduction in total work productivity, as well as impairments in work performance. These impairments may include reduced mental ability (concentration/focus, decision-making, problem-solving), decreased quality of interpersonal interactions, increased errors, having to repeat tasks, more accidents and/or injuries, taking longer to complete tasks, and poor time management. While some of these work impairments may improve over time and/or with treatment, depressed workers still generally display lower levels of work performance than other workers for up to two years.

Specific pathways to impairment

Some researchers have suggested work impairments arising from depression may be linked to certain symptoms including inability to concentrate, low energy/easy fatigability, exaggerated self-doubts, indecisiveness, disturbed sleep, cognitive slowing, and interpersonal problems (Berndt et al., 1998; Burton et al., 1999). Indeed, several studies have found that specific depressive symptoms were more strongly associated with decreased work productivity, particularly poor concentration/distractibility and sleep disturbance/increased fatigue (Lerner et al., 2004a; 2004b; Adler et al., 2004). Given that available meta-analyses and reviews show neurocognitive deficits can reliably be found in individuals with MDD on tasks involving mental flexibility, visual/spatial abilities, verbal fluency, working memory, planning, verbal and nonverbal learning, and attention (Debattista, 2005; Austin et al., 2001; Veihl, 1997; Burt et al., 1995), it could also be argued that these deficits provide specific pathways to work impairment. This view is supported by a longitudinal study which found that 60% of individuals hospitalized for MDD were still significantly, severely or totally disabled 6 months later, and that neurocognitive deficits arising from the depression (attention, working memory, cognitive flexibility, non-verbal functioning, and learning) were strongly associated with functional impairment at 6 months (Jaeger et al., 2005). The authors noted that these neurocognitive deficits may actually be independent of mood state i.e. do not improve in spite of decreases in mood symptoms.

Work impairments and limitations

A recent article (Bilsker et al., 2005) highlighted three ways in which depression may impair work performance: 1) Interpersonal relationships (depressed people are seen as irritable, pessimistic and withdrawn); 2) Productivity (they are seen as less productive due to fatigue, poor decision-making and lack of concentration); and 3) Safety (concern was expressed about greater risk of incidents or injuries among depressed workers).

Below are outlined possible work-related impairments and limitations which may result from depressive symptoms in workers diagnosed with depression. These have been derived from the research literature, clinical experience, and consensus among psychologists working in the workers compensation system. It should be noted that individual limitations will depend on a worker's circumstances, specific constellation of symptoms, severity of the disorder, and response to treatment.

<u>Signs/Symptoms</u>	<u>Impairment and possible limitations</u>
<ul style="list-style-type: none">• Apathy/reduced motivation (Feelings of hopelessness)	<u>Impairment</u> <ul style="list-style-type: none">• Reduced activity and productivity <u>Possible limitations</u> <ul style="list-style-type: none">• Tasks with deadlines, time pressures, high expectations for productivity, etc.
<ul style="list-style-type: none">• Psychomotor retardation - slowed speech; pauses before answering; speech reduced in volume, inflection, amount or variability of content etc.; slowed thinking; slowed movements.	<u>Impairment</u> <ul style="list-style-type: none">• Impaired communication with customers, supervisors and/or co-workers• Increased time to complete tasks, leading to reduced productivity• Increased risk for injury <u>Possible limitations</u> <ul style="list-style-type: none">• Tasks with frequent customer contact (i.e. customer service, cashier, etc.)• Tasks with deadlines, time pressures, high expectations for productivity, etc. <u>Possible restriction</u> <ul style="list-style-type: none">• Tasks with an immediate risk for injury due to slowed movements or reflexes (i.e. operating dangerous machinery)
<ul style="list-style-type: none">• Fatigue/loss of energy (Sleep problems)	<u>Impairment</u> <ul style="list-style-type: none">• Reduced activity and productivity (minor tasks require substantial effort and are exhausting)• Reduced attention and concentration (see below) <u>Possible limitations</u> <ul style="list-style-type: none">• Tasks with deadlines, time pressures, high expectations for productivity, etc.• Tasks in which error rate will be greatly affected by decreased concentration <u>Possible restriction</u> <ul style="list-style-type: none">• Tasks with an immediate risk for injury due to reduced attention (i.e. operating dangerous machinery)

<u>Signs/Symptoms</u>	<u>Impairment and possible limitations</u>
<ul style="list-style-type: none"> • Feelings of worthlessness or excessive/inappropriate guilt • Brooding/excessive rumination • Feelings of helplessness 	<u>Impairment</u> <ul style="list-style-type: none"> • Reduced activity and productivity via apathy/reduced motivation (see above) • Diminished ability to think or concentrate (see below) • Interpersonal difficulties with supervisors and/or co-workers.
<ul style="list-style-type: none"> • Diminished ability to think or concentrate (easily distracted, memory problems), or make decisions 	<u>Impairment</u> <ul style="list-style-type: none"> • Increased work errors • Increased risk for injury • Reduced productivity • Difficulty with complex tasks or multi-tasking • Reduced organizational and time management abilities <u>Possible limitations</u> <ul style="list-style-type: none"> • Tasks with deadlines, time pressures, high expectations for productivity, etc. • Tasks in which increased error rate is unacceptable • Tasks involving complex activities or multi-tasking <u>Possible restriction</u> <ul style="list-style-type: none"> • Tasks with an immediate risk for injury due to reduced concentration (i.e. operating dangerous machinery)
<ul style="list-style-type: none"> • Irritability and/or aggression (persistent anger, angry outbursts, exaggerated frustration over minor matters, blaming others, etc.) 	<u>Impairment</u> <ul style="list-style-type: none"> • Interpersonal difficulties with other people • Reduced ability to deal with conflict <u>Possible limitations</u> <ul style="list-style-type: none"> • Tasks with frequent customer contact (i.e. customer service, cashier, etc.)
<ul style="list-style-type: none"> • Reduced ability to cope with stress 	<u>Impairment</u> <ul style="list-style-type: none"> • Difficulty with complex tasks or multi-tasking • Not able to cope with stressful positions • Reduced ability to deal with conflict <u>Possible limitations</u> <ul style="list-style-type: none"> • Tasks with deadlines, time pressures, high expectations for productivity, etc. • Tasks involving complex activities or multi-tasking

In discussing impairment and limitations arising from depression, the difference between psychological limitations and restrictions should also be reviewed:

- A *limitation* is a reduction of the individual's capacity to perform job-related tasks as a result of a psychological condition. The person can still do their job from a psychological point of view, though with reduced capacity e.g. the worker is slower, less productive, less efficient, or can do the work activity for a shorter duration – but they can still do that activity.
- A *restriction* is a clinical prescription to avoid an activity due to immediate likelihood of significant harm that arises out of a psychological condition. If the work participates in the work activity, there is a significant probability of immediate harm. Even if the worker stated they wanted to do the activity, the clinician would advise against it.

As noted in our previous clinical memo (2007/05/07), it is essential to understand that the limitations and restrictions outlined by assessment and treatment providers in their reports are used by WorkSafeBC to make claim decisions, which can have a significant impact on ongoing benefits and/or pension entitlements. For example, case managers and vocational rehabilitation consultants use these functional descriptions to create return to work or vocational rehabilitation plans. Therefore, when reporting limitations resulting from depressive symptoms, it is helpful to be as specific and detailed as possible. If necessary, use the descriptions listed in the table above. Your accurate depiction of these limitations and restrictions will ensure that WorkSafeBC is able to provide injured workers with the assistance that best fits their needs.

List of references available on request.