# Cognitive Behavioural Therapy for Chronic Pain

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#### Abstract:

Cognitive Behavioural Therapy is a widely researched, time-limited psychotherapeutic approach that is efficacious across multiple mental health conditions. CBT involves a structured approach that focuses on the relationships among cognitions, emotions and behaviours.

Only a very few Sri Lankan patients receive comprehensive pain management with psychotherapy.

This case study provides support for the utilization of CBT-CP for Sri Lankan patients with chronic low back pain. Strong therapeutic alliance, absence of other comorbid psychiatric disorders and delivering CBT-CP as a part of an integrated and interdisciplinary pain management program were advantages in achieving success within 7 sessions.

#### INTRODUCTION

Chronic pain is defined as persistent pain for more than 3 months that affects patients' wellbeing, level of function and quality of life. (1) (2) Studies show that agestandardized prevalence of chronic pain conditions in the previous 12 months can be as high as 37.3% in developed countries and 41.1% in developing countries. (3) (4)(5)...

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The contemporary therapeutic approaches of treating chronic pain syndromes remain a global challenge. (1) Given the limited effectiveness of medication and other biological treatments in some patients, it is appropriate to offer psychologically-based treatments aiming at the rehabilitation. Thus, cognitive behaviour therapies (CBT) have been a mainstay of chronic pain management. (3)(4)

#### CASE OVERVIEW:

Mr. R, a 48-year-old factory worker residing in the Agalawatta area of Kalutara District, was married with three children. He toiled in a rubber factory, primarily involved in the preparation of rubber for export, with his main responsibility being the repair of wooden frames. At the time of

our encounter, he had been absent from work for approximately 7-8 months due to persistent and debilitating chronic low back pain. His chronic back pain, likely stemming from lumbar radiculopathy, had persisted for three years and had been managed at the Colombo North Teaching Hospital's dedicated pain clinic for the same duration. Various medication regimens and interventional procedures, including epidural steroid injections, had provided only partial relief.

When he was referred to our pain psychotherapy clinic, Mr. R's daily function had been significantly impaired, leading to sporadic work absences jeopardising his job security, restricted participation in daily activities, and financial challenges due to his ongoing struggle with chronic low back pain. Aside from low back pain, he did not experience other complications such as incontinence or substantial sensory deficits. The pain clinic specialists were dissatisfied with progress his under existing pharmacological treatment and observed that he was not effectively employing coping strategies to manage pain, instead displaying exaggerated emotional and behavioural responses to his discomfort. Taking these factors into account, he was offered the option of psychotherapy for chronic back pain, a decision he enthusiastically embraced while concurrently maintaining regular his medical management and investigations for chronic pain.

The individual was initially evaluated for suitability for psychotherapy, demonstrating the capacity to establish a therapeutic rapport, a history of meaningful relationships with others, motivation for

therapy, and the ability to introspect and communicate inner experiences. The Cognitive Behavioural Therapy for Chronic Pain (CBT-CP) programme was structured into six sessions, with an optional seventh follow-up session.

- Session 1 Assessment, rapport building, education, orientation to CBT
- 2. Session 2 Goal setting and physical activation and pacing
- 3. Session 3- Relaxation techniques and pleasant activities
- 4. Session 4 Introducing negative thoughts and exploring those
- 5. Session 5- Cognitive challenging and improving sleep
- 6. Session 6- Maintaining treatment gains, anticipating obstacles and discharge planning
- 7. Session 7- Follow-up session (optional)

## Session 1

comprehensive A assessment was conducted to understand the onset and progression of the chronic pain experienced Mr. R. Cross-sectional clinical evaluations and past records did not major indicate any psychiatric morbidities, such as major depressive disorder, anxiety disorders, or substance abuse. The focus shifted to identifying factors that exacerbated or alleviated his back pain and gaining insight into his daily life with this condition. Mr. R expressed concern about the financial strain on his family due to the expenses associated with his back pain treatment. His wife had to seek employment in a garment factory,

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affecting the care of their adolescent children, and his social interactions in the village had been disrupted. Empathetic listening helped establish rapport.

Mr. R's objectives for Cognitive Behavioural Therapy for Chronic Pain (CBT-CP) were to acquire better symptom management skills, improve sleep, and gradually return to work and resume previous social and recreational activities. He received an orientation to the treatment sessions, with an explanation that CBT-CP targets thoughts, emotions, and behaviours enhance functioning, emphasising personal responsibility. Mr. R preferred a more advisory role from the therapist, reflecting the hierarchical doctor-patient relationship common in Sri Lanka, where patients trust doctors to make decisions while respecting their autonomy. A balanced approach was suggested, ensuring task-focused guidance while valuing Mr. R's input. He was informed about session duration, frequency, and the importance of homework assignments.

Deconditioning

Chronic pain

Avoidance of movements

Using the above diagram, the patient was educated about chronic pain's impact on daily life, including reduced activity, physical deconditioning, negative thoughts, and emotions like frustration and depression. The therapist discussed how

these factors affected the patient's avoidance of socio-occupational interactions.

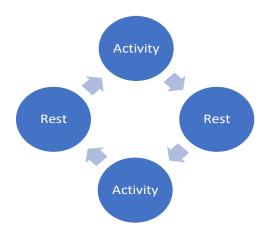
## Session 2

Mr. R was introduced to gradual physical activities as a crucial step in breaking the cycle of chronic pain. Emphasising that activity would be based on his current capabilities, he began with regular walks, focusing on posture and arm movement. These exercise sessions were scheduled separately from his daily routines to instil the habit. Mr. R also considered house sweeping and stationary bicycle riding as exercise options. The concept of "time-based pacing" was introduced to ensure exercise effectiveness.



Pacing involves not overexerting on painfree days and resting or pacing before pain sets in. Overactivity on pain-free days can worsen pain and disrupt exercise routines, leading to negative consequences like stress, anxiety, reduced efficiency, low selfesteem, and complete activity avoidance. Pacing aims to balance activities and work more efficiently, breaking tasks into manageable chunks, such as cleaning a small portion of the garden for 20 minutes

daily over 4 days instead of 2 hours in one day.



After practicing pacing as homework, Mr. R responded positively in the following session. He was advised to gradually increase physical activity while avoiding pain. In this session, he listed previously enjoyable activities, including talking to village friends at the boutique, escorting his daughter to the bus stop, and sweeping at the village temple, all within 1km of his home. He was encouraged to resume these activities gradually, not waiting for pain to disappear entirely, with an emphasis on creating a fulfilling life despite pain. Mr. R agreed to avoid discussing his pain with friends, recognising its negative impact on mental well-being. Engaging in pleasurable activities offered benefits like distraction, socialisation, concentration improvement, and a sense of purpose.

#### Session 3

Mr. R had been practicing pacing techniques but hadn't yet engaged in pleasurable activities due to fear of exacerbating his pain. His progress from limited physical activity to some household tasks was acknowledged, boosting his morale. He was reassured that his condition

was non-progressive, according to pain clinic specialists. Relaxation techniques were introduced, with chronic pain framed as a chronic stressor affecting the body physically and psychologically. Chronic pain triggers a prolonged stress response, which can exacerbate the condition. Relaxation techniques were aimed to counteract this response. Guided imagery and deep breathing relaxation techniques were explained and demonstrated. Mr. R initially questioned the effectiveness due to his prior struggles with relaxation, but he was educated that active relaxation isn't the same as passive rest and agreed to give it a try, understanding the distinction.

#### Session 4

Mr. R reported practicing active relaxation techniques and reengaging in previously avoided enjoyable activities, showing increased cheerfulness and confidence. His efforts were praised. This session focused on identifying cognitive distortions related to pain, including catastrophizing, all-ornone thinking, should statements, and emotional reasoning. Mr. R recognised catastrophizing as a prominent distortion. He learned to raise awareness of negative thoughts by asking specific questions like what triggered them and what they implied about his future, health, or life. This aimed to address cognitive distortions and their impact on pain perception.

#### Session 5

Here, the focus was on challenging and managing negative cognitive distortions. Patient was encouraged to examine the evidence supporting and refuting his catastrophic thoughts about the future impact of his back pain. He believed his

pain would worsen to the point of being bed-bound, citing an example from a villager with a hunched spine. However, evidence against were discussed in detail. Challenging these negative thoughts was facilitated by introducing the concept of a "coping sentence" to remind him when negativity overwhelmed him.

Additionally, principles of sleep hygiene were discussed. Relaxation techniques learned were recommended to reduce tension and initiate sleep. Consistent bedtime and waketime were advised to cue the body for sleep, regardless of pain or sleep quality. Environmental factors like room conditions, noise, light, and odours were highlighted as factors to control for improved sleep.

#### Session 6

Here, his notable progress was reviewed. He shared accomplishments like completing a carpentry project at home and returning to work with flexible hours. He effectively applied skills learned in the sessions, reporting improved mood, functioning, and pain management. While he acknowledged that chronic pain would remain a part of his life with expected flareups, he demonstrated a non-judgemental and accepting attitude, ready to face future challenges with the skills acquired.

The session focused on developing a discharge plan, including strategies for anticipating and managing pain exacerbations and tough days. Stressors related to financial constraints and low self-esteem were identified as potential triggers for anxiety and pain. Coping strategies involved open communication with his wife

and applying the newly learned skills in such situations.

A month later, during a booster session with his family, Mr. R had resumed work and supported his family members in their daily activities, marking significant progress.

While his CBT sessions were completed, he continued to follow up at the pain clinic for medication adjustments, with the option to return to the CBT-CP clinic should he need any additional support. Overall, Mr. R's journey demonstrated effective pain management and improved quality of life.

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