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Cognitive Behavior Therapy for Patients with Schizotypal Disorder in an Indian Setting: A Retrospective Review of Clinical Data

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Abstract

Background: Schizotypal Disorder is a long standing disorder which has largely been neglected in research till recent years. This study aims to provide the clinical reality of using CBT with this population at a specialized CBT clinic in a tertiary psychiatric hospital in India.
Method: The clinical records of CBT with 22 patients were reviewed and descriptive statistics were used to analyze the data obtained.
Results: The mean age of the sample was 29.81 years and 20 (91%) were males. Sixteen of them (73%) were treated as inpatients and 12 (54%) out of 22 of had dropped out of therapy. The most common co-morbidities were that of OCD and Social Phobia. The commonly used techniques across the patients were social skills training, behavioral activation, problem-solving training, cognitive restructuring and relaxation training. Family relationship problems continued to be a concern for 68% of them at the end of therapy. The major challenges were that of poor home-work compliance, reluctance to reveal information, and lack of 'motivation'.
Conclusion: The findings highlight the importance of individualized treatments rather than following structured protocols and the need to develop shorter, yet intensive models of therapy integrating family intervention with CBT in a developing country like India (German J Psychiatry 2013; 16(2): 68-74).

Keywords: Schizotypal personality disorder, cognitive behavior therapy, clinical practice patterns, treatment protocols, retrospective study

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Introduction

Schizotypal disorder is a long-standing disorder which can have debilitating social and occupational consequences (Thaker et al., 2001). There have been several issues concerning Schizotypal Disorder, beginning with what constitutes the disorder, where its place in the overall categorization of psychiatric disorders is and what is the optimal treatment. Prognosis for the disorder has been poor (Skodol et al., 2005). Despite all this, the disorder has received very little research attention till recent years (Raine et al., 1995).

Schizotypal Disorder was first described in DSM-III (American Psychiatric Association, 2000) where it was classified along with other personality disorders (which is true even in DSM-IV). In ICD-10 (World Health Organization, 1993), the disorder was re-categorized along with schizophrenia in consideration of its resemblance to schizophrenia. ICD-10 defines Schizotypal Disorder as characterized by eccentric behavior and anomalies of thinking and affect which resemble those seen in schizophrenia. The common disturbances include inappropriate or constricted affect, odd beliefs or magical thinking, odd/eccentric behavior, circumstantial/vague/metaphorical thinking and speech, poor rapport and paranoid ideas, obsessive ruminations, quasi-psychotic episodes and perceptual disturbances like depersonalization. ICD-10 specifies that though the symptoms resemble schizophrenia, the individual must never have met the criteria for schizophrenia itself (WHO, 2002). Unlike schizophrenia, the

psychotic experiences in these patients are transient. Schizotypal personality is differentiated from schizoid or avoidant personality based on the presence of oddities in thinking and behavior and perhaps, by a clear family history of schizophrenia (Sadock & Sadock, 2007)

A national study in the U.S. estimated the lifetime prevalence rate of Schizotypal Disorder at 3.9% (Pulay et al., 2009). Epidemiological data regarding the disorder from India is unavailable due to lack of studies. Studies have pointed toward a genetic link of Schizotypal Disorder with schizophrenia (Hans et al., 2009). Family history of schizophrenia is common in patients with Schizotypal Disorder (Siever et al., 2004) and similarly, presence of Schizotypal Disorder is a risk factor for developing schizophrenia (Bedwell et al., 2005). Twin studies support the genetic heritability (heritability estimate =.29) of Schizotypal Disorder (Torgersen et al., 2000).

Research from a biological perspective has suggested various neurobiological factors involved such as reduced temporal lobe volume, reduced frontal activation, abnormalities in thalamic nuclei, reduced dopaminergic sub cortical activity and impairments in working memory, verbal learning and attention (Siever et al., 2002). Psychopharmacological agents are utilized for quasi-psychotic experiences and for depressive features, if any. Randomized double-blind studies have supported the use of low-dose of risperidone (Koenigsberg et al., 2003), thiothixene (Goldberg et al.,1986), in reducing symptom severity, guanfacine (McClure et al., 2007) in enhancing context processing abilities, and pergolide (McClure et al., 2010) in enhancing neuropsychological performance Open label studies have supported the use of olanzapine (Keshavan et al., 2004), haloperidol (Hymowitz et al., 1986), and fluoxetine (Markovitz et al., 1991) but the evidence is not strong.

Though psychotherapy is most often preferred for this disorder, there is not much of information or clarity regarding this and the success of these therapeutic approaches has not been satisfactory (Perry et al, 1999). Out of the psychotherapy approaches available, Cognitive Behavior Therapy is the most studied, as is the case in other psychiatric conditions. Cognitive behavioral approaches have focused on the role of schema and other cognitions in the development of the disorder. Beck et al., (2004) have postulated some specific beliefs in patients with Schizotypal Disorder – the major ones revolve around the ideas of being 'unique', the world being dangerous, and relationships as threatening and self being defective. Cognitive approaches aim to alter the information processing styles and basic dysfunctional beliefs. At present, there are no controlled studies available for Cognitive Behavior Therapy with this population (Matusiewicz et al., 2010). Group therapy and therapeutic community approaches have also been suggested (Williams et al., 2005). Marital and family therapy are recommended when there are interpersonal conflicts with spouse or other family members. Psychodynamic therapy is not generally indicated in this disorder and can be useful to reach only a small group of patients, if ever used (Gabbard, 2009).

The relative success of psychological therapies for this disorder is unknown and non-researched. The Cognitive behavioral approaches seem to have gained more research support than any other model, as is the case with other disorders in general. Schema therapy which aims at restructuring of the basic world-view of the person has been utilized under the general rubric of cognitive behavioral approaches. Social skills training is another frequently used treatment procedure with this group of patients. A combination of psychotherapy and medication is believed to be most useful (Beck et al., 2004; Liebowitz et al., 1986; Stone et al., 1992; Nordentoft et al., 2006).

The manual by Beck et al. (2004) is the most popular for treatment of individuals with personality disorders from a CBT perspective. These authors recommend the use of a combination of cognitive, affective and behavioral techniques. Cognitive techniques aim at modification of automatic thoughts, schema/beliefs and decision-making and problem solving skills. Modification of basic schema/or beliefs such as "I have special talents" is deemed important considering the chronicity of the disorder.

Schema restructuring (a complete restructuring of schema), schema modification (smaller changes in the schema to increase adaptability and functionality of them) and schematic re-interpretation (re-interpretation of schemas in more functional ways) are three techniques recommended by Beck et al. (2004) for dealing with schema. They recommend the use of "schema diaries" to achieve this end. These diaries are used to modify/alter the person's beliefs based on daily events. Standard cognitive restructuring techniques such as guided discovery, scaling, decatastrophizing, reattribution etc. are also being suggested. The manual also describes behavioral techniques such as activity scheduling, role-plays, relaxation training and in-vivo exposure. Experiential techniques such as imagery techniques and "reliving" childhood experiences have also been recommended.

Therapy with patients having Schizotypal Disorder is difficult and challenging. One of the most important difficulties reported is lack of trust in therapist which makes establishment of rapport extremely difficult. This is said to be inherent to the disorder (Linigiard et al., 2005). Part of the difficulty is also due to clients' discomfort in discussing personal issues (Millon et al., 2007). The patients with Schizotypal Disorder are least likely to present themselves for therapy (Gabbard et al., 2012). Most often they are brought by the family members and even after the therapy they find it difficult to generalize what they had learnt in therapy settings (Stone, 1989).

In the background of lack of literature on therapy with Schizotypal Disorder, the intricacies of doing therapy is largely lacking. Thus, the current study aims to look at the clinical reality of providing CBT in patients diagnosed with Schizotypal Disorder in the Indian setting.

Methods and Subjects

Data for the present review was drawn from the clinical records maintained at the Behavioral Medicine Unit (BMU), Department of Clinical Psychology at National Institute of Mental Health and Neurosciences (NIMHANS), Bangalore,

India. The BMU is a referral unit which specializes in the application of cognitive behavior therapy to individuals with various mental health issues. The unit trains students from various mental health disciplines and the therapy sessions conducted by trainees are supervised intensively through individualized supervision, clinical case conferences, seminars, and group discussions.

For the current study, the clinical case records were reviewed and coded by the first author (ASKP) who is a trained clinical psychologist. This was reviewed again and checked for reliability by the second author (MM) who is a trained clinical psychologist and therapy supervisor at the unit with 15 years of experience. All case records from the years 2005 to 2012 were reviewed. All cases of Schizotypal Disorder (according to ICD-10) with or without co-morbidity were included to ensure clinical representativeness of the data collected. A total of 22 files were taken up for analysis. The therapy was carried out by trainee therapists under the supervision of MM, PMS and MPS (second, third and fourth authors).

Statistical Analysis

Descriptive statistics (Mean, standard deviation and range) were used to describe and analyze the data obtained. The socio-demographic and clinical details, interventions employed difficulties in therapy and outcomes are described in the following section.

Results

Sociodemographic and clinical details

The socio demographic and clinical details are shown in Table 1. The mean age was 29.81 (SD 7.04) (Range = 17 to 42 years). Out of the 22 patients, only two were females. 12 of them were from urban background. About half of them had professional degrees and same percentage was employed. Majority of them (73%) were treated during their admission in the hospital. The mean duration of inpatient stay was 22.69 days. The mean number of sessions was 5.05 sessions per week. For the outpatient group, the mean number of sessions was 4.43 sessions per month. The mean number of total sessions was 14.23 (SD 7.33) for both the groups. Twelve patients (54%) dropped out of therapy. All of the patients who received therapy on an outpatient basis had dropped out while for 6 patients from the inpatient group, therapy had to be terminated prematurely since the patient wanted to do so.

The most common co-morbidity was obsessive compulsive disorder (50%), followed by social anxiety (15%). The assessments were done mainly using behavioral analysis and clinical interview. Five out of 22 patients had a family history of Psychotic disorders (Schizophrenia/Schizotypal Disorder/Psychosis NOS). Three of them had a family history of Obsessive Compulsive Personality Disorder.

Table 1: Sociodemographic details (N=22)

Mean age in years (SD)	29.81 (7.04)
Range	17–42
Employment Status	
Employed	8 (36%)
Unemployed	9 (41%)
Students	5 (23%)
Education	
Mean (SD)	17.45 (1.49)
Professional	9 (41%)
Master	3 (14%)
Bachelor	7 (32%)
High school	3 (14%)
Locus of Treatment	
Inpatient	16 (73%)
Outpatient	6 (27%)
Mean duration inpatient stay (days)	22.69
Drop-put/premature termination	12 (54%)
Marital status	
Married	5 (23%)
Unmarried	17 (77%)
Number of sessions	
Mean (SD)	14.23 (7.33)
Range	5–35

SD, standard deviation

With respect to the common presenting complaints, difficulties in relationship with family members was most common presenting complaint, followed by fear of negative evaluation, perfectionism and low self-esteem (50% each). The other problems included excessive anger, beliefs of being unique, ruminative thinking, problems at workplace and marital discord.

The specific problem domains as reported by parents or spouses are as follows: 16 out of 22 cited lack of emotional expression (68%); lack of socially appropriate interactions and skills in 14 of these patients (64%); lack of motivation in studies and work in 9 of them (40%).

Interventions Used

The specific interventions utilized to treat these patients are summarized in Table 3. Behavioral activation, social skills training, cognitive restructuring, problem-solving training

Table 2: Clinical issues identified (N=22)

Issue identified	n	%
Fear of negative evaluation	11	50
Associated obsessions or ruminations	10	45
Perfectionism	11	50
Low self – esteem	11	50
Beliefs about being 'unique'	8	36
Relationship problems with family members	16	73
Excessive anger	10	45
Problems related to employment	7	32
Marital discord	5	23

Table 3: Interventions used (N = 22)

Interventions	n	%
Social skills training	13	59
Relaxation	11	50
Jacobson's Progressive Muscular Relaxation (JPMR)	3	14
Deep Breathing	4	18
Biofeedback	2	9
Applied Relaxation	2	9
Behavioral Activation	13	59
Problem Solving	11	50
Cognitive Restructuring	11	50
Anger management	10	45
Exposure to social situations	7	35

and relaxation were the major strategies used. Social Skills included the use of role-plays, training in interpersonal effectiveness, expressions of emotions and communication skills. Problem-solving training was applied largely to future goals and career related concerns. Cognitive restructuring focused largely on fear of negative evaluation and low self-esteem. Other beliefs targeted were that of one being 'unique' and perfectionism. Clinicians utilized exposure as a technique with the patients who reported fear of negative evaluation and/or social anxiety. These patients were provided with relaxation training if high physiological arousal was reported.

As for concomitant pharmacotherapy, the details of medicines taken by 14 of the patients are summarized in table 4. Two of them were not on any medication and the details of the remaining six were unavailable.

Outcome

The outcomes were assessed through subjective reports of the patients and their family members, and clinical observations that emerged from supervisory discussions. Twelve patients (55%) reported an improvement in interpersonal skills and effectiveness while seven patients (32%) reported improvements in obsessive–compulsive symptoms, and four (18%) reported improvements in social anxiety. The major complaint that remained even at termination of therapy was that of relationship difficulties with parent/spouse which was noted in 15 clients (68%). In 17 (77%) of the cases, clinician had observed improvement in 'flexibility' in the beliefs/schema maintained by the patients. Out of the 22 patients, only four had reported for follow-up which was approximately two months from termination of therapy. Three patients were referred for further management and follow-up with clinical psychologists at primary levels of care and the remaining were lost to follow-up.

Table 4: Details of pharmacotherapy

Drug Class	n	Mean Duration (years)
Only antipsychotics (risperidone)	4	3
Only antidepressants (escitalopram, sertraline, venlafaxine)	4	3.75
Only anxiolytics (clonazepam)	1	2
Combination therapy		
Antipsychotics + antidepressants	3	1.67
Mood stabilizers + Antipsychotics	2	5

Difficulties in therapy

The major difficulty that clinicians faced was that of poor compliance to homework. Nine (41%) out of the 22 patients were reported to be poor in homework compliance. The patient being reluctant to disclose personal information was another major barrier reported in as much as eight (36%) of them. Eight (36%) of these patients were not motivated to participate in the therapy as observed by the therapists. Seven of them (32%) came for therapy on the insistence of parents/spouse. Emotional blunting or appearing aloof/preoccupied was observed in six of the patients (27%) making discussions difficult during the therapy sessions.

Discussion

The findings of this review highlight the clinical reality of psychotherapy for patients with Schizotypal Disorder conducted at a tertiary mental health center. With respect to the demographic details, the findings of the current study are in line with the existing literature which indicates that more males are likely to be diagnosed with the disorder (Kremen et al., 1998; Mata et al., 2005; Pulay et al., 2009).

Significant deficits in interpersonal and cognitive skills, are likely to have led to a large number of the sample being unemployed. A majority of those who were employed had interpersonal difficulties at workplace. Occupational dysfunction has already been reported to be a major handicap for these patients (Skodol et al., 2002).

As far as the locus of treatment is concerned, sixteen (73%) of them were treated on an inpatient basis. Bender et al. (2001) also report relatively greater number of psychiatric hospitalizations in this group although this is not as high as in patients with Borderline Personality Disorder. There are indications in the literature that patients with personality disorder are likely to benefit from intensive inpatient treatment (Gabbard et al., 2000; Bartak et al., 2011). In the current study, the fact that most of these patients were under inpatient care could be arising from the practical issues of a mental health care setting in a developing country. Since the NIMHANS being a tertiary center, the patients are referred for treatment from different parts of the country. The relative non-availability/non-accessibility of trained professionals in their respective places makes it necessary to consider admission in the hospital for therapy. The reason for majority of the patients being lost to follow-up could be the same.

The most common co-morbidities were OCD and social phobia which is line with the existing research (Pulay et al., 2009). However, co-morbidity of major depressive disorder reported frequently in the literature (Siever et al., 1991) was

not found in the current sample. However, depression was not measured using any assessment tool. Fear of negative evaluation, low self-esteem, oddities in thinking/beliefs, beliefs about one being 'unique' and distress related to ruminations/obsessions are typical cognitions in this group (Beck et al., 2004). In these patients, perfectionism was found to be a major dysfunctional schema. The study by Sherry et al. (2007) also suggested a link between perfectionism (in the form of non-disclosure of imperfection) and Cluster 'A' personality disorders. However, there are no other studies which have reported a direct association of perfectionism with schizotypal pathology.

A large majority of them had relationship difficulties with their parents. This, again, may have cultural implications – India being a collectivistic culture and parents being involved with their children's lives even through adulthood. This has to be read together with the fact that at least seven (32%) of them came for therapy on the insistence of their parents/spouse. All the five married patients reported marital discord, which is understandable given their skill deficits in interpersonal realm. Lack of emotional expression (68%) and lack of socially appropriate interactions and skills (64%) were the major concerns for parents/spouse.

With regard to the interventions used, social skills training was the most common intervention used and this is in keeping with the literature (Dixon-Gordon et al., 2011). Behavioral activation has traditionally been utilized with patients who are depressed (Jacobson et al., 2001). However, therapists utilized behavioral activation through activity scheduling to help the patients regularize their routine and decrease inactivity. This was reported to be useful for improving the overall motivation of the patient as well. The findings of present study suggest the usefulness of relaxation training especially in the context of symptoms of social anxiety and hyper arousal. Exposure to anxiety provoking situations and problem solving were found to be clinically useful by the therapists in the management of Schizotypal Disorder in this study.

Cognitive restructuring focused predominantly on fear of negative evaluation, low self-esteem, beliefs about being 'unique' and perfectionism. This is in line with the recommendations by Beck et al. (2004). However, it is important to note that the therapists reported difficulty in directly focusing on the odd beliefs that are characteristic of Schizotypal Disorder. The therapists thus had to focus the restructuring largely on the present concerns which are readily acknowledged by the patients such as the fear of negative evaluation etc.

The outcome noted in the present review suggests that a majority of the patients reported an improvement in areas of social skills and interpersonal effectiveness. This is not surprising since this was one of the explicit aims of therapy and social skills training formed an important strategy used. The patients who had co-morbid social anxiety and obsessive-compulsive symptoms also reported improvements in these domains. Therapists observed a decrease in the rigidity or conviction in the beliefs/schema held by patients in as much as 17 (77%) of them. This roughly parallels 'schema modification' and not a complete 'restructuring' of the schema (Beck et al., 2004). However, standardized assessment tools were not used post therapy and this remains a major handicap in objectifying the results. The patients' subjective reports were also not available.

Poor homework compliance was the biggest difficulty faced by the therapists. Millon et al. (2007) suggest that difficulties in disclosing personal information is an inherent feature in the disorder, which makes it difficult to generate discussions. This is also observed in the present study. Eight (36%) of the patients were reluctant or did not seem motivated to participate in the therapeutic process. Therapists described these patients as 'resistant' and reported that they were not ready to put in personal efforts to bring about changes in the target problems. Existing literature does not allow us to draw any definite conclusion, especially in the context of Schizotypal Disorder. Though there have been discussions about the role of 'resistance' in therapy for individuals with personality disorders in general (Strand et al., 1997; Green et al., 2004). Six (27%) of the patients were reported to be preoccupied in the sessions, making the discussions difficult. This could be due to the ruminations/obsessions reported by these patients. However, a definite conclusion cannot be drawn without further investigation.

Limitations

It cannot be overemphasized that this study is only a preliminary uncontrolled, retrospective study and the findings cannot be overgeneralized. The sample was not homogeneous in terms of age, education or employment status. The sample had more number of males which may be due to the nature of the disorder itself. The outcomes were not assessed using any standardized measures and were based on the subjective reports of the patients. Also, there are only reports of 'over-all improvement' and it is difficult to attribute the improvements to CBT only. However, the aim of this study is to highlight the realities of clinical practice of CBT for Schizotypal Disorder at a tertiary mental health centre than to demonstrate the effectiveness of the therapy.

Since NIMHANS is a tertiary center, it is possible that the cases seen were of greater severity and the clinical picture may be different with less severe forms of the disorder. Though the challenges faced by the therapists were reported, the client's perspective has not been adequately represented. All the therapists were trained in cognitive behavior therapy; however, there could have been individual differences in the way sessions were conducted.

Conclusions and Implications

This study represents the clinical realities of providing cognitive behavior therapy for patients with Schizotypal Disorder. Though, structured interventions like cognitive restructuring, relaxation and social skills training have been recommended, it appears that clinicians utilize various other strategies including exposure, problem solving skills training, relaxation as and when required. This demonstrates the need for tailoring the interventions rather than following a fixed protocol.

The number of sessions and length of therapy also differed from suggested number of sessions in the literature. Long-term therapy is the norm when it comes to personality disorders. However, it may not be practically possible given the limited resources in a country like India. This calls for the development of briefer, yet intensive, models of cognitive behavior therapy to address the issues faced by this group of patients. This would ensure lower attrition or premature termination of therapy. Short-term therapy would have its own limitations, especially considering the chronicity of Schizotypal Disorder. It is important that these sessions are well defined with explicit goals of therapy. A skills-training format seems to be appropriate. The long-standing interpersonal issues which seem to be difficult to change in the short term can be taken up alongside the brief CBT mainly focusing on the communication patterns using contingency management strategies. Long term therapies are definitely required in order to maintain the treatment gains and to help them learn generalization of skills to different problems. Nevertheless, the study highlights important clinical considerations and the practical realities of providing cognitive behavior therapy to patients with Schizotypal Disorder at a tertiary-level mental health setting.

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