

## Return to Work as a Treatment Objective for Patients with Chronic Pain?

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### Abstract

Evidence-based clinical guidelines emphasize early return-to-work as a critical treatment objective in the management of recent onset pain conditions. However, something changes when a pain condition becomes chronic. For chronic pain conditions, return-to-work is rarely put forward as a primary treatment objective. Consequently, successful return to work is rarely an outcome in the treatment of chronic pain conditions. This editorial makes the case for placing return-to-work as a central objective of the treatment of chronic pain, regardless of the duration of chronicity.

**Keywords:** Chronic pain; Physical modalities; Medication

### Review

The sudden onset of a debilitating pain condition can present major challenges to an individual's ability to engage in many activities of his or her day-to-day life. One domain of activity involvement that can be affected is the individual's employment. Following medical consultation, the individual or the treating physician might consider that a period of work absence is warranted to permit symptoms to subside. Treatments offered during the initial stages of recovery will often tend to be palliative in character involving symptom-reducing medication, physical modalities and discontinuation of work-related activities.

Over the past decade, clinical research has drawn attention to the potential deleterious consequences of excessive use of palliative treatments past the early initial stages of recovery from a debilitating pain condition [1]. Research shows that the prescription of bed rest, passive modalities, and opioids is more likely to worsen than improve the prognosis for recovery [2,3]. Consequently, evidence-based practice guidelines emphasize the importance of restricted use of palliative interventions, and encouragement to remain active as optimal approaches to the treatment of recent onset pain conditions [4]. Evidence-based clinical guidelines also emphasize early return-to-work as a critical treatment objective in the management of recent onset pain conditions [5,6].

Something changes when a pain condition becomes chronic. For chronic pain conditions, return-to-work is rarely put forward as a primary treatment objective. Each year, countless papers are published describing the effectiveness of various pharmacological and non-pharmacological treatments for chronic pain. The effectiveness of treatments for chronic pain is typically evaluated in terms of changes in self-report measures of physical and emotional distress. Return-to-work is rarely included as an outcome variable [7]. In all likelihood, return-to-work outcomes are omitted from reports because few if any of the study participants are returning to work.

A case could be made that 'statistically significant' reductions in physical and emotional distress represent important clinical outcomes for a population of individuals that must endure a chronic state of suffering. However, if reductions in physical and emotional distress do not translate into improved return-to-work outcomes, one can legitimately question whether such reductions are meaningful. It is important to consider that if a chronic pain patient remains out of work after completing a treatment for chronic pain, nothing has changed in terms of the costs of the patient's disabling condition. The

disproportionate costs associated with chronic pain are directly (e.g., disability benefits, salary indemnity) or indirectly (e.g., lost production) associated with work-disability. Treatments that do not translate into improved return-to-work outcomes do little to impact on what is currently being considered the most expensive non-malignant health problem affecting the North American working-age population.

The emphasis on return-to-work as a primary treatment objective is not simply relevant to reducing the economic burden of chronic pain. Return to work is associated with a multitude of health and mental health benefits. Conversely, prolonged absence from work is associated with a multitude of adverse health outcomes [8,9]. For example, research from Australia showed that unemployment leads to increased mortality [10]. Similar increased mortality linked to unemployment was seen in Sweden [11], Denmark [12], Greece and the USA; these findings are not explained by the healthy worker effect. A Canadian study showed not only increased mortality, but increased cardiovascular disease and suicide associated with unemployment [13]. Many population studies show being out of work as placing someone at increased risk of substance abuse, divorce and violent behaviour.

As a treatment outcome, return-to-work represents the highest level of independence that can be offered to a work-disabled individual with a chronic pain condition. Addressed from this perspective, it would seem appropriate to place return-to-work as at least an equally important outcome as distress reduction. A case could even be made that it would be clinically irresponsible not to place return-to-work as a primary treatment objective for work-disabled individuals with a chronic pain condition.

The reluctance to consider return-to-work as a primary treatment objective for work-disabled individuals with chronic pain conditions might be understandable if it was clear that return-to-work was not a feasible treatment objective for this population. However,

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clinical research shows that return-to-work is a feasible outcome for a significant proportion of work-disabled chronic pain patients. Watson et al. [14] reported that approximately 40% of chronic pain patients who attended a 6-week (total 50 hours of intervention) multidisciplinary treatment program successfully returned to work. On average, participants had been work-disabled for more than 3 years at admission. The program offered to patients differed from traditional multidisciplinary rehabilitation programs in that vocational services were an integral part of treatment, and return-to-work (as opposed to pain management) was the stated objective of treatment.

Other research shows that return-to-work can even be achieved with uni-disciplinary approaches that specifically target psychosocial determinants of disability. For example, Sullivan et al. [15] described the results of a psychosocial risk-targeted return-to-work intervention that was offered to patients with long standing (greater than 2 years) work-disability due to chronic low back pain or fibromyalgia. The intervention combined activity-mobilisation with techniques designed to target pain-related psychosocial risk factors (e.g., catastrophic thinking, fear of pain, perceived injustice, disability beliefs). Delivered by an occupational therapist over the course of 10 weeks (total 10 hours of intervention), successful return to work was achieved for 50% of the participants with chronic low back pain, and 23% of the participants with fibromyalgia. The same intervention delivered telephonically to chronic low back pain patients living in rural regions yielded a 26% return-to-work rate [16].

One challenge in making return-to-work a primary treatment objective for work-disabled chronic pain patients is that many of these patients (and/or clinicians) do not believe return-to-work is a feasible treatment objective. Beliefs are the roadmaps of behaviour. People behave in ways that are consistent with their beliefs and they are typically not motivated to invest resources in goals that are belief-inconsistent. As such, interventions where return-to-work is a stated treatment objective are not considered very attractive treatment options by many chronic pain patients.

The clinical practice community, however, must assume some degree of responsibility for the reluctance of chronic pain patients to participate in treatment programs aimed at promoting occupational re-integration. It is not uncommon to hear chronic pain patients state 'my doctor told me I would never be able to go back to work'. When a patient hears these words from a treating professional that is held in high esteem, the patient develops the belief that he or she is totally and permanently occupationally disabled. Once the patient adopts this belief, he or she will behave in a manner consistent with that belief, regardless of the severity of underlying symptoms. Participating in a treatment aimed at promoting occupational re-integration would be at odds with the patient's disability beliefs.

Given the challenges associated with engaging chronic pain patients in programs aimed at occupational re-integration, to be effective, these programs must consider not only the patient's rehabilitation needs, but the patient's disability beliefs as well. In essence, the treatment program must function as a 'belief change' intervention as much as it functions as a rehabilitation intervention. Behavioural techniques such as engaging the patient in activities that are inconsistent with disability beliefs, and creating a reality that is incompatible with disability beliefs, can be effective tools in changing the disability beliefs of chronic pain patients. Such techniques can easily be incorporated into treatment programs currently being offered to chronic pain patients. Change in disability beliefs has been shown to distinguish between chronic pain

patients who return to work and those who remain work-disabled [15,17].

Work-disabling pain conditions are a major contributor to injury and disability insurance costs in industrialized countries. In the United States alone the annual direct costs associated with pain conditions are an estimated 20 billion dollars [18]. The economic costs associated with pain-related disability will only be contained if it is possible to improve the return-to-work outcomes associated with chronic pain treatment. Research is accumulating showing that, if return to work is the objective of treatment, symptomatic treatment will not achieve that outcome [19,20].

As a clinical research community, it is necessary to broaden our view of important clinical outcomes to consider return-to-work as a central determinant of health and mental health. Combining symptomatic interventions with treatment programs designed to promote occupational re-integration will be necessary if we hope to impact in a meaningful way on the personal, health and economic costs of chronic pain.

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