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Workplace Functional Impairment Due to Mental Disorders

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1. Introduction

Psychiatrists are commonly expected to conduct disability assessments. These include an assessment of the worker's functioning, putative impairment, risk, and capacity to work. Employers and other third parties, either administrative or judicial, subsequently make disability determinations based on such assessments. This assessment also forms the foundation for return-to-work determinations, or for determining the employer's duty to accommodate to the point of undue hardship.

To the extent the general psychiatrist becomes involved in assessing these occupational matters, the psychiatrist is practicing forensic psychiatry. The role and responsibilities of the treating psychiatrist, within in the context of a traditional physician-patient relationship, differ vastly from one conducting an occupational or forensic evaluation. Yet, the boundaries between these distinct and often irreconcilable roles are not always clearly delineated, properly understood, or abided by. The forensic aspects of psychiatric practice are often viewed as intrusive and challenging by non-forensically trained psychiatrists, representing a role conflict many psychiatrists find themselves poorly equipped to navigate.

This chapter outlines the common psychiatric disorders encountered in clinical and occupational settings. It discusses the concepts of impairment and disability, as well as the benefits of working. The most commonly requested opinions in occupational psychiatric assessments are that of a psychiatric diagnosis, causation, impairment, fitness to work (FTW), and disability, along with recommendations for further investigations and treatment. The importance of objectively measuring impairment is outlined, along with reliably establishing a diagnosis (if any), along with the non-linear relationship between mental disorder, impairment and disability. For the purposes of this chapter, any reference to mental disorders are implied to include the broad range of disorders captured in the Diagnostic and Statistical Manual of Mental Disorders, the DSM IV-TR, which includes the substance-related disorders (i.e. Substance Abuse, Substance Dependence, or Addiction, and others).

This chapter addresses the main pitfalls and risks associated with Independent Medical (i.e. Psychiatric and Addictions) Evaluations (IME), and provides a template for conducting these. The potential cost saving associated with implementing evidence-based interventions drives a sound business case for addressing mental disorders in the workplace. This chapter offers a pragmatic approach to treatment matching and disability management for workers with mental disorders (i.e. including substance-related disorders). It outlines the principles of vocational rehabilitation in the context of psychopathology, mental disorders, impairment and disability, ensuring safety, as well as optimal clinical and economic outcomes.

The enjoyment of the human right to optimal health, without discrimination, is vital to a person's well-being. This chapter aims to provide a pragmatic approach, albeit non-exhaustive, to determining mental impairment in the workplace.

2. The purpose of work

The Merriam-Webster dictionary defines *work* as "an activity in which one exerts strength of faculties to perform something: (a) sustained physical or mental effort to overcome obstacles and achieve an objective or result; (b) the labor, task, or duty that is one's accustomed means of livelihood; (c) a specific task, duty, or function, or assignment often being a part of phase of some larger activity".

Work plays a central role in daily life, and for most people, work is probably second only to love as a compelling human activity (O'Toole, 1982). Society values work and those who do, echoing the Latin phrase: "Labor corona vitae", loosely translated, "Work is life's crown". Working, gainfully or not, employed or not, may hold a range of psychological, monetary, and other potential benefits (Gold & Shuman, 2009):

- 1. Income and sense of security;
- 2. Source of identity, from which people derive a sense of recognition, belonging, and understanding;
- 3. Sense of purpose in life;
- 4. Source of self-worth and self-esteem;
- 5. Opportunity to develop skills and creativity;
- 6. Autonomy and independence;
- 7. Relationships outside the family;
- 8. Structuring time into predictable, regular periods;
- 9. Defines activities whereby work provides a temporal framework within which other activities, such as leisure, gain meaning.

The psychological benefits of work significantly overlap with several of the treatment goals in mental health settings. It suggests that employment has positive therapeutic benefits, but not all aspects of work or beneficial under all circumstances, and for every worker, e.g. where work causes inordinate levels of stress, or where a worker is exposed to discrimination or risks. Most workers do not become excessively distressed by the presence of challenges in their workplace, but rather by their inability to meet the particular challenge they are faced with (Aneshensel & Phelan, 1999).

Almost as a rule, the risk of exacerbating mental illness by returning workers to the workplace is minimal. Based on the evidence, return to work is generally stabilizing and therapeutic for the lives of these patients. In general, ongoing employment has a beneficial effect in persons with mental illness (Blustein, 2008). For the vast majority of workers, and under most circumstances, it is reasonable to suggest that active participation in work is therapeutic and beneficial.

3. Adopting a common language

Foundational to working with common psychopathology or mental disorders in the workplace is the use of common language. It is erroneous to use concepts like *impairment* and *disability* interchangeably. Failure to adequately and reliably delineate concepts of *risk*, *tolerance*, and *capacity* in the disability assessment, compromises a valid response to return-

to-work determinations, the duty to accommodate, or further mental health disability management.

3.1 The definition of a "mental disorder"

Two major global classification systems provide a common language and standardized criteria for the diagnosis and classification of mental disorders. These are the 10th revision of the World Health Organization's (WHO) International Statistical Classification of Diseases and Related Health Problems (ICD-10) (WHO, 1992), and the 4th Edition (text-revised) of the American Psychiatric Association's (APA) Diagnostic and Statistical Manual of Mental Disorders (DSM IV-TR) (APA, 2000). There exists significant congruence between these two classification systems, with a reduction in differences between these two classification systems over time.

For the purposes of this chapter, the authors will utilize the DSM as the predominant classification system and frame of reference in the authors' jurisdiction. Since the publication of the first edition of the DSM in 1952, the manual has undergone vast changes, and the manual is currently in its 4th edition, of which the text has been revised. The DSM-5 is expected within the next 2 years, updating the current DSM IV-TR, describing almost 300 mental disorders, which includes the categories of substance-related disorders (i.e. substance use disorders, e.g. abuse and dependence, and the substance-induced disorders). The terms illness, disease, and disorder, as it pertains to the mental (psychiatric) status of the worker, are often used interchangeably. For the purposes of this chapter, the term disorder is preferred, defined as a "deviation from the normal or expected status, associated with distress or a deterioration in functionality". The term mental refers to "(a) inner experiences, relating to mood, thought content, or sensory experiences; (b) behavioral patterns, and (c) cognitive functions such as learning, social understanding, and reality assessment", and a mental disorder is conceptualized in the DSM IV-TR (APA, 2000) as a "clinically significant behavioral or psychological pattern that occurs in an individual and that is associated with present distress (e.g. a painful symptom) or disability (i.e. impairment in one or more important areas of functioning) or with a significantly increased risk of suffering death, pain, disability, or an important loss of freedom". The concept of mental disorder does not include a situation that is merely an expectable and culturally sanctioned response to events, e.g. the emotional response of bereavement following a significant loss, e.g. the death of a loved one.

Symptoms and signs of mental disorders may include any combination of affective, behavioral, cognitive, and perceptual components. To allow for consistency of diagnosis, standardized criteria are outlined in the DSM, based on the best available research and clinical literature. Illegal or deviant behavior and conflict (i.e. primarily between the individual and society) are not considered mental disorders unless this actually represents a symptom of dysfunction in the individual. Mental disorders are a rarely cause of unlawful behavior or violence.

Mental disorders are diagnoses representing syndromes, based on clusters of symptoms and signs, as opposed to many other medical conditions with consistent and proven underlying pathophysiology. It utilizes a categorical approach where there exists no assumption that each category of mental disorder is completely discrete from other mental disorders, or that there exist absolute boundaries dividing disorders from one another. The diagnostic criteria, albeit based on consensus of current formulations of evolving knowledge in the field, do not encompass all the conditions for which persons may be treated (APA, 2000).

3.2 The 5-Axis formulation

The DSM system has gained wide international acceptance and the 5-Axis description is deemed a gold standard for offering a standardized psychiatric formulation, across international borders and cultural boundaries. To standardize the approach for occupational assessments, the 5 Axes formulation is also considered an essential component of formulating the results of the assessment:

Axis I: Clinical Disorder(s)

Other condition(s) that may be a focus of clinical attention

Axis II: Personality Disorder(s) Mental Retardation

Axis III: General Medical Condition(s)

Axis IV: Psychosocial and Environmental Problem(s)

Axis V: Global Assessment of Functioning (GAF)

The use of *specifiers* assists in further describing the specific diagnosis on Axis I. If criteria are met for a specific mental disorder, severity may be specified as mild or moderate or severe, and if criteria are no longer met, a specifier for remission may be offered, e.g. in partial remission, in full remission, or suggesting a "prior history" of the disorder existed. On Axis V, the GAF rating offers a dimensional assessment of overall functioning, but which is not only indicative of occupational functioning. The scoring for Axis V is divided into 10 ranges of functioning, and reflects the clinician's judgment of the respondent's overall level of functioning. It is useful in monitoring impact of treatment, and also in predicting treatment outcome (APA, 2000). Although the adjudication of insurance claims takes GAF scoring into consideration, it should not be the sole determinant of fitness-to-work. The GAF score, albeit useful, is not specific to fitness-to-work. Utilizing GAF scores alone to determine fitness-to-work should be avoided.

3.3 Expressing a degree of uncertainty

In determining if a worker fulfills the diagnostic criteria for a specific mental disorder, a certain degree of uncertainty may prevail. These include situations where inadequate information is available for making an accurate diagnostic judgment. In other situations limited information may be available, perhaps only sufficient to determine and validate the presence of a *class* of disorders (e.g. mood disorder, psychotic disorder, anxiety disorder), but where further specification of the particular disorder within the class is not possible. In other cases information may be altogether inadequate to offer any diagnosis whatsoever. Under these circumstances where a formal diagnosis cannot be offered with a reasonable level of certainty, the situation may call for a proper description of the level of uncertainty. The use of terms to describe these levels of uncertainty include the following: offering a *provisional* diagnosis, *deferring* a diagnosis, offering the diagnosis of an *unspecified* mental disorder, or of a mental disorder "not otherwise specified" (NOS). As a result of the limitations of this categorical (as opposed to a dimensional) approach, in some cases the diagnosis of a mental disorder can only be offered in a probabilistic fashion.

3.4 Limitations in the use of the classification system in occupational context

The categorical approach to diagnosis of mental illness poses challenges in quantifying mental and behavioral impairment in a dimensional fashion. Mental disorders, in the absence of the currently proven underlying pathophysiology and absent operational

definition, have been defined by a variety of concepts, e.g. distress, dysfunction, dyscontrol, disadvantage, disability, inflexibility, irrationality, syndromal pattern, etiology, and statistical deviation (APA, 2000). These levels of abstraction do not constitute a consistent or equivalent description of any one specific mental disorder in any single class.

Relying on the diagnosis alone does not provide sufficient evidence of the existence of impairment or disability. The levels of abstraction appear on a continuum of severity, and no single diagnosis of a mental disorder automatically implies a universal or specific level of impairment, or a specific degree of disability.

Volatility, interpersonal conflict, and unreliability are also relevant to fitness for work. These may be unrelated to mental disorders, and may hence not qualify as compensable conditions under disability determination paradigms used by a third party. Further, the inclusion of diagnostic categories (e.g. antisocial personality disorder, pedophilia) does not imply that the specific condition meets the *legal* criteria for what constitutes a mental disorder.

The determination of the level of functional impairment faces significant impediments: the disturbance in functional activities is driven by the diagnosis and not test results per se. For example, a diagnosis alone does not determine fitness for work – just as the diagnosis of diabetes is not necessarily limiting to work under certain circumstances. But, uncontrolled diabetes poses a risk for work, especially in safety-sensitive settings. In the absence of external validation, there exists a potential for large inter-individual variability in interpretation of levels of impairment or disability associated with a mental disorder. There are few objective measures to ensure reliability and validity of impairment ratings. The dearth of validated tests to confirm the percentage of psychiatric impairment and the apportionment due to mental disorders, poses a salient challenge.

The use of the DSM in forensic settings should be conducted with caution, as the categorization of disorders in clinical and research context may not take into account the necessary issues of responsibility, competence, tolerance, risk, or disability. Blindly relying only on the DSM diagnostic criteria poses a significant risk that the clinical information may be misused or erroneously interpreted by a third party that does not take into account any level of clinical judgment. The classification system is ultimately intended to serve only as a guideline to be informed by clinical judgment and are not meant to be used in a "cookbook fashion" (APA, 2000). The establishment of a DSM IV-TR diagnosis represents only the first step in a more comprehensive evaluation. This is the basis for further assessment or treatment planning may rest, and also upon which disability management or accommodation may be based.

3.5 Impairment versus disability

The AMA Guides to the Evaluation of Permanent Impairment, Sixth Edition (AMA, 2011) defines *impairment* and *disability*. Impairment refers to "a significant deviation, loss, or loss of use of any body structure or body function in an individual with a health condition, disorder, or disease." Impairment rating is a physician-provided process that attempts to link impairment with functional loss. It is also a "consensus-derived percentage estimate of loss of activity reflecting severity for a given health condition, and the degree of associated limitations in terms of activities of daily living". Impairment ratings are conducted by the physician, whereas disability assessments are conducted by the third party.

Disability refers to "activity limitations and/or participation restrictions in an individual with a health condition, disorder, or disease." The disability determination takes into account the lack or restriction in the ability to perform an activity in the manner or within the range of what

is deemed normal or expected. Impairment and disability fall on a spectrum of low to high severity. The determination of disability is thus a relational outcome, contingent upon the environment in which the particular demands are met, by a specific individual, based on the activities performed, within a specific occupational environment. The level of disability is dependent on the relational aspects or interplay between impairment and several factors within the occupational environment.

Regardless of the diagnosis, the relationship between impairment, disability, and fitness to work depends on the respondent's functional abilities and functional limitations, the occupational environment, and the specific demands of any particular job (Bonnie 1997; Gold and Shuman 2009). Not all individuals with psychopathology or mental disorders necessarily display significant impairment or disability, despite the presence of diagnosable DSM conditions. Similarly, not all persons displaying mental disorders are necessarily deemed disabled based on the presence of a psychiatric disorder. No linear relationship exists to predict the level of impairment or disability associated with any particular mental disorder. Return to work depends on availability of modified work, job skills, and medical limitations.

3.6 "Presenteeism" and absenteeism

Absenteeism refers to repeated absence from work, duties, or obligations. *Presenteeism* refers to a situation where the employee is present at work, but not functioning at full capacity, or at a lower level of productivity, as a result of a mental disorder or psychopathology. Both presenteeism and absenteeism may be indicative of employer performance issues, workplace issues, employer issues, relational issues between employer and employee, or of a medical or psychiatric impairment and subsequent inability to perform in the expected fashion, or the incurring of risks. More than 80% of lost productivity and associated cost related to mental disorders is accounted for by *presenteeism* as opposed to absenteeism.

3.7 The concepts of risk, capacity, and tolerance

Commonly requested occupational psychiatric opinions pertain to that of risk assessment, tolerance, and capacity. *Risk* refers to the potential for a specific situation to translate into negative outcomes, including accidents, lack of attention, violence, injury (patient, coworkers, public, or equipment), or aggressive behavior. The risk may result from specific actions or inactions by the employer, and is confounded by a range of factors of which the class of substance used disorders is a salient predictor of violence, especially when co-occurring with mental illness.

Aggressive behavior constituting increased risk ranges from minor incidents to more significant behavioral actions and disturbances, including homicide, suicide, assault, terrorism (e.g. some industrial settings may be at risk of such attacks) or the damaging of property. Certain mental disorders are more likely to be associated with increased risk, i.e. the psychotic disorders, individuals with a previous risk of harm to self or others, those with a previous history of aggressive behavior, those with comorbid mental disorders and substance use disorders, those with paranoia or homicidal or suicidal ideation, persons with antisocial personality disorders, or any combination of such factors. Risk assessments trump most other considerations in the assessment.

Capacity refers to the employee's ability to perform or to produce according to occupational expectations. Mental disorders and substance use disorders can impact on the employee's

memory, the ability to concentrate, focusing attention, and on judgment, fatigue, insomnia, tendency to fall asleep, and decreased reaction (e.g. truck driver, pilot, or police) Medical conditions, mental disorders, substance use disorders, or any combination of these, including the adverse effects of medications, may adversely impact on the employee's performance and may pose safety risks.

Tolerance addresses the employee's ability and/or willingness to tolerate (accept or similar word) the workplace and associated circumstances and stressors. The most prominent factor in this context refers to motivation (representing an inner state) to return to work, or to perform in the workplace. Motivation is impacted by the respondent's appraisal of the relative importance to perform particular duties according to standards and expectations, paired with the relative confidence that he/she would be able to do so. It represents a predominantly volitional state of choice in terms of what the employee chooses to tolerate and what the worker chooses not to tolerate. Difficulties in the workplace, including unreasonable workload demands, job dissatisfaction, suboptimal goodness-of-fit, job changes, relational and interpersonal problems with co-workers or supervisors, negative evaluations or warning letters, or threat of layoff or termination, may foreseeably impact or contribute to the subjective distress. These, however, have to be separated from bona fide mental disorders in causing subjective distress or functional impairment.

Workplace issues may contribute to symptoms, but are not considered causally related to bona fide psychiatric illness or disability as a result of a mental disorder e.g. when a worker is disciplined for performance issues, the expected response is to react with a sense of subjective distress, like feeling depressed, anxious, frustrated, or angry. This is, however, to be distinguished from bona fide symptoms related to a psychiatric disorder in adjudicating disability matters. When an employer or supervisor disciplines a worker for performance issues, then the worker often claims stress or depression attributed to this event. Workplace stress and burnout are commonly attributed to the workplace. Post-Traumatic Stress Disorder (PTSD) from life-threatening events at work may plausibly cause impairment, preclude fitness for duty, and legitimately lead to disability.

3.8 Restrictions and limitations

An integral part of the occupational assessment concerns itself with the determination if the worker's psychiatric clinical condition is severe enough to limit or restrict their ability to perform occupational functions. In general, *restrictions* refer to activities / duties the worker "should not do", while *limitations* describe as what a worker "cannot do" due to severity of psychiatric impairment. Fitness to work-related terms are described as follows: a. Capabilities (i.e. the maximum that this person can do); b. Limitations (i.e. this person cannot do more than this); and c. Restrictions (i.e. this person can do this, but should not do this).

4. Causality of the workplace in the development of impairment

There exist no single or definitive model for understanding the etiology and pathology of mental disorders. Psychopathology and mental disorders stem from a variety of origins, and vary widely across disorders and classes. A variety of hypotheses have been postulated to explain the origins of mental disorders, and these theories continue to evolve. Some of the most common perspectives for the understanding of psychopathology and etiology of mental disorders include: (1) neurobiological, (2) sociobiological, (3) psychodynamic, (4) behavioristic, (5) cognitive, (6) interpersonal and systems, (7) humanistic, and (8)

anthropological (Thomas & Hersen, 2004). The stress-diathesis and bio-psycho-social models offer two of the more generic approaches to understanding respectively the significant roles of stress and the role of biological, psychological, and social factors play in human functioning as well as in the development of illness or disorders (Engel, 1977). None of these categories suggest participation in work per se to be psychopathogenic, i.e. causing psychiatric disorders or psychopathology.

Working, unlike the commonly understood etiological factors, is not viewed as a risk factor and therefore also not a cause of the development of a mental disorder or substance-related disorder. Despite common claims made by workers suffering from mental disorders, there is a lack of definitive empirical evidence to suggest that employment is a causal factor in the development of mental disorders. In determining the etiology, it is commonly understood that non-occupational factors are overwhelmingly deemed as causal and relevant agents in the development of mental disorders. In other words, work does not cause mental illness or addiction, but work rather protects against the development of mental disorders. When a worker is disciplined, or where workplace issues may exist, a worker may claim "stress" or attempt to attribute depression (or a mental disorder) as a result of these events in the workplace. Workplace stress and burnout are commonly attributed to the workplace, despite the dearth of empirical evidence to support a direct and causal relationship. Where the treating physician becomes involved in offering opinions or conclusions related to disability, the role of the advocating physician might obfuscate the adjudication of a claim. There are legitimate occupational causes for mental disorders, e.g. where an individual has been exposed to a significant or life-threatening stressor (e.g. where he/she feared for life), PTSD may develop.

5. Psychopathology and psychiatric disorders in the workplace

5.1 Prevalence of mental disorders and disability in the workplace

Over a third of people in most countries report meeting criteria for the major categories of either mental illness or addiction, or both at some point in their lives. Psychiatric impairment and disability may be associated with a broad range of psychiatric disorders, and may be debilitating under some circumstances. Disability is a common, though uniquely personal experience, with an estimated 15% of the world's population thought to have a disability.

Most of the empirical work to date focused on persons with Mood Disorders, (Major Depressive Disorder, Bipolar Disorder), Anxiety Disorders (specifically Generalized Anxiety Disorder (GAD), and Post-Traumatic Stress Disorder (PTSD), the psychotic disorders (specifically Schizophrenia), Personality Disorders, Substance Use Disorders (Substance Abuse and Substance Dependence), the functional somatic syndromes (e.g. Somatoform Disorders). These disorders represent the mental disorders most commonly found in occupational settings and comorbidity (i.e. co-occurrence of psychiatric illnesses) is common. The prevalence of commonly encountered workplace psychiatric disorders by class and specific diagnosis is reflected in Table 1 (Kessler, Berglund, et al., 2005; Kessler, Chiu, et al., 2005).

The majority of individuals with psychopathology and mental disorders continue to be employed. The presence of a mental disorder does not automatically preclude an individual from working safely and successfully. In general, however, severe and persistent mental illness (SPMI) tends to be more likely disabling, e.g. Bipolar Disorder and Schizophrenia. The worker who suffers from at least one SPMI is often are unable to compete on equal footing for employment, and hence SPMI is rarely encountered in most occupational

settings. The less severe mental disorders do not typically preclude individuals from competing for employment, and are hence seen more commonly in occupational settings.

Class of Disorder	Specific Diagnosis	Lifetime	12-month
		Prevalence	prevalence
		(%)	(%)
Anxiety Disorders		28.8	18.1
	Panic Disorder	4.7	2.7
	Specific Phobia	12.5	8.7
	Social Phobia	12.1	6.8
	Generalized Anxiety Disorder	5.7	3.1
	Post-traumatic Stress Disorder	6.8	3.5
	Obsessive Compulsive Disorder	1.6	1.0
Mood Disorders		20.8	9.5
	Major Depressive Disorder	16.6	6.7
	Dysthymia	2.5	1.5
	Bipolar I and II	3.9	2.6
Impulse Control			
Disorders			
	Attention deficit / hyperactivity Disorder	8.1	4.1
Substance Use			
Disorders		14.6	3.8
	Alcohol Use	13.2	3.1
	Alcohol Dependence	5.4	1.3
	Drug Use	7.9	1.4
	Drug Dependence	3.0	0.4

Table 1.

5.2 Major Depressive Disorder (MDD)

Major Depressive Disorder (MDD) is often a common and chronic condition, with a lifetime risk of 10-25% for women and 5-12% for men, in community-based settings. The essential feature of MDD is a clinical course that is characterized by one or more Major Depressive Episodes (APA, 2000). Major Depressive Episodes may occur in the context of MDD or Bipolar I or II Disorder. The MDE in a MDD has to be distinguished from legitimate stress related to workplace issues, a depressed mood related to substance use, (i.e. Substance-Induced Mood Disorder, e.g. with the use of alcohol or cocaine and other drugs), and a Mood Disorder due to a General Medical Condition, e.g. where hypothyroidism is responsible for symptoms of a mood disorder.

The use of the term "depression" to describe the mental disorder diagnosis is inappropriate as it represents only one symptom of a syndrome, by itself does not reliably describe a specific mental disorder. The diagnostic criteria for MDE and MDD, as well as other disorders associated with a depressed mood are captured in the DSM IV-TR (APA, 2000). The term "clinical depression" is no longer recommended for use, and for the diagnosis of MDD a range of specifiers allow for finer description of the disorder, e.g. severity (i.e. mild, moderate, or severe). There also exist remission specifiers, i.e. partial or full remission, as well as specifiers to indicate the presence of catatonic features, psychotic features,

melancholic features, atypical features, or with post-partum onset. Course specifiers, i.e. with or without interepisode recovery, or with seasonal pattern allows for longitudinal descriptions, along with the descriptors of single episode, recurrent, and chronic. Dysthymic Disorder refers to a disorder associated with a chronically depressed mood or irritability that occurs for most days for at least two years, upon which a MDD could be superimposed. There are no diagnostic laboratory tests for any of the depressive disorders, but non-specific findings have been described, e.g. elevated glucocorticoid levels as well as EEG sleep alterations. Because up to a quarter of persons with certain medical conditions will develop depression (APA, 2000), medical conditions and substance-related disoders have to be ruled out in any person diagnosed with a MDE.

Depressive disorders are considered a leading cause of disability globally (Murray & Lopez, 1996), projected to become the world's leading cause of disability. Most persons with mild depression can continue to function in the workplace, despite the presence of some degree of impairment or the presence of related symptoms. In those suffering from one or more depressive disorder absenteeism and presenteeism are linked to decreased productivity and an increased potential for risk in some, as a direct result of the symptoms (both physical and mental) of depression. These include depressed mood, irritability, low energy, cognitive symptoms (attention, memory, distractibility, executive function) and loss of motivation, or thoughts of death, dying, and suicide. Like in the case with other mental disorders, the mere presence of the diagnosis of MDD is not an indication of the level of impairment. The DSM IV-TR criteria require to be supplemented with a dimensional functional assessment to determine the level of impairment, based on which disability determinations should be based.

A number of substance-related disorders may mimic the features of MDD and other disorders in this class, and require to be ruled out in the diagnosis of the condition. These include mood disorders that develop as the direct result of the use of alcohol, amphetamines, cocaine, hallucinogens, inhalants, opioids, sedatives / hypnotics, or any combination thereof, i.e. poly-substance use. The condition of a depressive episode may be mimicked in either intoxication or withdrawal phases of substance use, and may be compounded by the presence of a bona fide medical condition.

Clinical practice guidelines for the treatment of MDD typically include multimodal pharmacotherapy and psychotherapy combinations. In the management of MDD, attention should be given to the detection and treatment not only of the primary condition, but also of comorbidity of any substance-related disorder, specifically Alcohol Abuse or Dependence, as well as the potential for imminent risk of harm to self or to others. With the appropriate treatment, 80% of depressed individuals can return to normal activities, including work. Improvements following treatment initiation are usually notable within 10 days to 2 weeks, and with relatively rapid improvement in work function. Adverse effects of antidepressants are usually evident within the first two weeks, and in general these are mild and transient. In the face of untreated depression, chronicity may develop, with subsequent increased levels of disability as a result of chronic impairments.

Because MDD and other depressive disorders may be associated with an increased risk of harm to self, the necessary level of vigilance is required to detect any safety risk in occupational context.

5.3 Bipolar Disorder

Bipolar I Disorder is ranked as a leading cause of disability, but is less prevalent than MDD. As a result of the heterogeneous nature of this disorder, workers can present with a variety

of symptoms, e.g. depressed, hypomania (Bipolar II Disorder), mania (Bipolar I Disorder), or psychotic features (i.e. hallucinations, delusions, disorganized behavior). The condition is typically characterized by the presence of chronic symptoms, either mania, or depression, or both in alternating or mixed cycles. The diagnosis of Bipolar Disorder also warrants the rigorous exclusion of any substance-related disorder as the clinical presentation of this condition may be mimicked by a number of substance use disorders, e.g. alcohol, stimulants (e.g. cocaine, crystal methamphetamine), and over-the-counter medications. The impairment related to Bipolar I Disorder will depend on the phase of the illness the worker is in as well as the relative intensity of the symptoms, e.g. cognitive symptoms during the depressive phase, as opposed to disinhibition during the manic phase of the disorder.

Bipolar Disorder is considered chronic, yet treatable, but treatment is generally more complex than for MDD, and closer attention is given to treatment adherence. The utilization of multimodal interventions, i.e. including mood stabilizers and psychotherapy, along with longitudinal follow-up by an attending physician, is deemed the mainstay of treatment. Although considered treatable, the course of the disorder is typically recurrent and more than half of persons diagnosed with the disorder continue to experience interpersonal or occupational difficulties between acute episodes. As a general statement, the prognosis for Bipolar I Disorder is less optimistic than for MDD, and approximately 10-15% of persons diagnosed with Bipolar I Disorder complete suicide.

A number of substance use disorders may mimic the features of Bipolar Disorder, and requires to be ruled out in the diagnosis of the condition. These include: alcohol, amphetamines, cocaine, hallucinogens, inhalants, opioids, and poly-substance use.

5.4 Anxiety Disorders

On a daily basis, most persons in the general population will experience varying degrees of anxiety. This is necessary for survival and tends to increase performance, and is not considered pathological. However, when the threshold for a disorder is reached (i.e. causing significant distress or leading to significant functional impairment), and the DSM criteria are met, an Anxiety Disorder is diagnosed. Anxiety Disorders are the most common psychiatric disorders, and may be associated with significant impairment. This class of disorders includes Generalized Anxiety Disorder (GAD), Post-Traumatic Stress Disorder (PTSD), Acute Stress Disorder, Social Anxiety Disorder (Social Phobia), Panic Disorder with / without Agoraphobia, Agoraphobia without a history of Panic Disorder, Specific Phobias, Obsessive-Compulsive Disorder (OCD), Anxiety Disorder due to a General Medical Condition, and Substance-Induced Anxiety Disorder. While low levels of anxiety is ubiquitous and may increase productivity, it may equally be potentially impairing when it exceeds threshold levels.

There is no direct correlation between any single Anxiety Disorder, the level of impairment, fitness to work and subsequent disability. The complex relationship requires the assessment of the individual, with measurement of the level of functioning and the putative impairment as a result of the condition. Panic attacks and PTSD tend to be most disabling, and special attention should be given to ruling out medical conditions or substance use patterns that may mimic anxiety, or substances, which may be used to self-medicate anxiety symptoms. Anxiety Disorders are highly treatable, with multimodal interventions, including pharmacotherapy and psychotherapy. The response to medication in the context of OCD may take longer than for other anxiety disorders, and higher dosages may be required

compared to other disorders in the same class. Caution should be taken with regards to the use of sedating or habit-forming classes of medication for the treatment of the worker with an Anxiety Disorder, as it may increase the risk of cognitive impairment, the risk of accidents (specifically in safety-sensitive positions), or it may provoke complications with regards to other addictive disorders (e.g. in a person with pre-existing history of problem related to among others alcohol, barbiturates, opioid, or benzodiazepines).

5.5 Substance-related disorders

The impact of substances on the workplace is diverse and potentially severe, posing salient safety concerns for those working in safety-sensitive occupations. The essential feature of Substance Dependence (addiction) is a cluster of cognitive, behavioral, and physiological symptoms indicating that the individual continues use of the substance despite significant substance-related problems (APA, 2000). Eleven classes of substances are listed in the DSM, including alcohol, amphetamines, caffeine, cannabis, cocaine, hallucinogens, inhalants, nicotine, opioids, phencyclidine, sedatives-hypnotics or anxiolytics, and there is allowance for poly-substance use as well. The use of caffeine and nicotine are generally not deemed impairing in the short-term, although the chronic use of tobacco is an obvious and common cause of death, disease, and medical disability.

Although the use of substances is ubiquitous in the general population, only a fraction of those who use drugs are deemed as suffering from a mental disorder, i.e. Substance Abuse or Dependence. Substance Use Disorders can be associated with lifestyle changes, such as socializing at bars or having business meetings in facilities where alcohol is served. The use of substances may be used recreationally and in a non-addictive pattern, or the user may become addicted to it. Substance use, whether used recreationally or in the context of having become addicted, poses significant concerns to persons working in safety-sensitive occupations. Ongoing substance use in a worker who has ever been diagnosed with Substance Abuse or Dependence (excluding nicotine) is generally inconsistent with functioning in a safety-sensitive position. Total abstinence of all classes of drugs of abuse (excluding nicotine) is usually required under such circumstances, to avoid the potential impact ongoing use may have.

The impact of substances on performance and safety in the workplace goes beyond the immediate intoxicating effects of the substance, may also be related to withdrawal symptoms, and also to carry-over effects of certain drugs that are used outside working hours. An additional and significant factor for the worker consuming illicit substances is that the person must purchase the substance by illegal methods, and this requires the worker to have contacts with individuals engaging in criminal activity. This exposes the worker to a range of potential complications associated with the subculture in which trafficking occurs.

Apart from the acute effects of drugs during intoxication and withdrawal, chronic drug use, especially alcohol, may also be associated with cerebral atrophy and cognitive deficits. Many psychiatric disorders are associated with an increased risk for Substance Abuse, and comorbidity has to be ruled out. This suggests that an individual undergoing a psychiatric assessment should be assessed for substance use issues, and vice versa. The request for an "addiction assessment" in the expressed absence of any psychiatric assessment represents a potential ethical quandary, which may impact on safety as well as the adjudication of any disability claim.

5.6 Personality disorders

The DSM IV-TR defines Personality Disorder (PD), as applied to the 10 specific Personality Disorders: "An enduring pattern of inner experience and behavior that deviates markedly from the expectations of the individual's culture, is pervasive and inflexible, has an onset in adolescence or early adulthood, is stable over time, and leads to distress or impairment" (APA, 2000). The Personality Disorders are divided into three Clusters: A, B, and C. Individuals in Cluster A (Paranoid PD, Schizoid PD, and Schizotypal PD) appear odd or eccentric, while individuals in Cluster B (Antisocial PD, Borderline PD, Histrionic PD, and Narcissistic PD) appear dramatic, emotional, or erratic. Persons in Cluster C (Avoidant PD, Dependent PD, Obsessive-Compulsive PD) often appear anxious and fearful (APA, 2000).

In this category the DSM includes the following disorders, with descriptions offered from the same source:

- Paranoid Personality Disorder: (referring to a pattern of distrust and suspiciousness such that others' motives are interpreted as malevolent);
- Schizoid Personality Disorder: (a pattern of detachment from social relationships and a restricted range of emotional expression);
- Schizotypal Personality Disorder: (a pattern of acute discomfort in close relationships, cognitive or perceptual distortions, and eccentricities of behavior);
- Antisocial Personality Disorder: (a pattern of disregard for, and violation of, the rights of others);
- Borderline Personality Disorder: (a pattern of instability in interpersonal relationships, self-image, and affect, and marked impulsivity);
- Histrionic Personality Disorder: (a pattern of excessive emotionality and attention-seeking);
- Narcissistic Personality Disorder: (a pattern of grandiosity, need for admiration, and lack of empathy);
- Avoidant Personality Disorder: (a pattern of social inhibition, feelings of inadequacy, and hypersensitivity to negative evaluation);
- Dependent Personality Disorder: (a pattern of submissive and clinging behavior related to an excessive need to be taken care of);
- Obsessive-compulsive Personality Disorder: (a pattern of preoccupation with orderliness, perfection, and control)
- Personality Disorder Not Otherwise Specified: (this section is reserved for situations where the person's personality meets the general criteria for a Personality Disorder and the traits of several Personality Disorders are present, but the criteria for any one specific Personality Disorder are not met).

Although persons with Personality Disorders may legitimately suffer from symptoms and signs, which may constitute impairment, these disorders (in the absence of Axis I disorders) would generally not be deemed compensable in disability adjudication processes. Individuals with personality disorders may experience a lack of goodness-of-fit in the context of their occupational situation, and issues are often dealt with in a performance fashion as opposed to an accommodation paradigm.

6. The cost of mental health disability

Common psychiatric disorders, including Addiction, frequently lead to an inability to work and contribute to both visible and invisible costs of disability (Armstrong, 2008). The

invisible costs associated with not treating mental disorders in the workplace include loss of productivity, absenteeism, presenteeism, and the inability to retain a worker, i.e. leading to increased employee turn-over. Globally, mental disorders rank among the most common workplace disabilities. The key drivers of increasing disability costs are psychiatric disabilities or mental disorders. Mental disorders are the leading cause of long-term disability (72%) and short-term disability (82%), representing about 12% of overall Canadian business payroll costs (Watson Wyatt, 2007). Indirect costs of mental illnesses account for about 75% of total employer costs (McCulloch et al., 2001). The 2001 Health Canada report "The Economic Burden of Mental Health Problems in Canada" estimates the cost of lost productivity due to depression and stress at more than \$8.1 billion dollars a year (Stephens & Joubert, 2001).

7. The occupational mental health assessment

7.1 Dual agents and advocacy bias

The World Medical Association reminds treating physicians that they have an ethical duty and a professional responsibility to act in the best interest of their patients without regard to age, gender, sexual orientation, physical ability or disability, race, religion, culture, beliefs, political affiliation, financial means or nationality (WMA, 2006).

Often a conflict emerges between the patient's legitimate health interests and the third party's specific requirements. When conducting independent assessments, the expectations from the patient and the treating physician are not always or necessarily aligned with those of the employer, insurer, regulatory, or legal system (collectively termed "third party"). Situations arise where there exists a conflict between the interest of the patient (and whereby the treating physician is obligated to act as a patient advocate, or where the duty dictates that the physician should act in the best interest of the patient) and the third party, whose decisions are typically shaped by economic, administrative, occupational, or legal parameters. It is considered a failure to meet professional standards as well as an ethical violation for a treating physician to offer conclusions about causation and other forensic issues (Greenberg & Shuman, 1997; Hales & Yudofsky, 2002; Barth & Brigham, 2005, Talmage, et al, 2011).

Under all circumstances, the independent assessment boundaries should clearly communicate (in advance) that the assessing physician has no duty to advocate for the patient (respondent). The duty also exists to communicate that the assessing psychiatrist is not employed by, or otherwise affiliated with, the retaining third party. If an assessing physician has previously provided treatment to the worker who has to be assessed, or has other affiliation with the retaining third party, the assessment is no longer deemed independent and the results may not be valid. To avoid these pitfalls, clear boundaries should be communicated in advance of the commencement of the assessment.

Attempting to fulfill both services and roles for the same worker (who has to be assessed) represents a conflict of interest for the psychiatrist and represents an ethical conundrum. These concerns pertaining to acting as dual agents should be addressed with the party in violation of the guideline. Psychiatrists acting as treatment providers should avoid offering opinions and conclusions pertaining to fitness-to-work, causation, or other forensic matters. It is however, permissible for the treating health professional to offer content witness input, but should avoid acting in both capacities.

7.2 The setting in which the Independent Medical Examination (IME) is conducted

The typical IME is conducted on an elective outpatient basis. The office setting deemed suitable for general psychiatric practice is usually suitable for conducting an IME. The reliance on usual protective measures to ensure safety is recommended. The assessment usually takes longer than a regular clinical assessment, and is not routinely audio/video-recorded unless the request for such is made in advance. The presence of a collateral source is not encouraged, but is not disallowed if requested.

7.3 Issues related to consent for obtaining or release of information

In an IME, the examining psychiatrist is responsible to explain the parameters, scope, risks, and who receives the report. This function, like obtaining consent, should not be delegated to office staff. The health professional conducting the independent assessment has an ethical and legal obligation to ensure that respondents are informed of their legal rights with respect to the assessment service (in this case referring to the occupational assessment, which is a forensic assessment). The respondent is advised that a traditional physician-patient relationship is not established, and that no duty to advocate or engage in a longitudinal therapeutic relationship is implied. This limited physician-patient relationship is subject to compliance to the same ethical principles as a traditional therapeutic relationship, in that objectivity needs to be achieved, the highest degree of confidentiality needs to be maintained, potential conflicts of interest should be declared, and boundaries should be honored (i.e. adherence to the same rules strictly proscribing boundary violations).

The respondent has to be informed of the purposes and parameters of the evaluation, of the nature of procedures to be employed, of the intended uses of any product of the assessing physician's services, and of the party who has retained the assessing professional. To protect confidentiality, the employer is typically entitled only to the fitness-to-work information (as opposed to the entire clinical assessment), while the disability manager may have access to the entire data set. Although the employer is not entitled to receive information pertaining to the exact diagnosis, it is not unusual for the employer to demand the full independent report. This conflict is resolved by attempting to utilize the services of a separate health professional (e.g. Occupational Health Nurse) as the designated employer representative. This person then acts as a caretaker of the information (in order for the non-relevant clinical and personal information to not go to Human Resources, the Employer, or beyond), but to remain in the hands of a health professional.

The worker should understand the lack of confidentiality in regards to anything discussed during the assessment, as it would potentially form part of the assessment report, which is communicated to the retaining third party, i.e. the employer or its designate. The results of any blood testing or urine drug screening should be incorporated into the report as deemed necessary to provide a reliable and valid independent opinion, and the worker should be fully informed and unless valid consent is obtained, such assessment cannot proceed. Only under the circumstances under which the worker fully understands the nature of the assessment, as well as his/her legal rights, could consent be viewed as valid. In the absence of valid consent, the assessment cannot proceed. Valid consent statements should be included in the report to the third party, and an example of such statement is as follows:

"Mr. John Doe was advised to the purpose and parameters of this assessment, as well as to the lack of confidentiality in regards to anything discussed, as it would potentially form part of the assessment. Mr. Doe was also informed that the information would be sent to the requester of this report, and that

the results of any blood testing or urine drug screen would be incorporated into the report. Mr. Doe was notified and understood that this would be an independent assessment, initially requested by a third party, and that a retainer was initiated by the third party. However, there existed no other affiliation with such, or with her employer, and the writer confirmed that he had not previously provided health services to him. Mr. Doe was also notified that this assessment would constitute a single liaison, which did not, and would not in future, constitute the establishment of a physician-patient relationship. As the writer, I notified Mr. Doe that I could not release a copy of this report to him, but that he would be able to approach the retaining third party regarding the protocols for obtaining a copy of this report. The writer also has no objection if a copy of this report is to be shared with any of the attending health professionals, with the appropriate consent as needed. Mr. Doe was given the ongoing opportunity to ask questions regarding the assessment, and was satisfied with the parameters of this protocol, and fully complied with the entire assessment. Upon request, he furnished the writer of this report with a government-issued proof of identification. There were no issues with language competence or understanding".

In situations where the respondent is unable to furnish the assessing party with a reasonable form of picture identification, the assessment report should include a detailed description of the respondent to ensure that the person assessed was indeed the individual under discussion and referred for assessment. If there are issues with language competence, the duty of the assessor is to wait until adequate interpretation services to be utilized. The responsibility for such falls on the shoulders of the retaining third party.

7.4 Duty to report

In certain situations the assessing physician may have a duty to report the IME findings to the authorities. Where there are threats uttered against any third party, a duty to report to the appropriate authorities exists. The duty to report motor vehicle drivers that are deemed incapable of operating a vehicle depends on the jurisdiction the provider practices in. As is the case with acute intoxication as a contra-indication to driving, it should be noted that several other acute contra-indications to driving exist (CMA, 2006):

- Acute psychosis;
- Condition relapses sufficient to impair perceptions, mood, or thinking;
- Medication with potentially sedating effects initiated or dose increases;
- Lack of insight or lack of cooperation with treatment;
- Lack of compliance with any conditional licensing limitations imposed by the authority;
- Suicidal plan involving crashing a vehicle;
- The intent to use a vehicle to harm others.

7.5 The nature independent assessment

The aim of the independent psychiatric evaluation is to reach specific and reliable answers to the questions posed by the retaining third party.

The domain of the independent assessment overlaps with the typical psychiatric assessment of adults, but differs in a number of ways. It is geared towards the resolution of a specific legal, administrative, or other nonclinical questions, and the respondent is not the physician's patient, and there does not exist any past or future prospects for the establishment of a patient-physician relationship. The independent assessment relies on previous or current medical records, additional documentation pertaining to the respondent's occupational circumstances, performance in the workplace, and knowledge of

the existence of any workplace issues, taking into account the potential biases that may exist. In the context of an evaluation, the main focus is the collection of sufficient information to be able to provide a valid and reliable independent opinion, and the usual task of establishing a working relationship with the patient is completely avoided.

It is deemed unethical to use psychotherapeutic techniques or approaches (e.g. specialized cognitive, coercive, contingency, or motivational enhancement) to obtain information the respondent would not otherwise have offered, or to attempt to obtain information by implying or suggesting any future therapeutic involvement. The independent evaluation is by definition not an emergency evaluation, and the assessor should exercise great caution when a request is made for an emergency independent assessment. The IME is typically a time-intensive exercise, conducted over consecutive hours, the duration of which is dependent on the complexity of the case.

Although there has not been established a traditional physician-patient relationship, the IME may yield information pertaining to threats to the safety of others. Although emergency issues are relatively rare in the context of IME's, the duty of the assessing psychiatrist would be to ensure the safety of the patient and others, and a duty to report may exist. When the respondent is agitated or psychotic, or if imminent risk of harm to self or others is identified, immediate steps are required to ameliorate the risk of harm. Involvement in the IME precludes active involvement in treatment, but does not negate the duty to address immediate safety issues. Depending on the duty to report impaired drivers in the particular jurisdiction, a respondent who is under the influence of a substance at the time of the IME may have to be reported to the transportation authorities or police if there is an imminent risk of impaired driving.

The psychiatric evaluation is aimed to establish whether a mental disorder or other condition is present, and the DSM IV-TR 5-Axis formulation is used to summarize the clinical picture, which may include a differential diagnosis if uncertainty exists. The assessment includes the evaluation of longer-term issues (e.g., premorbid personality issues or disorders, pre-existing psychiatric conditions or vulnerabilities) that may impact on the outcome of the disability assessment.

7.6 The domains of the psychiatric evaluation

The independent psychiatric evaluation involves the systematic consideration of the broad domains, including:

- i. Reason for the assessment.
- ii. History of the present illness.
- iii. Occupational history, including exploration of workplace issues.
- iv. Past psychiatric history, previous psychiatric hospitalizations, previous suicide attempts or treatment.
- v. Past and current medical history.
- vi. Medication, including dosage and duration of use, as well as previous trials of use of medication, including over-the-counter preparations.
- vii. Legal history, including current or past involvement, and the existence of outstanding charges.
- viii. Family history.
- ix. Substance-related history including (but not limited to) alcohol, caffeine, nicotine, marijuana, cocaine, opiates, sedative-hypnotic agents, stimulants, solvents, MDMA, androgenic steroids, and hallucinogens; or any combination thereof.

- x. Developmental, social and interpersonal, cultural, and military history.
- xi. Review of systems, to identify symptoms not already listed to date in the assessment.
- xii. Functional assessment, e.g. activities of daily living (ADL), activities necessary for public transportation, Activities of Daily Living Commonly Measured in Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL). These include (Cocchiarella & Andersson, 2001):

Self-care, personal hygiene Urinating, defecating, brushing teeth, combing hair, bathing,

dressing oneself, eating.

Communication Writing, typing, keyboarding, seeing, hearing, speaking,

reading.

Physical activity Standing, sitting, reclining, walking, climbing stairs. Sensory function Hearing, seeing, tactile feeling, tasting, smelling.

Non-specialized hand

activities Grasping, lifting, tactile discrimination.

Travel Riding, driving, flying.

Sexual function Orgasm, ejaculation, lubrication, erection.

Sleep Restful, nocturnal sleep pattern.

xiii. Mental Status Examination (MSE), a systematic collection of information, is designed to obtain evidence of the existence of any mental disorder, and to augment the assessment of risk, capacity, and tolerance. In documenting the findings of the mental status examination, it is often useful to include examples illustrative of the clinical observations. The typical MSE includes the domains of (1) Appearance and general behavior. (2) Psychomotor activity, (3) Characteristics of speech, (4) Mood and affect. (4) Thought processes, (5) Thought content, (6) Perceptual disturbances, (7) Sensorium and cognition, which includes include orientation (e.g., person, place, time, situation), attention and concentration, memory (e.g., registration, short-term, long-term), and the respondent's fund of knowledge. Additional comments pertaining to intelligence, language functions (e.g., naming, comprehension, repetition, reading, writing), drawing (e.g., copying a figure or drawing a clock face), abstract reasoning (e.g., explaining similarities or interpreting proverbs), and executive functions (e.g., list making, inhibiting impulsive answers, resisting distraction, recognizing contradictions) are useful in formulating the opinion; (8) Insight; and (9) Judgment. The MSE should also include statements about the respondent's reliability as a historian. The MSE should contain documented information on the putative presence of any imminent or substantial risk of harm to self or to others.

xiv. Physical examination, if deemed contributory.

xv. Further diagnostic testing.

7.7 Assessment of work functions

To describe the dimension of putative impairment of work functioning, the assessing psychiatrist attempts to determine the potential impact the specific symptom (associated with the diagnosed mental disorder), or other reported symptoms or signs, may have on the specific work functioning. Three domains for such have been identified (Gold & Shuman, 2009):

a. Social / emotional

- Giving directions
- Requesting clarification
- Initiating interpersonal contact
- Asking for feedback on job performance
- Responding appropriately to negative feedback
- Initiating corrective action
- Providing explanations
- Describing events
- Communicating intelligibly, fluently, coherently
- Responding appropriately to supervision
- Maintaining relationships with supervisors
- Responding appropriately to supervisors
- Responding appropriately to coworkers
- Adapting to a new supervisor or new coworkers

b. Cognitive

- Understanding, remembering, carrying out directions
- Assessing own performance
- Making decisions
- Seeking information when necessary
- Exercising judgment
- Problem-solving capacity:
 - Managing multiple pressures or stresses
 - Balancing work and home life
 - Solving routine problems that make it possible to work, such as getting up on time, taking public transportation.
- Recognizing when to stop doing one task and move on to another
- Learning new tasks
- Transferring learning
- Adapting to a change in work assignment
- Focusing on multiple tasks simultaneously
- Screening out environmental stimuli
- Processing information (e.g. understanding, analyzing, synthesizing)
- Maintaining boundaries of responsibility

c. Physical

- Maintaining fixed work schedule, including:
 - Need for flexible schedule or breaks or modified hours due to the impairment;
 - The effects of medication;
 - The need for appointments to receive treatment;
 - The need for leave to receive acute treatment.
- Maintaining work pace
- Maintaining stamina throughout the day

The AMA Guide to the Evaluation of Work Ability and Return to Work (AMA, 2011) suggests screening tests for establishing functional capacity. These include (adapted) the "Grocery Store" test question ["If the individual owned his/her own grocery store, would he or she

be able to find a way to work safely? If the answer is yes, then an absence from work is probably not medically required"]. This suggests that a non-medical aspect (or psychosocial issue), as opposed to the medical condition, is creating the disability. Another test is that of the "Molehill Sign": ["Is the individual making a mountain out of a molehill, or is an apparently minor health condition having a major effect on the individual's daily life and functions?" In the case of an affirmative response, the issue creating disability relates to motivation, i.e. tolerance. A final test is that of "The Obstacle". The question is posed what the specific obstacle is that is preventing the individual from working today, hence attempting to uncover the situational or environmental obstacles to returning to work (AMA, 2011).

7.8 Documenting the results of the Independent Medical (Psychiatric and Addictions) Evaluation (IME)

Upon completion of the IME, the assessing physician should be able to respond to the questions posed. The report should restrict its scope to such questions posed, and inclusion of unnecessary information not pertinent to issues under discussion should be avoided in the interest of privacy. The IME report aims to provide a succinct overview of issues related to:

- 1. The DSM IV-TR diagnostic formulation and the symptoms and evidence to support such.
- 2. The existence of any risk issues.
- 3. The respondent's capacity in the context of activities of daily living, and activities outside the workplace.
- 4. The existence of any workplace issues.
- 5. Tolerance and fitness to return to work, as well as in which capacity that would be feasible.
- 6. Potential recommendations for further management.

Like in clinical practice, if a specific finding or item is not documented, it is reasonable to suggest that it was not tested. The source file (i.e. the notes made during the actual assessment) may be requested by the retaining third party, or in tort cases by the opposing counsel. These should be available and released only with the appropriate level of consent. Handwriting should be legible and the content should be consistent with the opinions provided and conclusions offered in the final report. The industry standards for turnaround (i.e. from assessment to report submission) are approximately ten days for IME's, and no draft versions are offered for review to the retaining party. Reports are offered in its entirety and should not be severed as this may distort the collective opinion and conclusions.

7.9 Psychiatric disorders and shift work

It is not uncommon for workers to request to be excused from shiftwork. There exist very few indications for legitimately recommending the avoidance of shift work. Under circumstances where Bipolar Disorder has been diagnosed, where unnecessary sleep disturbance or deprivation may trigger a manic episode, the worker may be restricted from conducting shift (night or rotating) work. For the majority of cases of psychiatric disorders, there is no basis for restricting shift work. Pregnancy, in the absence of another basis for imposing a restriction, is not just cause for recommending the avoidance of shift work.

7.10 The issue of over exaggeration of symptoms

Cognitive deficits resulting in erroneous comprehension, recall, and expression may lead to inaccurate reporting of information. However, there is also a real risk of malingering and deception in symptom reporting. In the absence of objective and validated correlates for most mental disorders, the assessing psychiatrist should maintain a high index of suspicion with regards to the over-exaggeration of symptoms. Exaggeration of cognitive symptoms is widespread in disability-related evaluations, and it is unwise to accept self-reported memory complaints at face value (Richman, et al., 2006). Symptom exaggeration can create a seriously misleading impression of impairment and disability, but there exists no simple measure to detect malingering during independent evaluations.

7.11 Offering a disclaimer to the IME

The IME should include offering a verbal disclaimer to the worker who is about to be assessed, but such disclaimer should also be included in the written report. This allows for sufficient protection of the assessing party and also decreases the likelihood of a future successful suit against the psychiatrist. An example of a disclaimer is as follows:

"The writer of this report is responsible for the documented comments based on reviewing the listed information, and is independent from the adjudication of claims by the requesting third party. The writer was not in a position to objectively verify the historical accuracy of all of the information provided, and if significantly inaccurate or incomplete, it may understandably impact on the accuracy of the opinions provided, and the writer's stated opinion may be subject to modification or change. The writer reserves the right to alter his opinion should further information come to light, which would warrant reconsideration of the opinion. The opinions are provided with a reasonable degree of medical certainty, and recommendations for treatment are provided independently from the requesting third party. The reader is advised to contact the writer if any clarification is required regarding the content of this report".

8. Quantifying impairment in across different classification systems and guides

The triangulation of criteria of three published rating scales (i.e. the DSM IV-TR GAF scale, the AMA Class of Impairment, and the Washington State WAC Permanent Impairments of Mental Health) describes a practical strategy to allow for quantitative objectivity in measurement of impairment, and the GAF scores have been matched through triangulation with the Washington State WAC Permanent Impairment of Mental Health (omitted from the table below), and the class of impairment of the AMA Guidelines (Williams, 2010).

In an attempt to construct a similar grid that would be applicable to the Worker's Compensation Board's definition in the authors' jurisdiction, the authors compared the AMA classes with the Alberta WCB classes of impairment (WCB, 2001).

To allow for reconciliation of the GAF scores and the rating of permanent impairment in Alberta (WCB, 2006), the authors propose the following alignment between existing practice in the jurisdiction of Alberta, Canada's WCB Permanent Impairment Rating and the DSM IV-TR GAF scores. The alignment, although less intuitive than what has been achieved with the AMA classes of impairment, appear to offer some additional clarity in quantifying the levels of impairment through triangulation. These correlations are based on face value, best matching of the GAF score descriptors with the category in the Alberta WCB description, based severity of impairment. The impairment classes based on WCB descriptions were

tentatively placed in the categories as outlined in the table below. The local jurisdiction's class I and II appear to be consistent with a GAF of 80-100, which appears dissimilar to the AMA impairment rating, and for Class V, the GAF scores from 0-20 and 21-40 appear to match. This triangulation requires further study and validation.

DSM IV-TR GAF Score	Class of Impairment (AMA, 2011)	Description of Class
80-100	1 No Impairment	No impairment detected
61-80	2	Impairment levels are compatible with most
01-00	Mild Impairment	useful functioning
41-60	3	Impairment levels are compatible with some
41-00	Moderate Impairment	but not all useful functioning
21-40	4	Impairment levels significantly impede
	Marked Impairment	useful functioning
1.20	5	Impairment levels preclude useful
1-20	Extreme Impairment	functioning

Table 2.

DSM IV-TR GAF Scale (APA, 2000)	Class of Impairment: WCB Guide (WCB, 2006)	Description (WCB, 2006)
GAF 81-100:	Class I:	The worker:
- Superior functioning in a wide range of activities, life's problems never seem to get out of hand, is sought out by others because of his or her many positive qualities. No	No impairment, 0%	 Is able to carry on with all the activities of daily living; and Is able to perform work related duties without difficulty under normal conditions of stress, or May exhibit intermittent pain
symptoms.		behavior without restriction of
	Class II:	functional ability.
- Absent or minimal	Minimal	
symptoms, good functioning in all areas, interested and involved in a wide variety of activities, socially effective, generally satisfied with life, no more than everyday problems or concerns.	impairment 1-10%	The worker: - Is able to carry out all the activities of daily living with some decrease in personal and social efficiency, AND - exhibits mild anxiety in the form of restlessness, uneasiness and tension which result in minimal functional limitation, OR - exhibits pain behavior causing a minimal restriction of functional ability, AND - is able to function in most vocational settings but develops secondary psychogenic symptoms under normal conditions of stress.

DSM IV-TR GAF Scale	Class of	
(APA, 2000)	Impairment: WCB Guide (WCB, 2006)	Description (WCB, 2006)
GAF 61-80:	Class III:	The worker:
- If symptoms are present, they are transient and expectable reactions to psychosocial stressors; no more than slight impairment in social, occupational, or school functioning Some mild symptoms OR some difficulty in social, occupational, or school functioning, but generally functioning pretty well, has some meaningful interpersonal relationships.	Mild Impairment 11-30%	- is capable of taking care of all personal needs at home but may experience a reduced confidence level and an increased dependency outside the home, AND - experiences a definite limitation of personal and social efficiency, OR - suffers episodic anxiety, agitation, and unusual fear of situations which appear to threaten re-injury, OR - exhibits persistent pain behavior, associated with signs of emotional withdrawal and depression (e.g. loss of appetite, insomnia, chronic fatigue,
		low noise tolerance and mild psychomotor retardation), OR in the case of conversion reactions, consistently avoids the use of affected part leading to restriction of everyday activities, AND - will probably require vocational adjustment depending upon both the signs and symptoms present and the nature of the pre-accident work.
GAF 41-60:	Class IV:	The worker:
- Moderate symptoms OR	Moderate	- Suffers definite deterioration of
moderate difficulty in social,	Impairment	familial adjustment and incipient
occupational, or school	31-50%	breakdown of social integration, AND
functioning Serious symptoms OR any		- in the case of conversion reactions, exhibits bizarre behavior and a
serious impairment in social,		tendency to avoid anxiety creating
occupational, or school		situations to the point of significant
functioning.		restriction of everyday activities, AND
		- may require periodic confinement to
		the home or a treatment facility and
		will need significant vocational
		adjustment.
GAF 21-40:	Class V:	The worker:
- Some impairment in reality	Severe Impairment	- exhibits a chronic and severe
testing or communication,	51-75%	inability to function both in and out of
OR major impairment in		the home,
several areas, such as work,		- suffers obvious loss of interest in the
school, family relations,		environment, extreme emotional
judgment, thinking, or mood.		irritability, emotional lability and
- Behavior is considerably		uncontrolled outbursts of temper, OR

DSM IV-TR GAF Scale (APA, 2000)	Class of Impairment: WCB Guide (WCB, 2006)	Description (WCB, 2006)
influenced by delusions or hallucinations or serious impairment of communication or judgment OR inability to function in almost all areas.		- experiences mood changes with psychotic levels of depression, severe motor retardation and psychological regression, AND requires constant supervision and/or confinement as well as major vocational adjustment.
GAF 1-20:	Also Class V:	The worker (as above):
Some danger of hurting self or others, OR Occasionally fails to maintain minimal personal hygiene, OR Gross impairment in communication. Persistent danger of severely hurting self or others, OR Persistent inability to maintain minimal personal hygiene, OR Serious suicidal act with clear expectation of death.	Severe Impairment	- exhibits a chronic and severe inability to function both in and out of the home, - suffers obvious loss of interest in the environment, extreme emotional irritability, emotional lability and uncontrolled outbursts of temper, OR - experiences mood changes with psychotic levels of depression, severe motor retardation and psychological regression, AND requires constant supervision and/or confinement as well as major vocational adjustment.

Table 3.

9. Providing remedies through comprehensive mental health disability management

9.1 Towards an operational definition for Mental Health Disability Management

Mental Health Disability Management (MHDM) is a relatively new field involving a range of health professionals from different disciplines. The authors offer the formal definition of "the restoration of functional capacity, or the prevention of deterioration thereof, in a person who has been chronically or permanently impaired as a result of psychopathology, mental and/or addiction-related disorders". MHDM should be offered on the least restrictive level of care that is likely to be effective and proven to be safe, consistent with the principles of treatment matching in other areas of healthcare. It aims at developing the individual's existing resources, mobilizing additional resources, and to correct the relational interplay between impairment, the respondent, and the environment, collectively responsible for the disability. MHDM has a broad focus and is concerned with an individualized approach to limiting risk and ensuring safety, improving capacity (or preventing further deterioration), increasing tolerance, remedying negative attitudes towards MHDM, and increasing motivation to return to work. With financial expenditure related to psychiatric disability appearing to be out of control, and the existence of an empirical body of evidence suggesting the economic advantages of management of psychiatric disability, the authors are observing a growing trend and demand for evidence-based MHDM.

9.2 The goals of MHDM

In 1981 the World Health Organization stated that the aims of rehabilitation should be to reduce the impact of disabling conditions and identified three levels of action to bring this about. These same three goals (Harder and Scott, 2005) translate into the goals of MHDM:

- Reducing the occurrence of impairments
- Limiting or reversing disability caused by impairment
- Preventing the transition of disability to *handicap* (which is defined as a disadvantage for a given individual, resulting from an impairment or disability, which limits or prevents the fulfillment of a role that is normal for the individual).

9.3 The components of MHDM

MHDM includes a variety of components: prevention (primary), assessment, claim management (secondary, tertiary prevention), accommodation, return to work, and aftercare monitoring. Early identification and intervention are superior to lengthy and delayed protocols of assessment and management. Identification of mental health impairment and disability is a shared responsibility between employer and employee, and the responsibility of co-workers to report safety concerns or impairment in co-workers is beneficial in early initiation of remedies to prevent injuries and disability.

- Under ideal circumstances, workplace mental health promotion programs have the potential to prevent the development of a range of disorders. These prevent the development of mental disorders and addiction in vulnerable individuals and allow for prevention of update of drugs to cope or to self-medicate subjective distress.
- When a safety issue or a performance deficit has been identified, and there is reasonable suspicion of the existence of psychopathology, a mental disorder, or risky behavior, the confidential collection of accurate information pertaining to the health status of the respondent is mandated. The minimum data set in this regard should include an objective diagnosis (if any), formulated in a 5-Axis format, which includes a Global Assessment of Functioning, information pertaining to the safety issue / performance deficit that brought the case to the attention, information on putative predisposing, precipitating, and modulating factors in this regard, as well as the existence of any workplace issues. The claimant's motivation to return to work and the factors that could be affecting it should be assessed, and routine screening for any substance-related disorder or issues, which may be impacting the employee's presentation and recovery, should be explored. The symptoms reported by the employee should be documented, along with their frequency, severity, and duration, and the objective clinical findings during the examination, including the results of any mental status testing, should be included. A determination should be made whether the objective findings are consistent with the subjectively reported findings, and if there is any evidence of malingering, symptom amplification, or simulation.

A routine part of the independent evaluation should include the previous psychiatric history, including previous hospitalizations, previous suicide attempts, and previous psychiatric treatment received. The assessment should include questions pertaining to adherence to previous treatment, as well as the nature of any trials offered, e.g. the dose and duration of pharmacotherapy. If counseling or psychotherapy were offered in the past, a determination should be made if this represented a reasonable and appropriately focused trial, and if a reasonable level of adherence was achieved. With an appropriate description of previous and current treatment modalities, the

- employee's response to treatment should also be determined, along with the identification of factors that might have impacted on the clinical course and recovery.
- In all cases the existence of personality disorders or the prominent use of specific ego defense mechanisms should be assessed, to determine if any DSM IV-TR Axis II factors are impacting on the response to treatment? Activities of daily living, such as household chores, child care, hobbies, interests, ability to socialize or travel, and any academic or vocational pursuits should be assessed and reported on.

With the completion of a standardized and comprehensive psychiatric assessment, an opinion can be rendered pertaining to risk, tolerance, and capacity. To offer informed opinions pertaining to any putative restrictions and limitations, which may exist, the assessor should obtain sufficient information regarding the essential duties of the job, any potentially safety-sensitive elements of the job, and of any potential workplace issues the employee may not have reported.

Following the completion of the comprehensive psychiatric assessment, discussion should ensue with the employer to assist in informing further MHDM.

9.4 Claim management

This component falls outside the scope of practice of the assessing physician, and it is recommended that the assessing physician clearly communicate the boundaries. The reporting on impairment, psychiatric illness, capacity, risk, and tolerance are not implied to construe a recommendation pertaining to the adjudication of any claims or legal matters. The opinions provided also do not suggest that a specific administrative function be made or enforced, and are offered independently from the requesting party's interests. Many persons becoming ill, psychiatrically or otherwise, find it challenging to navigate the maize of healthcare systems. It falls outside the scope of the physician conducting the assessment to assist in such navigation as it might be interpreted (by the worker undergoing the assessment) as the establishment of a physician-patient relationship. Such relationship would be associated with other duties and obligations. At a time with the worker is psychiatrically unwell; he/she may be particularly vulnerable, and less inclined to assume responsibility for accessing care unless additional support is offered.

9.5 The Duty to Accommodate

Under Human Rights legislation, the employer has a duty to accommodate disability to the point of undue hardship. This is a legal determination, falling outside the scope of this manuscript.

9.6 Return-to-work

The safe and timely return to work has favorable human and financial results (Curtis & Scott, 2004), and is often therapeutic in psychiatric conditions. Lengthy disability decreases the likelihood of a return to work.

9.7 Follow-up monitoring

Following the establishment of a diagnosis and after furnishing treatment recommendations, the worker should be matched with the appropriate level of evidence-based treatment interventions. In cases where a substance-related disorder was diagnosed, the need for ongoing random drug screening may be necessary, within what is permissible under human rights or disability legislation.

10. Avoiding common pitfalls in the assessment and management of mental health disability

The authors offer a non-exhaustive table of 10 common pitfalls (along with proposed solutions) in the practice of conducting psychiatric IME's:

Description of common pitfall:	Proposed remedy:
1. Dual agency conflicts.	Treating physicians should avoid involvement in offering conclusions pertaining to forensic matters. Similarly, physicians conducting IMEs should not become involved in treatment, in the context of a traditional physician-patient relationship. The assessing physician should refrain from acting as an advocate for the worker, but is also not an advocate for the retaining party.
2. Equating mental disorder diagnosis with impairment and disability. 3. Assumption that occupation is an automatic and causal factor in mental disorders.	There is a non-linear relationship between mental disorder, impairment, and disability. Rigorous and distinction between these matters is required, and each domain should be quantified based on collected evidence. Assessment of disability should be related to work-specific functions. The criteria for disability are determined by the particular third party and may vary across jurisdictions. The Social Security Administration's Criteria for Total disability requires that the mental disorder persist despite adequate treatment, for at least 12 months, at a level that produces at least two of the following: 1. Marked restriction in ADL; 2. Marked difficulties in maintaining social functioning; 3. Marked difficulties in maintaining concentration, persistence, or pace, and 4. Repeated episodes of decompensation, each of extended duration. Work is therapeutic and is rarely considered causally related to the development of mental disorders. Consideration should be given to workplace issues, motivation, psychosocial issues, and other non-occupational factors in determining
4. Reporting without the use of standardized diagnostic language, e.g. using "depression" to describe a Major Depressive Disorder.	causality. Strict adherence to the diagnostic classification system of choice, e.g. the DSM IV-TR or the ICD-10.

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5. Reliance on Mental Status	The systematic determination of functioning
Examination and GAF scores alone	should be conducted.
to determine degree of impairment.	
6. Failure to obtain valid consent.	Consent should be informed and valid, and this
	task should not be delegated to administrative
	personnel. The explanation of the scope and nature
	of the assessment should be the duty of the
	assessing physician, and should include the
	opportunity for the worker to ask questions.
7. Failure to report imminent risk of	In a small number of situations there may exist a
harm.	duty to report imminent risk of harm to self or
	others, or a reporting to the appropriate
	transportation authorities.
8. Failure to take Axis II conditions	1
	A standard IME should include an opinion
into consideration	pertaining to the presence of any possible
	Personality Disorder, or the salient use of defense
	mechanisms that may impact on the individual's
	clinical condition.
9. Reliance on self-reporting only in	The assessing physician should take into account
the context of symptoms, e.g.	that cognitive dysfunction cannot be determined
cognitive symptoms.	by relying on self-report only. Exaggeration in this
	context is widespread, and objective measures are
	required to validate the presence of any cognitive
	disturbance.
10. Failure to provide a well-	Care should be taken to ensure that the questions
substantiated report, or failure to	posed to the assessing physician are clarified in
respond to the referral source's	advance of conducting the assessment, and the
questions.	
question.	report should focus on responding to these
	questions only. If an opinion is reached based on
	the review of records only, such fact should be
	clearly communicated in the report.

Table 4.

11. Summary

Disability is on the increase, and mental disorders are projected to be the leading cause of disability in future. Work is therapeutic, and most individuals do not experience an exacerbation of mental disorders as a result of working.

Conducting independent occupational assessments to determine capacity, risk, tolerance and fitness for work, is a specialized area of psychiatry, with its own pitfalls and caveats. Many psychiatrists experience this as intrusive and feel they are ill-prepared to navigate this arena.

This chapter outlined the common mental disorders, encountered in clinical and occupational settings, including Depressive Disorders, Anxiety Disorders, Substance-Related Disorders, and Personality Disorders. Of central importance is the duty to

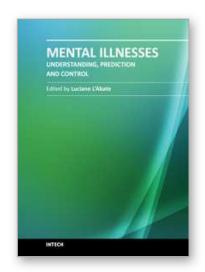
objectively measure impairment, and to not only rely on the diagnosis to determine the level of impairment. The non-linear relationship between mental disorder, impairment and disability is a key concept, and utilizing a template for conducting independent assessments may assist in bypassing some of the most common pitfalls.

The assessment of the functional impairment is the first step towards implementing the appropriate level of mental health disability management. The enjoyment of the human right to optimal health, without discrimination on the grounds of any disability, is vital to a person's well-being.

12. References

- Armstrong, J. (2008). A Business Case for Conversations on Mental Health. Canadian Mental Health Association, Calgary Region. Available at: http://www.cmha.calgary.ab.ca/copernicus/The%20Business%20Case%20for%20 Web%20link.pdf
- Aneshensel, C.S., & Phelan, J.C. (Eds.) (1999). *Handbook of the Sociology of Mental Health*, Kluwer Academic Publishers, ISBN 9780387325163, New York
- American Medical Association. Guides to the Evaluation of Permanent Impairment. Chicago, IL: AMA Press; 2001:1-613
- American Psychiatric Association (2000) Diagnostic and Statistical Manual of Mental Disorders, 4th Edition, text-revised. American Psychiatric Association. ISBN 9780890420256. Arlington VA
- Blustein, D.L. (2008). The Role of Work in Psychological Health and Well-being: A Conceptual, Historical, and Public Policy Perspective. *American Psychologist*. 63(4):228-240
- Bonnie, R.J. (Ed). (1997). Mental Disorder, Work Disability and the Law. University of Chicago Press, ISBN 9780226064505, Chicago
- Canadian Medical Association (2006). *Determining medical fitness to operate motor vehicles. CMA driver's guide*. 7th ed. Ottawa (ON): The Association. Available at: http://www.cma.ca/index.php/ci_id/18223/la_id/1.htm
- Cocchiarella, L & Anderson, GBJ, eds. (2001). *Guides to the Evaluation of Permanent Impairment*. 5th ed., American Medical Association. Chicago
- Curtis, J., & Scott L. (2004). Integrating disability management into strategic plans. *American Association of Occupational Health Nurses Journal*. 52(7):298-301
- Dewa, C., Lesage, A., Goering, P., Caveen, M. (2004). Nature and prevalence of mental illness in the workplace. *Healthcare Papers*. 5(2): 12-29
- Don, A.S., & Carragee, E.J. (2009) Is the self-reported history accurate in patients with persistent axial pain after a motor vehicle accident? *Spine J.* 9:4-12
- Engel, G.L. (1977). The Need for a New Medical Model: a Challenge for Biomedicine. *Science*, 196, 129-136
- Greenberg, S.A., & Shuman, D.W. (1997). Irreconcilable conflict between therapeutic and forensic rules. *Professional Psychology Research and Practice*. 28:50-57
- Gold, L.H., & Shuman, D.W. (2009). Evaluating Mental Health Disability in the Workplace Model, Process, and Analysis. Springer. ISBN: 9781441901521. New York.
- Harder, H.G., & Scott, L.R. (2005). Comprehensive Disability Management. Elsevier Churchill Livingstone, ISBN 0443101132, London

- Kessler, R.C., Berglund, P., Demler, O., et al. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, 62, 593-602
- Kessler, R.C., Chiu, W.T., Demler, O., & Walters, E.E. (2005). Prevalence, severity, and comorbidity of the 12-month DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, 62, 617-627
- O'Toole, J. (1982) Work and love (must mostly work). *Journal of Psychiatric Treatment and Evaluation*. 4,227-237.
- Richman, J., Green, P., Gervais, R., et al. (2006). Objective Tests of Symptom Exaggeration in Independent Medical Examinations. *Journal of Occupational and Environmental Medicine*. 48;3:303-311.
- Stephens, T., Joubert, N. Health Canada. Population and public health branch (2001). The economic burden of mental health problems in Canada. *Chronic disease in Canada*; 22 (1).
- Talmage, J.B., Melhorn J.M., Hyman M.H. (2011). *AMA Guides to the Evaluation of Work Ability and Return to Work, 2nd Edition* American Medical Association, ISBN 9871603595308, Chicago
- Thomas, J.C., & Hersen, M. (2004). Psychopathology in the Workplace. Brunner-Routledge, ISBN 9780415933797, New York
- Wang, P., Simon, G., Kessler, R. (2003). The economic burden of depression and the cost-effectiveness of treatment. *The International Journal of Methods in Psychiatric Research*. 12(1):22-33.
- Watson Wyatt Worldwide. (2005). Staying at work: Making the connection to a healthy organization. United States: Watson Wyatt Worldwide. Available at: http://www.towerswatson.com/
- Watson Wyatt Worldwide. (2007). Staying at Work: Effective presence at work.2007 Survey report. Canada: Watson Wyatt Worldwide. Available at: http://www.towerswatson.com/
- Williams, C.D. (2010) Disability and Occupational Assessment: Objective Diagnosis and Quantitative Impairment Rating. *Harvard Review of Psychiatry*. 18:336-352.
- Workers' Compensation Board Alberta. Alberta Permanent Clinical Impairment Guide (2006). Available at URL
 - http://www.wcb.ab.ca/pdfs/public/policy/manual/a_d.pdf
- World Medical Association Statement on Patient Advocacy and Confidentiality, (2006). Available at: http://www.wma.net/en/30publications/10policies/a11/



Mental Illnesses - Understanding, Prediction and Control

Edited by Prof. Luciano LAbate

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In the book "Mental Illnesses - Understanding, Prediction and Control" attention is devoted to the many background factors that are present in understanding public attitudes, immigration, stigma, and competencies surrounding mental illness. Various etiological and pathogenic factors, starting with adhesion molecules at one level and ending with abuse and maltreatment in childhood and youth at another level that are related to mental illness, include personality disorders that sit between mental health and illness. If we really understand the nature of mental illness then we should be able to not only predict but perhaps even to control it irrespective of the type of mental illness in question but also the degree of severity of the illness in order to allow us to predict their long-term outcome and begin to reduce its influence and costs to society. How can we integrate theory, research evidence, and specific ways to deal with mental illness? An attempt will be made in the last conclusive chapter of this volume.

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