

Cognitive Functional Therapy - A Review

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ABSTRACT

Cognitive functional therapy, a biopsychosocial approach, is used in management of chronic low back pain. It is an individualized integrated self-treatment approach in graded manner. It is based on three components -reconceptualizing the concept of pain, specific functional training by retraining the altered movement patterns and modifying the lifestyle. It focuses on the cognitive restructuring, stress reduction, understanding pain beliefs and enhancing body awareness. The progression of this approach depends on the individual's levels of distress, tissue sensitivity and levels of conditioning. Research has reported the clinical effectiveness of cognitive functional therapy in chronic low back and neck pain patients.

Key words: cognitive functional therapy, pain, disability, rehabilitation, biopsychosocial

INTRODUCTION

Chronic low back pain is a multidimensional and disabling musculoskeletal condition leading to an economic burden on individual, society and community. [1] There is interplay of multiple causative factors involved in perpetuation of chronic low back pain – physical factors, cognitive factors, psychological factors, lifestyle factors and neurophysiological factors. [2-4] This in turn has an effect on performance of activities of daily living leading to disability and reduced quality of life. [5,6] Factors predicting disability not only include pain but also the psychosocial factors like kinesiophobia, activity avoidance behaviour, and beliefs. [7] Cognizing these biopsychosocial factors contributing to chronic low back pain necessitates a clinical reasoning framework to assist the therapist to identify these factors and provide patient care. [8]

In earlier times, only biomedical approach was used to treat chronic low back pain. This approach increased the health care cost, chronicity of the problem and the disability. [9,10] This led to paradigm shift in

the rehabilitation of chronic low back pain from biomedical approach to focused, individualized, biopsychosocial approach. [11]

COGNITIVE FUNCTIONAL THERAPY

Cognitive functional therapy (CFT) is a multidimensional, unique, behavioral intervention primarily used in the rehabilitation of chronic low back pain. [11] It caters to individualized patient care with self-management approach in cognitively integrated, functionally specific and graduated manner. CFT is based on clinical reasoning framework designed to identify the modifiable factors that lead to pain and disability in chronic low back pain. [12] It focuses on reconceptualizing the concept of pain by educating the patient about the underlying pain mechanisms, functionally retraining the altered movement patterns and modifying the lifestyle. [8,13]

ASSESSMENT

Keeping a sensitive and non-judgemental approach in assessing the

patient is very important. For objective assessment, outcome measures are used to assess the patient's level of disability, psychological condition, pain catastrophizing nature of a person and kinesiophobia which is associated with chronic disabling pain in patients. [14-16] However, detailed interview of the patient plays a vital role in the assessment. This interview should include pain history, patient's emotional and behavioural response towards the perceived pain, coping strategies, functional activities that are avoided due to pain, patients' expectations and goals from the treatment and barriers to achieve the set goals. Functional assessment requires careful observation of pain-provoking activities, how the patient performs the tasks that cause pain. Individuals are questioned regarding their beliefs, feelings, body perceptions, and pain responses while performing these tasks. [8]

CFT INTERVENTION

Cognitive functional therapy intervention is based on three inter-related components. [8]

Making sense of pain. It is a reflective process which uses patients' own words and metaphors with their experiences to provide a new understanding of their pain. Contextual factors, negative pain beliefs, unhelpful emotional and behavioural responses perceived by the patient lead to cascade of pain, distress and disability which acts as barrier to rehabilitation. In this phase, the major focus is to break down these beliefs. Individual is asked to reflect upon what they could do to break this vicious cycle of pain. They are asked to write down and discuss in a constructive manner. This helps in developing clear and realistic self-reliant strategies for behavioural change. [8]

Exposure with control

A behavioural change through experimental learning is achieved. The functional activities which the patient is avoiding due to fear are targeted and retrained. This

approach helps the patient return to their functional activities gradually without pain and associated distress. [12] Specific functional training is designed to discourage pain beliefs, normalize provocative movements and behaviours based on individual presentation. It involves strategies to enhance body awareness and control. These activities will be based on the individual's levels of distress, tissue sensitivity and levels of conditioning.

Along with this, impairment based targeted functional conditioning like development of muscle strength and endurance is also enforced. These new functional strategies are immediately integrated into activities of daily living in a gradual and sequential fashion. Further progression is achieved based on the individual aims, level of conditioning and control over pain. Sometimes achieving pain control becomes difficult, wherein emphasis is given to body relaxation, safety behaviors and lifestyle goals. Providing constructive feedback plays a pivotal role. It can be provided via verbal, visual, written explanations and demonstration. Videos or mirror can be used to underline the difference in the actual and the perceived bodily pain. Direct hands-on feedback also can be applied but care should be taken to avoid encouragement of patient dependence. [12, 17-19]

Lifestyle change:

The program is designed individually based on the patient preference and goals. Incorporation of home exercise program is also encouraged to bring about social engagement and reduce costs. [20,21] Addressing patient's unhelpful lifestyle habits like sedentary lifestyle, sleep deficits due to pain, and stress is important. Breathing exercises, relaxation techniques, guided meditation techniques, and engaging in physical activity are incorporated to relieve stress. [18, 22] A key component fundamental to CFT which will aid in attaining a positive outcome is showing empathy with the patient. This will not only

help to motivate the patient but also to develop patient-therapist rapport and interaction.^[23,24]

CLINICAL EFFICACY:

A recently conducted randomized controlled trial in 121 chronic LBP patients reported that CFT approach was significantly more effective than combining manual therapy and exercise.^[18] Another case-cohort study proved the effectiveness of cognitive functional therapy in 26 Nonspecific Chronic Low Back Pain patients.^[19] Another randomized controlled trial showed that CFT is more effective than exercise and manual therapy in a randomized trial.^[25] A pre-test-post-test intervention study conducted in 52 chronic LBP patients compared the effectiveness between CFT and lumbar stabilization treatment (LST). It showed that both CFT and LST groups had improved lumbar movement control and reduced pain intensity.^[26] A recent randomized controlled trial demonstrated CFT to be more effective in reducing disability levels at 6 and 12 months follow up, than group education and exercise in people with moderate disabling LBP.^[27] A randomized controlled trial conducted in male rowers with LBP showed that cognitive functional approach significantly reduced pain and disability.^[28]

A pilot study evaluated clinical outcomes and pain thresholds after a 12-week cognitive functional therapy compared to multidisciplinary pain management pathway in patients with severe chronic LBP. It showed that CFT group helped to reduce disability and improved quality of life at 3 and 6 months.^[29] Another randomized controlled trial conducted in 206 adults with chronic low back pain showed that CFT reduced disability at 6 and 12 months compared with the group-based exercise and education intervention.^[27] It has been reported in qualitative case studies that patients perceive changed mindset towards pain, enhanced self-efficacy, and greater understanding of their pain.^[13]

A recently published case report evaluated the effect of cognitive functional therapy in a patient with chronic non-specific neck pain. It reported that CFT integrated with manual therapy and active exercises to reduce pain, disability and enhance confidence in the patient.^[30]

SUMMARY

Cognitive functional therapy, based on the biopsychosocial perspective, should be implemented in management of chronic pain. The fundamental concept of CFT is individualized care, understanding pain beliefs; augment pain-coping strategies through cognitive reorganization, stress reduction, targeted functional training and lifestyle change. It promotes increased self-efficacy and builds confidence in performance of functional activities. Randomized controlled trials and long term follow up studies should be conducted to determine the effectiveness of CFT intervention in chronic pain conditions. Also, further studies should be conducted in different geographical settings.

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