# Integrating Cognitive Behaviour Therapy into Schizophrenia Care

### **Abstract**

Cognitive Behavioural Therapy (CBT) is an evidence-based psychotherapeutic approach widely applied in managing schizophrenia and many other mental conditions. It aims to address cognitive distortions, reduce psychotic symptoms and improve overall functioning by nurturing adaptive coping mechanisms. This article explores the role of CBT in schizophrenia, emphasizing its effectiveness in treating both positive symptoms (e.g., hallucinations, delusions) and negative symptoms (e.g., social withdrawal, apathy). Techniques such as cognitive restructuring, behavioural activation, and coping strategy enhancement are highlighted. The importance of CBT as a supportive mechanism along pharmacotherapy is discussed, demonstrating significant developments in patient outcomes, including symptom management, quality of life, and relapse prevention.

**Keywords:** Cognitive Behavioural Therapy (CBT), psychotherapeutic, schizophrenia, cognitive distortions, cognitive restructuring

### Introduction

The presenting conditions in Schizophrenia, as defined by the ICD-10 (World Health Organization), includes persistent hallucinations and functional impairments. People with this condition report abusive voices that disrupt daily activities and social life. Cognitive Behavioural Therapy (CBT), a recommended intervention (NICE, 2019), can be employed in Schizophrenia patients to improve their quality of life and achieve their milestones in personal and professional life to son=me extent, as a supportive therapy.

Schizophrenia is a complex mental disorder characterized by diverse symptoms that can affect perception, cognition, emotions, and behaviour. Here's an elaboration of each symptom with examples:

# **Hallucinations**

Hallucinations involve perceiving things that are not present in the environment. They can affect any of the senses: Under the ICD-10, hallucinations are key features for diagnosing schizophrenia (F20). They are categorized as "abnormal sensory perceptions" and must occur in the absence of external stimuli. The DSM-5 identifies hallucinations as one of the five key symptoms required for diagnosing schizophrenia. At least two symptoms must be present for a significant portion of time over one month, and one of them must be hallucinations, delusions, or disorganized speech. The key features of DSM diagnosis of hallucinations include Auditory Hallucinations, Visual hallucinations, Tactile hallucinations and Olfactory and gustatory hallucinations.

Key Features in ICD-10: Most patients state that they hear abusive words or commands or instructions that they cannot ignore. For eg., a person hears voices that comment on their actions or instruct them to perform tasks. For instance: "The voices keep telling me I'm being followed, even when I'm alone" (National Institute of Mental Health, 2022). Visual hallucinations may involve seeing figures or shadows that aren't there, such as a figure standing at the end of the bed at night.

#### **Delusions**

"Delusions, particularly persecutory and referential, are significant predictors of reduced quality of life and heightened distress in schizophrenia" (Lincoln et al., 2010). Delusions are a prominent symptom of schizophrenia, characterized as steadfast, false beliefs that lack a basis in reality and persist despite logical reasoning or opposing evidence. They indicate distortions in thought processes and are a central factor in diagnosing schizophrenia according to both the DSM-5 and ICD-10. Delusions are unwavering, false beliefs disconnected from reality, frequently impervious to logical reasoning. For instance, a person may believe they are under constant surveillance by government, even though there's no evidence of this. They might say: "Every time I see a white car, I know it's an FBI agent tracking me" (American Psychiatric Association, 2013).

# **Disorganized Thinking**

Disorganized thinking is a core feature of schizophrenia and is typically inferred from speech patterns, Patients depict an inability to structure thoughts logically. Communication is disrupted due to this symptom and patients utter incoherent, jumbled, or tangential speech. Disorganized thinking demonstrates as difficulty in structuring thoughts logically, leading to incoherent or jumbled speech. During a conversation, the person might say: "I went to the park because the dog was barking, and the stars were out, so now I'm a rainbow". The connections between ideas are unclear or nonsensical (Mayo Clinic, 2023).

# **Disorganized Behaviour**

Disorganized behaviour includes actions that are unpredictable, bizarre, or lacking purpose.: A person might wear heavy winter clothing on a hot summer day or randomly start shouting in a quiet library. They might justify this by saying: "The heat protects me from the invisible rays" (National Alliance on Mental Illness, 2022). Disorganized behaviour may be characteristic of bizarre postures like repetitive, purposeless movements or gestures, being catatonic, that is remaining in one position for a long time, sometimes frozen in a single posture, such as standing or sitting still for hours. Patients may show lack of response to external stimuli, even when someone is speaking directly to them or trying to get their attention. Even when they speak, their utterances are jumbled and incoherent and make sense or may sound disconnected. Thereis frequent switching of topics during a conversation with no logical flow. These behaviours often disrupt daily functioning and affect interpersonal communication. These conditions may be distressing to both the person experiencing them and those around them

# **Negative Symptoms**

Negative symptoms refer to a reduction in normal emotional expression or behaviour. For eg., a person may have a blank facial expression, speak in a monotone voice, or show no interest in social activities. They might say: "I just don't feel like doing anything anymore. It's all meaningless" (World Health Organization, 2021).

#### **Social Withdrawal**

This involves distancing oneself from others and feeling disconnected from relationships or social interactions. Patients seem to live in their own world and avoid peer interaction Sanand communication with friends and family members. previously sociable individual may avoid friends and family, staying in their room for extended periods, saying: "People don't understand me, and I'd rather be alone" (Harvard Health Publishing, 2023).

# **Motor Impairment**

Motor impairment includes difficulty with movement or adopting unusual postures for prolonged periods (catatonia). A person might stand completely still in a rigid posture for hours, unresponsive to external stimuli, or exhibit repetitive, purposeless movements like hand-flapping. Catatonia may involve behaviours like "wax-like flexibility, where limbs remain in positions they are placed" (American Psychiatric Association, 2013). He/she do not respond to verbal or non -verbal communication.

# **Cognitive Impairment**

Cognitive impairment impacts the ability to concentrate, plan, or process information. A person may struggle to read a simple paragraph or follow instructions, saying: "I just can't focus long enough to finish even a sentence" (National Institute on Aging, 2023). A person may suffer from less processing speed, memory deficits, executive functioning deficits, verbal and visual clues incomprehendability etc., This heavily affects their daily life, especially in occupational scenario.

### **Mood Changes**

Mood disturbances such as depression, anxiety, or irritability can occur alongside other symptoms. A person may feel persistently anxious and say: "I know something terrible is going to happen, and I can't shake this feeling" (Mental Health Foundation, 2023). Patients suffer from depression, anxiety, irritability, rare episodes of Euphoric or Elevated Mood, Emotional Unpredictability, Flattened or Blunted Affect, Mood Congruence with Psychosis and anger and aggression. Strained relationships and suicidal risks are the main impacts of mood changes.

# **Suicidal Thoughts**

Schizophrenia can lead to feelings of hopelessness and suicidal ideation. A person might express thoughts like: "There's no point in living anymore. The voices are telling me I'm worthless" (World Health Organization, 2021). Expressing feelings of worthlessness or hopelessness. telling others about wanting die or committing suicide, sudden withdrawal from family and friends, saying good bye in some way or the other, disposing away favourite possessions, risky or self-destructive behaviours,

Agitation, severe anxiety, or restlessness etc are symptoms of suicidal tendency and this can be prevented by early detection, counselling and medication.

Lack of adherence to treatment or medication.

# **Supportive Treatment**

Although schizophrenia can be debilitating, treatment approaches such as antipsychotic medications, psychotherapy (e.g., cognitive-behavioural therapy), and social support can significantly improve the quality of life for individuals with the condition. Early intervention and a supportive environment are crucial for better outcomes.

The following interventional activities can be administered on Schizophrenia patients for living a better life: Psychoeducation about schizophrenia and hallucinations. During the initial week it is important to introduce the concept of schizophrenia as a neurodevelopmental condition. psychoeducation can be designed to help normalise the patient's experiences by subtly addressing the distress associated with auditory hallucinations while portraying them as a common symptom of schizophrenia. The therapist can use handouts and visual aids to help the patient understand how the brain misinterprets internal

Trigger identification through a symptom diary: Scheduling and journaling are very much effective in Schizophrenia patients. "Behavioural techniques, including graded exposure and activity scheduling, are central to changing avoidance behaviours and building positive reinforcement" (Lewinsohn, 1974). Patients can be guided to maintain a diary to record instances of hallucinations, including their timing, context, and their emotional reactions. This exercise can be conducive to identify potential triggers and patterns in the symptoms. By reflecting on their entries, he/she can gain insight into environmental or emotional factors influencing their experiences.

Cognitive restructuring to challenge unhelpful beliefs: During these sessions, the therapist assists the patient identify and challenge false assumptions associated with their voices. The therapist uses a Socratic approach to stimulate contemplation on the credibility of the voices' statements. Evidence collecting and thought records are used to facilitate reasonable reinterpretation of upsetting thoughts. "Through Socratic questioning, CBT encourages individuals to critically evaluate their beliefs and assumptions, fostering cognitive change" (Padesky & Greenberger, 1995).

Coping strategies such as grounding and distraction techniques. Practical strategies to manage distress are introduced, including grounding techniques such as focusing on sensory inputs and distraction methods like engaging in hobbies or social activities. The individual is encouraged to practice these strategies during episodes of hallucinations, helping to reduce their emotional impact and fostering a sense of empowerment. "CBT consistently demonstrates efficacy in reducing symptoms of depression, anxiety, and psychosis, with long-term benefits when combined with pharmacotherapy" (Butler et al., 2006).

Reality testing to differentiate real experiences from hallucinations. Patients undergo sessions focussing on enhancing the individual's ability to critically evaluate their experiences. They are encouraged to seek validation from trusted individuals or rely on factual evidence to distinguish between reality and hallucinations. If the trusted person confirms they didn't hear it, the patient learns to recognize the experience as a hallucination. Role-playing and reality-check exercises are used to reinforce these skills. When a person feel he or she is being watched the therapist may conduct a role paly saying, "Let's play out this situation. I'll be a co-worker, and you can tell me what you're experiencing. Then, let's explore whether there's any factual basis for it."

Social skills training to rebuild interpersonal relationships. Social withdrawal is addressed by practicing communication and assertiveness skills in simulated scenarios. The individual is gradually encouraged to re-engage with peers and participate in group activities. Positive feedback and reinforcement help rebuild confidence in social settings. A peer counselling session can be organized for the patients' relatives or friends, so that they understand the importance of peer engagement in helping the patient get out of the situation.

# Relapse prevention strategies and progress review.

While full "cure" in the conventional sense is rare among schizophrenia patients, many individuals achieve long-term decrease in symptoms and functional recovery. Though patients may experience Residual Positive Symptoms. with occasional or mild hallucinations or delusional thinking which may occur occasionally, they are not as disruptive as during acute phases. Advances in early detection, personalized treatment, and psychosocial interventions continue to improve the potential for meaningful reversal of symptoms.

During the last stage, relapse prevention techniques are created with an emphasis on building on recovery milestones and getting ready for any obstacles that are likely to occur in future, once the patient successfully gets back to normal life A customised relapse prevention strategy is developed, detailing coping mechanisms and early warning indicators. Reviewing progress helps to celebrate achievements and reinforcing a sense of self-efficacy.

# **Conclusion**

Cognitive Behavioural Therapy (CBT) has proved to be effective in eness in the treatment of schizophrenia, offering relief from both positive and negative symptoms and

facilitating functional impairments to a great extent. In both ICD-10 and DSM-5, hallucinations and delusions are central to understanding and diagnosing schizophrenia. "CBT has shown moderate effectiveness in reducing the severity of psychotic symptoms and improving functioning in individuals with schizophrenia" (Wykes et al., 2008). Assessing their type, frequency, and impact on functioning is essential for accurate diagnosis and treatment planning. Along with antipsychotic medications, Cognitive Behavioural Therapy (CBT) helps patients manage these experiences effectively.

In CBT, hallucinations and delusions are treated through techniques like reality testing and thought challenging. These techniques helps patients critically evaluate and manage their experiences, reducing distress and improving coping mechanisms. As far as negative symptoms, such as apathy and social withdrawal are concerned, CBT suggests involving the patients in meaningful activities and developing skills to enhance motivation and emotional expression.

Beyond symptom management, CBT contributes to long-term improvements by equipping individuals with strategies to recognize early warning signs, prevent relapse, and build resilience. Its focus on functional outcomes, such as social skills and problem-solving, supports reintegration into daily life and enhances overall well-being. Supported by robust research, CBT is a vital complement to pharmacological treatment, emphasizing a holistic approach to schizophrenia care. As an empowering and patient-centred intervention, CBT continues to offer hope and improved quality of life for individuals living with schizophrenia.

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#### Reference

American Psychiatric Association. Diagnostic and statistical manual of mental disorders: DSM-5. 5th ed. Arlington (VA): American Psychiatric Publishing; 2013.

Andreasen NC. Thought, language, and communication disorders. Arch Gen Psychiatry. 1979;36(12):1315–1321.

Beck AT. Cognitive therapy and the emotional disorders. New York: Penguin; 1979.

Beck AT, Steer RA, Brown GK. Beck Depression Inventory-II. Psychol Assess. 1996.

Beck AT, Rector NA, Stolar N, Grant P. Schizophrenia: Cognitive theory, research, and therapy. New York: Guilford Press; 2009.

Butler AC, Chapman JE, Forman EM, Beck AT. The empirical status of cognitive-behavioral therapy: A review of meta-analyses. Clin Psychol Rev. 2006;26(1):17–31.

Harvard Health Publishing. Social withdrawal in mental illness [Internet]. 2023 [cited 2025] Jan 24]. Available from: https://www.health.harvard.edu

World Health Organization. International Classification of Diseases, 10th Revision (ICD-10) [Internet]. Geneva: World Health Organization [cited 2025 Jan 24]. Available from: https://www.who.int/classifications/icd/en/

Kay SR, Fiszbein A, Opler LA. The Positive and Negative Syndrome Scale (PANSS) for schizophrenia. Schizophr Bull. 1987;13(2):261–276.

Lewinsohn PM. A behavioral approach to depression. In: Friedman RM, Katz MM, editors. The psychology of depression: Contemporary theory and research. Oxford: Wiley; 1974. p. 157–178.

Lincoln TM, Lullmann E, Rief W. Correlates and long-term consequences of poor insight in patients with schizophrenia: A systematic review. Schizophr Bull. 2010;36(3):490–503.

Mayo Clinic. Schizophrenia: Symptoms and causes [Internet]. 2023 [cited 2025 Jan 24]. Available from: https://www.mayoclinic.org

Mental Health Foundation. Mood disorders and schizophrenia [Internet]. London: Mental Health Foundation; 2023 [cited 2025 Jan 24]. Available from: https://www.mentalhealth.org.uk

National Alliance on Mental Illness. Understanding schizophrenia [Internet]. Arlington (VA): National Alliance on Mental Illness; 2022 [cited 2025 Jan 24]. Available from: https://www.nami.org/About-Mental-Illness/Mental-Health-Conditions/Schizophrenia

Morrison AP, Turkington D, Pyle M, et al. Cognitive therapy for people with schizophrenia spectrum disorders not taking antipsychotic drugs: A single-blind randomized controlled trial. Lancet Psychiatry. 2014;1(7):491–497.

National Institute on Aging. Attention and concentration in older adults [Internet]. Bethesda (MD): National Institute on Aging; 2023 [cited 2025 Jan 24]. Available from: https://www.nia.nih.gov

National Institute for Health and Care Excellence (NICE). Psychosis and schizophrenia in adults: prevention and management (CG178). 2019.

Padesky CA, Greenberger D. Mind Over Mood: Change how you feel by changing the way you think. New York: Guilford Press; 1995.

World Health Organization. Depression [Internet]. Geneva: World Health Organization; 2021 [cited 2025 Jan 24]. Available from: https://www.who.int/news-room/fact-sheets/detail/depression

Wykes T, Steel C, Everitt B, Tarrier N. Cognitive behavior therapy for schizophrenia: Effect sizes, clinical models, and methodological rigor. Schizophr Bull. 2008;34(3):523–538.