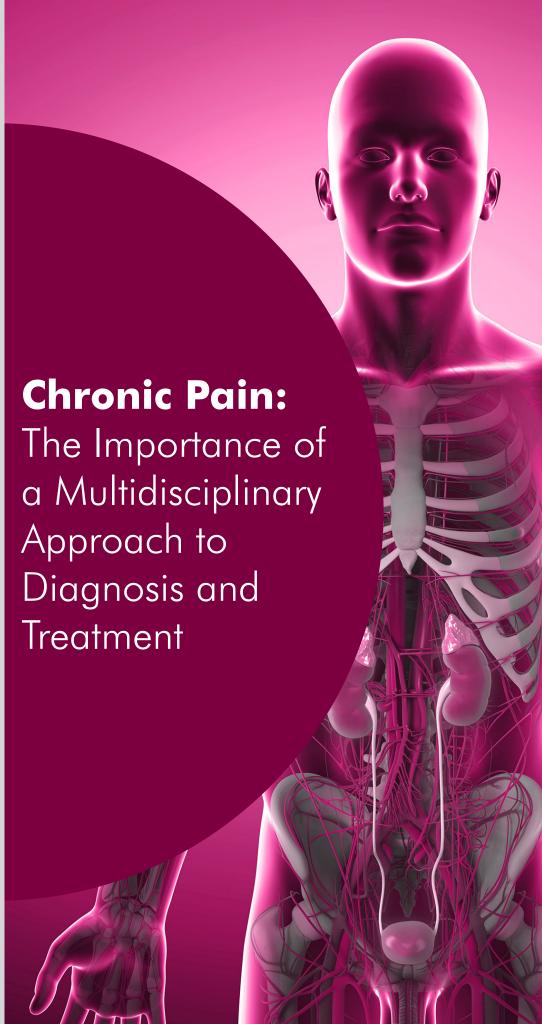


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Health recovery after a traumatic injury or acute illness is a complex process. In many cases, there is no straight line from injury to full recovery. It is all too often the case that complications disrupt the normal recovery process for an affected individual, contributing to the development of a chronic pain disorder.

Pain classically is defined as a "somatic perception" that is a bodily sensation with characteristics like those reported during tissue damage. It is an experienced threat associated with a feeling of unpleasantness or negative emotion based on this experienced threat.

Chronic pain is pain which lasts beyond the ordinary duration (>3-6 months by most definitions). It is pain that continues even after the injury or condition that first caused it has been treated or healed. In many cases the cause of the persisting pain cannot be clearly established.

One in five adult Canadians suffer from chronic pain. According to The Canadian Pain Society, there is a clear association between chronic pain and mental distress. Over 70% of people waiting for care at Canadian pain clinics report that chronic pain interferes with their normal work activities. More than 50% have severe levels of depression and 35% report thinking about suicide. Chronic pain is associated with the worst quality of life as compared to other chronic diseases such as chronic lung disease or heart disease. The cost of chronic pain in adults in Canada, in terms of health care resources and lost productivity is estimated to be \$50-60 billion dollars annually.

While there are many treatment modalities for chronic pain, complete resolution of pain is often an unrealistic goal. A more realistic goal is to seek ways to optimize function and quality of life despite pain. Shifting the chronic pain sufferer into an active role in their self-care is a key factor in achieving a "new normal" that includes a return to function and preserves quality of life.

Effectively treating chronic pain requires a targeted and comprehensive multidisciplinary approach. Early intervention in the recovery pathway from the acute injury helps prevent long-term complications such as chronic pain. Facilitating early intervention requires expert clinical advice from medical consultants who have experience in identifying at-risk individuals by applying appropriate screening/diagnostic tools and conducting pertinent in-person assessments. The medical consultants have the ability to provide treatment recommendations that actively engage individuals in their own recovery, which promotes treatment compliance. Accurate and early diagnosis, along with recovery planning, has the potential to significantly reduce the likelihood of chronic conditions such as chronic pain developing. Employers and insurers who employ such a comprehensive approach are able to demonstrate an active commitment to the health and long-term success of their employees and insured customers.

Understanding Chronic Pain

The pain experienced initially in the course of an individual's recovery post-trauma or in the immediate aftermath of the onset of acute symptoms is not the same as persistent pain that can develop well after the normal, expected recovery time for a condition that has run its course. As a result it is important to recognize that pain itself is not readily measured except by attempting to identify its duration. Pain is considered to have become chronic where it has persisted for longer than three or six months depending on what are considered to be the normal recovery timelines for the specific condition at hand. Traditionally, the search for mental health factors associated with the development and persistence of chronic pain symptoms was only given serious consideration once all possible physical explanations for the pain experience had been ruled out. Unfortunately, in many cases this approach does not adequately address the multifaceted factors that are either causing or contributing to the persistence of an individual's pain complaints. The result is often a diagnostic assessment and treatment plan that is only partially effective such that the ongoing cycling of pain complaints makes further management even more challenging. Consequently, it is during that period before pain associated with an acute injury or condition becomes chronic pain that health practitioners need to clinically consider what multiple factors may be at play and what treatment modalities are appropriate to address them.

Scientific evidence accumulated in recent years indicating the importance of mental health factors in the development of chronic pain has led to changes to the most recent edition of *The Diagnostic and Statistical Manual of Mental Disorders* (i.e., the DSM-5 released in May 2013) The manual has revised how pain disorders are conceptualized and the guidance given to clinicians in this regard. The DSM-5 abandoned the requirement of ruling out all potential physical causes before diagnosing a mental disorder associated with chronic pain complaints (Somatic Symptom Disorder). Instead, they now recognize that significant clinical markers for the subsequent development of chronic pain can be identified even where physical factors have been identified to be active and perhaps not yet fully accounted for in a definitive physical diagnosis. Indeed, it is now the consensus opinion in the medical community that physical and mental factors may interact simultaneously to influence the development of chronic pain.

Applying the Multidisciplinary Approach When it Counts

Many of the challenging cases that come before human resource managers, case coordinators and insurance adjustors involve individuals whose recovery has deviated from the normal expected course of healing and recovery. Arriving at a clear plan of action, one aimed at optimal return to function wherever possible, is a challenge from a clinical, quality of life and workplace perspective. Given the volume of cases being handled at any given time or the absence of specialized medical knowledge, determining which individuals are at risk for developing chronic pain is problematic. While there are screening pathways that can help anticipate which individuals may be at risk for chronic complications and/or prolonged recovery, the single most important tool in this regard is active clinical reasoning and

management of the case from the onset of the complaint/issue. The success of proactive early intervention is greatly dependent on the clinical professionals being well versed in dealing with similar cases, conditions and recovery pathways.

What to Look For

It is important to identify factors which are known to slow recovery from injuries/illness and to contribute to the development of persistent (chronic) pain. These specific factors will vary by the nature of the condition or even interventions performed. It is also important to proactively identify individuals at risk for development of chronic pain. The medical literature has identified different risk factors for chronic pain from different conditions. These risk factors can include age, sex, initial pain intensities, presence of underlying depression or anxiety state, prior workplace satisfaction and individual coping styles.

Further, an individual's reaction to pain itself can result in a unique clinical mental health disorder, currently known as Somatic Symptom Disorder (SSD) under the DSM-5, which replaces, among other diagnoses, Pain Disorder under the DSM-IV.

One important change from the DSM-IV Pain Disorder is that in diagnosing SSD it is not necessary to first eliminate all possible physical explanations for an affected individual's physical pain experience. And, while it is not appropriate to diagnose SSD exclusively because a physical cause for pain symptoms cannot be established, it is important to consider the symptoms otherwise associated with SSD for the purposes of clinically screening medical files for individuals at risk of developing chronic pain.

The initial key clinical marker includes reports of one or more somatic symptoms (i.e. those that are bodily experienced) that are distressing or that significantly disrupt normal daily activity. Clinically speaking, consideration should be given to whether the case history demonstrates disproportionate and persistent thoughts about the seriousness of symptoms. Also relevant is the presence of persistently high levels of anxiety about current health status and symptoms. The devotion of excessive time and energy to the reported somatic symptoms or health concerns is a key clinical feature. When these symptoms persist for at least six months, a formal diagnosis of a persistent SSD may be considered.

While the current scientific understanding of chronic pain and the specific risk factors which may mark its development is far from complete, it is clear that early identification of the physical pathological and psychosocial risk factors and conditions contributing to the individual's current state provides a basis for effective management decisions and improved pain outcomes over time.

Targeted Assessments

Even where a formal psychological/psychiatric diagnosis has not been made or is not yet warranted, the clinical review may indicate that it is appropriate to further investigate and to make treatment recommendations that effectively address the reported symptoms in atrisk individuals. In many instances, this will include arranging in-person assessments with the appropriate medical specialists to investigate the potential organic causes of the physical complaints and to assess the individual's current mental status.

A case study can illustrate a scenario in which multidisciplinary assessments are warranted, along with the attendant treatment recommendations.

The Woman in Pain

A 48-year-old woman, Jane Doe, who is married and has two daughters, was in a motor vehicle accident five months ago. Upon clinical review of the file, an accident-related diagnosis of whiplash and low back strain was identified. The medical records from the treating practitioners were noted to indicate that she was continuing to experience continuous, widespread pain.

The employer noted that she was initially missing work off and on as a result of the pain. Eventually she discontinued her employment altogether as a result of the ongoing pain. Along with her pain she complained of difficulties with sleep, appetite, energy and concentration. She was treated by both a chiropractor and physiotherapist just following the accident. Her ongoing pain symptoms were noted by her treating practitioners to be inconsistent with the mechanism of injury she originally suffered in the accident five months ago. She, herself, reported no decrease in her symptoms since the time of the accident despite significant amounts of chiropractic intervention and physical therapy.

Jane was prescribed medication for her sleep issues. She was noted to be regularly following up with her family doctor and physiotherapist. Despite treatment, she was not improving from a physical or mental perspective.

After reviewing Jane's file, the adjustor/case manager concluded that while it was clear that Jane was facing significant pain which was impacting her ability to function in the workplace and in other life capacities. It was also clear that she was not progressing with her current treatment strategies. In conversation, Jane also expressed her frustration in this regard, stating, "I just want to get back to my life".

The adjustor/case manager agreed to assist and requested a multidisciplinary assessment with a physiatrist and psychiatrist to provide an updated diagnosis as well as a strategic management plan complete with timelines around any potential for gradual return to function.

The physical medicine assessment confirmed that Jane's injuries from the accident were primarily soft tissue in nature. There were no other pre-accident conditions like degenerative disc disease identified. Physical therapy that emphasized active (instead of passive) treatment modalities including exercise was recommended.

The psychiatric assessment determined that she had no genetic predisposition for depression and there were no psychiatric issues in her personal history prior to the accident. Her formal diagnosis upon assessment was Somatic Symptom Disorder with Physical Pain, Persistent, Moderate; Adjustment Disorder with Depressed Mood; Chronic Back Pain. The psychiatric assessor indicated that her pain disorder was not being treated with appropriate medication. A trial of a selective serotonin reuptake inhibitor was recommended along with adjunctive medications to address her sleep issues. It was also identified that she was a good candidate for participation in cognitive behavioral therapy, including the option for an interactive program online.

Furthermore, both the physiatry and psychiatric assessors emphasized to Jane concepts such as hurt versus harm and encouraged incremental participation in physical, social and cognitive activities over the coming weeks and months. This information was communicated back to Jane's treating health team, who incorporated the recommendations in her ongoing care and who coached Jane on how to maintain compliance with the treatment plan/recommendations.

Over the following weeks and months, Jane slowly discovered that she was able to accomplish more, improve her sleep pattern and enjoy again many of the activities that used to be important to her. Three months after her assessments, Jane tried to return to work on a part-time basis. With some further adjustments to her medications made by Jane's treating health team, she was successful at this. Her manager and colleagues were enthusiastic and supportive of her return to work. Six months later, Jane found that she did not need the help of any further therapy or medications. She was also able to resume her full-time duties at work.

The Benefits of an Expert Approach

When risk factors for the development of chronic pain are identified early on, appropriate treatments can be initiated when they are most likely to have a positive impact. Wherever possible, it is vital that treatments engage those suffering from persisting pain as proactive participants in their own recovery. The odds of preserving or regaining functionality in this context are dramatically increased. For employers and insurers the benefits are also marked. Employees are more likely to adhere to treatment recommendations and successfully return to work. This results in a lowering of cost of long-term insurance benefits. Ultimately, employees and insured individuals will experience improved quality of life as they gradually resume more of their prior activities and return to their work teams in a sustainable and supported fashion, with the knowledge that their employer/insurer is committed to their long-term success.

Treatment Options for Chronic Pain

Health practitioners may recommend one or a combination of treatment approaches in order to maximize the potential for positive outcomes in chronic pain cases. Customizing the approach to treatment, while monitoring and modifying therapy over time, is the cornerstone to achieving optimal recovery outcomes. Treatment for chronic pain cases include but are not limited to the following:

- Pharmacologic treating pain, sleep, and mood
- Physical Therapy exercise, stretching, massage
- Behavioral Interventions counselling, cognitive behavioral therapy
- Neuromodulation e.g., TENS machine, spinal cord stimulation
- Interventional e.g. percutaneous injections, intercostal nerve blockage, spinal injections
- Surgical neurablative techniques (i.e., the selective distribution of nerves to relieve pain

Optimal Outcomes

The benefits of engaging in an expert clinical review of the case history and arranging targeted multidisciplinary assessments to determine an at-risk individual's current mental and physical status are significant. For individuals with pain, multidisciplinary assessments can diagnose and propose customized treatment plans for identified physical and mental conditions affecting their individual pain experience before it becomes chronic. This is critical to equipping at-risk individuals with the tools they need to cope and function in the context of a new normal that may well entail living with a significant degree of pain. Maintaining or preserving function as a treatment goal is instrumental in an individual's ability to remain socially and productively engaged, whether it is in their personal relationships or in the workplace.

Sources

Canadian Medical Association, CMA Policy: The Treating Physician's Role in Helping Patients Return to Work (Update 2013)

The Canadian Pain Society, Pain in Canada Fact Sheet (November, 2013)

Clay, F.J., Watson, W.L., Newstead, S.V. & McClure, R.J. (2012). A systematic review of early prognostic factors for persistent pain following acute orthopedic trauma. *Pain Res Manag*, 17(1): 35-44

Hadjistavropoulos, T. & Marchildon, G.P. et al. (2009). Transforming long-term care pain management in North America: The Policy-Clinical Interface. *Pain Medicine*, 10: 429-431.

Kehlet, H., Jensen, T. S. et al. (2006). Persistent postsurgical pain: risk factors and prevention. Lancet, 367: 1618-1625

Longo, D., Fauci, A. & Kasper, D. et al. (2011). Harrison's Principles of Internal Medicine (18th Ed.). McGraw-Hill Professional

Papadakis, M. & McPhee, S.J. (2014). Current Medical Diagnosis and Treatment (53rd Ed.). McGraw-Hill Education

Radresa, Olivier PhD, Chauny, Jean-Marc MD, MSc; Lavigne, Gilles DMD, PhD; Piette, Eric D, MSc; Paquet, Jean PhD; Daoust, Raoul MD, MSc (2014). Current views on acute to chronic pain transition in post-traumatic patients: Risk factors and potential for pre-emptive treatments. *Journal of Trauma and Acute Care Surgery*, 76(4): 1142-1150

Schopflocher, D., Jovey, R. et al. (2011). The Prevalence of Chronic Pain in Canada. *Pain Res Manag*, 16(6):445-450

The Benefits to At-Risk Individuals

1. Less chance of misdiagnosis or missed diagnosis

By organizing and conducting concurrent multidisciplinary assessments as recommended on the basis of an expert clinical review of available case history, the prospects of appropriately diagnosing the organic and psychological components of an individual's pain experience are greatly increased.

2. Fully-Customizable Treatment Plan

The targeted multidisciplinary approach to assessment and treatment permits the development of treatment options that are best suited to the individual's particular pain experience.

3. Quicker Return to Function and Achieving a "New Normal"

Expert clinical coordination is essential to identifying at-risk individuals as early on in the recovery process as possible and to formulating the most appropriate assessment plan and, ultimately, to identifying an effective treatment pathway.

Benefits to Employers, Case Managers and Insurers

1. Expediting Effective Management of Cases

Obtaining expert clinical advice and recommendations for appropriate multidisciplinary assessment helps progress files toward positive outcomes.

2. Healthier, Engaged Employees

A fully-customizable approach is important in building trust and confidence on the part of employees by demonstrating understanding and willingness to work with their unique needs. Helps to improve an employee's ability to sustain health moving forward.

3. Quicker Return to Functionality and Productivity for Employees

A safe and timely return to work by the employee preserves a skilled and stable workforce for employers and contains costs with respect to STD and LTD plans.

4. More Effective Use of Limited Resources

At the end of the day, having healthier, engaged employees that return to work quickly after they've been ill comes with a significant benefit to any organization's bottom line and also ensures appropriate spending on health care and reducing drug costs.

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About Cira Medical Services

Cira Medical Services (Cira), a division of SCM Insurance Services, is a leading national provider of medical assessments and health services for the employer, insurance, and medical legal communities across Canada. With a quality controlled multidisciplinary network of medical professionals and highly qualified, on-staff industry experts, Cira pursues a results-oriented business model designed to meet the needs of each client. Cira is committed to helping Canadians live healthier lives and does so through unique service offerings such as Health Reach™ and Health Assess™. In December 2013, the Commission on Accreditation of Rehabilitation Facilities (CARF) International awarded Cira its highest level of recognition with a Three-Year Accreditation for the Independent Evaluation Services program.

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