Efficacy of brief cognitive behavioural intervention for the treatment of psychosis: a case report

Abstract
Cognitive behavioural therapy (CBT) has been found to have strong empirical evidence for the treatment of anxiety and mood disorders. However, its applicability to schizophrenia and other psychotic disorders have posed as a challenge to clinicians and researchers for a long time. In the recent years, there has been a growing body of literature on the effectiveness of CBT on psychosis. The present study attempts to highlight the role of brief CBT in the management of a 23-year-old Bengali speaking, unmarried male, hailing from a rural extended family, with a diagnosis of schizophrenia with prominent symptoms of hallucinations and delusions for the past three years. He was treated with brief CBT approach, resulting in improvement after eight sessions.

Keywords: Schizophrenia. Hallucinations. Delusions.

INTRODUCTION
Patients with schizophrenia and other psychotic disorders continue to be a serious challenge for cognitive therapists and theorists, as opposed to mood and anxiety disorders. Despite its widespread efficacy in the neurotic spectrum, the collaborative nature of cognitive behavioural approach was considered limited in dealing with disengagement with reality. However, since the 1990s therapists began successfully applying the Socratic nature of this intervention to the uncharted waters of psychosis. Cognitive behavioural therapy (CBT) is one of the best known evidence-based therapies for the treatment of mental disorders and various researchers have revealed its strong empirical support for treating mood and anxiety disorders.[1,2] However, studies have also established its efficacy in the treatment of psychosis.[3] In the recent years, research on applicability and utility of brief CBT interventions for psychosis are being explored.[4]

CASE HISTORY
A 23-year-old, unmarried, Bengali, graduate, male, from a low socioeconomic rural background of West Bengal, India presented with complaints of reduced social interaction, hearing voices of threatening content, belief that people are conspiring against him, and belief that his thoughts are being controlled for a duration of three years.

In the year 2014, the client had an altercation with a man in his locality which turned out of control to the extent that he was beaten up by the man and his gang. Since then the client became fearful of this man and his gang, and would not venture out of home to prevent any further altercations with them.

Whenever he would go out, he would hear voices of men and women threatening him. According to the patient, they would also control his thoughts which would also be broadcasted in television and radio through which the entire world would come to know. Because of these voices, he would stay at home and would not engage in any social or occupational activities.

He had been on antipsychotic medication for the past three years. Although there was reduction in anger outbursts, assaultive behaviour, and self-smiling, no significant reduction in hallucinations and delusions were found. Hence, he was referred for psychotherapy.

Assessment
From the clinical interview, it was found that the patient was suffering from auditory hallucinations, delusion of control, and thought broadcasting among the positive symptoms of schizophrenia and had blunt affect and social withdrawal among the negative symptoms. Based on this, the Positive and Negative Syndrome Scale (PANSS) and the Brown Assessment of Beliefs Scale (BABS) were administered as pre- and post-therapy assessments to determine the outcome of therapy.[5,6]
Bases on pre-therapy assessment, the goals of the intervention were:

- Improvement of daily functioning
- Increase in social interaction
- Reduction of intensity of hallucinations
- Reduction of conviction of delusions

**Procedure**

It was a single-case study, where efficacy of the psychotherapeutic intervention was assessed through pre- and post-therapy assessment of the client. The therapeutic intervention included the following components:

1. Psychoeducation
2. Activity scheduling
3. CBT techniques:
   - Engagement
   - Blocking
   - Disputing and empirical testing of beliefs about voices
   - Challenging delusions, examining evidence, weakening evaluative beliefs

The therapy was administered in eight sessions of 45 minutes duration, over four weeks. Initially the patient and his informants were made aware of the prevalence, nature, course, and prognosis of schizophrenia, and their implications for the patient in the present scenario. The basic concept of CBT and the nature of “collaborative approach” was explained to the patient. A rating of his subjective distress resulting from his current symptoms was taken on the visual analogue scale (VAS) at the end of each session. An intervention programme was developed with the following components of behavioural and cognitive methods.

The psychotherapy of the patient started with activity scheduling. An activity schedule was prepared after discussion with the patient, focusing on organising his daily activities in a way that would promote social interaction and prepare him for occupational engagement. Patient was suggested to defocus his attention from hallucinatory voices by focusing on work at hand in the schedule. The informant was also informed about the schedule and its importance in coping with the symptoms.

In the next session, an antecedent-behaviour-consequence (ABC) and cognitive assessment of voices and delusion was done which revealed, going out of home and being in the vicinity of people would inevitably trigger hearing of voices. The content of voices would be persecutory in nature and was intended to hamper his overall well-being: social, emotional, and occupational. He believed that the voices were real and coming from the people of his locality with whom he had the fight three years back. He also revealed that people in his locality would be jealous of others’ success, a belief which the parents also shared. Every time he would hear the voices, he became scared and feared that they would beat him up if he went out. This would result in avoidance of social interaction and he had become homebound.

An intervention programme was tailored according to the features of hallucinations elicited from the ABC assessment. He was encouraged to understand the cues and context triggering the voices and differentiate it from others. After an understanding of the triggers, he was encouraged to seek evidence for and against persecutory nature of voices. Evaluative beliefs behind the persecutory voices were elicited. Blocking beliefs by encouraging him to dispute his beliefs about voices was done. This was combined with behaviour experiments to empirically test the prediction of voices or beliefs about the voices. Coping skills to deal with the fear and anxiety resulting from going out were taught which helped in breaking the vicious cycle of social withdrawal and psychotic symptoms. Activity scheduling was continued to address withdrawal from social situations.

CBT techniques for managing delusion was simultaneously adopted. Management of delusions began with narrowing the sphere of occurrence of delusions. For example, in session, places outside his locality, shops, were found to be among the places where he would have less persecutory thoughts. Understanding situations which lead to the distress behind delusions helped elucidate his evaluative beliefs behind them. This also boosted his confidence by eliminating situations in which he would have such beliefs. After eliciting the evaluative beliefs, attempts were made to weaken his delusions by challenging them, and seeking evidence for and against his evaluative beliefs. Weakening the strength of delusion encouraged him to reattribute the occurrence of delusional beliefs to the illness. The patient was asked to list the pros and cons of holding the belief which also helped in exploring the utility of the delusion for the individual. The connections between holding the belief and his distress, fear and social withdrawal were emphasised. Through self-disclosure, the patient was able to ascertain the origin of his beliefs to his unpleasant experience in the brawl in his locality. He revealed that the beliefs were not present before that and he would go out without fear. The patient was given homework of going out twice every day.

After a total of eight sessions, the patient reported reduction of intensity of hallucinations, weakening of conviction of delusions, and there was significant increase in social interaction.

**DISCUSSION**

Psychosis has been mainly treated with antipsychotics and traditional therapies which did not effectively help the patients in managing their distress, dealing with psychotic symptoms, and in improving their functioning in the community.[7] However, since the first controlled study of CBT on psychosis in 1990s in the United Kingdom (UK), specific symptom interventions for schizophrenia came into practice. In fact, CBT is recommended as evidence-based psychotherapy for schizophrenia by the National Treatment Guidelines in both UK and the United States (US).[8]

The recommended steps of CBT for engaging clients with psychosis include building a working therapeutic alliance, developing formulation, and specific interventions to build skills to address symptoms and improve functioning. Prevention of relapse to enhance resilience and specific interventions to address stigma are also part of the intervention.[4]
Based on the assessment of psychotic symptoms, it was found that the client's social withdrawal was hampering his daily functioning severely and maintaining his psychotic experiences. As the client reported the anomalies in his experience which was leading to distress, he was asked whether he would be willing to consider discussing possible explanations of his experiences along with the therapy. As he became willing to have a discussion, we proceeded towards eliciting the evaluative thinking behind his hallucinations and delusions. Subsequent sessions were spent in challenging delusions and hallucinations, eliciting his evaluative beliefs, and seeking evidence for them. As the client's delusion and hallucination were resulting from the same evaluative belief, both were approached simultaneously. The patient was given between-session tasks and the importance of these tasks in the process of therapy was emphasised. He was given behavioural experiments to test his evaluations, which were used to discuss evidences for and against his evaluative beliefs. Over sessions as the patient found lesser evidence for his beliefs, it led to weakening of frequency and intensity of his hallucinatory experience, and the conviction of his delusional beliefs. At this point the patient was educated again about the nature of the illness, its relation to his current experience and helped to reattribute his symptoms to the illness. At the end of eight sessions, the interference with daily functioning from positive symptoms had reduced. However, slower rate of improvement in negative symptoms interfered with further improvement.

Conclusion

The present study highlights the efficacy of brief CBT in the management of schizophrenia with prominent symptoms of delusions and hallucinations. However, further CBT intervention is required to continue the treatment and maintain positive outcome. As this is a single-case study with short-term follow-up, long-term follow-up is essential to evaluate the efficacy of the brief cognitive behavioural intervention. Studies showed efficacy of CBT in chronic schizophrenia for positive symptoms and cognitive impairment.[9,10] However, brief CBT was found to be more effective in case of positive symptoms of psychosis and was found to be comparatively less effective with the negative symptoms.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given his/her name and initials will not be published and due efforts will be made to conceal identity, but anonymity cannot be guaranteed.

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REFERENCES