The International Classification of Functioning Model and Untreated Psychological Need in Workers' Compensation

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This article discusses the presence of untreated psychological need present among claimants within the Workers' Compensation system and how it can negatively affect the rehabilitation process. Unrecognized and untreated psychological conditions, specifically depression, anxiety, and somatization, can interfere with the return to work process, including both physical and vocational rehabilitation. Although this concept is not novel, untreated psychological need persists within this disability compensatory system. This article highlights the interrelationship of physical and psychological disabilities by utilizing the World Health Organization's (WHO) International Classification of Functioning (ICF) Model. The ICF Model is a multidirectional, biopsychosocial model of disease and disability, unique for its recognition of individual characteristics, such as personal or environmental attributes. By using the model, the comorbidity of physical and psychological health conditions can be specifically addressed, supporting the argument that untreated psychological needs warrant appropriate attention and treatment.

Workers' Compensation and Psychological Treatment

Workers' Compensation is a disability compensatory system that provides several types of benefits to individuals who have sustained work-related injuries (Betters & Shaw, in press; Shaw & Betters, 2004). The ultimate goal for all parties is a quick and successful return-to-work for the injured individual. Theoretically, all parties benefit from a successful return-to-work and all possible solutions to facilitate this objective should merit attention. When an individual sustains a work-related injury that is deemed compensable, meaning that the injury was indeed a byproduct of a work accident, the individual is entitled to three forms of benefits: medical, wage loss, and vocational rehabilitation.

Regarding medical benefits, individuals with work-related injuries may be generally extended medical care, surgical care, hospitalization, prescription coverage, and mental health care (FWCI, 2003). This latter benefit could include psychological treatment, such as evaluation, psychotherapy, and pharmacotherapy. However, individuals in the Workers' Compensation system may not be receiving necessary mental health care (Dush, Simons, Platt, Nation, & Ayres, 1994). This may be attributable to financial constraints, specifically in the "managed care-like" system that Workers' Compensation has become (Tugman & Palmer, 2004). Mental health care and rehabilitation needs may be perceived as less important than physical rehabilitation needs (Sullivan & Stanish, 2003). Numerous studies suggest otherwise, however including findings relating the efficacy of psychological rehabilitation over physical rehabilitation during the return-to-work process (Dush, Simons, Platt, Nation, & Ayres, 1994; Fishbain et al., 1993; Gardner, 1991; Sullivan & Stanish, 2003; Tugman & Palmer, 2004).

The Coexistence of Medical and Psychological Conditions

Tugman and Palmer (2004) asserted that rehabilitation professionals' work often encompasses a complex interaction: a potential coexistence of not only a physical impairment and accompanying functional restrictions, but also a psychological impairment and subsequent disability. When this combination occurs, psychological problems are often subordinated or ignored, and physical impairment becomes the focus of rehabilitation interventions (Tugman & Palmer). A possible failure to recognize the coexistence and associated interaction effects may occur, which in turn may seriously compromise rehabilitation professionals' and injured employees' ability to meet the Workers' Compensation prime objective: a rapid return-to-work (Dush, Simons, Platt, Nation, & Ayres, 1994). In some cases, injured workers may be wrongly held liable for unsuccessful return-to-work outcomes (Vowles & Gross, 2003).

Psychological Status and Return To Work Outcomes

Several studies identify psychological return-to-work barriers. Gardner (1991) reported that the probability of return-to-work diminishes the longer an injured worker is absent from the workplace. He provided several explanations for this inverse relationship, including the development and exacerbation of psychological concerns. Depression and disability have a profound, positive correlational relationship, reported as high as r = .86 (Gardner).

Another study (Fishbain, Rosomoff, Goldberg, Cutler, Abdel-Moty, & Khalil, 1993) suggested that psychological distress after work-related disability is highly prevalent. Depression, anxiety, and fear of re-injury were all pinpointed as psychological impairments that directly affected return-to-work success.

Sullivan and Stanish (2003) suggested a "Pain Disability Prevention Program" to facilitate successful return-to-work following work-related injury. The program design was based upon overwhelmingly consistent reports from rehabilitation counselors that the pain patients' psychological needs were not being met. Surprisingly, this program does not incorporate physical or occupational therapy interventions; it relies on a cognitive-behavioral treatment intervention focused on reducing psychological return-to-work barriers and increasing goal-directed beliefs. The primary mechanism used in the program was an activity log, which provided direct feedback through the documentation of activities done, such as household, social, and recreational activities. The participants were encouraged to remain as active as possible, and by planning their daily activities, recording them into the log, and then reviewing them to measure activity maintenance, psychological obstacles to activity involvement were overcame (Sullivan & Stanish). Following the program, Sullivan and Stanish reported a 60% increase in return-to-work among the participants, which they directly attributed to participation in the psychological intervention.

Depression and anxiety are commonly recognized psychological conditions; however, somatization and fear of re-injury are not. Vowles and Gross (2003) examined the concept of "fear-avoidance," a theoretical model that suggests individuals with injuries or disabilities maintain an irrational fear of re-injury secondary to physical activity. This model posits an "activity phobia," particularly relevant to activities approximating activity resulting in the initial injury. It is easy to understand how this psychological condition impairs return-to-work; the individual is simply afraid to perform the job-related functions for fear of aggravating the previous injury and possibly acquiring a new injury and disability problems.

The World Health Organization's ICF Model

The World Health Organization (WHO) has been a recognized source for the maintainence and classification of health-related information since its creation in 1947 (Ustun, Chatterji, Bickenbach, Kostanjsek, & Schneider, 2003). In order to better facilitate classification, the WHO has developed and modified several models to better describe human health states, leading up to the presently recognized International Classification of Functioning, Disability, and Health, second edition (ICFDH-2), or commonly known as the International Classification of Functioning (ICF) Model. This model, adopted in 2001, has attempted to cover all facets of an individual's health status.

Prior models that existed to classify health conditions placed great emphasis on four main concepts: Pathology, Impairment, Functional Limitation, and Disability. Across this spectrum, previous models utilized the traditional medical model approach to describe and classify diseases and disabilities (Bickenbach, Chatterji, Badley, & Ustun, 1999). These models include the Nagi, Institute of Medicine, and the National Center for Medical Rehabilitation Research Models (Bickenbach, Chatterji, Badley, & Ustun). These three models, with some minor differentiation, included these four concepts:

- Pathology (Active Pathology, Pathophysiology) – Physiological and biological disturbances and abnormalities.
- Impairment – Organ or organ system abnormalities resulting in physiological or anatomical dysfunction.

- Functional Limitation – Physical restrictions interfering with action performance or range of abilities associated with dysfunctional organ or organ system.
- Disability – Limitation in task performance and activities associated with functional limitations.

The National Center for Medical Research Model also includes the concept of Societal Limitation, which addresses structural and attitudinal barriers associated with disabilities that prevent equal opportunity (Bickenbach, Chatterji, Badley, & Ustun).

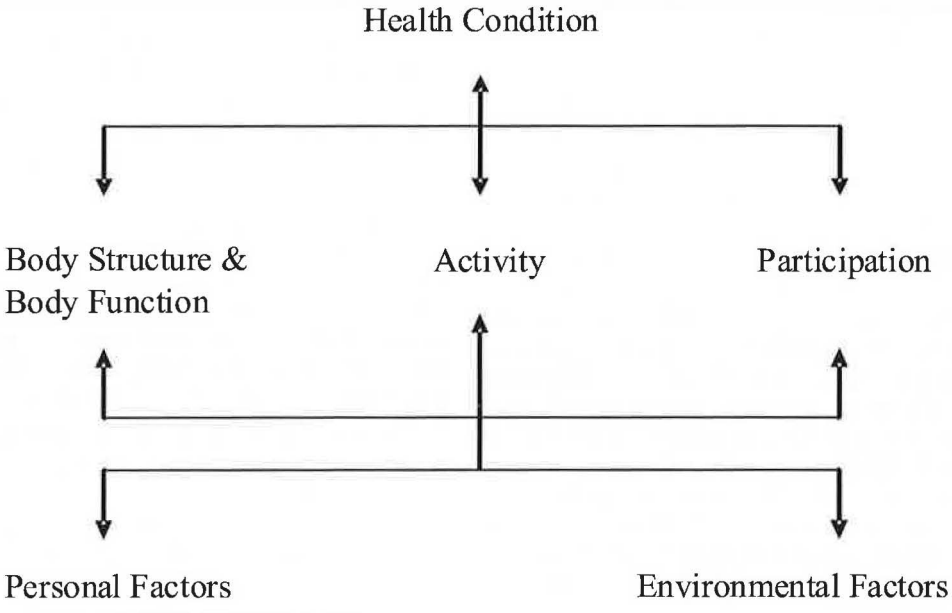
In 1980, the WHO enacted the first ICFDH model, which consisted of four concepts: Disease, Impairment, Disability, and Handicap. According to this model, Disease referred to abnormal etiology due to physiological or biological abnormalities; Impairment referred to loss of functioning due to abnormal etiology; Disability referred to activity restrictions due to impairment; and Handicap referred to disadvantages encountered in society due to disabilities (Ustun, Chatterji, Bickenbach, Kostanjsek, & Schneider, 2003). However, several flaws were cited in the logic of this model when examining individuals with disabilities. One of the most apparent was that, according to this model, individuals with disabilities are disadvantaged solely by their disabilities. The model also suggested that impairments and disabilities are the only causative factor for handicapping situations (Bickenbach, Chatterji, Badley, & Ustun, 1999). No consideration for external or internal factors excluding the disease and impairment was available based on the first ICF DH model. Another motivating factor for the decision to revise was the first-person language movement, which frowned upon the use of "handicap" in the model terminology (Bickenbach, Chatterji, Badley, & Ustun).

In 2001, the ICFDH-2, or ICF model, was adopted in order to alleviate the problems of the ICFDH model, as well as to better enhance the understanding of disease and disability condition for easier classification (Ustun, Chatterji, Bickenbach, Kostanjsek, & Schneider, 2003). The ICF model, which is more comprehensive in recognizing all aspects regarding health states, is illustrated in Figure 1.

The following definitions have been provided by the WHO for the ICF terms (Ustun, Chatterji, Bickenbach, Kostanjsek, & Schneider):

- Health Condition – the medically-recognized disease state or disability.
- Body Structures – anatomical parts of the body, including the organ and organ systems levels.
- Body Functions – physiological or psychological functioning.
- Activity – capacity for task completion involved during daily living.
- Participation – performance of involvement in a social environment.
- Environmental Factors – external positive or negative conditions that impact participation.

Figure 1.
World Health Organization's ICF Model



- Personal Factors – internal positive or negative conditions that impact participation.

Any deficiency in body function or structure constitutes impairment. A lack in activity suggests limitations, and similarly any incapability in participation presents as a restriction.

A key feature of this model is that, unlike the stage-like presentation of former models, individuals can move across this model, suggesting a continuum rather than discrete stages. The previous models allowed for this as well, but not with the clarity of the ICF model, which allows consideration for each characteristic. The most significant feature, however, would be the separation from the traditional medical model, which viewed disease and disability as a problem that needed to be medically resolved. The WHO's ICF Model incorporates the medical, social, and psychological aspects of disease and disability, and therefore can be considered to have a biopsychosocial approach (Ustun, Chatterji, Bickenbach, Kostanjsek, & Schneider). Because of this incorporation, all health-related domains can be included when classifying a given disease or disability.

The ICF Model and Work-Related Injury

Work-related injury, like all disease states and disabilities, can be described using the ICF Model. For example, within the Body Function and Structures domain of the ICF Model, the primary item might be the presence of chronic pain, which would be the individual's chief complaint. Depending on the individual, other physical and psychological complaints may exist, such as restrictions in range of motion if the pain is related to the musculoskeletal system, or the presence of psychological disturbances, including depression, anxiety, or adjustment disorders (Block, Kremer, & Callewart, 1999).

When examining the contextual factors of the ICF Model for chronic pain, including the Environmental and Personal Factors, Wittink (2005) provides several examples of potential characteristics to consider. Environmental Factors include external items that can positively or negatively impact the other domains in the ICF Model, such as Body Function and Structures, Activity, and Participation. Examples of Environmental Factors that may positively impact an individual with chronic pain, specifically a Workers' Compensation claimant, include: strong social support system; accommodating employer; cooperative insurance carrier; efficacious rehabilitation program post-injury; successful pharmacology for pain management; assistive technology; limited physical barriers in the environment; and attention to psychological need (Betters & Shaw, in press). When presented with these positive factors, the impairment, limitation, and restriction are decreased, thus allowing individual enablement.

Negative impacts may include a lack of support; poor employer and insurance carrier relationships; unsuccessful medical treatment; physical and environmental barriers; and unrecognized psychological need. These factors increase the impairment, limitation, and restriction, thus instilling individual disablement.

When considering Personal Factors that may positively or negatively impact the other domains, special factors to consider include the claimant's age, gender, ethnicity, marital status, education level, coping mechanisms, motivation, pain threshold, and intention in regards to returning to work (Betters & Shaw, in press; Wittink, 2005). The presence of an untreated psychological need is also a Personal Factor. If the untreated psychological need, such as clinical depression or anxiety, remains untreated, it can directly influence all of the other domains within the ICF Model, hence the bi-directionality of the ICF Model. All Personal Factors may either enable or disable the individual with chronic pain, depending on how they relate to the other ICF domains. If untreated psychological need goes on unchecked, according to the model, activity may be impaired, which would be evident in potential problems with activities of daily living. The model would also suggest a direct influence on the individual's capability to restore participation, including a successful return to work.

Psychological Treatment Cost-Effectiveness

The cost-effectiveness of psychological treatment for chronic pain has been evaluated to determine the efficacy of including psychological therapy in a traditional rehabilitation plan (de Boer, Wijker, & de Haes, 1997; Turk, 2002; Turk & Burwinkle, 2005; Turk & Okifuji, 2002). Turk and Burwinkle report that the desire to investigate the cost-effectiveness of psychological treatment is not new, as the Commission on the Accreditation of Rehabilitation Facilities (CARF) has required a psychological treatment component in order for facilities and programs to become certified. However, the question still remains as to whether larger entities, such as disability compensatory systems (Workers' Compensation, Long-term disability, etc.), would benefit from this inclusion. Turk and Burwinkle suggest the following considerations:

- Chronic pain involves psychosocial and behavioral components, as well as physical characteristics.
- Patients with complex chronic pain problems are best treated within a rehabilitation model

and by a team of rehabilitation professionals (including psychological).

- The treatment must address the pain itself and not just be a search for hidden causes and specific remedies for these causes.
- The treatment must address the restoration of well-being and not just aim at the alleviation of symptoms.
- Emphasis needs to be given to strategies that will facilitate patients' ability to self-manage their situations for extended periods (p.608).

Given these considerations, it is easy to see how the two most common forms of chronic pain management are pharmacology and surgery, which do not address all of these considerations (Turk & Burwinkle). The researchers suggest that by developing an interdisciplinary rehabilitation plan, including psychological treatment, treatment costs for individuals with chronic pain will be minimized while treatment benefits will be maximized. The benefits, based upon self-reported measures from patients, include improved functionality and quality of life, while the researchers' objective measurements found additional benefits, including faster return to work, a decrease in pain medication use and dependency, and a more efficient utilization of health care resources.

Fiscally, Turk (2002) reports remarkable potential financial incentives for implementing psychological treatment into rehabilitation programs for individuals with chronic pain. Turk estimated that health care savings per chronic pain patient annually could exceed $78,000. This is more impressive when looking at the situation globally. Although there are varying statistics for the actual number of individuals with chronic pain, the health care savings for all chronic pain patients, after the implementation of an interdisciplinary pain rehabilitation program including psychological treatment, could conservatively exceed $45 billion (Turk).

Conclusion

The ICF Model does an excellent job identifying the key areas of concern regarding disease and disability. However, the ICF Model truly excels in recognizing the contextual factors (Environmental and Personal). These two facets can drastically influence the other domains, which completely support the need to move away from a traditional medical model and accept the need to focus on psychological and social concerns. By utilizing the ICF's biopsychosocial approach to disability, rehabilitation counselors can include all of the factors related to the inured worker as they work towards a successful return-to-work outcome. The biopsychosocial approach considers any physiological impairment, any functional limitations related to activities of daily living, as well as any deficits in social integration. These concerns may also include the presence of untreated psychological need, as well as the ability to recognize the need and appropriately intervene. Individuals undergoing vocational rehabilitation through Workers' Compensation may experience less difficulty in successfully returning to work if their vocationally relevant psychological needs are recognized and appropriately addressed. According to the ICF Model, correctly addressing this Personal Factor would promote enablement among all of the other factors, which would allow for positive rehabilitation. Given Turk's (2002) findings, appropriately responding to untreated psychological need would also yield an economic reward. Based on both the potential systematic and financial incentives, taking measures to identify and remedy psychological issues affecting return-to-work of individuals within the Workers' Compensation system is prudent.

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