

Attempted Suicide : The Process of Change Through Therapy

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ABSTRACT

Background : Suicide and suicidal attempts is a public health problem. Very few studies in the Indian context have highlighted the changes in thought patterns brought about by different modalities of treatment of suicidal subjects. **Objective:** The present study aims to find out the alterations in thought processes with treatment over time and in this context the efficacy of Pharmacotherapy and combined therapy in attempted suicide. **Method :** Sixty first-time suicide attempters in the age group 18 to 30 years were divided into 2 groups using simple random sampling-(a) the Treatment As Usual group (TAU), maintained on SSRI only and (b) the Combined Therapy group (CBT) receiving SSRI+CBT (8-10 weeks). All subjects were evaluated on Beck Depression Inventory, Beck Hopelessness Inventory, Adult Suicidal Ideation Questionnaire and Cognitive Style Test both before and after the intervention and on a follow up after 6 months. **Results and Discussion :** Significant change in Hopelessness, Suicidal Ideation and Depression were observed in both groups. After 6 months a significant difference persisted in pre-post scores on all the variables in CBT group. **Conclusion:** The study explores the changes through the therapeutic process and highlights the superiority of Combined therapy in changing negative thought patterns.

Key words : Attempted suicide, CBT, Suicidal ideation, hopelessness, Cognitive Style

INTRODUCTION

Suicide is an issue of major concern among clinical populations. India recorded a 21.6% increase in the number of suicides during the last decade (NCRB, 2013). In addition to those who die, many more people survive attempts to take their own lives, or harm themselves, often seriously enough to require medical attention. Suicide acts are multi-factorial events (Schneidman, 1993), and different categories of suicidal behaviour may have different aetiology, pathogenesis, and expression (Silverman and Maris, 1995), yet the total range of suicidal behaviour and attempted suicide constitutes a major public health problem and advances in clinical care of suicidal patients depends on further improvement in our ability to identify individuals at risk.

Several risk factors for suicide and attempted suicide have been identified and hopelessness and suicidal ideation are perceived to be reliable indicators of an individual's future potential for suicide (Truant et al., 1991). Cognitive style or an individual's habitual or typical way of perceiving, remembering, thinking and problem solving (Allport, 1937) has been implicated as an important risk factor for depression and suicidal behaviour (Blackburn et al, 1986).

Suicidal ideation and behaviour arises from feelings of entrapment, that there is no escape, and represents a particular pattern of information processing concerning one's self and the world (Williams, 2001). Suicidal feeling may alleviate,

if the person feels that he or she has something to look forward to in future, some important reasons for living. Hopelessness with regard to the future takes away these possibilities. The combination of a poor problem solving capacity and hopelessness and perception towards the world, self and future is an important area to be explored to comprehend the psychological processes of suicidal behaviour.

Various modes of intervention have been applied in addressing attempted suicide. Pharmacotherapeutic strategies addressing attempted suicide have primarily utilized TCAs and SSRIs. Among psychotherapeutic interventions, CBT has emerged as a popular therapeutic technique for suicide prevention (Brown et al, 2005; Wenzel et al, 2009). Research on suicide prevention primarily addresses risk factors or the efficacy of different therapeutic techniques in dealing with suicidal clients (Beck, 2005; Brown et al, 2002). Not much work has been documented to highlight the change in thought process in suicidal clients undergoing cognitive therapy in the Indian context (Raj *et al*, 2001). The present study aims to explore the alterations in thought processes with treatment and highlights the efficacy of Pharmacotherapy and combined therapy in attempted suicide. In context, the study attempts to explore the effect of multimodal treatment on suicidal ideation, hopelessness, depression and perception towards the world self and future and its maintenance over time.

METHODOLOGY

The present study was conducted in Kolkata, West Bengal, and the sample was drawn from the Accident and Emergency department and psychiatry unit of 3 Government hospitals in Kolkata.

SAMPLE : Sixty patients attempting suicide for the first time were taken for the study. The sample was collected from different government hospitals from middle socio economic status.

INCLUSION CRITERIA

- Individuals who have attempted suicide for the first time within the last 1 month

- Age 18 to 30 years
- **Education :** minimum 10 + 2 standard

EXCLUSION CRITERIA

- Persons with psychosis
- Persons with bipolar affective disorder
- Persons with alcohol dependence or abusing other psychoactive substances

TOOLS

1. Personal Information Schedule: to record demographics, and detailed interview regarding the suicide attempt.
2. Beck's Hopelessness Scale (BHS) (Beck and Steer, 1988)
3. The Adult Suicidal Ideation Questionnaire (ASIQ) (Reynolds, 1991)
4. Cognitive Style Test or CST (Blackburn *et al*, 1986)

PROCEDURE

After initial contacts, the individuals underwent a detailed psychiatric interview, and fulfilling the criteria of selection, were assigned to the groups randomly. Diagnosis was done following DSM-IV-TR criteria. Consent was taken from each subject before enrolment in the study. After completion of the personal information schedule, the psychometric tests (Adult Suicidal Ideation Questionnaire, Beck Depression Inventory, Cognitive Style Test, Hopelessness Scale) were administered respectively for baseline (Pre-intervention) assessment. The individuals in the TAU were kept on adequate dose of Antidepressants (Selective Serotonin Reuptake Inhibitors). Individuals in the CBT group were administered Beck's technique of Cognitive Therapy along with Behavioural Techniques for the next 8-10 weeks along with optimum doses of antidepressants (SSRIs). SSRIs were continued for both groups after 2 months of treatment. All subjects were followed up by Psychiatrist at regular intervals. The psychotherapeutic regimen consisted of 14-16 sessions of 45-55 minutes each. The sessions were conducted twice a week. The common therapeutic procedures used were : activity scheduling, graded task assignments, thought recording,

Socratic questioning, cognitive restructuring, guided imagery, cognitive rehearsal, behavioural experiments, enhancing problem-solving skills and social skills training. After completion of 2 months, the individuals were again administered the same psychometric tests for follow up (post-intervention) assessment. Follow up assessments in both groups were carried out again after 6 months to see if there was any significant difference among the groups in hopelessness, suicidal ideation and perception towards the world self and future over time.

STATISTICAL ANALYSES

Descriptive statistics (Mean and Standard Deviation) for both groups were carried out to see the nature of the data.

Mean Difference between the TAU and CBT groups (after 2 months, and 6 months) was tabulated by conducting t – tests to see the difference between the two groups as time progressed.

RESULTS AND DISCUSSION

Intervention in either form, medication or combined with Cognitive behaviour therapy brings about a significant change in the thought process of a suicidal individual. This initial improvement is not maintained with subsequent medication only (Table 1). The BDI and ASIQ scores in the TAU group after 2 months of ongoing treatment (Table 1) indicate that the group was responding differentially to pharmacotherapy, the variable rate of response gradually reduced with time. A significant change on all variables except perception towards Self (CS-S) indicates that medication helped to decrease suicidal thoughts and hopelessness but was unable to address negative attribution towards self. Post 6 months, the initial improvement observed was not maintained except perception towards the World.

Table 1 : Mean SD and t values of all the Dependent Variable measures in TAU

DV measures	Pre test		Post-2 months		t1*	Post 6 months		t2**
	M	SD	M	SD		M	SD	
CS - W	24.10	3.81	20.47	2.66	3.86***	19.10	2.52	6.43***
CS - S	21.97	3.78	20.23	2.34	1.94	19.20	2.94	3.13
CS - F	23.30	3.12	18.57	3.81	5.18***	21.80	3.81	1.85
ASIQ	92.97	11.74	52.33	11.51	12.65***	83.17	10.26	3.33
BHS	19.23	3.95	13.17	2.26	9.14***	18.93	2.59	0.37

* t1 – t test between pre-tests and post-tests after 2 months

** t2 – t test between pre-tests and post- tests after 6 months

*** P<0.05

In the CBT or combined therapy group, a significant difference is observed on all measures following therapy (Table 2). TAU, the initial spurt

of improvement gained in the first 2 months is maintained over time.

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Table 2 : Mean SD and t values of all the Dependent Variable measures in CBT

DV measures	Pre test		Post 2 months		t1*	Post 6 months		t2**
	M	SD	M	SD		M	SD	
CS - W	22.63	2.46	14.73	1.31	18.49***	12.27	1.38	21.46***
CS - S	22.30	2.23	16.23	1.22	15.47***	13.03	0.96	23.80***
CS - F	23.30	2.15	16.43	1.41	15.04***	13.33	1.54	20.53***
ASIQ	86.70	12.37	47.17	9.75	13.59***	15.47	6.34	24.96***
BHS	19.50	4.08	14.73	5.19	5.28***	8.13	3.42	14.89***

* t1 – t test between pre-tests and post-tests after 2 months

** t2 – t test between pre-tests and post- tests after 6 months

*** P<0.05

Improvement in the CBT group indicates that along with the SSRIs inhibiting exaggerated negative emotional reactions through the amygdala and enabling the suicidal individual to override its associated ruminations, cognitive therapy assisted the individual to alter the cognitive context, that is, automatic assumptions and belief systems that perpetuate negative emotional responses. Behavioural methods in addition help in primarily testing out the reliability of the previous adopted alternatives and also in exploring the new alternatives in problem solving. This helped in improving the perception of the world.

The link between cognitive style and suicide is based on two hypotheses. First, that suicide is associated with a constriction in cognitive style rather than with style per se. Second, that suicide is correlated with an increase in negative affect (O' Connor and Sheehy, 2002). Various studies also documented restricted cognitive style of attempted suicides (MacLeod *et al.*, 1993). The suicidal person tends to endure a pessimistic view of the future, their general environment and themselves and manifest a depressogenic attributional style. They attribute negative life events to internal, stable and global

causes (Peterson *et al.*, 1982). The suicidal individuals also lack the ability to generate positive future cognitions (MacLeod *et al.*, 1993). In the CBT group, in contrast, the cognition towards the World, Self and Future improve with therapy and this has its impact in bringing about a decrease in depression hopelessness and suicidal ideation.

In the CBT group, the negative attributional style was addressed through cognitive therapy, by identifying the automatic thoughts, guiding the suicidal individual to generate alternatives to evolve positive cognitions regarding the future. The overall change in perception is reflected through the change in all the 3 spheres (following Beck's cognitive triad of depression) of World, Self and Future thus rebuilding the self-esteem and reducing suicidal ideation.

The present study reflects a consistent finding from studies over a long period of time that suicidal behaviour has a common causal factor of hopelessness. (Minkoff *et al.* 1973; Van Gastel *et al.* 1997; Malone *et al.* 2000). Both the treatment groups show an initial improvement in hopelessness and suicidal ideation scores at the end of 2 months.

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In the CBT group, Drug treatment can be expected to enhance the substrate for learning from psychotherapy (Van Heeringen, 2003) and the rate of decrease in hopelessness and suicidal ideation are maintained through the course of the study. Cognitive Behaviour Therapy addresses the perception of the suicidal individual that highly desired outcomes will not occur or that highly aversive outcomes will occur, coupled with the expectation that no response in one's repertoire will change the likelihood of occurrence of these outcomes.

The impact of CBT as compared to medication may be traced back to the various researches emphasizing the less rate of relapse with CBT. This is because CBT lays special emphasis on Relapse Prevention Tasks (RPTs) (Nierenberg *et al.* 2003; Hollon, 2005). In the later sessions, thus, with the assistance of guided imagery through both the index suicide attempt and a potential future suicidal crisis, focus was on implementing the coping skills learned for treatment. RPT served both as a cognitive rehearsal for future coping and an assessment of treatment programme and also helped in deciding whether termination was appropriate.

Conclusions : Cognitive Behaviour Therapy was effective in improving the treatment efficacy by enhancing mode-specific effects of CBT such as reduction of cognitive distortions and dysfunctional attitudes that were effective in bringing about a decrease in hopelessness and changes in the attribution process in terms of reducing negative perception towards the world, self and future and bringing about a decrease in the Suicidal ideation of attempted suicide patients. These are, in effect, not addressed by conventional Pharmacotherapy (SSRI) as found from this current study. Therefore a Combined Therapy approach for Suicidal subjects seems the choice of therapy.

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