CHAPTER II

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CHAPTER II

REVIEW OF RELATED LITERATURE

Dysthymia is essentially a low-grade, chronic depression. Because it is chronic, psychiatrists used to consider it a personality trait, then called neurotic depression, and not easily amenable to treatment. Based on mounting empirical data, in 1980 the American Psychiatric Association renamed neurotic depression as dysthymia and reclassified it as a mood disorder (DSM-III, 1980).

Dysthymia has become recognised as a discrete clinical entity only recently. So, there has not been enough time for large numbers of controlled studies on its treatment. Prior to the definition of the disorder in DSM-III, a variety of terms had been in use to describe a condition very similar to what is now delineated as dysthymic disorder. Since these included diagnostic categories such as neurotic depression, a number of studies with these categories of depressive patients, together with a small number of uncontrolled trials in explicit dysthymia will be reviewed in this chapter.

The review of relevant literature is organised under the following 5 major sections:

1. Studies conducted in Western Countries
2. Studies in defined dysthymic patients
3. Studies conducted in India
4. Follow-up studies
5. Critical Appraisal of the studies.

2.1 STUDIES CONDUCTED IN WESTERN COUNTRIES

This section deals with the studies dealing with the correlates of dysthymia and the studies assessing the efficacy of Cognitive-Behaviour Therapy (C.B.T.) in the treatment of depression.

It is further divided into:

2.1.1 Studies dealing with the Correlates of Dysthymia
2.1.2 Case reports and Single Group Design Studies
2.1.3 Comparative Studies
2.1.4 Table showing the studies on Cognitive-Behaviour Therapy in the treatment of dysthymia.

2.1.1 Studies dealing with the correlates of dysthymia

Data from the NIMH Epidemiologic Catchment Area (ECA) study, (Weissman, et al., 1988b) which involved five communities in the United States, indicated a lifetime prevalence rate for dysthymia of 3.1%. The samples consisted of residents who were 18 years or older; its total size was 18, 572, with a response rate of 68-79%. Diagnosis was based on the NIMH Diagnostic Interview Schedule (DIS), a structured interview for use in epidemiological studies.
There exists considerable agreement among the limited studies of dysthymia on its prevalence. The overall prevalence in Edmonton, Canada, was 3.7% (Bland et al., 1988c), which was much like the US rate. Korea reported a 2.2 rate per hundred (Lee, et al., 1987) and Italy reported a 2.3 rate per hundred given as a one-year prevalence (Faravelli and Incerpi, 1985). Puerto Rico had the highest rate 4.7/100 due to a very high prevalence among women (Canino, et al., 1987). Hwu, et al (1989) reported a 0.9 rate per hundred in urban and rural villages and 1.5 rate per hundred in small towns in Taiwan.

Sex

Epidemiology Catchment Area (ECA) study (Weissman, et al., 1988b) yielded about a 1.9 female to male ratio for dysthymia.

Age

Bland et al's (1988b) study revealed that rates of dysthymia would generally increase with age.

Socio Economic Status (S.E.S.)

The Epidemiology Catchment Area (ECA) study found significantly higher dysthymia rates among 18-44 year-olds with less than $ 20,000 annual income, compared with those earning more. However, income had little effect in older groups (Weissman et al., 1988b).
Marital Status

The Epidemiology Catchment Area (ECA) study (Weissman, et al., 1988b) found that dysthymia was more prevalent among unmarried persons under age 65, with rates in the 45-65 year-old range double those of married persons.

Edmonton also reported higher rates among the divorced or widowed, although by far the lowest rates were among those who never married (Bland et al., 1988c).

Locality (Urban/Rural)

Urbanites in Puerto Rico had significantly higher rates of dysthymia compared with rural dwellers (5.5% versus 3.3%) (Canino, et al., 1987).

City dwellers in Korea had a trend to higher rates (2.4% versus 1.9%) (Lee et al., 1987). In Taiwan, on the other hand, urban and rural areas differed little (Hwu, et al., 1989).

Family History

Rosenthal et al's study (1981) looked at family history and developmental differences in a comparison between 50 patients with chronic low-grade depression and 40 primary unipolar controls. Results showed that 30% of the dysthymsics had a first-degree relative who manifested depressive illness, compared to 20% of the unipolars.
Klein et al's (1988c) study results showed that early-onset dysthymins were significantly more likely to have a family history of affective disorders in first-degree relatives (49%), compared to relatives of persons suffering from episodic major depression (29%).

In another study by Klein et al. (1988a) that compared early and late-onset dysthymins and clinical and familial variables, it was found that the first-degree relatives of early-onset probands had significantly higher rates of major affective disorder than the relatives of the late-onset subjects.

In an investigation by Szadoczky et al. (1994), psychosocial (sociodemographic characteristics, loss and separation and family atmosphere in childhood, recent life events) and biological (family history, DST, TRH-test) variables were studied in 180 patients with Major Depression (MD) and Dysthymic Disorder (DD). The aim of the study was to reveal certain differences between the chronic and non-chronic course of MD and the early and late-onset subtypes of dysthymia. The authors found that the late-onset dysthymins were mainly women with a low level of education, a lower suicidal tendency, normal suppression in DST, and a lack of blunted TSH responses to TRH administration during the period of double depression. The early-onset dysthymins showed a higher number of persons who had never married, who presented a more traumatic and frustrating childhood background, and who had a higher rate of DST non-suppressors and blunted TSH responses after TRH administration during the period of their double depression. Their data suggested that late-onset dysthymia might be a biologically distinct sub-group of chronic depression.
In a study by Blackburn et al. (1981), wherein the two therapies, that is, cognitive therapy and pharmacotherapy in the treatment of depression were compared, it was found that long duration of illness or chronicity was a negative predictor of outcome. The other socio-demographic variables like socio-economic level and level of education affected the treatment outcome significantly. The authors pointed out that improvement was related to educational attainment of patients.

(Continued in the next page)
Intelligence

Haaga et al. (1991), in their study, evaluated the notion that intelligence is positively associated with the capacity to benefit from Cognitive-Behavioural Therapies, by relating pre-treatment measures of fluid and crystallized intelligence to self-reported symptom reduction in a naturalistic study (n = 106) of cognitive therapy for out patients with principal diagnoses of major depression, dysthymia, or generalized anxiety disorder. Intelligence measures did not significantly predict outcome and non-significant relationships were in the opposite direction from the theoretical prediction. The authors discussed about the possible limitations to the generalizability of these results and on the logical interpretation of prediction studies in psychotherapy research.

2.1.2 Case Reports and Single Group Design Studies

Case reports refer to the description of individual cases seen for Cognitive-Behaviour Therapy. Single group design studies considered only one group to assess the efficacy of Cognitive-Behaviour Therapy. Rush, Khatami and Beck (1975), in their study treated three chronic depressive patients with a combination of cognitive and behavioural techniques. The study gave individual case histories of patients. The therapeutic sessions ranged from twelve sessions, twenty sessions and five sessions for the three cases respectively. Follow-up evaluation was conducted after one year of terminating the therapy. The results revealed that each patient was better symptomatically and functionally after Cognitive-Behaviour Therapy.
They were able to eliminate the tendency to make negative evaluations and showed some improvement in self-esteem.

Schmickley (1976) used an ABA single-subject design with 11 depressed female outpatients. The treatment intervention being Cognitive-Behaviour Therapy, consisting of four one-hour sessions over a two-week period. The positive aspect of the study was the involvement of ‘significant others’, to know about the patient’s behaviour in the natural environment. The self-report and observational measures of depression indicated improvement during treatment which lessened during withdrawal phase.

Baker and Wilson (1985), diverted their concern to study the maintenance of effects of earlier treatment during the following period and the necessity for booster sessions. The authors compared three groups by allocating 31 depressed subjects to either (a) cognitive - behavioural booster sessions; (b) non-specific booster sessions; or (c) no ‘booster sessions’ for a 3-month period. Booster sessions were not effective in reducing relapse or in furthering treatment gains. The study highlights the significance of initial treatment response, that is regardless of booster sessions, subjects who improve during the treatment remain improved.

Jarret and Nelson (1987) conducted a study which examined mechanism contributing to the efficacy of Beck’s Cognitive-Behaviour Therapy for depression and identified some of the depressive responses influenced by this treatment. The sample consisted of 37 community volunteers with moderate to severe major depressive disorder. Cognitive therapy was administered in a small group format semi-weekly for 6 weeks and the therapy was divided into
3 components: Self Monitoring (SM); Logical Analysis (LA); and Hypothesis Testing (HT). The results showed that Cognitive-Behaviour Therapy not only reduced depressive features and automatic negative thoughts but also increased pleasant events and improved their interpersonal relationships. This occurred in the case of all the three components. Exposure to all the components or to more components of treatment was associated with significantly fewer depressive symptoms and dysfunctional thoughts than exposure to only logical analysis or hypothesis testing components.

The above mentioned studies have shown that the therapeutic approach in toto is effective in reducing depressive symptoms and negative cognitions which tend to maintain during the follow-up phase.

2.1.3 Comparative Studies

Some of the studies comparing Cognitive-Behaviour Therapy (Beck's approach) with other forms of therapies are cited below:

In an investigation by Shaw (1977), the primary purpose was to evaluate the therapeutic efficacy of Beck's Cognitive-Behaviour Therapy and Lewinsohn's behavioural treatment against a non-directive control group and a waiting list group. The sample consisted of 32 depressed males and females, who were divided into two experimental and two control groups. The subjects were assessed at pre-mid-and post-treatment phases and seen for two hours over a four week period. As per the findings, there was improvement in both cognitive and behavioural groups after two weeks, greater improvement in cognitive group members at post-assessment. There was no significant
difference on all measures of depression between the groups at one month follow-up though depression scores were generally lower for the cognitive treatment group.

Taylor and Marshall (1977) allocated 28 college and graduate students to one of four groups; cognitive therapy; behaviour therapy; cognitive and behaviour therapy waiting list group. Subjects were seen individually for 40 minutes each week for 6 weeks. The results showed that there was significant overall improvement for the treatment groups compared with the untreated controls on all measures. A combination of cognitive and behavioural methods was more effective than either component alone, while the cognitive and behavioural components alone did not differ from one another on any of the measures. A follow-up after 5 weeks showed the maintenance of improvement in the case of combined treatment group.

Rush et al. (1977) attempted to compare the efficacy of Cognitive-Behaviour Therapy and pharmacotherapy in the treatment of out patients neurotic depressives. 41 patients were randomly assigned to individual treatment with either cognitive therapy (n = 9) or imipramine therapy (n = 22) and the sessions ranged over 12 weeks. Both the interventions resulted in symptomatic improvement at the end of the treatment, although cognitive therapy was significantly superior. The drop-out rate in the medication group (8 out of 22) was significantly higher than in the cognitive therapy group (1 out of 19). The trend continued at 3 and 6 month follow-up periods. Of particular interest was the finding that 16% of those treated with cognitive therapy re-entered treatment during the 6th month follow-up, compared with 68% of
sample. The findings of the study imply that, behaviour therapy is not only effective in reducing depression, but long term maintenance of improvement as well as reduction in the rate of illness.

In a study by McLean and Hakstian (1979), 178 moderately clinically depressed patients were given 10 weeks of psychotherapy, behaviour therapy, drug therapy or relaxation therapy which acted as a treatment control condition. In this study, behaviour therapy consisted of helping clients to avoid their negative and introspective habits, communication and behavioural productivity, social interaction and assertiveness, decision making, problem solving and cognitive self-control. In addition to showing differential treatment drop-out rates, results showed behaviour therapy to be superior in 9 out of 10 measures at the end of the treatment and marginally superior at the third month follow-up. There were no significant differences between drug therapy and relaxation therapy on any outcome measure.

Kovacs et al (1981) in their investigation using a controlled, clinical trial format treated 44 non-psychotic, non-bipolar depressed outpatients with cognitive therapy or imipramine hydrochloride over a 12-week period. The two groups, that is, cognitive therapy group (n = 19) and pharmacotherapy group (n = 25) did not significantly differ on demographic variables, history of illness characteristics or on pre-treatment self and clinician rated symptom scales. The results indicated that both the interventions led to a marked reduction in depressive symptomatology and to a notable decrement in levels of anxiety. However, according to both self and evaluator rated depressive symptoms
scales, cognitive therapy was associated with consistently better results than was pharmacotherapy. At the one year follow-up phase, cognitive therapy group reported significantly lower self-rated levels of depression than those who had been in the pharmacotherapy group.

In an extensive study by Blackburn et al. (1981), cognitive therapy, pharmacotherapy and a combination of the two were compared. This was one of the initial published attempts in terms of sample selection, that is the neurotic depressive patients were taken from two sources viz., hospital outpatient clinic (n = 40) and a general practice setup (n = 24). The results revealed that, in the group of mild to moderately depressed hospital outpatients, in chronically ill and resistant to previous treatments, cognitive therapy was minimally more effective than pharmacotherapy and the combined group had an additive effect. In the general practice setup, cognitive therapy and the combined group were superior to drugs alone.

In line with this study, Teasdale et al. (1984), considered general practice patients, diagnosed as primary major depressive disorder, for their investigation. They randomly allocated 44 patients in two groups, that is, treatment as usual - TAU (Tricyclic antidepressant group) and TAU with cognitive therapy of 20 sessions. Although the post-treatment results were significantly superior for the cognitive therapy, there was no longer any difference between the groups at 3 months, following a continuing improvement in the comparison group. In this study cognitive therapy was associated with more rapid improvement, fewer deliberate overdoses and fewer referrals to psychiatrists.
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Simons et al. (1984) designed their study in a way as to involve differential prediction and differential mechanism of change. They randomly allocated 28 moderately depressed outpatients to 12 weeks of cognitive therapy \((n = 14)\) or pharmacotherapy \((n = 14)\). The results highlighted that there was a significant difference on cognitive measures between patients who responded to treatment and those who did not, regardless of the type of treatment.

Another investigation conducted by Murphy et al. (1984), consisted of randomly assigning 87 moderately to severely depressed psychiatric outpatients to 12 weeks of cognitive therapy \((n = 24)\), pharmacotherapy \((n = 24)\), cognitive therapy plus pharmacotherapy \((n = 22)\) or cognitive therapy plus placebo \((n = 17)\). Out of them, 70 patients completed treatment and 17 dropped out. The interpretations of the study were as follows: neither treatment was uniquely effective alone or in combination, that is their combined effects were neither additive nor interfering. The addition of dropouts did not alter the finding of no difference in outcome between treatment modalities indicating that dropping out of treatment did not reflect early or spontaneous recovery. The treatment gains were essentially maintained at 1 year follow-up assessment.

Beck et al. (1985) contrasted cognitive therapy with combined cognitive therapy and pharmacotherapy (amitriptyline) for primary non-bipolar depressed outpatients. 33 patients were allotted to cognitive therapy group \((n = 18)\) or cognitive therapy plus amitriptyline therapy \((n = 15)\). The sample consisted of patients with additional diagnosis of schizoid, passive dependent, cyclothymic personality disorder. The group was also heterogeneous with
regard to endogenicity. The results of the study indicated that both cognitive therapy alone and combined cognitive therapy with amitriptyline were associated with significant reductions in depressive symptoms. Combined treatment had no disadvantage, but showed evidence of possible gain with regard to long-term stability.

Covi and Limpman (1987) undertook a study to examine the effectiveness of group Cognitive-Behaviour Therapy and group Cognitive-Behaviour Therapy combined with Imipramine, in major non-bipolar, non-psychotic depression. The sample was selected from the volunteers who presented themselves in response to newspaper publication. About 70 depressives were allocated to one of the three groups: (1) Cognitive-Behaviour Therapy; (2) traditional group psychotherapy based on interpersonal psychodynamic theories. They underwent 14 weeks group course of treatment. The results revealed that a high percentage (51.8%) of cognitive therapy alone group showed a remission of their depression. Cognitive therapy and the combined group showed superiority at 9 months follow-up over traditional psychotherapy.

Rehm et al. (1987), compared cognitive therapy and behaviour therapy in their investigation. They selected 104 women diagnosed as non-psychotic, non-bipolar major affective disorder and treated in 21 therapy groups for 10 weekly one and half hour sessions. They were allotted to cognitive therapy, behaviour therapy and a combined (cognitive and behaviour) group. All 3 conditions produced significant improvement on each of the depression variable, that is, self report and clinician rating scales of depression. All
conditions improved equally on measures of both behavioural and cognitive target variables, and initial levels on these variables was not related to outcome. The authors who conducted follow-up at 6 months, found no difference between conditions and no significant change from the post test. However there was reduction in recurrence, intensity and duration of episodes.

In contrast to the above mentioned studies which selected outpatient sample, the investigation by Miller et al. (1989) considered the inpatients for therapy. They compared three treatment conditions: (1) standard treatment which referred to hospital milieu, pharmacotherapy, medication and management sessions; (2) cognitive therapy (in addition to standard treatment); (3) social skills training (in addition to standard treatment). The sample consisted of 47 depressed inpatients assigned to one of the treatment conditions stated above. The treatment began in the hospital setup and continued for 4 months on the outpatient basis after discharge. The analysis of pre-assessment, assessment at the time of discharge and post-treatment assessments showed that all treatments produced significant improvement by the end of hospitalization. The post-treatment assessment showed that cognitive therapy plus standard treatment group had lower levels of psychiatric symptoms, and higher percentages of patients made complete recoveries. The study indicated that cognitive therapy can be applied in the case of severely depressed patients with suicidal risk who require hospitalization.

Zettle and Rains (1989), differed from the other studies in the aspect of assessing the efficacy of Cognitive-Behaviour Therapy, delivered in the group
format as against individual therapy and also comparing it with comprehensive distancing, a contextual approach. A sample of 30 women volunteers recruited through announcements in local media, were assigned randomly to one of the 3 treatment conditions: complete cognitive therapy package \( n = 10 \); partial cognitive therapy package \( n = 10 \). Two therapy groups of 4-7 members each were conducted within each treatment condition. All the three groups showed significant, but equivalent reductions in depression over 12 weeks of treatment and 2 months follow-up. But there were significant reductions in dysfunctional thoughts in the case of complete and partial cognitive therapies as against comprehensive distancing group. In comparison with the other studies, the authors found no differences in the efficacy of cognitive therapy as a function of treatment format, but a trend towards reduced effectiveness for group versus individual comprehensive distancing therapy.

With the growth in the investigations conducted using Cognitive-Behaviour Therapy, many authors have attempted to quantitatively review them to throw light on the efficacy of the therapy. Wright and Beck (1983), in their review of studies pointed out that regardless of etiology, cognitive therapy had been found to be an effective treatment in reducing depression of outpatient population. Though they acknowledged the equal efficacy of Cognitive-Behaviour Therapy with pharmacotherapy, they claimed that the former yielded superior results when therapists had been trained and supervised closely.
Miller and Berman (1983) analysed 48 studies investigating the efficacy of cognitive behaviour therapies and indicated that cognitive therapy was superior to no treatment, its efficacy appeared relatively uniform across diagnostic categories and equally effective when administered in a group or individual format.

However, though Stravynski and Greenberg (1987), in their review of studies found Cognitive-Behaviour Therapy to be equally efficacious as pharmacotherapy, opined that there was still no evidence at present that cognitive procedures with psychiatric outpatients were unique in producing the kind of cognitive change that is, improvement in the validity of inference, reduction in irrational belief or erroneous interpretation of events they were trying to achieve.

The purpose of the following Table No.6 is to simplify the presentation of the above mentioned comparative studies and to facilitate comparisons.
## Table 6  Studies on Cognitive-Behaviour Therapy in the Treatment of Depression

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Study</th>
<th>Sample</th>
<th>Treatment Comparisons</th>
<th>Duration (Weeks)</th>
<th>Results</th>
<th>Follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Shipley &amp; Fazio (1973)</td>
<td>College Students; Volunteers; Male &amp; Female Age: 18 to 33</td>
<td>1. Functional Problem Solving- Cognitive (FPS) 2. Supportive (S) 3. Wait List Control (WLC)</td>
<td>3</td>
<td>FPS &gt; S &gt; WLC</td>
<td>Nil</td>
</tr>
<tr>
<td>4.</td>
<td>Rush, Khatami &amp; Beck (1975)</td>
<td>3 outpatients; Males, Age: 24, 37, 53</td>
<td>Activity assignments and modification of self-evaluation, style and judgement</td>
<td></td>
<td>All S's depression decreased to nondepressed range</td>
<td>12 months progress maintained</td>
</tr>
<tr>
<td>6.</td>
<td>Kovacs &amp; Rush (1975)</td>
<td>33 outpatients; 12 Males, 21 Females, Age: 21-55</td>
<td>1. Cognitive-behaviour modification 2. Pharmacology (imipramine)</td>
<td>5</td>
<td>Both conditions produced similar decreases in symptoms; both conditions were maintained for 1.3 and 6 months; gains were maintained for decreases in symptoms; both conditions dropped out of treatment</td>
<td></td>
</tr>
<tr>
<td>S.No.</td>
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<td>10.</td>
<td>Rush, Beck, Kovacs &amp; Hollen (1977)</td>
<td>41 out patients; 15 males, 26 females. ages 18-65</td>
<td>1. Cognitive therapy (Beck's) 2. Drug Therapy (Imipramine)</td>
<td>12</td>
<td>Drug therapy group = ↑ drop out rate. CT &gt; Drug 76.5% C.T. completely remitted. 22.7% drug therapy completely remitted</td>
<td>3 &amp; 6 months trend continued though significant only at 3 months</td>
</tr>
<tr>
<td>S.No.</td>
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<td>14.</td>
<td>McDonald (1978)</td>
<td>28 depressed clinic patients</td>
<td>1. Cognitive &amp; Modification + Day care  2. Day care</td>
<td>12</td>
<td>Both treatments were equal</td>
<td>Nil</td>
</tr>
<tr>
<td>15.</td>
<td>Mu Leun &amp; Hakstian (1979)</td>
<td>C.T  2. Psychodynamic Therapy</td>
<td>3. Relaxation Training  4. Antidepressant</td>
<td>-</td>
<td>1 &gt; 2, 3, 4 post-treatment C.T. had lower drop-out rate</td>
<td>1 &gt; 2, 3, 4 at 3 months Follow-up</td>
</tr>
<tr>
<td>S.No.</td>
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</table>
2. Group C.T.  
3. Individual C.T. + antidepressant medication (ADM) | - | Individual C.T. = individual C.T + ADM > Group C.T. | Nil |
2. Cognitive treatment (Beck's)  
3. No treatment | 8 | Behavioural = Cognitive > no treatment | Maintained at 5-month follow-up |
| 23.   | Thompson & Gallagher (1984) | 37 elderly outpatients with major depression. Age > 60  
HRS-D > 14  
BDI > 16  
Mini-mental state Exam > 24 | 1. Behavioural  
2. Cognitive  
3. Short-term dynamic  
4. Delayed treatment control | 12 | All active treatment > control. All active treatments were equal. Pilot data suggest non-endogenous depression is more likely to respond and to respond more quickly. | 9% behavioural or cognitive relapse in one year. 56% dynamic relapse. |
2. Psychodynamic group psychotherapy | 36 | Both groups associated with pre-post changes C.B.T. > Psychodynamic or B.D.I. | Nil |
2. Antidepressant  
3. C.T. + Antidep  
4. C.T. Active Placebo | - | 1-2-3-4 post treatment combining treatment did not have additive effect or negative interaction. | Maintained at 1 year follow-up |
2. Antidepressant | - | 1-2 Questions role of cognition in Depression | Nil |
<table>
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</table>
2. G.P. consultation + antidepressant | -               | 1 > 2 Post treatment C.T. associated with more rapid improvement, fewer deliberate over-dose & fewer referral to psychiatrists. | No difference at 3 months follow-up. |
BDI ≥ 20  
HRS-D ≥ 14 | 1. C.T. (Beck's)  
2. C.T. + amitriptyline | 12              | Both treatments were equal                                   | Nil                            |
2. Relationship therapy (exploratory psychotherapy) | -               | 1 > 2 Stresses the need to focus research on process measures to account for differential effectiveness | Nil                            |
2. Interpersonal Psychotherapy  
3. Clinical management + antidepressant  
4. Clinical management + placebo | 16              | 1 = 2 = 3 > 4 post-treatment  
No evidence of greater effectiveness of any lone psychotherapy. | Nil                            |
2.2 STUDIES ON DEFINED DYSTHYMIC PATIENTS

De Jong et al. (1986) reported a trend to better results in inpatients with combined major depression and dysthymia who were treated with a combined activity scheduling, social competence, and cognitive approach than with cognitive therapy alone or waiting list controls. Anecdotal accounts from cognitive therapists suggests better results in late-onset than early-onset dysthymia.

McCullough et al. (1990), in their investigation compared early and late onset community dysthymia groups on insidious onset patterns, cognitive, coping, and symptom measures testing the assumption implicit in DSM-III-R that the two groups are qualitatively dissimilar. The results suggest that regardless of age of onset, the groups did not differ except on some features of coping style. Homogeneity and no heterogeneity, was the predominant finding.

McCullough (1991) conducted a study with ten early and late onset dysthymia cases, diagnosed by DSM-III criteria, who were treated with the cognitive behavioural analysis system of psychotherapy, a standardized, three-stage therapy system developed specifically for the treatment of dysthymia. The cases were presented as naturalistic, direct replication studies. The ‘Cognitive-Behavioural Analysis System’ of psychotherapy was not orthodox cognitive therapy, but combined cognitive elements with an interactional and interpersonal approach; nine of the ten were in remission at two-year follow-up.
Stravynski et al. (1991) reported improvement in six cases treated with orthodox Cognitive-Behaviour Therapy, while Mercier et al. (1992) reported improvement in six out of 15 dysthymics or double depressives with atypical depression, treated with Cognitive-Behaviour Therapy.

Akiskal (1993) in his article presented a prospective 2-years study, comparing the efficacy of fluoxetine with tricyclic antidepressants. The results showed the efficacy of fluoxetine in dysthymia.

Howland’s (1993) article reviewed the literature on the general health, health care utilization, prevalence, medical comorbidity, and treatment of dysthymia in medical settings. His review showed that dysthymic patients were at increased risk for poor general health and frequently used medical services. Compared to the general population, dysthymia was more prevalent in primary care and among patients with various medical and neurological conditions, sleep disorders, chronic fatigue, hypothyroidism, and somatoform disorders. Pharmacotherapy was effective, but had not been well studied. Non-tricyclic antidepressant might be especially useful. Psychotherapy studies were virtually non-existent.

Markowitz (1994) reviewed empirical research on the psychotherapy of dysthymia. The results of his review showed that psychotherapy research on dysthymia had been confined to small, usually uncontrolled studies with varying methods and limited follow-up. Cognitive approaches had been most frequently studied; the results had not been dramatic but did suggest that some dysthymic patients responded to brief cognitive therapies. The author proposed the following guidelines for such trials: time-limited, manual-based
psychotherapy, interpersonal focus, serial design, continuation and maintenance treatment, combined treatments, and follow-up assessments.

McCullough et al's (1994) primary goal of the study was to compare the psychosocial functioning of an untreated, community sample of DSM-III-R-dysthymia subjects (n = 24) at screening to that of a matched sample of community nondepressed volunteers (n = 18) with no lifetime or current history of axis-I disorders. Subjects were compared across a number of psychosocial indices. The dysthyrmics were found to be less sociable (introversion) and clinically high on neuroticism - instability, external in regard to their causal attributions, less stable for positive uncontrollable events, relying more on coping strategies such as wishful thinking and self-blame, more interpersonally submissive and hostile, and to have a poorer social support-resource network. In addition, the dysthyrmics reported more family dysfunction and a higher rate of negative major life events.

McCullough et al's (1994) study replicated an earlier naturalistic - prospective investigation of non-treatment, community DSM-III-R dysthymia subjects. Major goals were to determine spontaneous remission rates and monitor the stability of psychosocial functioning levels over time. Twenty-four dysthymia subjects were followed for 1 year. Three remissions (13%) were diagnosed at the final interview. At a 4-year diagnostic follow-up contact with the remitters only, one remitter had relapsed and two remained in remission. Subjects were monitored for depressive symptom intensity, personality functioning, general medical distress, cognitive functioning, coping stylistics, interpersonal functioning, quality of their social support resources, and general
family functioning. Stable levels of psychosocial functioning were maintained across all measures over the 1-year period.

2.3 STUDIES CONDUCTED IN INDIA

In India, not much published literature is available. Hence studies which have utilised behavioural techniques, cognitive techniques such as Ellis's Rational Emotive Therapy (R.E.T.) are also mentioned.

Sen (1975) employed behavioural techniques like graded activity schedules, premack principle, behavioural rehearsals, self-monitoring, regulation and self-reinforcement for the modification of behavioural components of depression in 72 depressive patients. Out of this sample, 6 completed treatment and showed improvement, 18 cases showed improvement in behaviour but depressive feelings persisted, 48 cases dropped out due to various extraneous factors.

Kumaraiah (1979) conducted a study wherein 10 neurotic depressive patients were treated with behaviourally oriented treatment strategies, aimed at increasing activity level, reducing behavioural excesses and inducing effects incompatible with depression and enhancing instrumental skills. All the patients showed improvement which they maintained during the 14-28 month follow-up period.

Kuruvilla (1983) attempted to use the basic principles of cognitive behavioural approach in the treatment of a small group of depressive patients
in India. He found cognitive behavioural techniques to be effective in treating depression.

Balodhi and Keshavan (1986) attempted to summarise the main postulates of Bhagavad Gita, a sacred book of Hindus, with reference to their implications in psychotherapeutic context in the Indian social-cultural set-up. According to the authors, what Krishna did in the Bhagavad Gita for dispelling Arjuna's depression in the battle field was an example par excellence for cognitive therapy.

Rao (1988) examined the irrational beliefs in anxiety and depressive neurotics and treated them with Rational Emotive Therapy (R.E.T). She considered a sample of 10 anxiety and 10 depressive neurotics for the study. The comparison of pre and post-therapy scores on various variables as a result of R.E.T. indicated that there was a significant reduction in the irrational thinking, a rise in self-esteem, decrease in feelings of alienation, a further shift toward internality and lowered difficulties in their problem solving process apart from reduction in anxiety and depressive features.

Nalini (1990) in her unpublished Ph.D. thesis studied the effectiveness of Cognitive-Behaviour Therapy (Beck's approach) in reducing depression and negative thoughts in neurotic depressives. Her sample consisted of 25 clients diagnosed as neurotic depressives. The analysis of data revealed that the therapy was significantly effective in bringing about a reduction in depressive features as well as negative thoughts from pre to post-assessment period. Most of the clients maintained improvement gained during the post-assessment
period as the follow-up findings revealed. She reported a low drop-out rate of 20%.

2.4 FOLLOW-UP STUDIES

Until 1981, there had been few controlled studies which had followed up their patients adequately. McLean and Hakstian (1979) observed their group for three months. The first study in which there was adequate time between discharge and follow-up was that of Kovacs et al. (1981) (a follow-up of Rush et al.'s patients). Thirty-five of the forty-six were followed (eighteen C.B.T. and seventeen drug). They found no significant difference between dependent measures at the end of one year from those taken at the end of treatment, indicating that treatment gains had been maintained. Despite this, they found considerable variability in the course of both cognitive-behavioural and drug groups' progress, and the difference between the two was not always apparent on the dependent measures.

On the other hand, the comparisons always favoured the C.B.T. group and reached statistical significance at some points over the year. Defining 'relapse' as a Beck Depression Inventory (B.D.I.) score of over 16 during the year at any time, receiving further psychological treatment (plus either of these or both of these), the drug group was found to have been twice as likely to relapse as the cognitive therapy group. It is apparent from these data that there is no evidence that any improvement brought about by Cognitive-Behaviour Therapy is merely short-term. However, this study followed up both those who responded and those who did not respond to the original treatment. Thus it could not distinguish between 'non-responders' and 'relapsers'.
Four studies have looked at relapse in depressive illness and the results have been consistently of great promise. These are summarized in the following Table.

<table>
<thead>
<tr>
<th>Study</th>
<th>Period</th>
<th>Measures</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kovacs et al (1981)</td>
<td>1 Year</td>
<td>BDI, HS</td>
<td>CT &gt; ADM</td>
</tr>
<tr>
<td>Beck et al (1985)</td>
<td>1 Year</td>
<td>BDI, HS</td>
<td>CT = CT + ADM</td>
</tr>
<tr>
<td>Simons et al (1986)</td>
<td>1 Year</td>
<td>Relapses</td>
<td>((CT, CT + P) &gt; (ADM, CT + ADM))</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>((CT, CT + P, CT + ADM) &gt; ADM)</td>
</tr>
<tr>
<td>Blackburn et al</td>
<td>2 Years</td>
<td>Relapses</td>
<td>CT = CT + ADM &gt; ADM</td>
</tr>
</tbody>
</table>

( ) : Denotes collapsed treatment cells;  
+ : Denotes combined treatment;  
> : Denotes 'more effective than';  
= : Denotes equivalent efficacy;  
ADM : Antidepressant medication;  
BDI : Beck depression inventory;  
CT : Cognitive Therapy;  
HS : Hopelessness Scale;  
P : Placebo.

Relapses are defined in terms of BDI 16 or restart of treatment.

All the above mentioned four studies indicated a marked improvement in relapse rates over a period of 1 year or 2 years in patients treated with cognitive therapy alone or in combination with antidepressant medication. In the Blackburn et al. (1986) study, over the 2 years follow-up, the relapse rate for cognitive therapy alone was 23%, for the combined treatment 21% and for medication alone 78%. Thus, although the relapse rate on medication was
equivalent to that reported by Glen et al. (1984) for their placebo maintenance group, the two cognitive therapy groups suffered considerably less relapse than their patients maintained on medication for 2 years (59%).

Williams, (1989) found that the estimate of proportion of people who relapse following the initial response to treatment varies depending on the severity of patients in the sample, the length of the follow-up period and the definition of relapse. The details of his review will be given in the following table.

**Table 8** Percentage of Patients relapsing following initial recovery after antidepressant acute or maintenance treatment

<table>
<thead>
<tr>
<th>Study</th>
<th>Treatment</th>
<th>Follow-up (months) % relapse (Amongst initial responders)</th>
</tr>
</thead>
</table>
| Klorman et al (1974) | TCA¹ (acute)  
TCA (+ maintenance) | 36% 12%                                                   |
| Mindham et al (1973) | TCA² (acute)  
TCA (+ maintenance) | 50% 22%                                                   |
| Prien et al (1974)   | TCA³ (acute)  
TCA + lithium  
(+ maintenance) | 92% 48%                                                   |
| Glen et al (1984)    | TCA⁴ (acute)  
TCA + lithium  
(+ maintenance) | 56% 34% 67% 45% 78% 59%                                   |

¹ 4-6 weeks amitriptyline, 100-200 mg/d.
² 3-10 weeks imipramine/amitriptyline.
³ Imipramine.
⁴ Amitriptyline.
Klerman et al. (1974) found that 36% of their predominantly neurotically depressed outpatients relapsed within eight months following initial response to four to six weeks of amitriptyline, 100-200 mg/d (if given no further treatment).

The UK Medical Research Council Multicentre Trial (Mindham et al., 1973) involved more severely depressed outpatients and found that 50% relapsed within six months following initial treatment response if given no further treatment.

The US National Institute of Mental Health Study (Prien et al., 1974) examined more severely depressed patients and found that 92% of a placebo group relapsed within the two years following successful response to initial active treatment. This pattern of results has been replicated in a further MRC trial of maintenance amitriptyline on lithium treatment (Glen et al., 1984): six months after good response to initial treatment, 56% of patients given no further treatment had relapsed; this figure had increased to 67% after twelve months and 78% after twenty-four months.

Each of these cited studies has also examined to what extent maintenance dosage of antidepressant or lithium can reduce the probability of relapse. Although absolute levels have differed depending on severity of condition, most have found that relapse rates can be (at least) halved by maintenance medication (from 36 to 12% after eight months Klerman et al., 1973); from 92 to 48% after six months (Mindham et al., 1973); from 92 to 48% after 24 months (Prien et al., 1974). However the most recent estimate from the MRC trial (Glen et al., 1984) is more pessimistic. They found that relapse
rates at six months were reduced from 56 to 34%; but at twelve months 45% and at twenty-four months 59% of patients who remained on maintenance medication had relapsed.

There have been four outcome studies which having compared tricyclic antidepressants with cognitive therapy in the initial treatment, have taken patients who initially responded and examined their outcome over the subsequent twelve or twenty-four months (Evans et al., submitted; Blackburn et al., 1986; Simons et al., 1986; Shea et al., submitted which is the eighteen-month follow-up of the Elkin et al (1989) NIMH trial).

Table 9  Percentage of patients relapsing following initial recovery after acute treatment by antidepressants, cognitive therapy or the combination

<table>
<thead>
<tr>
<th>Study</th>
<th>Treatment</th>
<th>Follow-up (months)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>% relapse (amongst initial responders)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Evans et al (submitted)</td>
<td>TCA + CBT</td>
<td>50</td>
</tr>
<tr>
<td>(1992)</td>
<td>TCA (+ maintenance for 12 months)</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>C.B.T.</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>TCA + CBT</td>
<td>15</td>
</tr>
<tr>
<td>Simons et al (1986)</td>
<td>TCA&lt;sup&gt;1&lt;/sup&gt;</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>CBT</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>TCA + CBT</td>
<td>43</td>
</tr>
<tr>
<td>Blackburn et al (1986)</td>
<td>TCA&lt;sup&gt;2&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CBT</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CBT + TCA</td>
<td></td>
</tr>
<tr>
<td>Shea et al (Submitted)</td>
<td>TCA + clinical management&lt;sup&gt;3&lt;/sup&gt;</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>CBT&lt;sup&gt;3&lt;/sup&gt;</td>
<td>9</td>
</tr>
</tbody>
</table>

<sup>1</sup> Nortriptyline  
<sup>2</sup> amitriptyline and clomipramine  
<sup>3</sup> Imipramine
Each of these studies has found that patients who have responded to tricyclic antidepressants have a probability of relapse equivalent to that seen in the groups who receive no maintenance treatment in the drug trials with moderate to severe depression cited above (Evans et al. 50% at twenty-four months; Siemons et al. 66% at twelve months; Blackburn et al. 78% at twenty-four months; Shea et al., 28% at twelve months and 50% at eighteen months).

These studies have also found that the properties of patients relapsing was substantially reduced if cognitive therapy had been added to tricyclic antidepressant medication during the acute treatment - Evans et al. from 50% to 15% at twenty-four months (cognitive therapy alone 20%); this compares with a 27% rate of relapse for medication plus maintenance medication for the first twelve months; Simons et al., from 66% to 43% at twelve months (Cognitive therapy alone 20%) Blackburn et al. from 78% to 21% at twenty-four months (cognitive therapy alone 23%); and Shea et al. found that cognitive therapy alone had a relapse rate of 9% compared with the TCA + clinical management of 28% at twelve months, and 36% for CT alone compared with 50% for TCA + CM at eighteen months.

The results of these studies conducted at different centres in both the U.S. and the U.K. appear consistent. They are particularly interesting in that three of them (Evans et al., Simons et al., Shea et al.) found some differences in relapse rates despite having found no difference between tricyclic antidepressant and cognitive therapy or the combinatin of two in the acute phase of treatment. If these results are reliable, it will indicate an important advance in the management of chronically relapsing depressive illness. For
example, Shea et al found that over the eighteen-month follow-up period, recovered patients who had received C.B.T., received an average of 4.2 weeks of further treatment. Recovered patients who had received amipramine received an average of 20.3 weeks of further treatment ($p < 0.017$).

In summary, the effectiveness of cognitive therapy for depression is supported by a number of studies. However, the evidence that it is more effective than other active treatments during the acute treatment phase is not conclusive. There is promising evidence that it is superior to pharmacotherapy and nonbehavioural psychotherapies in preventing relapse. Cognitive therapy remains one of the most valuable contributions to the treatment of depression.

2.5 CRITICAL APPRAISAL OF THE STUDIES

The cognitive model delineated by Beck has been most widely used in the clinical setting with patients suffering from depressive disorders.

The critique of the reviewed studies will be given below:

1. Methodological aspects which include the population studied, assessment measures, therapist variables, control procedure and

(Continued in the next page.)
therapeutic sessions are not satisfactory in many of the studies. Many studies lacked controls, had small sample sizes, inadequate and/or inconsistent measures of outcome, and very limited follow-up. There is a heavy reliance on self-report questionnaires and appropriate measures which pick out the specific factors modified by the cognitive therapy are not used. The basic problem lies in generalization of results to the depressive population. Because of the small sample size and the nature of the sample, either students or volunteers are accepted for the studies, which restricts the findings. The range of experience among study therapists has often been small which means that the chance of finding significant outcome differences as a function of experience has also been small. The cognitive therapy sessions conducted are very few in some investigations which prevent one from commenting on the efficacy of Cognitive-Behaviour Therapy.

2. Most of the studies conducted in the past have been univariate in nature. The present study on the other hand is multivariate, because many factors simultaneously operate on the criterion variable dysthymia. Multivariate study is definitely preferable to univariate studies because of additional information to the knowledge on dysthymia, and exercise of better control on all possible extraneous factors.
8. There is a dearth of epidemiological studies on dysthymia in India.

There is a paucity of research in dysthymia area in the Indian clinical set-up. The present study conducted in the Indian set-up, attempts to identify the factors that contribute to dysthymia and to study systematically the effectiveness of treatment of dysthymia with a non-pharmacological (Cognitive-behaviour therapy) therapeutic strategy.

Keeping this in view, in the next chapter, problem and hypotheses are stated.