COGNITIVE THEORIES OF DEPRESSION

Cognitive theories of depression hypothesize that particular negative ways of thinking increase individuals' likelihood of developing and maintaining depression when they experience stressful life events. According to these theories, individuals who possess specific maladaptive cognitive patterns are vulnerable to depression because they tend to engage in negative information processing about themselves and their experiences. Beck (1,2) hypothesized that depression-prone individuals possess negative self-schemata (beliefs), which he labeled the "cognitive triad." Specifically, depressed patients have a negative view of themselves (seeing themselves as worthless, inadequate, unlovable, deficient), their environment (seeing it as overwhelming, filled with obstacles and failure), and their future (seeing it as hopeless, no effort will change the course of their lives). This negative way of thinking guides one's perception, interpretation, and memory of personally relevant experiences, thereby resulting in a negatively biased construal of one's personal world, and ultimately, the development of depressive symptoms. For example, the depression-prone individuals are more likely to notice and remember situations in which they have failed or did not live up to some personal standard and discount or ignore successful situations. As a result, they maintain their negative sense of self, leading to depression.

A second cognitive model, the hopelessness theory of depression, proposed by Abramson, Metalsky, & Alloy (3) is based on Seligman's work on learned helplessness and attribution styles (4,5). The hopelessness theory of depression posits that when confronted with a negative event, people who exhibit a depressogenic inferential (thinking) style, defined as the tendency to attribute negative life events to stable (enduring) and global (widespread) causes, are vulnerable to developing depression because they will infer that: a) negative consequences will follow from the current negative event, and b) that the occurrence of a negative event in their lives means that they are fundamentally flawed or worthless. For example, consider a woman whose fiancé breaks off their engagement. If she attributes the cause of the break-up to her personality flaws, a stable-global cause that will lead to many other bad outcomes for her,
or if she infers that a consequence of the break-up is that she will never marry or have children, or if she infers that without a lover, she is worthless, she is likely to become hopeless and develop the symptoms of depression. Thus, according to hopelessness theory, a specific cognitive vulnerability operates to increase the risk for depression through its effects on processing or appraisals of personally relevant life experiences.

COGNITIVE BEHAVIOR THERAPY OF DEPRESSION

Aaron T. Beck and colleagues (1) initially developed cognitive therapy as a treatment for depression. Cognitive behavioral treatment (CBT) of depression involves the application of specific, empirically supported strategies focused on depressogenic information processing (1) and behavior (6,7). In order to alleviate depressive affect, treatment is directed at the following three domains: cognition, behavior, physiology. (see Depression [8] for a session-by-session description). In the cognitive domain, patients learn to apply cognitive restructuring techniques so that negatively distorted thoughts underlying depression can be corrected, leading to more logical and adaptive thinking. Within the behavioral domain, techniques such as activity scheduling, social skills training, and assertiveness training are used to remediate behavioral deficits that contribute to and maintain depression (e.g., social withdrawal, loss of social reinforcement). Finally, within the physiological domain, patients with agitation and anxiety are taught to use imagery, meditation, and relaxation procedures to calm their bodies.

CBT is oriented towards empowering the patient. Within this specific, brief psychotherapeutic treatment modality, the emphasis is on providing patients with skills to offset their depression. One primary goal of CBT is to facilitate the use of treatment techniques outside therapy sessions to create a "positive emotional spiral" wherein patients can implement specific strategies to offset their depressive mood (e.g., cognitive restructuring is used to offset negative thought patterns and the consequent depressive affect, scheduling pleasant activities is used to offset decreased reinforcement secondary to social withdrawal).

EFFICACY OF COGNITIVE BEHAVIOR THERAPY FOR DEPRESSION

Since cognitive therapy was first formulated by Beck (9), numerous studies have demonstrated the efficacy of cognitive therapy for depression. The first landmark study conducted by Rush and colleagues in the late seventies (10) demonstrated that cognitive therapy was more effective than tricyclic antidepressant therapy in patients suffering from clinical depression. In contrast with previous outcome research which demonstrated that psychotherapies were no more effective than pill-placebos and less effective than antidepressant medications, the Rush et al. study was the first to show that a psychosocial treatment was superior to pharmacotherapy in the treatment of depression (11). Further, a follow-up study conducted twelve months post-treatment showed that relapse rates were lower among patients who received CT (39%) versus those who received antidepressant medication (65%), although this difference did not reach statistical significance (12).

In the two decades since the initial trial, many controlled trials have been undertaken to replicate these findings. Although many experts now believe that the Rush study was
sufficiently flawed to negate study findings (11), many qualitative and quantitative reviews now conclude that cognitive therapy: 1) effectively treats depression, 2) is at least comparable, if not, superior to medication treatment, and 3) may have lower rates of relapse in comparison to medication treatments (11,13-17). As a result, cognitive therapy has gained widespread acceptance as a first-line treatment for depression, and cognitive behavioral therapy is one of only two psychotherapies included in the guidelines for the treatment of depression published by the Agency for Health Care and Policy Research (AHCPR).

FUTURE DIRECTIONS
Although the breadth of support for CBT is impressive, additional multicenter studies that compare medications and different forms of psychotherapy are still needed to confirm the efficacy of short-term CBT as a treatment for depression, especially in light of the results of the recent National Institute of Mental Health Treatment of Depression Collaborative Research Program study (NIMH TDCRP) which concluded that cognitive behavior therapy was not effective in the treatment of severe depression (18). Although many investigators now suggest that the TDCRP study was flawed in several important respects (19-21), additional studies still need to be conducted to see if these findings can be replicated. However, for any study findings to be valid, it is essential that active treatments are administered by clinicians adequately trained in the various approaches and that issues of researcher allegiance and site differences are appropriately addressed. Further, adding controls such as a pill placebo and a placebo plus CBT control condition are imperative to enhance treatment interpretability.

In order to enhance treatment effects, studies must also examine the relative efficacy of CBT in depressive subtypes that may have characteristics that are associated with poorer outcome. For example, it has been demonstrated that patients with atypical depression (AD), a new subtype of the mood disorders in the DSM-IV are less responsive to tricyclic antidepressants (22,23). Hence, cognitive behavioral treatment for depressed patients with atypical depression may need to be modified to meet their unique symptom needs (24). Along the same lines, there is preliminary evidence that patients with personality disorders may be less responsive to short-term CBT, and that optimal treatment can only be accomplished for these patients if the treatment is modified to address the personality disorder as well (25 for a review). Identifying specific populations who do not respond as well to short-term CBT will lead to the elucidation of factors that must be modified to provide more appropriate treatment.

Finally, future research studies need to evaluate the effectiveness of CBT for depression outside of clinical research centers. The demonstration of treatment efficacy in controlled research environments is only the first step in treatment research. Once a positive therapeutic effect has been conclusively demonstrated, generalizability becomes of paramount importance. With regard to CBT for depression, it seems fair to conclude from the reviews conducted that CBT is an effective treatment in clinical research settings. But data are not available on the efficacy of CBT for depression when delivered in non-research clinical settings to a diverse group of patients (This is not unique to CBT, and applies to other empirically supported treatments as well, e.g., pharmacological
approaches). Without data, one must be cautious in generalizing the results from research settings to typical clinical settings because there are several factors that might reduce the efficacy of this treatment (26). For example, one area of particular concern is that clinicians in research settings are likely to possess greater expertise in the administration of a particular treatment developed in that setting compared to the average clinician. Thus, since clinician competence may be an important factor for success, one would expect a less favorable outcome in uncontrolled settings where the quality of treatment may not be as good. While caution may be warranted until data are generated specifically on CBT for depression, it is reassuring to note that data are beginning to appear that support the effectiveness of evidence based treatments outside of controlled research environments (27), and a recent meta-analysis of psychotherapy studies found that the effect sizes of psychotherapy in "clinically representative settings" is slightly lower (approximately 10%) but comparable to that obtained in clinical research settings (28).

REFERENCES


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