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Cognitive Behavior Therapy for Depression: A Case Report

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Abstract : Depressed persons have lower activity levels, report less pleasure from positive events, and obtain less total pleasure compared to normal. Depression can be treated with pharmacology and psychotherapy. There are various types of psychotherapies for treating depression. Cognitive behavior therapy is probably the most well-known and the most practiced form of modern psychotherapy and has been integrated into highly structured package for the treatment of patients suffering from depression. The present case study is an attempt to provide therapeutic intervention program to a 21-year-old, unmarried hindu male, engineering student, suffering from depression. The assessment was done with Beck Depression Inventory II, Hamilton Depression Rating Scale, Behavioural Analysis Proforma and Dysfunctional Attitude Scale. The client received cognitive behavioral intervention comprising of psycho-education, cognitive restructuring, problem-solving strategies, motivation for maintaining activities of daily living etc. After 16 sessions of therapeutic intervention program post assessment was done and significant improvement was found in the patient. He was under follow-up for a period of 1 year and was maintaining well.

Keywords: Cognitive behavior therapy, dysfunction, depression

Introduction

Beck's (1972) theory defined depression in cognitive terms. He saw the essential elements of the disorder as the "cognitive triad": (a) a negative view of self, (b) a negative view of the world, and (c) a negative view of the future. The depressed person views the world through an organized set of depressive schemata that distort experience about self, the world, and the future in a negative direction. According to MacPhillamy & Lewinsohn (1974) depressed persons have lower activity levels, report less pleasure from positive events (are unable to experience reinforcement), and obtain less total pleasure (experience a relative lack of reinforcement) compared to normals or psychiatric controls. Psychosocial causes of depression are occurrence of stressful life events (Coyne, J. C. 1976), hopelessness (Abrahamson et at, 1989), severe life events (Murphy, E. 1982), and Helpless (Saligman, M.E. P.1978). During the first episode of depression, an association between dysfunctional beliefs and depressed mood is created, and dysfunctional beliefs can then be easily

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activated during a subsequent depressed mood (e.g., Teasdale, 1988). It has been proposed that depressive symptoms are promoted by dysfunctional attitudes (Sheppard & Teasdale, 2000) in a reciprocal causal relationship (Burns & Spangler, 2001). Cognitive therapy models have long posited links between childhood adversity and the development of maladaptive schemas (Beck, 1976; Beck & Young, 1985). There are several approaches to psychotherapy, including cognitive-behavioral, interpersonal and other kinds of talk therapy—that help individuals recover from depression. Psychotherapy helps people identify the factors that contribute to their depression and deal effectively with the psychological, behavioral, interpersonal and situational contributors.

Cognitive behavioral therapy combines cognitive psychotherapy with behavioral therapy and maintains that irrational beliefs and distorted attitudes toward the self, the environment, and the future perpetuate depressive affects and compromise functioning. The goal of CBT is to reduce depressive symptoms by challenging and reversing these beliefs and attitudes and encouraging patients to change their maladaptive preconceptions and behaviors in real life (Beck, Rush, Shaw & Emery, 1979). CBT was developed to change an individual's thoughts, feelings, and behaviors that stem from dysfunctional cognitive patterns (ie, "I made a mistake and therefore I am a failure") as well as maladaptive behavioral patterns (ie, withdrawal, social isolation). In CBT, the therapist confronts the negative emotions through reconstruction of client's thinking process in a way that logical thoughts replace dysfunctional ones (Clark, Beck & Alford, 1999). CBT is a "here and now," approach that is goal oriented and designed to reduce a client's presenting symptoms (Ghaziuddin, Barbosa & King, 2011). During CBT, a patient learns how to self-regulate unpleasant emotions, which is essential for mental health (Beauregard, 2007). A defining feature of cognitive-behavioral therapy is the proposition that symptoms and dysfunctional behaviors are often cognitively mediated and, hence, improvement can be produced by modifying dysfunctional thinking and beliefs (Dobson & Dozois, 2001). Lovell and Richards (2000) suggest that traditional service delivery systems reach only a small proportion of people who could benefit from CBT and argue for multiple points of access, including the widespread availability of self-help methods in primary care. A recent research review of self-help interventions in mental health reported that almost all are based on CBT principles, and that computers may best be seen as another way of providing access to self-help materials (Lewis et al., 2003).

Paykel (2001) concludes that cognitive therapy therefore appears to have a specific indication as a continuation or maintenance therapy for relapsing and recurring depression, particularly in the presence of residual symptoms and in conjunction with medication. He finds that other psychological therapies have less evidence to support them in this role. In their study, Thase et al., 1997) found some evidence that the combination of psychotherapy and antidepressant medication leads to

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significantly better outcomes with severely depressed patients. Meta-analysis of psychotherapies that have been used in the treatment of child and adolescent depression revealed 63% of those receiving some form of CBT showed significant improvement of symptoms (Kendall, 2000 ; Mc Ginn, 2000). Cognitive behavioural therapy is the primary psychosocial therapy for the treatment of mood and anxiety disorders in typically developing children (Ollendick, King, & Chorpita, 2006). A meta-analysis of 22 RCTs of psychological treatments for chronic back pain indicated that psychological interventions, contrasted with various control conditions, had positive effects on pain, pain-related interference with activities, health-related quality of life, and depression (Hoffman, Papas, Chatkoff, & Kerns, 2007). Sharma (1998) as a part of his study "behavioral intervention with the aged" examined the efficacy of cognitive behavior therapy in 10 elderly depressed patients. A trial was conducted by (Patel et al, 2010) to test the effectiveness of an intervention led by lay health counselors in primary care settings to improve outcomes for people with depression and anxiety disorders. The intervention consisted of case management and psychosocial interventions led by a trained lay health counselor, as well as supervision by a mental health specialist and medication from a primary care physician. The trial found that patients in the intervention group were more likely to have recovered at 6 months than patients in the control group, and therefore that an intervention by a trained lay counselor can lead to an improvement in recovery from depression

Rationale: There are very few studies in India on cognitive behavior therapy in depression. The effectiveness of CBT in depression has been rarely studied in Indian context. Most of the published literature on cognitive behavioral therapy on young patient is from western countries. In India, the research on therapeutic Interventions with young is at initial stage. CBT can be a time- and cost-effective strategy in a setting like India, where a large number of young seek treatment for depression. Therefore, present study is an effort to study the usefulness of cognitive behavioral therapy in the treatment of depressed on Indian population. The objectives of the study were to see the efficacy of cognitive behavior therapy in reducing depressive symptoms and dysfunctional cognitions in depressed.

Method:

The aim of the present study was to examine the effectiveness of CBT in the management of depression in young patient. The objective of the study was to evaluate the effectiveness of CBT in reducing the depressive symptoms in young patient. For the present study a 21 year old B.Tech student, having Moderate level of depression taken from an engineering college of Greater Noida. After preliminary assessment patient was treated for 16 sessions of Cognitive Behaviour Therapy spreading across 6-8 weeks.

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A pre-post intervention method was adopted. A young patient was taken from an engineering college of Greaten Noida. He was suggested to consult the psychiatrist. He was treated on OPD basis in Kailash Hospital, Greater Noida. He had no primary sensory motor deficit, neuro-psychiatric conditions or major co-morbid medical illness such as tuberculosis, cancer, cardiac problems, mental retardation or alcohol or any other substance abuse, and who had already undergone psychological intervention for depression in the last one year. Assessment was carried out at 3 points pre, mid and post. Informed consent from the participant was obtained before the study.

Case Report

Mr. A.K. 21-years-old, single male, pursuing B. Tech IIIrd year, from Middle socio-economic status hails from Gorakhpur presented with sad mood, lack of interest in studies, suicidal thoughts with insidious onset, there was no precipitating factor and the course was continuous. Patient was apparently well till two week back when he started having low mood. He lost interest in doing anything therefore he was unable to carry out his study and any activity at home His interest in listening to music decreased. His interaction with the family members and friends came down. His family members were critical of him as he was not performing well in the studies. The negative attitude of the family members further decreased his performance. Sometimes he felt himself as burden on others as he was not doing anything significant. He was not able to share his problem as nobody understood him. There was no history suggestive of head injury, seizure, excessive cheerfulness, persecutory ideas and grandiose ideas. Patient took no treatment for present problem. There was family history of psychiatric illness in distant relatives. His father was retired therefore he was dependent on his brothers. Mental Status Examination revealed sad mood, depressive cognitions and feelings of helplessness, and worthlessness. Insight was present. Patient was diagnosed as having Moderate Depression with somatic symptoms. The patient was taking anti-depressant.

Tools

Socio-Demographic and Clinical Data Sheet (SDCS):

This data sheet was be used to obtain information about age, gender, education and occupation.

Beck Depression Inventory: Depression was measured by Beck Depression Inventory developed by Beck, Steer, & Brown, (1996). BDI-II contains 21 questions, each answer being scored on a scale value of 0 to 3. The test was also shown to have a high one-week test–retest reliability (Pearson r =0.93), suggesting that it was not overly sensitive to daily variations in mood. The test also has high internal consistency (α=.91).

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Behaviour Analysis Proforma: The behaviour analysis proforma developed by Kanfer and Saslow (1965) involves assessment in seven steps, namely: analysis and problem situation, clarification of problems situation, motivational analysis, developmental analysis, analysis of self-control, analysis of social relationships and analysis of socio-cultural-physical environment. Thus it assesses specific behaviour in various areas, which includes historical, social, cognitive and biological factors. Hence, it provides comprehensive data on various variables needed for selecting appropriate intervention strategies.

Hamilton Depression Rating Scale (HDRS, Hamilton, 1960): This assesses the severity of depression in studies of patients who had received a diagnosis of depression. This scale is widely used in depression intervention studies and has been shown to be sensitive to changes in the elderly people. Inter-rater reliability of the scale ranged from 0.80 to 0.90. Factor analytic studies showed good validity measures that ranged from .40 to .97. Various cut-off points have become standard for determining levels of severity, as follows:

A total score: Greater than 24 (or 25) = Severe depression
Greater than 17 (or 18) =Moderate depression
Greater than 5 (or 6) =Mild depression
Less than 6 (or 5) = no depression

Dysfunctional Attitude Scale (DAS): Weissman (1978) revised the original 100 item scale of beck into two parallel forms (A &B) of the DAS. Each form is a 40 item, 7 point Likert scale which "elicits information on an individual's dysfunctional beliefs which act as schemas by which he constructs the world" (Weissman and Beck, 1978). It is a self-administered scale that assesses cognitive distortions with items representing 7-major value systems: approval, love, achievement, perfectionism, entitlement, omnipotence and autonomy. Items are rated based on the degree of agreement with the attitude stated in the item as totally agree, agree very much, agree slightly, neutral, disagree slightly, disagree very much, and totally disagree. For 10 items "totally agree" corresponds to a score of 1 and for the remaining items scoring is reversed. The range of possible scores in 50 to 280, and the cut-off score is 199 above which indicates the presence of significant dysfunctional attitudes. The Cronbach alpha is 0.86 and test retest reliability for 8-week interval is 0.84. Adequate construct validity is reported. It has an internal reliability of 0.90 (males) and 0.88 (females).

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Procedure

Therapeutic Programme

The therapeutic program consisted of 16 sessions for the patient including three assessments. The sessions were conducted individually and duration of each session was of approximately 45 minutes. The sessions were carried out over a period of 6-8 weeks. The specific components of the therapeutic program included psychoeducation, self-monitoring of depressive symptoms, maintaining thought diary, relaxation training through mindfulness meditation, and cognitive restructuring for modifying dysfunctional beliefs and activity scheduling. In addition, specific strategies for handling negative automatic thoughts and ruminations, and cognitive strategies such as verbal challenging and reattribution were applied. The contents of the sessions in therapy were kept flexible taking into consideration of the specific needs of the patient.

Analysis

Analysis was carried out for patients and clinically significant changes i.e. based on pre- and post, mid- and post, pre- and post-therapy were used to assess the effectiveness of therapeutic intervention. Therapeutic changes between pre- and mid-, mid- and post-, and pre- and post-therapy assessments were calculated in terms of percentages using the following formula:

$$\frac{\text{Pre score–Mid score}}{\text{Pre score}} \times 100 = \%\ \text{of therapeutic change}$$

Result and Discussion

Table 1: Pre- mid- and post-therapy scores for clients on BDI, HDRS and DAS

Measures	**BDI**			**HDRS**			**DAS**		
Clients	Pre	Mid	Post	Pre	Mid	Post	Pre	Mid	Post
1	23	18	12	21	15	9	181	149	108

BDI= Beck Depression Inventory; HDRS= Hamilton Depression Rating Scale: DAS= Dysfunctional Attitude Scale.

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Table 2: Pre-mid, mid-post and pre-post therapeutic change in percentages for patient on BDI, HDRS and DAS

Improv-ement Score %	BDI			HDRS			DAS		
Clients	Pre-Mid	Mid Post	Pre Post	Pre-Mid	Mid Post	Pre Post	Pre-Mid	Mid post	Pre Post
1	21.73	33.33	47.82	28.57	40.00	57.14	17.67	27.51	40.33

. Table 1 show improvement scores and therapeutic changes (in percentages) on BDI, HDRS and DAS

On BDI, therapeutic change ranged between 38.46 – 61.53%. Reduction in the symptoms on HDRS, an objective measure of depression ranged between 41.66 – 72.25%. The findings are in agreement with (Thase et al., 1997) who found some evidence that the combination of psychotherapy and antidepressant medication leads to significantly better outcomes with severely depressed patients. Similarly, the treatment of child and adolescent depression revealed 63% of those receiving some form of CBT showed significant improvement of symptoms (Kendall, 2000 ; Mc Ginn, 2000). Psychological interventions had positive effects on pain, pain-related interference with activities, health-related quality of life, and depression (Hoffman, Papas, Chatkoff, & Kerns, 2007). Sharma (1998) as a part of his study "behavioral intervention with the aged" examined the efficacy of cognitive behavior therapy in 10 elderly depressed patients.

On DAS, the client has shown significant reduction in dysfunctional attitude as there was 40.33 percent pre-post decrease in the patient. In CBT, the therapist confronts the negative emotions through reconstruction of client's thinking process in a way that logical thoughts replace dysfunctional ones (Clark, Beck & Alford, 1999). In the same way (Dobson & Dozois, 2001) was of the view that symptoms and dysfunctional behaviors are often cognitively mediated and, hence, improvement can be produced by modifying dysfunctional thinking and beliefs.

The first limitation, the generalizability of the results is limited because of small sample size. Second limitation that the control measures could not be exercised up to the level of desirable standard such as personality characteristics, duration of disorders, and severity of depression. This hampers confidence in results and findings larger sample should be included so as to enhance the reliability and confidence in these findings.

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Conclusion: In sum, at present depression is one of the most common psychological problems in the society. It is characterized by sad mood, low energy and hopelessness. Depression can be well treated if psychopharmocology combined with the psychotherapy. Among psychotherapies Cognitive Behaviour Therapy had been found to be very effective in reducing depressive symptoms and dysfunctional cognitions in depressed individual.

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