Review Article

Cognitive Behavioural Therapy: The Treatment of Insomnia and Depression

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ABSTRACT

The purpose of this study is to investigate, in a community mental health surroundings, the effectiveness of cognitive behaviour therapy in treating depression and Insomnia (sleeplessness) in older persons. Moreover, the study aims to determine whether an advanced version of cognitive behaviour therapy for insomnia produces better results than a conventional version of the therapy. The coexistence of insomnia and depression demonstrates a complex, mutually influential relationship. When a therapist conducts cognitive-behavioural treatment (CBT), it might decrease the intensity of both depression and sleeplessness in patients who have both conditions coexisting. It is regarded as the initial course of treatment for depression and insomnia. In order to lessen symptoms, CBT integrates a range of therapy strategies, including sleep restriction, stimulation management, education on good sleep hygiene, and relaxation methods.

Keywords: CBT-I, Insomnia, Depression, Cognitive Therapy, Behaviour, Disorder, Mental health.

INTRODUCTION

The word "Cognitive" comes from the Latin word "cognoscere," which meaning "to recognize." Acquiring an extensive understanding of one's beliefs, mindsets, and expectations is an essential aspect of cognitive therapy. The objective is to recognize and change negative and false ideas. Often, it is not solely the circumstances and events themselves that lead to difficulties, but also the excessive significance we attribute to them.[1] The most prevalent sleep-wake disorders or distressing beliefs among older persons with serious mental disease are insomnia (sleeplessness) and depression.[2,3] In this article we are studied about the effects of Cognitive Behavioural Therapy in the management of Insomnia and Depression.

Insomnia: Insomnia disorders include daytime and night-time sleep disorders. These include fatigue and, to a lesser extent, daytime sleepiness and other health or sleep disorders. One of the most common sleep cycle issues in geriatric patients, especially those with mentally disturbed, is insomnia. This disorder occurs during the day as well as at night time also. Cognitive performance difficulties can include difficulties with attention, concentration, memory or performing complex skills due to other health conditions or sleep disorders[4]. The Diagnostic and Statistical Manual of Mental Disorders – IV (DSM-IV) describes the condition of insomnia as the inability to initiate or sustain sleep or to achieve peaceful sleep for a minimum of one month.[5] These sleep disturbances may cause major discomfort or limitation in social, vocational, or other aspects of activity. Sleeplessness has also been connected to mental health issues, reduced efficiency at work, and cognitive decline in addition to tiredness. Even with its high frequency and potentially dangerous effects, very few individuals receive therapy for insomnia.[6]

Depression: Insomnia is often associated with the most prevalent comorbid mental disorders, namely depression and anxiety, which can further intensify the sleep disorder. This association highlights the intricate relationship between sleep issues and mental wellness.[7,8] As stated by the World Health Organization, "Depression is a prevalent psychological scenario that is marked by recurrent feelings of sadness, a diminished interest in enjoyable activities, self-perceived guilt or lack of self-worth, disrupted sleep patterns or changes in appetite, decreased energy levels, and difficulties with concentration."[8] Patients experiencing depression feel sadness, fatigue, hopelessness and guilt. Research has shown that imbalances in neurological chemistry or brain chemicals, specifically serotonin (5-hydroxytryptamine, or 5-HT), is the cause of depression.[7] Depression is mostly experienced by young adults. According to estimations, approximately 3.6% of the global population was affected by anxiety and depression disorders in 2015 with physical illness, sleep disorders, impairments, sadness, and feminine gender have been identified as potential risk factors. Similar to depression, anxiety disorders were more prevalent among females, with a global prevalence of 4.6% compared to 2.6% among males.[7,8]

There is a strong reciprocal association (bidirectional relationship) between depression and insomnia.[9] Up to 70% of older persons with depression may also have concomitant insomnia symptoms, according to studies.[10,11] Studies have shown that sleeplessness frequently contributes significantly to the onset and maintenance of depression symptoms.[12-14] Even though the majority of older persons suffering from depression have trouble falling or staying asleep, sleeplessness is not given enough attention as a distinct therapy focus.[15] Comorbid insomnia carries a higher risk of depressive relapse and suicide when it is not properly evaluated or treated.[16,17] In addition to

have potentially fatal (life-threatening) implications, the correlation between depression and sleeplessness has a substantial financial impact on the larger healthcare system, both directly and indirectly.[18]

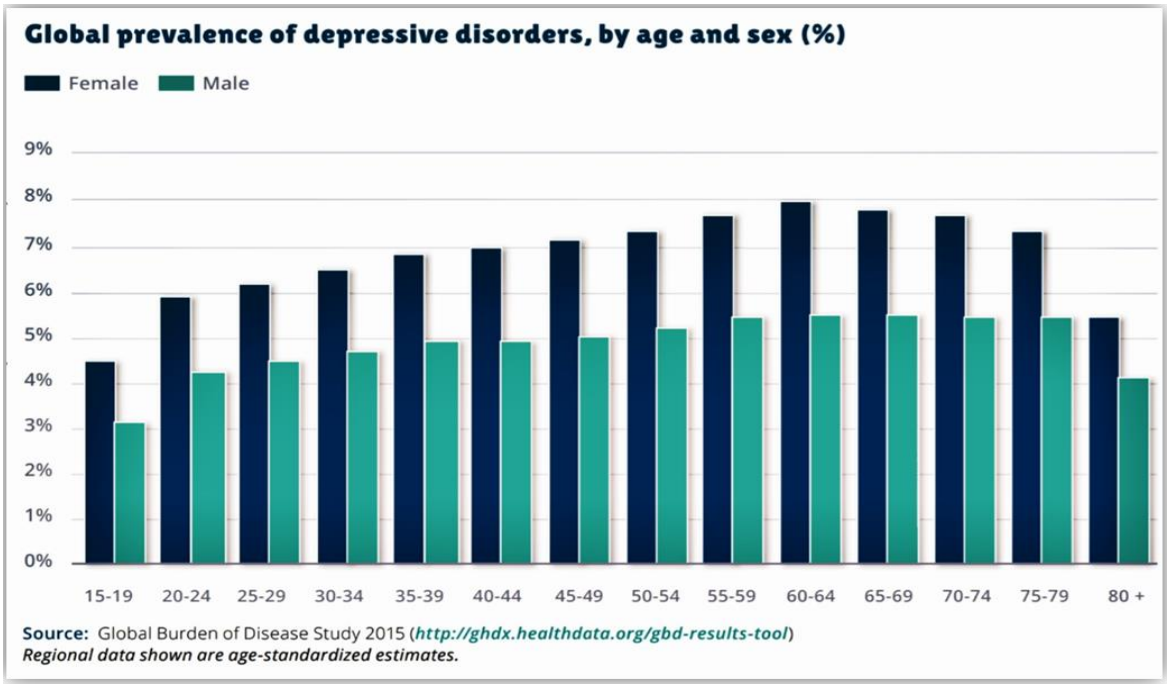

Figure 1: Global prevalence of depression disorders, by age and sex (%).

On X axis – Age group; On Y axis – Percent distribution of depressive disorder

Source: Global Burden of Disease Study 2015 (WHO).[8]

CBT: Cognitive behavioural therapy (CBT) is a sort of counselling or psychological care which has shown promise in treating a variety of conditions, such as severe mental illness, substance misuse, depression, anxiety disorders, sleeplessness, and marital difficulties.[19] Multiple investigations have indicated that Cognitive Behavioural Therapy (CBT) significantly enhances functioning, productivity and standard of life. In numerous cases, cognitive behavioural therapy (CBT) has demonstrated comparable or superior effectiveness relative to alternative modalities of psychological therapy or psychiatric pharmacotherapy.[20]

DISCUSSION

What Is Cognitive Behavioural Therapy:

Cognitive Behavioural Therapy for insomnia(CBT-I) encompasses a multifaceted approach that combines Cognitive and behavioural components to address the root cause of sleep disturbances and depression.[21] Cognitive behavioural therapy (CBT) utilizes elements of the cognitive behavioural model to investigate how an individual's thoughts are influenced by their emotional, behavioural and physiological responses to various situations.[22] The fundamental principle of cognitive behavioural therapy is the interdependence of feelings, thoughts, and actions and their potential to influence mental health.[23] Cognitive behavioural therapy (CBT) is a form of short-term psychotherapy, typically consisting of 12 to 30 weekly sessions.[24,25] This therapeutic approach is designed to address the current issues experienced by the patient, focusing on the "here and now." A person's beliefs about oneself, the outside world, and other people, along with past, and present events, sentiments, and bodily reactions, are the building blocks of cognitive behavioural therapy (CBT).[26]

Between sessions, the patient's assigned tasks involve completing homework assignments. These tasks may include self-reporting of feelings, ideas, actions, and physical responses, as well as conducting behavioural experiments to validate their own thought processes and making adjustments to their behaviours in real-life situations.[27] Using a range of therapeutic approaches such as Philosophical inquiry, the downward arrow technique, meditation, visualization, psychological counselling, and literature therapy, the therapist maintains a directing and engaged attitude throughout the therapy process.[28]

The core concepts of cognitive behavioural therapy include:

1. Cognitive Model: CBT is founded on the cognitive model of psychiatric disorder, suggesting that individuals' feelings and actions are influenced by how they perceive events. It underscores the fact that emotions do not result from situations themselves but how people interpret these circumstances.[29]

2. Cognition Levels: CBT classifies cognition into three levels:[30]

a) Core Beliefs: Strong convictions about oneself, other people, and the universe that tend to arise at early ages.[25]

b) Dysfunctional Assumptions: People are more likely to be attached to the undesirable than the positive thoughts. On the other hand, these illogical thinking processes that alter our perceptions of reality are known as cognitive biases.[31]

c) Negative Automatic Thoughts (NATs): Involuntary thoughts that arise in specific situations, often cantered on negativity and low self-esteem. [32]

3. Formulation: This comprises integrating a person's experiences into a cognitive-behavioural model. It helps to understand what causes and maintains a person's problems.[33]

4. Therapeutic Techniques: CBT uses both, cognitive approaches (e.g., guided research and philosophical inquiries) and behavioural approaches (behaviour planning or behavioural studies) to help patients change their thoughts and behaviours.[34]

5. Collaboration: Problem-solving and development of adaptive coping strategies is what CBT therapy constitutes in which therapist-patient collaboration is necessary for its success.[29]

6. Time-Limited and Structured: Typically, brief and structured approach, it makes this therapy effective for addressing specific issues.[35]

7. Empirical Support: The most researched form of psychotherapy is Cognitive Behaviour Therapy; there exists strong evidence base regarding its effectiveness across several mental health disorders.[29]

COMPONENTS OF COGNITIVE BEHAVIOURAL THERAPY FOR INSOMNIA:

Sleep management education, stimulus control (SC), sleep restriction treatment (SRT), meditation methods, and cognitive therapy (CT) are all vital elements of Cognitive Behavioural therapy for Insomnia (CBT-I). Stimulus control therapy, in particular, is acknowledged as the premier behavioural method and is often referred to as the "standard of excellence" for treating insomnia using behavioural therapy. In clinical settings, CBT-I therapists frequently integrate various therapies, such as stimulus control, sleep restriction therapy, and sleep hygiene, to effectively address insomnia.[36,37]

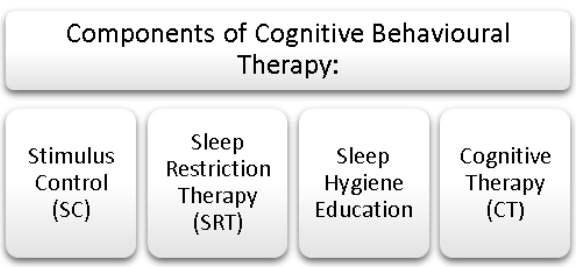

Figure 2: Components of Cognitive Behavioural Therapy

It is essential to highlight that the growth of CBT was informed via both, research and therapeutic practice. CBT is an evidence-based approach with substantial scientific support for the effectiveness of its methods, setting it apart from numerous other forms of psychological treatment.[38]

Stimulus Control Therapy (SCT):

1. Goal: The goal of the Stimulus Control Therapy (SCT) is to help people in falling asleep quickly and maintaining asleep throughout the night. Stimulus Control Therapy (SCT) tries to re-associate the bed and bedroom with sleep, eliminating habits that encourage arousal (e.g., watching TV, listening to music, thinking about things or reading in bed).[39,40] It is a vital aspect of CBT-I, and it is currently shown to be quite effective in managing sleepiness (Insomnia).[41] Based on an analysis of nonpharmacological treatments, SCT constitutes one of the most efficient treatments for persistent insomnia.[42]

2. Implementation: SCT necessitate patients to follow strict behavioural regulations, such as falling asleep only when sleepy, Getting up at a specific time every morning and preventing wakeful tasks before bed. It is frequently paired with other CBT approaches for a more accurate therapy.[43,44]

A trial using SCT, sleep restriction, and other treatments in breast carcinoma sufferers reported substantial increases in sleep quality and decreased insomnia symptoms.[45,46]

3. Effectiveness in Depression: SCT can also reduce depressive symptoms by improving sleep, which has a direct impact on mood regulation and overall mental health.[47]

Sleep Restriction Therapy (SRT):

1. Goal: The basic objective of sleep restriction therapy is to minimize time in bed (TIB) to the usual period of sleep. This is because it is believed that spending too much time in bed (TIB) is a significant factor in the persistent symptoms of insomnia.[48,49]
According to a study, SRT considerably increased sleep quality and decreased the intensity of persistent sleeplessness in patients.[50]

2. Effectiveness: SRT has been demonstrated to enhance sleep latency, lengthen overall sleeping time, and lessen overnight awakenings just like pharmaceutical therapy for insomnia.[51]
according to a systematic review of nonpharmacologic treatments, Behavioural approaches such as SRT, provide long-lasting improvements in sleep quality and are as efficient as medication without any adverse effects.[52]

3. Effect on Depression: SRT has been demonstrated to lessen signs of depression, especially when insomnia intensifies or prolong depression.[53,54]
According to a network meta-analysis, SRT can lessen depressive symptoms in those with comorbid depression and insomnia, this is especially true when coupled with other CBT-I approaches.

Both Stimulus Control Therapy and Sleep Restriction Therapy are the foundations of Cognitive Behavioural Therapy for Insomnia (CBT-I).[55] In a study involving bipolar disorder patients, SCT and SRT were found to improve sleep without triggering hypomanic episodes, making them effective for managing insomnia in depressive disorders.[56] By enhancing sleep quality and general mental health, they have been shown to be beneficial in controlling comorbid depression and provide long-lasting, effective remedies to insomnia and depression.[57] SCT and SRT utility in clinical practice, either by itself or in conjunction with other CBT-I components, is consistently supported by research.[58]

Cognitive Behavioural Therapy for Insomnia (CBT-I): Over the past 30 years, a strong body of research has been developed demonstrating the benefits of cognitive behaviour therapy for insomnia (CBT-I). This therapy program provides several useful tools to assist in altering maladaptive thought and behaviour patterns that worsen insomnia.[59,60] CBT-I is an efficient first-line treatment approach for insomnia condition, according to meta-analyses.[61] During therapy, an important element for the patient was to establish a safe relation and strong therapeutic alliance with a therapist.[62] In clinical settings, CBT-I practitioners frequently integrate therapies that typically incorporate stimulus control, sleep restriction therapy, and sleep hygiene education. CBT-I has longer-lasting beneficial benefits and compares favourably to pharmaceutical treatments.[63,64,65] Past studies on CBT-I excluded patients with comorbidities and concentrated on primary insomnia; however, a growing amount of research suggests that CBT-I is also useful for treating comorbid insomnia.[66,67] The majority of participants in CBT-I studies have been younger or older persons (mean age less than 65 years), despite these significant advances in research. Because of this, there hasn't been enough representation of older persons (mean age > 65) with concomitant serious mental diseases in the CBT-I literature. [68]

The majority of older persons in need of community mental health care often have severe, numerous, interrelated, recurrent/persistent comorbidities when they first present with varied biopsychosocial formulations. In this context, a randomised controlled study (RCT) is required because encouraging data suggests CBT-I not only alleviates insomnia but may also lessen depression.[69]

CBT-I+: The CBT-I+ program is an enhanced standard CBT-I program that includes additional treatments like light therapy, stimulus control therapy and relaxation training, which greatly enhances the therapeutic outcome, particularly when the patient is suffering from comorbid depression, trauma, or complex medical conditions like cancer or chronic pain.[70-72] It incorporates three new CBT methods particularly designed to handle comorbid depression.[73] The first extra strategy used was behavioural activation, which consisted tasks like daily positive activity scheduling. The next approach involves cognitive reframing to treat depression, as well as extra cognitive restructuring activities to combat adverse mindsets that might intensify depressive symptoms. Finally, in the third technique, individuals practiced positive affirmations aimed to improve hopefulness or decrease depression.[74,75] Because of the additional therapeutic material, advanced CBT-I+ sessions typically lasted 75-90 minutes, whereas basic CBT-I sessions lasted 60-75 minutes.

LIMITATIONS OF COGNITIVE BEHAVIOURAL THERAPY FOR INSOMNIA (CBT-I):

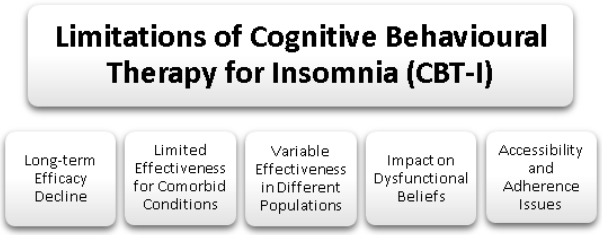

Figure 3: Limitations of Cognitive Behavioural Therapy for Insomnia (CBT-I)

1. Long-term Efficacy Decline: While CBT-I shows moderate to large effects in the short term, these effects tend to decline over time, with significant reductions in impact after 12 months.[76]
2. Limited Effectiveness for Comorbid Conditions: CBT-I is effective for sleep improvements in comorbid insomnia, but its effects on co-occurring psychiatric or medical conditions are smaller and less robust.
3. Variable Effectiveness in Different Populations: In populations such as cancer survivors, CBT-I shows varying efficacy, particularly for subjective sleep measures compared to objective ones, with more benefits seen in psychological well-being than actual sleep improvement.
4. Impact on Dysfunctional Beliefs: CBT-I is effective in addressing dysfunctional beliefs about sleep, but the effects on these cognitive components might not be long-lasting without continuous follow-up.[77]
5. Accessibility and Adherence Issues: Self-help versions of CBT-I show effectiveness, but adherence can be an issue, with dropout rates as high as 14.5%.[78]

CONCLUSION

With fewer adverse effects than sleep aids, cognitive behavioural therapy (CBT) is extensively acknowledged as the main nonpharmacologic method for treating depression and insomnia. Insomnia and depression severity in older individuals have been shown to be reduced by both CBT-I and CBT-I+. Offering cognitive behaviour therapy for comorbid insomnia in mental health services may improve the chances of recovery for older adults who are depressed. This therapy has been demonstrated to greatly improve sleep quality and reduce symptoms that arise during the day, such as mood swings, exhaustion, daytime sleepiness, and other psychological symptoms. CBT is a potentially effective technique for treating the global issues of depression and insomnia that people face.

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