Cognitive-behavioral therapy for depression

Terapia cognitivo-comportamental da depressão

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Abstract
Objective: *To describe the use of cognitive techniques and to review studies on the efficacy of CBT in the treatment of depression.* ***Method:*** *A non-systematic review of the literature of original studies complemented with data from meta-analyses and specialized textbooks.* ***Results:*** *The fundamentals of cognitive-behavioral therapy in the treatment of depression are described and the evidence of short- and long-term efficacy is reviewed. The use of pharmacological therapy in conjunction with CBT is also discussed.* ***Conclusions:*** *CBT in the treatment of depression is one of the therapeutic modalities with the highest empirical evidence of efficacy, whether applied alone or in combination with pharmacotherapy.*

Descriptors: *Depression; Depressive disorder, major; Cognitive therapy; Epidemiology; Drug therapy*

Resumo
Objetivo: *Descrever o uso de técnicas cognitivas e revisar os estudos de eficácia da terapia cognitivo-comportamental no tratamento da depressão.* ***Método:*** *Revisão não-sistemática a partir dos estudos originais, complementada por informações provenientes de metanálises e livros-texto especializados.* ***Resultados:*** *Foram descritos os fundamentos da terapia cognitivo-comportamental no tratamento da depressão e revisadas as evidências de eficácia em curto e longo prazo. Discutimos igualmente o uso de tratamento farmacológico concomitante à terapia cognitivo-comportamental.* ***Conclusões:*** *A terapia cognitivo-comportamental é uma das abordagens que apresentam mais evidências empíricas de eficácia no tratamento da depressão, quer oferecida de forma isolada ou em combinação com farmacoterapia.*

Descritores: *Depressão; Transtorno depressivo maior; Terapia cognitiva; Epidemiologia; Farmacoterapia*

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Introduction

Depression exerts a high impact on the life of patients and their families, significantly affecting their social and occupational lives as well as causing other functional impairments.[1]

According to the Diagnostic and Statistical Manual of Mental Disorders, 4th edition, Text Revision, (DSM-IV-TR) of the American Psychiatric Association,[2] depression may manifest itself as a major depressive episode (MDE). In this case, the DSM-IV-TR criteria specify that at least five of the following nine symptoms should be present: depressed mood, decreased interest or pleasure in all or almost all activities, weight loss or weight gain, insomnia or hypersomnia, psychomotor agitation or retardation, fatigue or loss of energy, inappropriate feelings of unworthiness or guilt, reduced concentration and thoughts of death or suicide. To confirm this diagnosis, symptoms must have been present for at least two weeks and one of them must obligatorily be depressed mood or loss of interest or pleasure.

Depression may also manifest itself either as dysthymia or chronic major depression. Dysthymic disorder is by definition chronic and is characterized by depressive mood or loss of interest in almost all routine activities, albeit symptoms are insufficiently intense to characterize a MDE. A key distinction between dysthymia and chronic major depression lies in their characteristics at onset. While chronic depression begins with a complete MDE, dysthymia has its onset with mild and more insidious symptoms, taking at least two years to reach proportions corresponding to a major depressive episode.[3]

According to the World Health Organization's 10th edition of the International Classification of Diseases (ICD-10),[4] major depression has diagnostic characteristics similar to the ones described in the DSM-IV-TR. According to the ICD-10, the number and severity of symptoms classifies three levels of depressive episodes: mild, moderate or severe. The minimum criteria for the diagnosis of a depressive episode include two out of three main symptoms (depressed mood, loss of interest or pleasure and decreased energy), and may also include the following symptoms: decreased concentration and attention, and reduced self-esteem and self-confidence, in conjunction with functional or social impairments. Depressive mood varies little from day to day or according to the circumstances, and may be associated with so-called somatic symptoms: loss of interest or pleasure, early morning awakening (several hours prior to the usual time of waking), morning aggravation of depression, significant psychomotor slowness, agitation, loss of appetite, weight loss and loss of libido.

Depressive episodes may occur within the context of bipolar mood disorder. This is characterized by one or more manic or hypomanic episodes, generally alternated with one or more depressive episodes. Although the same diagnostic criteria are applied for bipolar and unipolar depression, the pharmacological treatment of the two conditions differs.[5]

The objective of this paper is to present the use of CBT in patients with MDE by describing and analyzing the characteristics of the disorder, the techniques used and the efficacy of this therapeutic strategy. To achieve this aim, a search was accomplished to identify the principal relevant clinical trials by conducting a non-systematic literature review using the Medline, SciELO and PsychInfo databases, supplemented with textbooks on the subject. A description of the cognitive-behavioral therapy model is followed by a discussion on efficacy studies.

Epidemiological aspects

MDE is one of the most prevalent psychiatric disorders. A study carried out in the United States using the DSM-IV[6] criteria reported lifetime prevalence of 16.2%, and 12-month prevalence of 6.6%.[7]

For many patients, the disorder is chronic and recurrent. Follow-up studies have shown that up to 30% of patients remain depressed after one year, 18% after two years and 12% after five years. Many treated patients retain residual and subsyndromal symptoms that are associated with unfavorable outcomes such as higher risk of recurrence and suicide, poorer psychosocial functioning and elevated mortality resulting from clinical diseases. Of the patients who recover from a depressive episode, more than 50% relapse.[8] The return of depressive symptoms during maintenance therapy with antidepressants occurs at rates that vary from 9 to 57%.[9]

The greatest concern in the follow-up of these patients is suicide, which is significantly associated with major depression. Based on the results of a meta-analysis, the estimated risk of suicide was 2.2% in less severe outpatients and 8.6% in those with more severe depression and a history of hospitalization.[10] Because of its high prevalence and resulting disability (major depression is classified as the second greatest cause of disability, adjusted for years of life, in developed countries).[1] The concern in preventing recurrences of MDE is relevant and has been the target of research both with pharmacological treatment and psychotherapy.[11-15]

The cognitive model and depression

In the 1960s, Albert Ellis and Aaron Beck reached the important conclusion that depression was the result of extremely deeply established thought habits, and described the fundamental concepts of cognitive-behavioral therapy. Beck[16,17] observed that negative moods and behavior were usually the result of distorted thoughts and beliefs and not of unconscious forces, as the Freudian theory suggested. In other words, depression may be understood as being the result of the patient's own cognitions and dysfunctional cognitive strategies. Patients with depression believe and act as if things were worse than they really are. This new treatment approach emphasizing thought was referred to by Beck as cognitive therapy.[16] To this date, more than 300 controlled clinical trials have confirmed the efficacy of this therapy, which is currently the psychotherapeutic option with the greatest empirical support.[18,19]

As developed by Aaron T. Beck, cognitive behavioral therapy (CBT) for depression is currently the best-researched therapeutic strategy for any psychological disorder.[18] Many studies and meta-analyses have confirmed its efficacy for the treatment of mild, moderate or severe depression. Furthermore, CBT is just as effective as or even more so than pharmacological therapy or any other form of psychological intervention [e.g. interpersonal therapy (IPT) or supportive treatment].[20] An additional benefit of CBT has been recorded in many treatment studies; it results in a more durable response compared to drug therapy and may be protective against recurrence.[15,21]

Cognitive triad

Beck's cognitive theory of depression assumes two basic elements: the cognitive triad and cognitive distortions.[16] The cognitive triad consists of a negative vision of oneself in which the person tends to see him/herself as inadequate or inept (e.g. *"I am a boring person", "I am uninteresting*", "*I am too sad for anyone to like me"*), a negative view of the world, including relationships, work and activities (e.g. "*No one appreciates my job*") and a negative view of the future, which appears to be cognitively linked to the degree of hopelessness. The most typical thoughts and verbal expressions with respect to a negative view of the future include: "*Things are*

never going to get any better", *"I will never be worth anything*" or "*I'll never be happy*". When thoughts such as these are associated with suicide ideation, hopelessness makes them more intense and death may be understood by depressive patients as a relief from the psychological pain or suffering or as a way out of a situation perceived to be unbearable.[22]

Beck et al. observed that the depressed patients describe their experience negatively and expect unfavorable outcomes for their problems.[23] This manner of interpreting events and expectations works as a kind of trigger for depressive behavior, which in turn, following a new interpretation, endorses the individual's personal feelings of inadequacy, low self-esteem and hopelessness.

Cognitive distortions

Cognitive distortions, defined as systematic errors in the perception and processing of information, occupy a central stage in depression. Individuals with depression tend to be absolute and inflexible in structuring their experiences, leading to errors of interpretation with regard to personal performance and judgment of external situations.[24,25]

The most common cognitive distortions in depressed patients were classified by Beck et al.[23] into a typological system that includes, among others, arbitrary inference (formulating a conclusion in the absence of sufficient evidence), selective abstraction (tendency of the person to select proof of his/her poor performance), overgeneralization (tendency to consider that one negative event or performance will occur other times), and personalization (personal attribution, often negative). A larger series of distortions has been described by Beck and others.[23,25] Distortions are a result of dysfunctional rules and assumptions, which are stable patterns acquired throughout the lifetime of a depressed individual. These rules and beliefs are sensitive to activation by primary sources such as stress and often lead to ineffective interpersonal strategies.[26]

Application of cognitive therapy

Cognitive therapy for depression is a treatment process that helps patients alter beliefs and behaviors that produce certain mood states. The therapeutic strategies of cognitive-behavioral management of depression occur in three phases:[27]

1) focus on automatic thoughts and depressogenic cognitive styles;

2) focus on the way in which the person relates to others; and

3) the behavioral changes necessary to enable the individual to recover from the problem situation.

One of the advantages of cognitive therapy is the way in which patients actively participate in their own treatment, helping them to: a) identify distorted perceptions; b) recognize negative thoughts and seek alternative thoughts that more closely reflect reality; c) find evidence supporting negative and alternative thoughts; and d) generate more believable and accurate thoughts associated with certain situations in a process called cognitive restructuring.[24]

Criticism that therapists working with cognitive therapy tend to establish the "power of positive thought" is unfounded. Actually, cognitive therapy is based on the power of realistic thought, i.e. the extent to which the individual is aware of reality.[27] In the treatment of depression, this aspect of therapy has a great clinical relevance, since it helps patients consider whether their beliefs are true or not in relation to the facts, leading to a realistic judgment of the factors that contribute to maintain depression.

Behavioral activation

One of the theories that guides the procedures involved in the treatment of depression is the Lewinsohn's theory[28,29] that social learning and the level of positive reinforcement are factors that contribute towards the onset and maintenance of depressive states. This theory states that patients become depressed because they are experiencing a decrease in the general reinforcement they receive from the outside world – as a result of a decreased positive reinforcement and/or an excess of aversive experiences. Depression is conceived in this model as a vicious circle in which the patient gradually withdraws from positive activities and experiences the exponential loss of positive reinforcement. Therefore, the therapist must work incisively to increase the involvement of depressed patients in activities that should result in positive reinforcement and social interaction.

The behavioral strategies used in CBT originate from Lewinsohn's model of psychopathology and are used flexibly.[28,29] These strategies are planned in accordance with each individual patient and are used in such a way as to engage the patient, relieve symptoms and obtain information that is relevant to therapy.

The initial strategy, consisting of the scheduling and monitoring of activities, may be a powerful tool to be used by patients with depression. Patients are instructed to record their activities hourly for several days. Whenever possible, this registering is made during each situation in order to prevent distortions resulting from the patients' depressed mood and memory difficulties. The scheduling of activities may be used flexibly by clinicians and patients to monitor activities (to correct distortions in the way patients think they are spending their time and to evaluate activities associated with control and pleasure), to schedule enjoyable activities and productive activities (particularly for depressed patients who do not allows themselves to participate in these activities) and to identify activities related to very positive or very negative feelings. This technique provides the patient and the therapist with data on how the patient is functioning. The scheduling of activities may be used to plan behavioral tasks and to record results. This prevents patients from having to make decisions regarding what to do as the activities that they carry out have already been scheduled. Moreover, this procedure gives patients control over their time, recognizes their efforts with respect to performing the activities and records true accomplishments. This technique may represent a powerful tool to be used with patients under pharmacological treatment, since it will give them the opportunity to record side effects, activities and changes in symptoms. This relatively simple intervention is capable of illustrating the relationship between depressive symptoms and lack of intentional, positive behaviors, thereby opening the pathway towards solving problems.[23]

In CBT, shortfalls in abilities are classified as factors that may contribute to depression. For example, if the individual is unable to deal with interpersonal relationships, he/she misses out on an important opportunity to generate a return in the form of positive reinforcement. One significant contribution of Beck and other investigators to the model is the idea that, besides the reduction in positive reinforcement, depressed patients also increase the magnitude of their symptoms through the cognitive evaluations and failed conclusions that they reach from the lack of positive reinforcement. For example, depressed patients carry out fewer and fewer activities and conclude that there is no solution for them. When therapists help patients modify this behavior, this brings direct evidence that their cognitive evaluations are incorrect. Patients then have a powerful example of how errors in their way of thinking

have led to dysfunctional emotions and behavioral responses, and the treatment advances by cognitive and behavioral means to the solving of the problems.[30]

Cognitive restructuring

The initial sessions are also directed towards defining the patients' problems by elaborating the conceptualization or formulation of the case. In these sessions, therapists will help patients identify: 1) the particular dysfunctional beliefs they have associated with depression; 2) their most common cognitive distortions and classification of automatic thoughts; 3) the physiological, emotional and behavioral reactions arising from these thoughts; 4) behaviors that were developed to confront dysfunctional beliefs; and 5) how previous experiences have contributed towards maintaining the patients' beliefs. Once patients have learned about the factors which contribute to maintain the depressive behavior, techniques are then applied in intermediate sessions to help patients manage their symptoms.[24]

1. Evoking thoughts and assumptions

Depression generates immobility and pessimism; therefore, patients find it difficult to begin any task and fail to identify any advantage in performing any activity. Techniques that help identify thoughts and how these affect behaviors and emotions may play a fundamental role in helping individuals with depression.

Of note, the goal of cognitive therapy in MDE is to facilitate the remission of depression and to teach patients to be their own therapists. Cognitive techniques should help achieve the objectives of therapy rather than be used as a process that generates dependency. Patients should be stimulated to confront the problems related to MDE and therapists should not help them with each problem, since this may prevent strengthening their own abilities.[23] An extensive series of cognitive techniques and the discussion of their applications may be found in Leahy's excellent textbook.[27] Some of the techniques that have proven more effective in the treatment of MDE are presented below.

2. Explanation on how thoughts create feelings

A direct question by the therapist such as "*what were you thinking about at that moment*?" or "*what went through your mind right now*?" when the patient exhibits a shift in emotion or relays an emotionally-laden situation, may be supplemented by a table with two parallel columns describing: 1) I think that …; and 2) Hence, I feel… When initiating the use of this type of resource, difficulties may arise to correctly identify thoughts and feelings, and the therapist's help may be necessary.[27]

3. Recording dysfunctional thoughts

This type of resource increases objectivity and encourages the individual to remember events, thoughts and feelings that occurred between sessions. Generally, the individual needs training to use this daily thought diary, being able to identify automatic thoughts by first identifying emotional states. The tool comprises a register in which the patient writes down sequentially an event and the subsequent thought, and that occurs at a time of problematic emotions or behaviors. There is an additional column to give a note related to what extent the patient believes that thought is true. This column will progressively help the individual identify which dysfunctional automatic thoughts are most likely to be a productive focus of attention. Next, the emotion is recorded and the degree of emotion is evaluated on a 0-10 or 0-100 scale. To help the patient, comparison may be made with the most intense emotion (sadness, for example) in order to reach a more realistic evaluation.[23] Thought records also include an evidence-gathering column, and a column to generate an alternative thought about the situation. Finally, the patient is asked to rate the believability of the new thought as well as to rate the intensity of the emotion.[31]

4. Trial-Based Thought Record (TBTR)

One of us has recently developed the TBTR, a 7-column thought record designed to address core beliefs by means of sentence-reversion and the analogy to a judicial process.[32] This method might be useful in restructuring negative beliefs in depressed patients. Despite the lack of clinical trials comparing this method with other psychological approaches used to treat depression, case reports indicate its potential in this regard. The inspiration for its development came from the surreal novel by Franz Kafka, *The Trial*.[33] The rational basis to propose the TBTR is that it could be useful to make patients aware of their core beliefs about themselves (self-accusations) and engage them in a constructive trial to develop more positive and functional core beliefs. TBTR incorporates a structured format and sequentially presents several techniques already used in cognitive therapy: downward arrow technique,[34] examining the evidence,[27] defense attorney technique,[35] thought reversal,[35] upward arrow technique,[36] developing a more positive schema,[27] and positive self-statement logs.[24]

5. Downward arrow

Negative or dysfunctional automatic thoughts may turn out to be true in some situations. Feeling rejected or inept may reflect reality. In these cases, it is important to investigate the underlying beliefs that reinforce the thought, and these can be re-evaluated using a form of Socratic questioning called downward arrow.[34] This Socratic method is also used to help the patient develop autonomous reasoning to question the evidence and create alternative thoughts and evaluations. Confronting the evidence of thoughts may help patients reduce the power of the thought, decreasing their feelings of fear, sadness or discouragement. The downward arrow is a very useful technique that helps to oppose beliefs that maintain the state of depression.

The duration of treatment and remission of symptoms

Although some patients require more treatment sessions of cognitive therapy, this therapy normally prioritizes short-term care, and the number of sessions vary from 6 to 20.[37] The structured sessions also help patients develop a sense of personal control. By learning the techniques, they learn to be their own "therapists" and this also contributes to reduce the time of therapy. Patients with personality disorders may require more time in therapy, even more than 12 months.[9] Often, these patients tend to drop out from treatment more easily and the therapist should be alert to the patient's compliance. In addition, the therapist should also be attentive that patients may drop out or interrupt their treatment following the remission of the first symptoms that had previously maintained them less active and less confident. As these symptoms improve, there may be a tendency to drop out treatment prematurely.

Prevention of relapses

The final sessions are aimed at evaluating the advances made in therapy and at preventing recurrences. The patient's improvement may be used as a resource for confronting new situations that include losses and adaptations to current problems. From the beginning, it

should be emphasized that the duration of therapy is limited; the procedures involved in therapy should be demystified by relating it to the identification of thoughts, their questioning and restructuring; the patients' confidence should be increased based on their gains; and, gradually, the active role of patients as their own therapists should be requested. All these are resources that also facilitate progress towards the termination of the therapy and generate confidence in patients to proceed with their lives. Therefore, the therapist must teach patients to deal with the possibility of a recurrence of the depressive symptoms. Ruminations on the recurrence of depressive symptoms and their implications increase the risk of a recurrence. The patients' learning to be their own therapists makes it easier for them to confront the recurrence of symptoms, and the final sessions of therapy should focus on how to deal with this issue.[38]

The return of depressive symptoms during maintenance treatment with antidepressants is, unfortunately, common, and occurs at a rate that varies between 9% and 57% in the different studies. Therefore, another important question is the capability of cognitive therapy to prevent recurrent unipolar depression, as compared to pharmacological treatments.[13]

Fava et al.[13] suggested that cognitive therapy for the residual symptoms of a depressive episode treated with medication leads to substantially fewer recurrences. In a preliminary study involving 40 patients, those with recurrent major depression who had been successively treated with antidepressants were randomly allocated into two groups, one treated with cognitive therapy for the residual symptoms and the other with conventional clinical management. After 20 weeks of treatment, the administration of antidepressants was reduced and then ceased in both groups. Patients were followed up for two years during which no medication was used except for cases of recurrence. The group in which cognitive therapy was given was found to have significantly fewer residual symptoms compared to the group that received conventional clinical management. Cognitive therapy also resulted in lower recurrence rates (25%) compared to clinical management (80%).

Data referring to the patients of the above-mentioned study were published after 4 and 6 years of follow-up.[12,14] Treatment with cognitive therapy resulted in a significant reduction in recurrence rates at 4 years (35% versus 70%).[12] After 6 years of follow-up,[14] 10 of the patients in the cognitive therapy group (50%) and 15 of the patients in conventional treatment (75%) had suffered relapses; however, this difference was not statistically significant. When multiple recurrences were considered, the patients submitted to cognitive therapy had significantly fewer episodes and responded to the same antidepressant used in the basal episode of the study. The authors concluded that cognitive therapy seems to offer a protective effect for up to four years of follow-up, and this effect becomes weaker afterwards. Nevertheless, cognitive therapy for the residual symptoms led to a long-term reduction in the number of episodes of major depression.[12] According to Fava et al.,[12] these results challenge the established belief that prolonged pharmacological treatment is the only way of preventing relapses in patients with recurrent depression.

However, in what way would CBT prevent recurrences in patients with MDE? One proposal denominated "metacognitive awareness" may explain this phenomenon.[39,40] Instead of considering the modification of dysfunctional beliefs as a tool for preventing recurrences, the metacognitive awareness suggests that the negative thoughts and feelings in MDE are experienced as mental events and not as an expression of reality. As patients evolve in their depressive state, they cease to automatically accept the negative thoughts. This hypothesis, still under investigation, seems useful as an explanation for the success achieved with cognitive therapy in the prevention of recurrences.

One study[41] followed patients with major depressive episode for two years. Patients who had had a mean of three episodes of moderate to severe MDE were divided into three treatment groups: 1) antidepressants (AD); 2) CBT with monthly maintenance; and 3) AD in the acute phase plus CBT with monthly maintenance. Patients were distributed as follows: AD: 31%; monthly CBT: 36%; AD + monthly CBT: 24%. At the end of 24 months, there was no statistically significant difference in recurrence rates. This study showed that cognitive therapy was at least as effective as AD in maintaining remission and preventing relapses. Maintenance pharmacotherapy may be necessary for some patients while cognitive therapy is a viable alternative for others.

Cognitive therapy and pharmacotherapy

The first study on CBT for depression was published in 1977.[42] The authors compared CBT to imipramine and reported significantly better results with CBT. This study was not, however, placebo-controlled. Another significant limitation was that the research team was not blinded with respect to the form of treatment. Given that Rush was so closely involved in the development of CBT for depression, further investigation was necessary to confirm efficacy. By 1989, a sufficient number of studies had been performed to allow a review and meta-analysis to be carried out by Dobson.[20] Twenty-eight studies were included in that sample, which found better results for CBT compared to medication and other psychological treatments. In subsequent years, various studies confirmed the significant efficacy of CBT in the treatment of major depression and its increased durability compared to pharmacological therapy. The sole exception to this was the NIMH's Treatment of Depression Collaborative Research Project (TDCRP), a large, multi-centered trial of CBT versus IPT versus medication (imipramine) versus placebo. CBT performed as well as IPT/imipramine in cases of mild to moderate depression, but in cases of more severe depression, IPT and imipramine gave better results.[43] Further analysis carried out by DeRubeis et al.[44] on the data from this study indicated that there were significant differences in the efficacy of CBT across sites. In Philadelphia, where therapist fidelity to the model was more robust, CBT performed as well as IPT or medication. DeRubeis and Feeley[45] subsequently studied therapist fidelity to the model and found that therapist fidelity early in treatment is predictive of patient response in depression.

Following TDCRP,[43] a significant number of studies went on to expand the empirical basis for the use of CBT in acute and chronic depression, both alone and in combination with medication.[46,47] Many studies evaluating efficacy were conducted in order to establish CBT as being at least as effective as or superior to a pharmacological intervention. Greenberg and Fisher[48,49] described a number of well-conducted clinical trials comparing active and directive psychotherapies (such as cognitive and interpersonal therapies) with antidepressants and suggested that outpatients submitted to psychotherapy evolved just as well or at times better than those receiving medication. They also concluded that, although medication improved sleep-related symptoms, psychotherapy was more effective in helping patients with depression and apathy. Moreover, unlike psychotherapy, medication was unable to help depressed outpatients to adjust socially, and to recover their interpersonal relationships and their professional performance.[50]

Systematic reviews and meta-analyses have noted that CBT has efficacy similar to that of antidepressant treatment.[20,21,51-53] Treatment with psychotherapy also conveyed an advantage with respect to dropout rates and recurrences.[54] A large clinical trial[55] involving 681 patients with major nonpsychotic depression, compared nefazodone, cognitive behavioral-analysis system of psychotherapy (a recently developed model of cognitive therapy), and the combination of both. A total of 16-20 sessions were conducted over 12 weeks. Taking into consideration only patients who completed the study, remission or a satisfactory response was achieved in 85% of cases in the group that received the combined treatment and in 55% of cases in the group treated with nefazodone alone.

Most combined treatment studies accomplished to date are heterogeneous regarding the medications evaluated and did not employ adequate pharmacotherapy as implemented in clinical practice; hence, it is difficult to draw adequate conclusions with respect to the added benefits of combined treatment versus the use of either modality alone. Nevertheless, several reviews and one interesting meta-analysis indicate that in cases of more severe depression there may be a significant added benefit with the combined use of medication and cognitive behavioral treatments.[21,56] Several studies have been conducted to counter the objections raised about data acquired in earlier studies of CBT for depression. Most impressively, in 2005 DeRubeis and Hollon[57] published a definitive study comparing CBT to medication, which included a placebo control group and an augmentation protocol for non-responders to the initial study medication. This study included patients who were moderately to severely depressed, and who had co-morbid anxiety and personality disorders. CBT and medication performed equally well for the acute treatment of depression.

As previously discussed, the most impressive finding in studies of CBT for depression is the durability of its effect. Patients who are CBT responders have a significantly more durable response than patients whose depression is treated with medication. Many recent reviews describe substantial decrement in response to antidepressant medication even if the patient continues to take the medication properly, an event that occurs only 26% of the time.[58]

Recurrence of major depression is common. Several studies have attempted to forestall this recurrence by employing novel strategies in CBT. Jarrett et al.[46] have shown that booster sessions of CBT have a substantial effect on the recurrence of depression in chronic patients who are CBT responders. Several studies have evaluated the sequential treatment with medication and CBT using a brief CBT protocol applied either individually or in groups following treatment with medication, including Fava's studies previously described.[12-14] Bockting et al.[58] and Paykel et al.[59] achieved similarly impressive results using individual and group treatment strategies with a very short-term treatment protocol. Mindfulness-based cognitive therapy has also been successfully used in chronic depression to forestall recurrence after successful remission has been achieved.[60]

In conclusion, CBT in the treatment of depression is one of the therapeutic alternatives with the highest empirical evidence of efficacy, whether applied alone or in combination with pharmacotherapy.

Disclosures

Writting group member	Employment	Research grant[1]	Other research grant or medical continuous education[2]	Spekear's honoraria	Ownership interest	Consultant/ Advisory board	Other[3]
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For more information, see Instructions for authors.

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