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Research Paper

Cognitive Behavioural Approaches in Chronic Musculoskeletal Pain Management: Enhancing Physiotherapy Practice

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ABSTRACT

The principles of chronic musculoskeletal pain (CMP) management in physiotherapy practice need a revamping as the recent evidence is detrimental to the existing regular biomedical practice. The current evidence broadly insists the multidimensional (Biopsychosocial model) approaches, for effective management of CMP in clinical practice. Physiotherapists may use cognitive and behavioural interventions to address the problems of individuals who present with enduring complaints may benefit from a comprehensive approach that encompasses personalised education, cognitive behavioural coping strategies, advice on physical activity, self-management and targeted interventions aimed at improving both structural and functional aspects. This multifaceted strategy has demonstrated promising results in terms of clinically significant long-term enhancements in pain management, reduction of disability, and improvement in quality of life. Physiotherapy practice for CMP conditions but also highlights the need for further research and training to ensure treatment adherence and successful implementation.

Keywords: *Physical Therapists, Chronic Pain Management, Musculoskeletal Pain, Cognitive Behavioural Approaches*

Chronic musculoskeletal pain, which affects a significant portion of the population (13.5% to 47%), is classified by the International Classification of Diseases (ICD-11). Chronic musculoskeletal pain can be either primary or secondary. Primary chronic musculoskeletal pain is when a person experiences pain without a specific disease as the cause. Secondary chronic musculoskeletal pain is when the pain is a symptom of an underlying disease in a different part of the body, causing persistent nociception due to local or systemic factors. This new classification is intended to improve patient-focused pain management and encourage research that uses more precise epidemiological analysis. [1-5] Psychological factors such as mood and health beliefs significantly affect chronicity[6, 7] Central sensitization (CS) refers to an increased sensitivity of the nervous system, which causes a heightened perception of pain, considered a contributing factor to the chronicity of musculoskeletal pain pathology and is believed to be associated with psychosocial and

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cognitive behavioural factors.[8-11].In particular, pain apprehension and catastrophizing are maladaptive states related to long-lasting pain symptoms. [12-14]

Cognitive behavioural approach

In this context, the evaluation and management principles of Chronic musculoskeletal pain (CMP) management in physiotherapy practice need a revamping as the recent pieces of evidence are detrimental to the existing purely biomedical practice. The current evidence emphasises the importance of dynamic multimodal analgesia and multidisciplinary (Biopsychosocial model) approaches, including pharmacological and non-pharmacological interventions, to effectively manage chronic musculoskeletal pain in clinical practice[15-19]. The cognitive behavioural approach explains the connections among thoughts, emotions, and behaviour. [20] According to the cognitive model, individuals' emotions and behaviours are shaped by their interpretations of events such as pain in the most basic form. The determining factor of people's emotional experiences is not solely the circumstances they find themselves in, but rather how they perceive and understand said circumstances. [21]

Cognitive behavioural therapy approach in physiotherapy practice

There are numerous literature shreds of evidence to support the use of Cognitive behavioural (CB) interventions by physiotherapists to manage chronic conditions. In one study, Physiotherapists used cognitive functional therapy to address physical, lifestyle, and psychological barriers to recovery for individuals with chronic low back pain (CLBP). Their approach was personalized to each patient and aimed to redefine pain, challenge unhelpful beliefs, overcome obstacles to functional engagement, and promote a healthy lifestyle. [22] In another study, psychologically informed physical therapy has potential but faces implementation challenges [23]. The cognitive behavioural approach, using operant conditioning principles, shows promise in promoting healthy behaviour and active coping strategies. This approach may positively impact obstacles to recovery from back pain such as catastrophizing and fear-avoidance beliefs. [24] One study recommends that Cognitive behavioural components can be helpful in physiotherapy for chronic Whiplash patients, but their contributions aren't fully understood. According to one of the authors, physiotherapists can effectively provide cognitive behavioural interventions for back pain patients with more training. If physiotherapists want to improve their treatment, they should undergo additional training in integrating cognitive behavioural techniques and show greater benefits for patient outcomes compared to brief education, exercise, or physical techniques alone. This highlights the importance of using a combined treatment approach. However, the lack of intervention descriptions and accessible training materials is a significant barrier to adopting these interventions. [25]. In contrast, according to one study, as a limitation, physiotherapists did not adhere to the treatment manual and did not adhere to the treatment protocol despite training and supervision.[26]. According to a study in elderly population cognitive behavioural interventions can reduce depression, anxiety, fatigue and improve physical inactivity ,they may not alleviate pain symptoms.[27, 28] Individuals who present with enduring complaints of chronic musculoskeletal pain (CMP) may benefit from a comprehensive approach that encompasses cognitive behavioural interventions.[29]

CONCLUSION

The evidence collectively supports the integration of cognitive behavioural therapy into physiotherapy practice for chronic musculoskeletal pain conditions but also highlights the need for further research and training to ensure treatment adherence and successful implementation.

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Conflict of Interest
The author(s) declared no conflict of interest.

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