Cognitive Behavior Therapy for Depression?
Choose Horses for Courses

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Objective: Although cognitive behavior therapy is a widely accepted treatment for depression, the problematic nature of efficacy studies is insufficiently recognized.

Method: The authors reviewed original studies and quantitative analyses on the use of cognitive behavior therapy for depression.

Results: The authors suggested that claims for cognitive behavior therapy's efficacy on depression have been overstated, questioned whether its efficacy fits within its theoretical underpinning, and argued against viewing cognitive behavior therapy as a universal rather than a targeted strategy.

Conclusions: Although cognitive behavior therapy may act more by its nonspecific therapeutic ingredients, the authors argued that by testing cognitive behavior therapy's efficacy in heterogeneous study groups, rather than in specific subgroups, failure to differentiate it from control therapies may have been ensured.

Cognitive therapy is the most extensively researched psychological treatment for nonpsychotic unipolar outpatient depressive disorders (1).

Cognitive behavior therapy evolved from cognitive therapy, which focused on dysfunctional beliefs, and then incorporated components of behavior therapy. Its role in depression was detailed in a key treatment manual (2) more than two decades ago.

While we observe clear benefit in many of our patients receiving cognitive behavior therapy, a careful review of the literature challenges cognitive behavior therapy as any more efficacious than other nonpharmacological therapies. There is a need to progress beyond the methods used so far to investigate cognitive behavior therapy's efficacy. In Western countries, antidepressant drugs and cognitive behavior therapy dominate the treatment of depression. Each has been tested in heterogeneous groups of depressed patients and, in direct comparisons, has been found to have comparable *overall* efficacy. Studying heterogeneous groups is only appropriate, however, when a treatment is effective for all expressions of depression. In our view, studies have failed to identify the situations and patient characteristics associated with effective cognitive behavior therapy.

Clinical management of the depressive disorders currently risks the "affective fallacy"—in literature, a term used to describe the error of evaluating a work by its effects on the reader rather than by the integral strengths of the work itself. Similarly, the choice between antidepressant and cognitive behavior therapy for an individual patient often rests simply on the professional and personal biases of the patient and therapist.

The Acute Phase of Depression

It is difficult to compare individual controlled studies of cognitive behavior therapy because of methodological problems associated with a psychotherapy that is variably defined and administered. Assessment of response is also problematic. For example, improvements associated with cognitive behavior therapy have been claimed to occur early in therapy (3), at mid-term (4), and after a significant delay (5), raising questions about the appropriate endpoint for analysis and exacerbating the usual limitations of meta-analysis. Although the treatment efficacy of cognitive behavior therapy in the acute phase of depression has been evaluated in numerous reviews (e.g., references 1 and 6) and meta-analyses (e.g., references 7–10), an inconsistency across reports is worthy of emphasis.

Dobson (7) concluded that cognitive behavior therapy was more effective than behavior therapy, other psychotherapies, and pharmacotherapy. The largest meta-analysis, by Gloaguen and colleagues (9), evaluated 48 randomized controlled trials that included 2,765 patients with nonpsychotic and nonbipolar major depression or dysthymia. The treatment of patients receiving cognitive behavior therapy was quantified as superior to the "treatment" of an amalgamated group of wait-listed or placebo-control subjects (20 studies, 29% improvement) and the treatment of patients receiving antidepressant medication (17 studies, 15% improvement) and "other therapies," such as supportive and nondirective psychotherapies, interpersonal psychotherapy, and relaxation therapy (22 studies, 10% improvement). Cognitive behavior therapy

was no better than behavior therapy (13 trials, 2% benefit). The authors concluded that cognitive behavior therapy had superior efficacy to both no therapy and all other modalities apart from behavior therapy.

Methodological concerns about this meta-analysis included the amalgamation of placebo-control and wait-listed patients into a composite group, therefore disallowing direct comparison with placebo "treatment." A placebo, by definition, should "please," while allocation to a waiting list should discourage any improvement since the therapeutic "gun" has yet to be "fired." Comparison against each group individually is required to understand cognitive behavior therapy's efficacy. Their amalgamated analysis resulted in only one study with a placebo cell—the National Institute of Mental Health (NIMH) Treatment of Depression Collaborative Research Program study by Elkin and colleagues (11). In fact, that cell was described by the original authors as involving "placebo plus clinical management," with the latter component serving "as a control for regular contact with an experienced and supportive therapist…[and thus] as a useful comparison group for evaluating the specific effectiveness of the psychotherapies" (p. 977). The outcome there did not differ significantly from the three active comparison treatments. Thus, the influential meta-analysis by Gloaguen et al. (9) did not truly compare cognitive behavior therapy to placebo, partially disallowing their conclusion that the effects of cognitive behavior therapy "are not due to placebo and/or demand characteristics."

Second, their definition of the "other therapies" comparator group included multiple psychotherapies (as well as relaxation therapy and alternative bibliotherapy), risking the less powerful therapies in this group, obscuring the advantages of more efficacious psychotherapies, and thus risking overstating cognitive behavior therapy's efficacy.

Third, their conclusions are inconsistent with the earlier Depression Guideline Panel meta-analysis (8), which considered 28 randomized controlled trials of psychotherapy for depression. Response rates were 50% for cognitive behavior therapy, 52% for interpersonal psychotherapy, and 55% for behavior therapy; this equivalence is in contrast to the conclusions reached in the study by Dobson (7) and the meta-analysis by Gloaguen et al. (9). The latter studies are also inconsistent with a meta-analysis by Leichsenring (10) comparing the short-term efficacy of at least 13 sessions of cognitive behavior therapy and behavior therapy with short-term psychotherapy and finding no difference in effects on depressive symptoms, general psychiatric symptoms, social functioning, or remission and improver rates.

The meta-analyses suggested a narrower question: is cognitive behavior therapy any more effective than nonspecific psychotherapy? Stravynski and Greenberg (12) suggested that all models of psychotherapy, including cognitive behavior therapy, may be "equally unsound scientifically but they energize the therapists and provide useful fictions to activate the patients to lead somewhat more satisfactory lives." Ilardi and Craighead (3) suggested that, since most symptomatic improvement with cognitive behavior therapy occurs before the formal introduction of cognitive restructuring techniques, improvement reflects more nonspecific treatment factors than the effects of specific cognitive behavior therapy. King (13) reviewed NIMH study data (11) and comparisons between cognitive behavior therapy and 1) interpersonal psychotherapy, 2) brief psychodynamic therapy, and 3) social work counseling and concluded that there was "no evidence that cognitive behavior therapy had superior short-term efficacy compared to other psychological treatment, or indeed to placebo."

Despite such concerns, a conservative interpretation suggests that cognitive behavior therapy is efficacious because it is superior to no treatment or the wait list control condition. In terms of superiority to other manualized psychotherapies or to basic clinical management, we suggest that the verdict of the efficacy of cognitive behavior therapy as not proven holds (the Scottish judicial system has an option of "not proven" as opposed to "guilty" or "not guilty," which is a useful call in this instance). Its efficacy may reflect nonspecific ingredients common to any psychotherapy.

Ongoing Treatment

There are few continuation or maintenance studies of cognitive behavior therapy. One (14) enrolled patients with major depression in 16 weeks of acute treatment, followed by 2 years of maintenance. Group members received either antidepressant drugs or cognitive behavior therapy for the acute and maintenance phases or antidepressants in the acute phase, followed by cognitive behavior therapy in the maintenance phase. There were no significant differences between treatments in improvement or rates of relapse.

Most long-term studies have relied on naturalistic follow-up of patients in short-term comparison studies in which treatment often ceased after the acute phase or continued at varying levels of frequency and compliance and used varying markers of outcome. The Depression Guideline Panel review (8) suggested that the prophylactic effects of acute-phase cognitive behavior therapy appeared superior to that of pharmacotherapy, although the nature of the data (that is, from open studies) disallowed definitive conclusions.

In the large meta-analysis by Gloaguen et al. (9), eight of the 48 studies were judged as allowing a comparison of cognitive behavior therapy with antidepressants at a follow-up point of at least 1 year, with respective rates of relapse of 29% and 60%. Five of those eight studies were also included in an analysis by Scott (1), who noted that the naturalistic follow-ups made comparison difficult but concluded that there was a "trend for cognitive therapy

(alone or in combination) to be nonsignificantly better than maintenance pharmacotherapy in preventing relapse." The more cautious tone of Scott was appropriate when there was a mean cell size of only 13 subjects, while the 1-year rates of relapse associated with antidepressants in each articles' analyses (60% and 65%, respectively) were uncharacteristically high.

There is some indirect evidence of a prophylactic effect of cognitive behavior therapy. Fava and colleagues (15, 16) studied 40 patients with major depression, who, after tapering antidepressant therapy, were randomly assigned to either cognitive behavior therapy for residual symptoms or standard clinical management. The small study group and the fact that some subjects required antidepressants for relapse limited the study's conclusions. Nevertheless, lower rates of relapse were demonstrated for cognitive behavior therapy after 2, 4, and 6 years (25% versus 80%, 35% versus 70%, and 50% versus 75%, respectively).

An important question is whether cognitive behavior therapy has prophylactic potential in preventing relapse or recurrence in partial responders to initial therapy, when such subjects are at a greater risk of depression relapse (17). Paykel et al. (18) and Scott et al. (19) investigated patients whose depression had partially remitted with medication and who were randomly assigned to clinical management alone or in combination with 20 weeks of cognitive behavior therapy while continuing to take antidepressants. Medication and clinical management sessions were maintained during a 48-week follow-up phase. There were no significant group differences over the 20-week acute phase; formalized relapse rates tended to be lower in the group receiving cognitive behavior therapy (18), both at the end of the 20-week treatment phase (10% versus 18%) and at the 68-week endpoint (29% versus 47%). Monthly depression scores showed an almost immediate improvement in the group receiving cognitive behavior therapy in self-report scores on the Beck Depression Inventory but not until the third month for blind, observer-rated scores on the Hamilton Depression Rating Scale. The rapid subjective effect of cognitive behavior therapy suggests either a placebo effect (with subjects aware of allocation to additional therapy) or a real cognitive impact after initial exposition and implementation of cognitive behavior therapy.

Thus, some studies indicate ongoing benefits of cognitive behavior therapy, but they have generally compared cognitive behavior therapy to treatment as usual or varying ongoing antidepressant therapies. The comparative effectiveness of cognitive behavior therapy and medication is of fundamental importance to clinicians and patients, but the question has been confused by comparing *prophylactic* cognitive behavior therapy with *maintenance* medication treatment. It would be more appropriate to compare cognitive behavior therapy's prophylactic potential with cogent clinical management, nonspecific psychotherapy, and even psychodynamic psychotherapy

(where the last has been held to demonstrate posttreatment improvement [20]) to determine if cognitive behavior therapy has specificity.

Superior to Other Psychotherapies?

As discussed, there is no clear consensus whether cognitive behavior therapy is superior or inferior to other psychotherapies, but there may be specific circumstances in which cognitive behavior therapy offers advantages. For example, Thase (21) suggested that the structured and directed components of cognitive behavior therapy are more beneficial than introspective psychotherapy, in which reflection on negative cognitions may overwhelm severely depressed individuals. However, Scott (1) reviewed numerous studies examining predictors of response to cognitive behavior therapy and concluded that research attempts "to characterize cognitive therapy responders have been disappointing."

An important advantage to cognitive behavior therapy might be in treating depression in patients with personality disorder, who are recognized as responding less well to all forms of therapy (22). Some reports support special benefits of cognitive behavior therapy (e.g., reference 23), but most have been negative (e.g., references 24 and 25). In regard to personality style, cognitive behavior therapy has been shown to be more effective than interpersonal psychotherapy for depressed patients with elevated levels of avoidant personality (26) in the NIMH Treatment of Depression Collaborative Research Program study, which is reassuring when such a style is an accepted risk factor for depression.

Other NIMH analyses, as well as other studies (e.g., reference 27), have identified depressed patients with less cognitive dysfunction or fewer dysfunctional attitudes having a superior response to cognitive behavior therapy (28)—which is somewhat paradoxical when cognitive behavior therapy is designed to redress dysfunctional attitudes.

Cognitive behavior therapy's psychotherapeutic efficacy has been linked to therapist characteristics, including the therapist's capacity to structure the treatment (29) and, in particular, to his or her empathy (30). Robinson and colleagues (31) have noted that the newer psychotherapies are more effective when practiced by "true believers," whether reflecting nonspecific effects of the therapist or therapist proficiency. Thus, there is no clear evidence identifying when cognitive behavior therapy might be superior to other forms of psychotherapy.

Superior to Antidepressant Drugs?

There are several theoretical situations in which cognitive behavior therapy may be superior to antidepressant medication, for example, when patients have antipathy to medication, an inability to tolerate medication, or are at special risk (e.g., pregnancy, high suicidality). Nonmedica-

tion options can be useful when there are concerns about prescribing antidepressant drugs to children and adolescents—a group for whom cognitive behavior therapy is said to be of benefit (32)—and, in particular, to prevent recurrence (33).

Thase (21) and Fava et al. (34) observed that there were many reports of patients with "drug-resistant" depressive disorders responding to cognitive behavior therapy, so patients with nonresponsive and partially responsive disorders may benefit. The studies reported by Paykel et al. (18) and Scott et al. (19) support such a role, while the report by Fava et al. (34) found a 63% rate of remission in a course of cognitive behavior therapy in patients who had achieved no benefit in two antidepressant trials.

Augmentation of Antidepressant Drugs?

Conte and colleagues (35) conducted a meta-analysis of studies investigating psychotherapy and pharmacotherapy, separately and in combination, and concluded that the combination was slightly more effective. Although several cognitive therapy and behavior therapy studies were included in the overall analysis, neither was specifically examined in the analyses of combination effects.

It has been claimed that combination therapy with cognitive behavior therapy is particularly beneficial for chronic and treatment-resistant depression (21, 36, 37) as well as recurrent depression (38), but few such studies have been reported. One (39) found some support in chronically ill and severely depressed subjects, with combination therapy showing slight superiority to cognitive behavior therapy or pharmacotherapy alone. The most positive study (4) suggested synergistic benefits in chronic depression, with subjects receiving either nefazodone alone, cognitive behavior therapy alone, or the combination of the two; respective rates of remission were 29%, 33%, and 48%. The study design requires repeating with antidepressant drugs of broader action.

Paykel (40) noted that combination therapy could aid medication compliance but, apart from some anecdotal reports, was unable to find any systematic controlled trials of any such effect. Thus, the empirical literature in regard to cognitive behavior therapy is slight, and there is a need to clarify whether any benefits emerge from the combination of medication and cognitive behavior therapy itself, from varying sequences of medication and cognitive behavior therapy, or from effects on compliance.

Relation to the Cognitive Theory of Depression?

Bowlby (41) argued that early attachment anomalies, especially uncaring and/or overprotective parenting, generate cognitive schema or internal working models that negatively shape the child's later interpretation of inter-personal interactions, therefore inducing and maintaining depression. Beck et al. (2) developed the model and advanced the application of cognitive behavior therapy, stating that his reformulation involved the depressed patient having a "global negative view of himself, the outside world, and the future" (the so-called cognitive triad), negative schemas (or stable faulty cognitive patterns), and cognitive errors (or faulty information processing) (2). He proposed that both stable depressogenic schema and situation-specific cognitive distortions contributed to depression (42). The first component is essentially a diathesis stress construct; the second suggests that stressful events reactivate earlier beliefs to precipitate depression.

If his model is valid, we would expect depressed individuals to show cognitive vulnerabilities upon recovery. Our review of more than 30 studies (43) failed—almost without exception—to identify differences between individuals with and without a history of depression. It is possible that the measures used—most commonly the Dysfunctional Attitudes Scale (44) and the Automatic Thoughts Questionnaire (45)—may not truly measure core beliefs and schemas. Ingram and colleagues (43) also suggested that negative studies could be explained by the enduring depressogenic schema existing at a deeper level, while Miranda and colleagues (46) similarly argued that cognitive vulnerability factors remain dormant, awaiting activation by a negative mood. Thus, predisposed individuals may have latent beliefs awaiting activation by stress and only measurable under conditions of stress. If so, their presence should be identifiable before the first depressive episode. Our review with Gladstone (47) identified only one supportive study (48).

Burns and Spangler (49) examined patients treated with cognitive behavior therapy over a 1-week period. They found no support for three hypotheses: 1) a cognitive mediation hypothesis—that changes in dysfunctional attitudes lead to changes in depression during treatment, 2) a mood activation hypothesis—that changes in depression lead to changes in dysfunctional attitudes, and 3) a circular causality hypothesis—that negative emotions and dysfunctional attitudes have reciprocal causal links. Their analyses favored a common cause model, with a state depressogenic factor driving both depression and dysfunctional attitudes (e.g., a loss of hope) and with therapy providing hope. However, Teasdale (50), who argued for a "shift in construct accessibility" model, showed that recovery associated with cognitive behavior therapy (in lieu of pharmacotherapy) involves modifying emotional processing, therefore changing the capacity of triggering clues to reactivate depressogenic processing.

Is it possible to define more homogeneous subsets of individuals for whom *the* cognitive theory is relevant? Our key-and-lock hypothesis (51, 52) views "locks" (cognitive schemas laid down by early adverse events) as being primed when an individual faces a mirroring life event (a "key"). Key-lock links were found in only a minority of indi-

viduals, were more common in nonmelancholic depression, and, seemingly counterintuitively, were more evident in those with reactive rather than neurotic depression. We suggested that reactive depression might be less a response to a severe stressor and more a response to a mirroring stressor that activates latent cognitive schema. Other analyses (e.g., reference 52) failed to find clear evidence that cognitive schema were latent locks and favored them as consequences of (or elicited by) a depressed mood. That is, when depressed, an individual may feel worthless (or hopeless) and then interpret recent stressors and the earlier environment according to the cognitive impact of the depression, in line with the Teasdale model (50).

DSM-IV includes a category for depressive personality disorder, with criteria including self-beliefs of inadequacy, worthlessness, and low self-esteem. Individuals with such symptoms appear ideal for assessing the relevance of cognitive behavior therapy, but we suspect a paradox. Since many have experienced profound childhood privation, the capacity of cognitive behavior therapy (like any other psychotherapy) to improve resilience may be limited. Resistance of such individuals to cognitive behavior therapy may explain the apparently paradoxical results from the NIMH Treatment of Depression Collaborative Research Program study, in which those with more cognitive dysfunction (as shown by higher dysfunctional attitude scores) benefited less from cognitive behavior therapy (28).

In summary, the theoretic basis for cognitive behavior therapy in depression is difficult to validate. We suggest that viewing cognitive behavior therapy as potentially effective across heterogeneous expressions of depression leads to its being tested in those in whom a cognitive predisposition may be of quite variable relevance. A state influence model might apply in most instances and a diathesis stress model in only a minority.

Relation to Depression Severity?

It is uncertain whether cognitive behavior therapy is equally efficacious in depression of varying severity. The 8-week NIMH Treatment of Depression Collaborative Research Program study (11) compared four treatments for major depression: imipramine, cognitive behavior therapy, interpersonal psychotherapy, and placebo plus clinical management, each having comparable rates of response. However, in a subset of more severely ill patients, imipramine was superior (53). There are several other studies suggesting that severely depressed patients are unlikely to respond well to cognitive behavior therapy (e.g., references 54 and 55).

DeRubeis and colleagues (55) undertook a mega-analysis of four randomized trials and concluded that cognitive behavior therapy "fared as well as antidepressant medication with severely depressed outpatients." In response, Klein (56) noted the "flawed nature of the cited data," the failure to consider relevant databases, and the "irrele-

vance of placebo-free experimental designs to claims for equivalent efficacy." Others have accepted a differential effect of cognitive behavior therapy across varying grades of severity. Shapiro and colleagues (57) found that severely depressed patients improved substantially more after 16 than after eight sessions. Thase and colleagues (58) proposed that the difference in improvement reflected a slower response rate and recommended more intensive or extended courses for more severely depressed patients.

We suspect that severity may sometimes serve as a proxy for biological depressive conditions such as melancholia and that it may be more important to examine the efficacy of cognitive behavior therapy across differing depressive disorders.

Is Efficacy Comparable for All Depressive Subtypes?

The depressive disorders essentially comprise three classes—psychotic, melancholic, and a heterogeneous residue of nonmelancholic disorders. The first two classes are generally viewed as more biological disorders, having a low placebo response and superior responses to physical treatments such as drugs and ECT. Their low rate of nonspecific improvement suggests that each is unlikely to respond to psychotherapy or to nonspecific elements of therapy. Conversely, the high nonspecific improvement of nonmelancholic depression means that any therapy has considerable potential for nonspecific improvement.

There are no data specifically examining the efficacy of cognitive behavior therapy in psychotic depression, suggesting its inappropriateness, while the situation for melancholia is more problematic. It is commonly claimed (e.g., reference 59) that melancholia/endogenous depression is unresponsive to nonsomatic treatments, but early studies of cognitive behavior therapy (e.g., references 39 and 60) reported a positive response. Thase and Friedman (61) reported an uncontrolled study in which 38 patients with Research Diagnostic Criteria-defined endogenous depression received 20 weeks of cognitive behavior therapy sessions, and 70% responded. One report from the NIMH study (28) concluded that "endogenous depression was an overall predictor of lower depression severity at termination across all conditions," but elsewhere it was stated that the relationship "was not observed" for cognitive behavior therapy. A key difficulty in analyzing such studies is that melancholia is variably defined and diagnosed.

A review (61) noted such limitations before concluding that the "data are somewhat suggestive that cognitive behavior therapy and behavior therapy are useful treatments for some outpatients with endogenous depressive features" (p. 7) but that "there is still not yet compelling evidence that they (i.e., those with melancholia) will respond as well to psychotherapy as pharmacotherapy" (p. 15).

We now consider the situation in regard to nonmelancholic depression. Most studies of patients with cognitive

behavior therapy have been undertaken in patients with diagnoses of major depression or dysthymia. Such diagnoses reflect a nominalistic approach to psychiatric nosology, with patients diagnosed as having, for example, major depression more distinguished by the commonality of its label than by the commonality of its essence.

In such a case, high placebo and spontaneous rates of remission are observed, limiting the capacity to assess the true efficacy of any treatment and best illustrated for major depression, in which the apparent equivalence of quite different treatments is striking. For antidepressant drug efficacy, a representative analysis by Janicak et al. (62) quantified the rates of response as 63% to tricyclic antidepressants (in 79 studies), 66% to a monoxidase inhibitor (in 16 studies), and 60% to 79% to four selective serotonin reuptake inhibitors (in 21 studies). Comparisons of drug treatments and psychotherapy suggest similar rates of response. For example, Robinson et al. (31) examined 60 psychotherapy studies and, although treatment outcome for psychotherapy was somewhat superior to that of pharmacotherapy, only trivial differences were evident after control for the researcher's allegiance to psychotherapy. Similar rates of response emerge across other treatment modalities. For instance, Williams et al. (63) quantified a 62% rate of response (across 14 studies) to hypericum (St. John's wort), and Mynors-Wallis and Gath (64) reported similar responses to problem solving and antidepressant medication.

Such data suggest that about two-thirds of patients with major (nonmelancholic) depression improve in response to nonspecific factors. In representative trials (62), placebo rates of response ranged from 32% to 48%, while Quitkin (65) suggested a placebo response rate in drug trials of 25% to 60%. Kirsch and Sapirstein (66) argued that response during receipt of an antidepressant drug comprises 24% natural history, 51% placebo effect, and 25% true drug effect. If similar response proportions apply to other therapies, it may be impossible to demonstrate a differential effect of treatment in patients with nonmelancholic depression.

We suspect that cognitive behavior therapy is more efficacious for nonmelancholic depression than in other types of depression but that efficacy estimates are influenced by the high responsiveness of those in the heterogeneous nonmelancholic group. It is unhelpful to continue to study the efficacy of cognitive behavior therapy across broad spectra (such as major depression and dysthymia) and expect differentiation from other treatments. More information is required on the subgroups that do and do not respond.

Application and Tolerability

Establishing the effectiveness of any psychosocial treatment is complicated by a range of variables in the therapy, therapist, and patient that are less important in the evaluation of physical treatments. These include the varied backgrounds, disciplines, and competence of therapists as well as paradigm fidelity (67), particularly since the ability to structure the treatment may be the component most closely related to outcome (68).

Keijsers and colleagues (69) identified qualitative aspects of the therapeutic relationship that affect outcomes of cognitive behavior therapy and suggested that cognitive behavior therapy appears to require more active direction by the therapist and higher levels of emotional support than insight-oriented therapies. Characteristics of the therapist associated with outcomes of superior cognitive behavior therapy include standard nonspecific components (i.e., empathy, nonpossessive warmth, and positive regard) as well as the patient perceiving the therapist as self-confident, skillful, and active (70). Patients who rated their therapist as significantly less empathic were more likely to drop out of therapy, not complete homework assignments, and fail to improve (71).

In contrast to studies demonstrating the importance of therapist characteristics, a randomized controlled study found computer-assisted therapy, which allowed targets for change to be chosen by the patient, to be as effective as therapist-delivered cognitive behavior therapy (72).

Judging the effectiveness of any therapy includes consideration of tolerability and side effects. Jarrett et al. (73) compared cognitive behavior therapy and treatment with phenelzine in a 10-week trial for patients with atypical depression. The two active treatments demonstrated identical rates of response (58%), which were superior to that of placebo (28%). However, attrition rates were 14% for cognitive behavior therapy, 25% for phenelzine, and 64% for placebo, while adverse side effects were more likely to be reported by those receiving phenelzine than those receiving placebo (92% versus 53%). Tolerability is likely to influence patients' initial interest in pursuing any therapy and subsequent compliance.

Possible Action

Cognitive behavior therapy may, as originally proposed, modify ongoing cognitive vulnerabilities, effecting a specific antidepressant action. This may also exert a prophylactic effect, either directly or indirectly, by modifying risk threshold and/or encouraging behavioral strategies that redress dysfunctional cognitive attributions. If this is valid, two issues must be reconciled. As noted earlier, the authors of the NIMH Treatment of Depression Collaborative Research Program study observed (28) that "it appears that the least cognitively impaired patients responded more favorably to cognitive therapy," challenging any effect of specific cognitive behavior therapy on underlying cognitive dysfunction. More important, symptomatic improvement may occur in the course of cognitive behavior therapy before cognitive restructuring (3). If initial improvement reflects the impact of hope and other nonspe-

cific therapeutic ingredients, to what extent is the improvement trajectory further influenced by any specific influence of cognitive behavior therapy?

Second, either the cognitive therapy or behavior therapy component of cognitive behavior therapy may be central and the other secondary. As stated earlier, several meta-analyses have suggested that cognitive behavior therapy is no more effective than behavior therapy, although individual comparison studies (e.g., reference 68) have generally failed to establish any differential outcome between, or target impact of, cognitive behavior therapy and behavior therapy. It is possible that the cognitive therapy component provides logic for a behavior therapy effect.

Third, nonspecific treatment and therapist effects (71) are likely to make a significant contribution to any psychotherapy as far as good clinical management.

Fourth, the structure of cognitive behavior therapy may provide an effective matrix for therapy. Scott (74) and Stravynski and Greenberg (12) identified common factors in effective psychotherapy. They provided a new frame of reference and a clear rationale, identified a structure with logical sequences and achievable goals, encouraged independent use of skills, changed the attributions of the patient, encouraged self-efficacy, and were active and directive. Cognitive behavior therapy clearly meets such criteria, having logic and possessing a credibility that appeals both to patients and to therapists. Hardy and colleagues (75) suggested that cognitive behavior therapy has a "treatment principle credibility" advantage that acts before the first treatment.

Fifth, cognitive behavior therapy invites patients to participate in the process of treatment and thus retain or regain control over their lives, which is important when many depressed individuals lack mastery, either intrinsically or as a consequence of depression.

Sixth, cognitive behavior therapy meets many needs of consumers not to merely receive a drug but rather to have extended contact with a professional and sense made of their personal world.

Seventh, cognitive behavior therapy may act on higher-order or antecedent constructs with any impact on depression being a secondary downstream component. Anxiety is a key candidate, as it increases the chance of depression and is responsive to cognitive behavior therapy. However, there is no evidence that comorbid anxiety predicts a superior response to cognitive behavior therapy. In fact, a majority of studies (e.g., reference 76) suggest the opposite, although another report (77) has indicated that those with high anxiety scores required more sessions of psychotherapy.

Conclusions

Cognitive behavior therapy has long been accepted as a credible therapy for depression. Despite high use and numerous evaluative studies, its efficacy (both acute phase and prophylactic) remains to be clarified, while proposed mechanisms of action may not be consistent with cognitive theories of depression.

We offer two possible conclusions about the true status of cognitive behavior therapy as a primary treatment for depression. First, cognitive behavior therapy is of equivalent efficacy and utility as other psychotherapies or basic clinical management, but it has a higher cachet because of extensive scientific evaluation and its credibility to patients and practitioners as a rational and logical approach. Second, cognitive behavior therapy is like all other antidepressant strategies, with gradients of benefit across heterogeneous groupings of disorders, such as major depression and nonmelancholic depression, and with the most appropriate primary and secondary treatment niches yet to be defined.

However, the efficacy and role of cognitive behavior therapy will remain undefined if psychiatry continues to accept the current dimensionally weighted model of depression, which uses pseudocategories to capture dimensional extremes and then argues that any therapy is equally effective across a heterogeneous group. When therapies are tested according to that model, all appear similarly efficacious. The message that "everyone's a winner" then allows practitioners to back any horse in any race. Currently, a practitioner's discipline or interest (rather than characteristics of the depressive disorder and the patient) may dictate which therapy is chosen—so demonstrating the affective fallacy.

We suggest that it is time to focus on determining the circumstances in which cognitive behavior therapy might be a specifically effective primary treatment. Until now, evaluation has conformed to the scientific model of undertaking randomized and controlled trials of cognitive behavior therapy as a primary universal treatment, revealing little definitive information about its specific efficacy and effectiveness. It is not useful to ask whether surgery or chemotherapy is a superior universal treatment for breast cancer. Each, depending on the circumstances, may be more effective and have advantages as a primary treatment, and neither excludes the use of the other or additional approaches. Furthermore, cancers are not classified as belonging to severity-based heterogeneous groups (e.g., major cancer, minor cancer, or subclinical cancer). Decisions about cancer treatment respect etiology, disease classification, and subsequent empirical testing of specific-treatment modalities.

Stravynski and Greenberg (12) argued for the need for more pragmatic distinctions (e.g., medication for those whose neurotransmission is disturbed, marital therapy for those with marital difficulties, cognitive behavior therapy for those with irrational thinking, and social skills for those with interpersonal difficulties). However, such a model still fails to address the possible advantages of sequencing different treatments or the use of primary and adjunctive therapies. It has been said that "search[ing] for

subgroups of patients who may preferentially respond to cognitive behavior therapy or pharmacotherapy has not been fruitful" (7), but most attempts have been exploratory, involved retrospective analyses of data sets assembled for disparate reasons, and examined depressive subtype influences in limited ways.

Further exploration of subgroups responsive to cognitive behavior therapy as a primary therapy could involve studying patients who appear to have achieved not just acute or sustained benefit but also greater resilience to future episodes. This may define characteristics such as clinical features, illness patterns, temperament and personality, cognitive style, attitudes toward therapy, and willingness to address behavioral tasks. In preparing this article, we found reasonable consistency when asking therapists to provide a prototypical true responder to cognitive behavior therapy. Responders were more commonly women with good general coping skills who were committed to their work and to others, with that commitment seemingly covering poor self-esteem or perceived limitations that were making them vulnerable to depression in certain circumstances. They found the theory of cognitive behavior therapy sensible and intellectually appealing, related well to the therapist, and actively engaged in the exercises to promote behavioral change. If true responders can be profiled, then controlled studies could test the effectiveness of cognitive behavior therapy in progressively extended subgroups to determine the limitations of therapy. It would be useful to engage in a similar process to identify responsiveness to cognitive behavior therapy as an adjunctive strategy.

If similar approaches were undertaken to evaluate other antidepressant modalities (and, for antidepressant drugs, specific drug classes), we might progressively develop a more rational treatment matrix whereby depressed individuals would be provided with sequenced treatment options appropriate to the characteristics of their disorders. The current treatment model for depression lacks "horse sense" in encouraging the view that any therapeutic modality should be universal rather than targeted. It is likely that cognitive behavior therapy (like other treatments) has specific benefits both as a primary treatment and as an adjunctive treatment for certain subsets of depressed patients. For those who wish to back the cognitive behavior therapy "horse," it would be better to first define its form.

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