

SHATTERING SHADOWS: TRANSFORMING PARANOIA IN SCHIZOPHRENIA THROUGH CBTP

Amber Roohee

Trainee Clinical Psychologist General Hospital, Lahore, Riphah International University, Lahore, MS Clinical Psychology, (Independent Researcher)

amber.roohee@gmail.com

<https://orcid.org/0009-0008-2360-4794>

Corresponding Author: *

Amber Roohee

DOI: <https://doi.org/10.5281/zenodo.15600067>

Received	Revised	Accepted	Published
13 April, 2025	13 May, 2025	28 May, 2025	05 June, 2025

ABSTRACT

This clinical case study aimed to establish the debatable treatment efficacy of cognitive behavior therapy for psychosis (CBTp) in reducing the symptomatology of chronic paranoid schizophrenia of a lady aged 29 years who was on antipsychotic medication and had not experienced any psychological therapy yet. She presented with complaints of delusions, hallucinations, aggression, increased appetite, hypersomnia, and poor personal hygiene. The case was conceptualized within the theoretical framework of stress and vulnerability (Zubin & Spring, 1977). The first phase of treatment involved an informal and formal assessment using baseline charts, clinical interview (DSM-5 TR checklist), mental status examination, symptom checklist-R, and the brief psychiatric rating scale (BPRS). The patient's assessment scoring led to a diagnosis of schizophrenia 295.90 (F20.9), with multiple episodes currently in the acute phase. We used a single-case ABA research design. The second phase focuses on various CBTp therapeutic interventions, such as distraction for hallucinations, cognitive restructuring for delusions and hallucinations, behavioral activation for negative symptoms, social skill training, anger management, and family counseling, showed moderate improvements in patient's symptoms. The follow-up sessions noted continued progress. The study concluded that by the end of 16 sessions, CBTp interventions demonstrated moderate effectiveness in reducing positive symptoms (delusions and hallucinations), though these symptoms did not completely disappear. Negative symptoms, such as avolition and flat affect, showed slight improvement, allowing for greater engagement in daily activities. Insight improved from denial to partial awareness, along with cognitive functioning. These findings have implications for professionals working with the diverse symptomatology of schizophrenia, as well as for family members and students involved in this field.

Keywords: paranoid, schizophrenia, CBTp, stress-vulnerability model.

INTRODUCTION

Adolescence is a crucial age for developing mental disorders (Solmi et al., 2021). For instance, the death of loved ones during this critical age can be an extremely traumatic incident for a developing brain. Similarly, the loss of a biological mother can have adverse effects on the teen's psychological and interpersonal well-being (Jessop et al., 2022).

Traditionally in Pakistan, a widower tries for a remarriage to seek companionship after his spouse's passing, regardless of his children's approval. Most of the time, a stepmother cannot replace a real mother; instead, the complex dynamics of this step-relationship can cause distrust, anguish, and even paranoid schizophrenia.

This article examines the efficacy of Cognitive Behavior Therapy for psychosis (CBTp) approaches for a 29-year-old lady patient from a middle-class with urban background in Pakistan. She exhibited a 15-years history of schizophrenia, primarily marked by enduring auditory hallucinations, persecutory delusions, diminished affect, and significant social withdrawal. Despite being on anti-psychotic medication, her symptoms remained severely impairing. Initially, her family ascribed her condition to spiritual origins, leading to delays in psychiatric assessment and diagnosis. She received a diagnosis of paranoid schizophrenia (DSM-5 TR) and a referral for Cognitive Behavioral Therapy (CBTp) to address her persistent symptoms.

The World Health Organization (WHO, 2018) illustrated schizophrenia as a chronic and recurrent psychological disorder characterized by disruptive cognitions, perceptions, feelings, and behaviors. Usually, schizophrenia appears during adolescence at about 16 to 30 years of age (Jones, 2013) and ranks among the top 10 global causes of impairment, with notable regional, cultural, and socio-economic differences in its symptomology (WHO, 2024). 70 % of schizophrenia patients are in Asia (Mari et al., 2009). A fair psychological diagnosis of this disorder is pivotal for determining the severity of symptoms, which in turn guides the development of appropriate therapeutic interventions. The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision (DSM-5-TR) in 2022, writes main features of schizophrenia are positive manifestations like incorrect beliefs called delusions and fake perceptions called hallucinations, and along with unordered behavior and speech (catatonia, derailment, and incoherence), and negative signs like belittle affect, avolition that lasts at least from 1 to 6 months and causes damage in daily life activities.

Now a days, anti-psychotic drugs are considered the well-known treatment protocol for schizophrenia world widely. A research indicated that only 30% of the patients continue with these psychotropic medications and the rest of them discontinue or switch to other treatment options due to the medication's side effects (Lieberman, 2005).

Approximately 70% of patients with schizophrenia suffer from auditory hallucinations (Kart et al., 2021), and 80% of patients held different types of paranormal beliefs (Ross & Joshi, 1992). For example, patients believed that psychosis was due to wrongdoing like sin or punishment, spells, possession, and black magic done by jealous relatives or friends (Ayub, 2021). Roohee et al. (2023) described how maladaptive emotional schemas and paranormal beliefs interplay and contribute towards psychological symptoms. SauveG et al. (2020) mentioned that these negative beliefs later change into delusions. Roohee and Sunbal (2023) further stated that these supernatural beliefs are processed differently in women as compared to men, like women are more emotional and superstitious.

According to Beck's ABC Model of Emotional Difficulties (2020) presented that negative emotions and unhealthy behaviors develop from negative beliefs and perceptions. Combs et al. (2022) said that CBTp encourages changing these distorted beliefs and faulty perceptions through reality testing and acquiring coping strategies to eliminate the distressing symptoms. A meta-analysis conducted by Burgess-Barr et al. (2023) indicated the CBTp is a kind of treatment that helps to significantly decrease delusions and hallucinations and helps in relapse prevention for longer periods. Combining psychological assessment with CBTp has become a complex way to understand the challenges related to this condition, especially for negative and cognitive symptoms (Moller & Czobor, 2015; Todorovic et al., 2020).

According to Kopelovich et al. (2022), CBTp-trained professionals are scarce, with only 0.57% of them available in the mental health field to serve. As we all know, Pakistan's mental health services provide limited facilities, resulting in significant neglect of psychological health. Pakistan only spends 0.4% on mental health (WHO, 2018). A study by Naeem et al. (2015) in the twin cities found that using a culturally adapted version of cognitive behavior therapy for psychosis (CACBTp) greatly reduced positive symptoms and improved patients' understanding and daily functioning compared to regular treatment. A study by Farooq et al. (2006) highlighted the importance

of incorporating cultural beliefs into the interventions of CBT, such as the therapeutic use of religious and spiritual practices. Husain et al. (2017) found that community-based CBTp in Karachi increases commitment and engagement and reduces hospitalization rates among individuals with schizophrenia.

The rationale of the study

Particularly individual with paranoid schizophrenia, leading to social isolation, limited support and inadequate evidence based care. While antipsychotic medications are primary treatment, they often fail to address residual paranoia and functional impairments, highlighting the need for adjunct psychological interventions. Cognitive Behavior Therapy for psychosis (CBTp) has shown promise in reducing symptom severity and improving functioning in individuals with schizophrenia (Manser & Johns, 2023), yet its efficacy particularly for positive symptoms remains debated (Jauhar et al., 2014). There is need to conduct more studies to explore its efficacy with different sub-types of schizophrenia to establish its impact further. Moreover, cultural, and religious context of Pakistan is align to make it more effective and acceptable. This study seeks to bridge this critical gap by further evaluating CBTp efficacy in managing chronic paranoid schizophrenia for a patient who belongs to a life with high risk factors such as early traumas, extremely emotional family background, held rigid supernatural beliefs with less educated and low socioeconomic status.

Theoretical Framework

The stress-vulnerability model (Zubin & Spring, 1977) is the main framework of CBTp for schizophrenia. This model depicts that stress and vulnerability are interlinked with developing psychosis. The interaction between stress and psychosis is complicated and determined by inherent and environmental factors. By understanding this relationship, it can help to prevent risk for psychosis by finding the individual's stress threshold.

Objectives of the Study

The main objectives of this study were to analyze the impact of treatment interventions of CBTp for the symptomatology of chronic

paranoid schizophrenia by a single case study to explore its mooted position for certain symptoms of psychosis.

Research Hypotheses

H1: Cognitive Behavior Therapy for psychosis will mitigate the Delusions and Hallucinations.

H2: Cognitive Behavior Therapy for psychosis will improve the patient's motivation, social engagement, and emotional expression.

H3: Family counseling will improve the home environment, support system and challenge culturally held supernatural beliefs about illness.

Method

Research Design

ABA, a single-case research design was used for assessing CBTp's efficacy for the treatment protocol of schizophrenia.

Sample

A 29 years old Muslim and an unmarried lady who belonged to the lower middle socio-economic status. She first visited the Outdoor Patient Department (OPD) of General Hospital in Lahore with her two attendants. Later, she was directed for further evaluation and treatment for her symptoms in the psychiatry ward.

Background Information

This study revolves around a 29-year-old woman with traumatic adolescence. She visited to the General Hospital, Lahore, due to the sleep and appetite issues, hearing voices (e.g., I can hear people saying that stab your stepmother, police is behind you, I am beautiful and intelligent), seeing people that not present in the environment (e.g., my late mother daily visited me, spirits harm me so many times), aggressive behavior, delusions of persecutory and grandiosity (e.g., my father and stepmother have plans to kill me and my siblings; they have hired police to harm me, they have plans to send my sister away from us; my stepmother is conspiring against me to throw me out, People have casted black magic on me, I am very smart), suspicious attitude towards people around, and non-compliance.

The informants were the patient's sister and paternal aunt.

The patient's family history showed that her mother died from hepatitis C when she was 14 years old. She was the eldest from 3 siblings (1 sister and 2 brothers). The patient joined school at 5 years and studied until the 11th grade and achieved average marks in all exams. She maintained a closed relationship with her teachers. The patient has remained single, and her authoritative nature, evident since childhood, particularly in her interactions with her siblings and other family members. There was a family psychiatric history as patient's two maternal uncles were suffering with schizophrenia.

Her personal history revealed prenatal and neonatal complications because her mother was suffered from hypertension and gestational diabetes throughout the pregnancy and she had a delayed first cry after birth. However, she was born through a normal delivery and there was not any postnatal complications. She met her developmental milestones on time and did not experience any physical or neurotic issues during her childhood. Her paternal aunt reported that she began menstruating at the age of 12, and, having been well-informed by her mother, she did not face any issues related to menarche. Although she noticed changes in herself after puberty, she was not surprised, as she had prior knowledge about it. The patient's premorbid personality revealed that she was shy, had few friends, and maintained satisfactory relationships with others, but she was sensitive and extremely emotional. Her sister reported that she was shy but used to enjoy home decoration and baking. She enjoyed watching films and TV dramas, used to go out with her family, and has been consistent in her prayers.

The first episode of schizophrenia was occurred 15 years ago, at the age of 14, following a traumatic event when her father remarried shortly after her mother's death. The decision did not inform or involve the patient or her siblings; they knew about the marriage only after returning home from school. This event triggered a series of emotional and behavioral changes in her. She started blaming her father for her mother's death, accusing him of neglecting her mother's treatment. Initially,

she exhibited aggressive behavior towards her father and stepmother, which escalated to physically assaulting her father. Over time, she became socially withdrawn, often remaining silent and isolating herself in a room. She began displaying odd behaviors, such as drawing hundreds of straight lines on the walls, putting her hands in the fire, walking barefoot outside on cold nights, and engaging in self-talk. The severity of her condition became apparent when she missed her first-year exams due to not receiving her roll number slip for the intermediate examination. Her friends informed her family about this issue, but she didn't share it with them. That led her family to seek psychiatric help for her. She was diagnosed with schizophrenia and has been treating ever since. Despite ongoing treatment, her symptoms have evolved, with new issues emerging over time. She became increasingly preoccupied with paranoid thoughts, believing that people were conspiring against her and intending to harm her. She spent most of her time at home, avoiding contact with family members, and experienced persistent auditory hallucinations, hearing voices that commanded her. She also reported visual hallucinations, seeing people in front of her who she believed were discussing and plotting against her. She described her father and stepmother as uncaring and insincere people, indicating a strained relationship between them. Following a significant argument, she has not spoken to them for over a year. Despite these challenges, she maintained a close and loving relationship with her younger sister, who is 25 years old; she also shared a friendly bond with her eldest brother, a 27-year-old banker. However, whenever her sister received a marriage proposal, she became aggressive and refused to allow her to marry. She also expressed affection for her younger brother, a 20-year-old university student. The patient's strained relationships with her father and stepmother have created heightened tension in the overall home environment. Her organicity was ruled out. The trainee clinical psychologist received her referral to assess and manage her symptoms. Ethical considerations were ensured with confidentiality and obtaining informed consent from the attendants.

Assessment Measures

The Mini-Mental State Examination (MMSE; Folstein et al., 1975)

The patient was a 29-year-old, tall, slightly overweight lady who was walking sluggishly. She lacked personal hygiene. She exhibited a lethargic posture and was unable to make eye contact. She displayed a flat facial expression with irritability and was uncooperative with the interviewer. Observations revealed evidence of formal thought disorder and perceptual disorder. Her mood and affect were both subjectively and objectively low. She was disoriented in terms of time, place, and person. Her memory, both remote and recent, was impaired. The patient did not exhibit any obsessions, but she did display persecutory and grandiosity delusions, as well as visual and auditory hallucinations. There are no signs of suicidal ideation or attempt. The patient demonstrated cognitive deficiencies in areas such as time management, adaptation, decision making, attention span, focus, critical thinking, and unaware of her problems. The interpretation of mini-mental status evaluation indicated the severe cognitive impairment with a score of 9 out of 30.

Baseline Charts

The patient's presenting complaints are rated on a 0-10 rating scale, where 0 = no problem, 5=average problem and 10= severely problem. Pre- and post-ratings help determine the severity of symptoms and changes in presenting symptoms after therapy, thereby determining the effectiveness of CBTp interventions. Lists the patient's baseline charts for the presenting problems (see Table 1).

Brief Psychiatric Rating Scale (Overall & Gorham, 1962)

The pre-evaluation stage involved administering the Brief Psychiatric Rating Scale (BPRS) prior implementing the intervention

protocol to investigate the features of schizophrenia. The BPRS score was 83 that was revealing severe schizophrenic symptoms, as it lies within 70 to 85 score range. The patient was found to be extremely sick. The post-assessment showed decreasing in symptoms from scores 83 to 62. (see Table 2).

Symptom Checklist-R (Rahman et al., 2009)

The schizophrenia sub-scale on the Symptom Checklist-R shows a score of 28 above the cut-off (17), which means the person has schizophrenia. The post-assessment showed slightly improvement in symptoms from 28 to 21 (see Table 3).

Following the formal and informal assessments, according to the diagnostic criteria mentioned in DSM-5 TR, the patient was diagnosed with schizophrenia 295.90 (F20.9) Multiple episodes with acute phase.

Procedure

Case Conceptualization

This case study involves a 29-year-old unmarried woman who presented with symptoms of persecutory and grandiosity delusions, auditory and visual hallucinations, anger outbursts, anxiety, irritability, increased appetite, and excessive sleep. She was diagnosed with paranoid schizophrenia. The Stress-Vulnerability Model conceptualized the case; inherent vulnerabilities (family history of psychosis, prenatal & postnatal complications) and environmental stressors (mother's death, family conflicts, and educational failures) interact with cognitive distortions (jumping to the conclusion, selective attention, personalization, mind reading, dichotomous thinking, catastrophizing, emotional reasoning and, over generalization) and maladaptive coping mechanisms, leading to the development and maintenance of the patient's paranoid schizophrenia.

Figure 1: Idiosyncratic Case Conceptualization of Patient

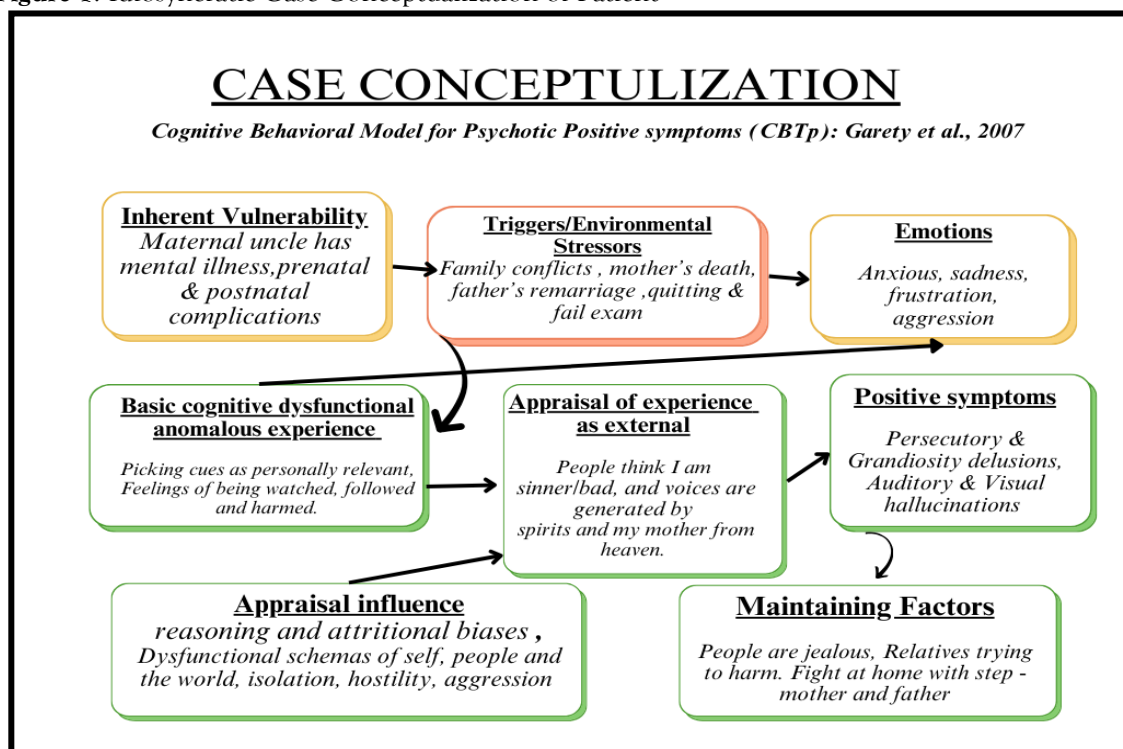


Table 1: Idiosyncratic Case Formulation of Patient

CASE FORMULATION				
Predisposing Factors		Precipitating Factors	Perpetuating Factors	Protective Factors
Hereditary Predisposition		Death of mother	Anxiety	Compliance
family history of psychosis, prenatal complications (such as her mother's infections during pregnancy) and postnatal factors (like delayed cry at birth)		conflicting relationships with father and stepmother, non-supportive family setting, social traumas like her mother's death, her father's remarriage, and conflicting relationships with her family,	lack of support and no expression of true feelings, family members dismiss her experiences, it triggers delusions of persecution, financial crisis, quitting and failing exam,	cooperation, motivation, good relationships with siblings
Existing Worries				
I am unsafe because they will throw me out. I am in danger because they are conspiring against me. I can't convey; They are not interested in me so no point to express anything, I will be left alone when my sister will get marry. They will harm me and my siblings.				
ABC Model for Dysfunctional Thoughts				
Activating Event (A)	Thoughts / Beliefs (B)	Feelings	Behaviors (C)	Somatic Symptoms
Fight with stepmother, argument with father, looking for sister proposal	I am worthless. I am going to lose my mind. They are conspiring against us.	anxious, scared, irritating, sadness, angry, distress, helplessness, suspiciousness	Isolation, excessive eating and sleeping, shyness, introvert, leave the room after argument, quiet, withdrawal, act aggressively, self-talk, staying alone in room and bed. (safety behaviors)	Palpitation, numbness, Gastrointestinal problems, lethargy, dizziness

Formulation of persecutory Delusions

Interpretation based on belief system and cognitive biases

Seeing a policeman in mall	He is behind me, parents hired him to arrest me.	Scared, anxious	Stop going out, angry with parents	Trembling, Stomachache, headache
----------------------------	--	-----------------	------------------------------------	----------------------------------

Formulation and maintaining of auditory and visual hallucinations

Sitting alone, Argument with stepmother, Voice and images of spirits and deceased mother ("Stab her, Policeman is going to arrest you.")	They are powerful and accurate, they are helping and saving me from danger.	Angry, scared, tension	Stop talking, hiding in room and bed,	Heart pounding, trembling, sweating
--	---	------------------------	---------------------------------------	-------------------------------------

Table 2: Evaluations of Negative Symptoms

Symptoms	Lack of expectation	Lack of Affect	Lack of acceptance	Cognitive Impairment
Flat affect	Showing emotions makes me inadequate.	I feel weird.	My facial expression looks odd.	I can't express my feelings.
Alogia	I can't communicate effectively	I am a boring person.	My voice seems stupid.	Talking effectively is hard for me.
Avolition	I can't be a successful person.	No use trying anything.	Better to not participate	Needs a lot of effort to express anything.

Table 3: Summary of CBTp Sessions and Therapeutic Techniques

Session # 1 <ul style="list-style-type: none"> Establishing Rapport Intake interview Baseline Charts Mini-mental status exam Psychoeducation/Normalizing Medicine Adherence Matrix Session summary & feedback 	Session # 2 <ul style="list-style-type: none"> Symptom Checklist- R administered Personal & sleep hygiene charts Contingency management/Token economy Session summary & feedback
Session # 3 <ul style="list-style-type: none"> Home-assignments reviewing Involving Family in counseling Anger management Session summary & feedback Home-assignments:Daily activity scheduling 	Session# 4 <ul style="list-style-type: none"> Home-assignments reviewing Brief Psychiatric Rating Scale administered CBTp socialization Session summary & feedback Home-assignments:Hallucinations & delusions diary
Session# 5 <ul style="list-style-type: none"> Home-assignments reviewing Deep breathing and progressive muscle relaxation Idiosyncratic case conceptualization Session summary & feedback 	Session #6 <ul style="list-style-type: none"> Set agenda hallucination's hierarchy ABC vicious circle of hallucinations Coping strategies Session summary & feedback Coping strategies
Session #7 <ul style="list-style-type: none"> Set agenda 	Session #8 <ul style="list-style-type: none"> Set agenda

<ul style="list-style-type: none"> • Home-assignments reviewing • Diverting techniques like listen loud music, ear plug • Evidence for and against for hallucinations by Triple column technique • Vertical decent, peripheral questioning, Socratic Questioning, guided discovery 	<ul style="list-style-type: none"> • Home-assignments reviewing • delusions 's hierarchy • delusions 's ABC model • downward arrow for delusions • Behavioral mini survey experiment challenging voices • Session summary & feedback
Session #9 <ul style="list-style-type: none"> • Set agenda • Home-assignment review of ABC delusions • Evidence for and against of delusions • Behavioral Experiment for challenging delusions • Session summary & feedback • Home-assignment: Mastery and pleasure 	Session #10 <ul style="list-style-type: none"> • Set agenda • Home-assignments reviewing • Mini-survey experiment for challenging delusions • Session summary & feedback
Session #11 <ul style="list-style-type: none"> • Set Agenda • Home-assignments reviewing • Social Skill strategies • Strategies for preventing relapse (Therapy Blueprint) • Session summary & feedback 	Session# 12 <ul style="list-style-type: none"> • Post-assessment • Mini mental status exam • Baseline Charts • Symptom Checklist -R administered • Brief Psychiatric Rating Scale administered

Analyses and Results

The therapeutic outcomes were assessed qualitatively and quantitatively through psychological tests, session notes, therapist observations, patient self-reports, and feedback from family members. The case demonstrates a gradual but noticeable improvement in the patient's symptoms.

Stress and Anger Management

During the middle phase of therapy (Sessions 7-11), the patient exhibited heightened irritability, especially when confronted with perceived threats or accusations from others (e.g., believing people were gossiping about her). Stress and anger management techniques were introduced, including deep breathing, guided imagery, and cognitive reframing. The patient was taught to recognize early signs of emotional escalation and use these strategies to calm herself.

Outcome: Over time, the patient reported fewer verbal outbursts at home and demonstrated increased emotional regulation when challenged. Her family confirmed that episodes of shouting and pacing had significantly reduced by Session 16.

Social Skills Training

Due to social withdrawal and flat affect, the patient had limited interactions with anyone outside her immediate family. Social skills

training began in the 5th session and included role-playing exercises, practicing eye contact, initiating small talk, and maintaining appropriate tone and posture.

Outcome: By Session 16, the patient began sitting with extended family members during meals and started greeting guests, previously avoided this activity due to paranoia. The therapist and family observed improved confidence and willingness to engage socially.

Distraction and Coping Strategies

To manage auditory hallucinations, the therapist introduced a coping toolkit that included distraction techniques (e.g., prayers, listening to Quranic recitations, humming, writing poetry), thought-challenging worksheets, and voice diaries.

Outcome: The patient began tracking the frequency and intensity of voices. She reported that the voices remained, but their emotional intensity and the sense of control they had over her significantly reduced. She developed a personal mantra she would repeat during hallucination episodes, which she found calming.

Family Counseling

Her stepmother, father, aunt, and younger sister were involved in four dedicated family counseling sessions from session 3 to onward, conducted in the hospital and occasionally via

phone. They were psycho-educated about medical model of illness to modify their supernatural beliefs about jin and evil eye.

Topics addressed in family sessions:

- Psychoeducation about schizophrenia and relapse prevention.
- Communication training to reduce critical or intrusive remarks.
- Setting realistic expectations and avoiding "over-parenting."
- Encouraging autonomy, such as allowing the patient to make minor decisions and

engage in household activities.

Outcome: The family became more cooperative and supportive. Expressed emotion within the household was reduced, and the patient's compliance with therapy and medication improved as the home environment became less critical and more structured.

The study was conducted in three phases: baseline, intervention, and post-intervention. The pre- and post-assessments were done before and after managing patient complaints. The following tables present the comparisons between pre- and post-treatment.

Table 4: Comparison of Pre-and Post-level Ratings of Patient's complaints on the Baseline Charts

Presenting Complaints	Pre-Treatment Rating			Post- Treatment Ratings		
	Intensity	Duration	Anxiety	Intensity	Duration	Anxiety
Hearing voices	9	5 times/day	10	7	4 times daily	8
Seeing Images	9	4 times/day	10	8	3 times daily	8
Suspicious ness	9	8 times /day	10	8	6 times daily	7
Aggression	9	5times/day	10	7	thrice daily	8
Excessive sleep	8	18hour/day	8	6	9 hours/day	6
Increased appetite	7	7 meals/day	9	6	4 meals/day	7
Irritability	9	8 times/day	8	7	5 times daily	7
Social withdrawal	9	20hours/day	10	8	10hours/day	8
Average	8.6		9.3	7.1		7.3

Note: 0 =No Problem; 5 = Average Problem; 10 = Severe Problem

Table 5: Comparison of Pre and Post Treatment scores of the Patient on the Brief Psychiatric Rating Scale (BPRS)

Scales	Pre-treatment Score	Post-treatment Score
Somatic Concerns	3	2
Anxiety	3	2
Emotional Withdrawal	3	2
Conceptual Disorganization	5	4
Guilt Feelings	3	2
Tension	4	3
Mannerism and Posturing	5	4
Grandiosity	4	3
Depressive Mood	2	1
Hostility	5	4
Suspiciousness	7	6
Hallucinatory Behavior	6	5
Motor Retardation	3	2
Uncooperativeness	5	3
Unusual Thought Content	6	5
Blunted Affect	4	3
Excitement	6	5
Disorientation	7	5
Elevated Mood	2	1
Total Scores	83	62

Figure 2: Graphical Representation of Pre and Post Treatment of Brief Psychiatric Rating Scale (BPRS)

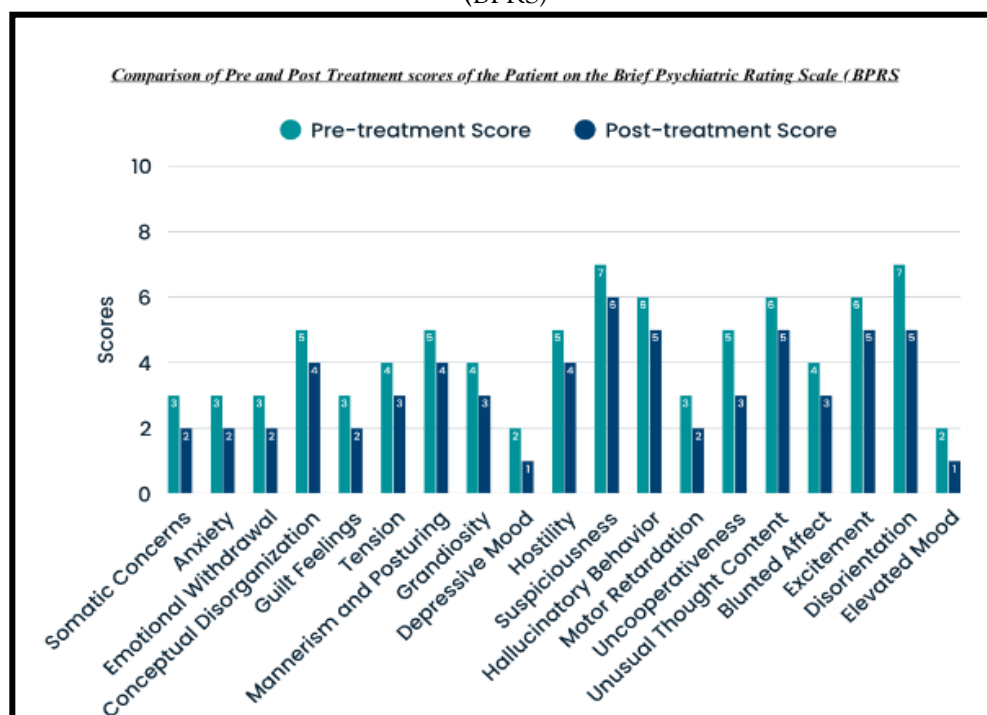


Table 6: Comparison of Pre- and Post Treatment Scores of the Patient on the Symptom Checklist-R

Levels	Schizophrenia	Cut off
Pre-Treatment Score	28	17
Post-Treatment Score	21	17

Table 7: Record of Patient's "Evidence For and Evidence Against"

Situations	Delusions /Voice content /Core beliefs	Mood %	Evidence For	Evidence Against	Alternative or balanced thoughts	Mood %
sitting alone when sister's proposal came, After fighting with stepmother, hearing voice	I am helpless, I cannot protect my sister" "People are trying to hurt me." "People aren't trust-worthy". "I am in danger". "I am unsafe." "I am weak." "Parents hired people to harm me."	Scared, angry, distress, anxious, Suspicious, irritated	My father and stepmother argue with me that they want to get rid of us, so they are planning to send us out from this home one by one. They want to live here alone. They hate us.	When I try to talk to my parents, most of the time they talk to me politely. Policeman was on duty not behind me.	I will see her after marriage. She will come occasionally to see me after marriage. "Not everyone is threat, I can find safe people."	Sad,
	"Don't worry. You are not alone. I come to see you here daily." "Stab stepmother" "Policeman is going to arrest you." (voice of deceased mother and spirits)	80%				40%

Table 8: Behavioral Experiments in CBTp by Patient

Target Thoughts	Alternative Thoughts	Experiment	Results	Conclusion
Paranoid Ideation: My father and stepmother want to kill me.	No one can harm me.	Go out to the shop and meet to father and stepmother.	No one trying to hurt me	My parents and people from outside were nice to me. People are not dangerous. Now, I am less depressed.
External Forces: The voices that I am hearing coming from spirits and my deceased mother.	The voices are my thoughts and coming from inside of me.	Stay in a closed room without any signals to see still voices coming.	If they are still there then I believe that they are only my thoughts	These voices are my thoughts and making me anxious, I should distract from them because they are meaningless.
Somatic Problems: There is something wrong with my stomach.	There is nothing wrong with my stomach. My symptoms do not fit with stomach disease.	Read about the digestive system to understand its function through the internet.	If I feel something wrong with my stomach, it doesn't mean it is fact.	There is nothing wrong with my stomach so I should stop hot compresses to protect it and stop taking unnecessary medication.
Ideas of persecution: My stepmother sent the police to attack me. The police are watching me to arrest.	The police are not interested in me. They are not watching me.	Meet to police and ask questions regarding my concerns	I am just afraid rather police are nice.	There is no one to behind me and conspires against me. The reason of hearing voices needs to look further. They are from inside me.

Discussion

This case study illustrates the effectiveness of Cognitive Behavioral Therapy for Psychosis (CBTp) in addressing both positive and negative symptoms of paranoid schizophrenia. Through structured interventions such as cognitive restructuring, reality testing, and behavioral activation, etc; the patient showed moderate improvements in delusions, hallucinations, and social withdrawal. These results corroborate previous research highlighting CBTp's efficacy (Jauhar et al., 2019; Husain et al., 2017; Degnan et al., 2017). The therapy specifically addressed the patient's persecutory delusions and cognitive biases, such as selective attention and premature inferences, that were perpetuating her symptoms. Approaches such as Socratic questioning and evidence seeking helped reduce her suspiciousness and challenge faulty beliefs. Additionally, the therapy targeted safety behaviors like isolation and hypervigilance that reinforced her paranoia (Beck et al., 2005). As symptoms improved, the patient also regained functional abilities and emotional resilience.

The case also underscored important psychosocial risk factors, including low socioeconomic status, early traumas, and high family expressed emotions, which likely

contributed to the onset and persistence of her illness (Kring et al., 2013; Comer, 2013). Cultural adaptation was a key strength, with the use of religious metaphors, family involvement, and familiar coping strategies like Quranic recitation enhancing engagement and compliance. This finding reflects the importance of aligning psychotherapy with cultural and familial contexts, especially in collectivist societies like Pakistan (Naeem et al., 2015).

Nonetheless, the study encountered limitations such as the patient's initial mistrust, logistical barriers, and family dynamics that disrupted therapy. The single-case design also restrict the generalizability of findings.

Clinically, this case reinforces the value of culturally tailored CBTp, active family involvement, and matching specific techniques to symptom profiles. Effective strategies included distraction for hallucinations, cognitive restructuring for delusions, and behavioral activation for negative symptoms.

In conclusion, CBTp proved to be a feasible and effective intervention in this case, offering symptoms relief and psychosocial benefits despite resource constraints. Future research should include larger samples, different standardized tools, and long-term follow-up to

strengthen the evidence base for CBTp in low-resource settings.

REFERENCES

- American Psychiatric Association. (2000). Diagnostic and Statistical Manual of Mental Disorders. Text revision.
- Ayub, A. (2021). Jinn possession, black magic, or mental illness: the impact of demographic factors & religion on people's perceptions. I am currently working on an unpublished undergraduate project. Institute of Business Administration, Pakistan. <https://ir.iba.edu.pk/sslace/76>.
- Batinic, B. (2019). In 2019, Batinic published a paper titled "Cognitive models of positive and negative symptoms of schizophrenia and implications for treatment." *Psychiatria Danubina*, 31(suppl 2), 181-184.
- Bebbington, P. E. (2018). Sexual abuse and psychosis: the security of research findings. *Schizophrenia Research*, 201, 37-38.
- Beck, J. S. (2020). Cognitive behavior therapy: Basics and beyond. Guilford Publications.
- Beck, A. T., & Rector, N. A. (2005). Cognitive approaches to schizophrenia: theory and therapy. *Annu. Rev. Clin. Psychol.*, 1(1), 577-606.
- Buck, J. N., & Hammer, E. F. (Eds.). (1969). *Advances in House-Tree-Person techniques: Variations and applications*. Los Angeles: Western Psychological Services.
- Burgess-Barr, S., Nicholas, E., Venus, B., Singh, N., Nethercott, A., Taylor, G., & Jacobsen, P. (2023). International rates of receipt of psychological therapy for psychosis and schizophrenia: systematic review and meta-analysis. *International Journal of Mental Health Systems*, 17(1), 8.
- Combs, D. R., Rose III, D. W., & Basso, M. R. (2022). Schizophrenia Spectrum and Other Psychotic Disorders: Second Wave Case Conceptualization. In *Behavior Therapy: First, Second, and Third Waves* (pp. 487-504). Cham: Springer International Publishing.
- Comer, R.J. (2013). *Fundamentals of Abnormal Psychology*. Worth Publishers.
- Degnan, A., Baker, S., Edge, D., Nottidge, W., Noke, M., Press, C. J., ... & Drake, R. J. (2018). The nature and efficacy of culturally adapted psychosocial interventions for schizophrenia: a systematic review and meta-analysis. *Psychological Medicine*, 48(5), 714-727.
- Fatima, W., Riaz, S., Shahzad, M. A., Naz, Z., Mahmood, S., & Hasnain, S. (2020). Chromosomal region 1q24.1 is associated with an increased risk of schizophrenia in the Pakistani population. *Gene*, 734, 144390.
- Folstein, M. F., Folstein, S. E., & McHugh, P. R. (1975). Mini-mental state examination (MMSE) [database record]. The PsycTESTS dataset is available at doi.
- Husain, M. O., Chaudhry, I. B., Mehmood, N., Rehman, R. U., Kazmi, A., Hamirani, M., ... & Husain, N. (2017). The study conducted a pilot randomized controlled trial of culturally adapted cognitive behavior therapy for psychosis (CaCBTp) in Pakistan. The article was published in BMC health services research, volume 17, pages 1-8.
- Jauhar, S., McKenna, P. J., Radua, J., Fung, E., Salvador, R., & Laws, K. R. (2014). Cognitive-behavioral therapy for the symptoms of schizophrenia: systematic review and meta-analysis with examination of potential bias. *The British Journal of Psychiatry*, 204(1), 20-29.
- Jauhar, S., Laws, K. R., & McKenna, P. J. (2019). CBT for schizophrenia: a critical viewpoint. *Psychological Medicine*, 49(8), 1233-1236.
- Jones, P. B. (2013). The study focused on adult mental health disorders and their age at onset. *The British Journal of Psychiatry*, 202(s54), s5-s10.
- Kart, A., Özdel, K., & Türkçapar, M. H. (2021). Şizofreni tedavisinde bilişsel davranışçı terapi. *Nöropsikiatri Arşivi*, 58, 61-65.

- Kopelovich, S. L., Nutting, E., Blank, J., Buckland, H. T., & Spigner, C. (2022). Preliminary point prevalence of Cognitive Behavioral Therapy for psychosis (CBTp) training in the US and Canada. *Psychosis*, 14(4), 344-354.
- Kring, A. M., & Elis, O. (2013). Emotion deficits in people with schizophrenia. Annual review of clinical psychology, 9(1), 409-433.
- Landa, Y. (2017). Cognitive behavioral therapy for psychosis (CBTp): An introductory manual for clinicians. Ment. Illn. Res. Educ. Clin. Cent.
- Lieberman, J. A., Stroup, T. S., McEvoy, J. P., Swartz, M. S., Rosenheck, R. A., Perkins, D. O., ... & Hsiao, J. K. (2005). The study examined the effectiveness of antipsychotic drugs in patients with chronic schizophrenia. *New England Journal of Medicine*, 353(12), 1209-1223.
- Mari, J. D. J., Razzouk, D., Thara, R., Eaton, J., & Thornicroft, G. (2009). The study focused on packages of care for schizophrenia in low- and middle-income countries. The article was published in *PLoS Medicine*, 6(10), e1000165.
- Manser, R., & Johns, L. (2023). Cognitive Behavioral Therapy for Psychosis. In *Psychological Interventions for Psychosis: Towards a Paradigm Shift* (pp. 171-190). Cham: Springer International Publishing.
- Möller, H. J., & Czobor, P. (2015). The study focused on the pharmacological treatment of negative symptoms in schizophrenia. *European Archives of Psychiatry and Clinical Neuroscience*, 265, 567-578.
- Naeem, F., Saeed, S., Irfan, M., Kiran, T., Mehmood, N., Gul, M., ... & Kingdon, D. (2015). Brief culturally adapted CBT for psychosis (CaCBTp): a randomized controlled trial from a low-income country. The study was published in *Schizophrenia Research*, volume 164, issue 1, pages 143-148.
- Overall, J. E., & Gorham, D. R. (1962). The brief psychiatric rating scale. *Psychological Reports*, 10(3), 799-812.
- Rahman, N. K., Dawood, S., Rehman, N., Mansoor, W., & Ali, S. (2009). They conducted a standardization of the Symptom Checklist-R on a psychiatric and nonpsychiatric sample from Lahore city. *Pakistan Journal of Clinical Psychology*, 8(2), 21-32.
- Roohee, A., & Sunbal, M. (2023). Gender differences: Paranormal beliefs and maladaptive \ emotional schemas. *Journal of Arts & Social Sciences*, 10(1), 17-27.
- Roohee, A., Sunbal, M., & Ahmad, S. M. (2023). PARANORMAL BELIEFS AS PREDICTORS OF MALADAPTIVE EMOTIONAL SCHEMAS IN YOUNG ADULTS WITH FUNCTIONAL NEUROLOGICAL SYMPTOM DISORDER. *Pakistan Journal of Social Research*, 5(02), 62-76.
- Ross, C. A., & Joshi, S. (1992). The study focused on paranormal experiences within the general population. *The Journal of Nervous and Mental Disease*, 180(6), 357-361.
- Sauve, G., Lavigne, K. M., Pochiet, G., Brodeur, M. B., & Lepage, M. (2020). The Efficacy of Psychological Interventions Targeting Cognitive Biases in Schizophrenia: A Systematic Review and Meta-Analysis. *Clinical Psychology Review*, 78, 101854.
- Solmi, M., Radua, J., Olivola, M., Croce, E., Soardo, L., Salazar de Pablo, G., ... & Fusar-Poli, P. (2022). Age at onset of mental disorders worldwide: a large-scale meta-analysis of 192 epidemiological studies. The study was published in the journal *Molecular Psychiatry*, volume 27, issue 1, on pages 281-295.

- Todorovic, A., Lal, S., Dark, F., De Monte, V., Kisely, S., & Siskind, D. (2023). CBTp for people with treatment-refractory schizophrenia on clozapine: a systematic review and meta-analysis. *Journal of Mental Health*, 32(1), 321-328.
- World Health Organization. (2018, February). International Classification of Diseases for Mortality and Morbidity Statistics (11th Revision).
- Mathers, C. (2008). The global burden of disease: 2004 update. World Health Organization.
- Wykes, T., Steel, C., Everitt, B., & Tarrier, N. (2008). Cognitive behavior therapy for schizophrenia: effect sizes, clinical models, and methodological rigor. *Schizophrenia Bulletin*, 34(3), 523-537.
- Zubin, J., & Spring, B. (1977). Vulnerability: A new view of schizophrenia. *Journal of Abnormal Psychology*, 86(2), 103.
- Züchner, S., Roberts, S. T., Speer, M. C., & Beckham, J. C. (2007). Update on psychiatric genetics. *Genetics in Medicine*, 9(6), 332-340.

