Social Anxiety Disorder Treatments: Psychosocial Therapies

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Controlled clinical trials in social anxiety disorder (SAD) have shown benefit with the use of medication and cognitive-behavioral therapies as well as incorporation of combined therapeutic modalities. This article briefly summarizes the literature on the outcome of group and individual cognitive-behavioral therapy for SAD and concludes that individual therapy is superior to group therapy. Finally, the article discusses comorbidity of depression and SAD and its implications for cognitive-behavioral therapy. *(J Clin Psychiatry 2006;67[suppl 12]:27–30)*

The use of cognitive-behavioral therapies (CBT) in anxiety disorders is based on the conception that anxiety disorders, defined as pathologic anxiety, occur when safe stimuli (situations or objects) acquire a meaning of "danger" and thus elicit fear and avoidance that are unjustified. There are specific dysfunctional, maladaptive behaviors, cognitions, and emotions associated with each of the anxiety disorders. For example, panic-disordered individuals fear situations that generate panic and anxiety because they believe that the panic and anxiety, rather than the situations that trigger them, are dangerous (e.g., can cause heart attack or suffocation). In contrast, people with specific phobias, such as dog phobia for example, are not afraid of their anxiety, but fear that the dog will kill them. Hence, the specific fears vary across the spectrum of anxiety disorders.

Effective treatment needs to be tailored accordingly and should target the specific maladaptive behaviors, thoughts, and emotions and assist patients in replacing them with adaptive ones. This process may occur through the use of various treatment procedures such as exposure therapy or cognitive restructuring.

Exposure therapy is a set of techniques that help patients confront their feared objects, situations, memories, and images. In vivo exposure deliberately places patients in feared real-life situations that include information that would be incompatible with the patient's maladaptive, unrealistic expectation of outcome. For example, panic-disordered patients who are exposed repeatedly to supermarkets, where they get anxious and even have a panic attack, discover that anxiety and panic do not cause heart attack or suffocation. Those experiences help them realize that what they are afraid of is unrealistic.

Imaginal exposure is used to help patients confront their dreaded situation and the feared negative consequences associated with it (such as giving a speech and being severely criticized). Patients are asked to imagine that the negative outcome is actually happening—they go blank during a speech and stop talking and the audience is jeering at them—so that they gradually become habituated to the thought. In cognitive therapy, the techniques aim at changing unrealistic cognition by identifying dysfunctional, unrealistic thoughts and beliefs and replacing them with functional, realistic cognitions. This is usually done through verbal discourse rather than through actual confrontation of the feared situation.

SOCIAL ANXIETY DISORDER

Social anxiety disorder (SAD) is characterized by misconceptions about social interactions. Patients believe that people criticize imperfect performance, or that others can tell that they are anxious and that anxious people are disrespected. They also believe that people perceive them as less skilled, and they view criticisms and imperfect social performance as catastrophic. Another common belief of individuals with SAD is that they must always have something interesting to say or else they will be criticized or rejected.

Whereas patients with panic disorders may have misconceptions about the dangers of a rapid heart rate and a perceived catastrophe of death from a heart attack, their fears are based on overexaggerated probabilities. Patients with SAD, in contrast, have to struggle with the realities that people are, in fact, critical and that the probability of

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This article is derived from a roundtable conference on social anxiety disorder, which was held March 3, 2005, in New York, N.Y., and supported by an educational grant from Forest Laboratories, Inc.

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being criticized is high. Thus, in social anxiety disorder, the issue is of an overexaggerated cost of criticism and rejection rather than overexaggerated probabilities.

Because it is impossible to avoid social situations completely, individuals with SAD develop subtle avoidances called *safety behaviors*. They may mentally rehearse responses to questions or wear turtlenecks to hide evidence of blushing. As a result of such strategies, exposure therapy may be less effective for social anxiety disorder. It is very difficult to refute the beliefs of socially anxious people because they are engaging in such an abundance of safety behaviors that they are convinced that the catastrophic consequences did not occur because they prevented them with their safety behaviors. Conversely, they believe that the catastrophic consequences would occur if they did not use these behaviors. These beliefs pose an additional obstacle in the treatment of patients with SAD.

All anxiety-disordered individuals have a tendency to interpret ambiguous stimuli as negative. However, this poses a particular problem for those with SAD because social situations are often ambiguous, because expression of negative emotions and especially open, harsh criticism are discouraged in our society. As a result, in exposure therapy it is difficult to disconfirm the patient's belief that other people think badly of him or her. Even after a successful social encounter, socially anxious patients can continue to believe that other people were polite and therefore did not express their negative feelings. In addition, as noted above, they may attribute their success to safety behaviors rather than recognizing that their fears were unrealistic. Another challenge for treatment is that patients with SAD are often socially isolated and do not have opportunities to practice skills that they learn in therapy. As a result, it was believed that group therapy could be of particular benefit when applied to such patients. Bringing several patients with SAD together, in effect, creates an exposure situation in itself. As a result, group therapy has been used and studied in this manner over the last 10 to 15 years.

GROUP THERAPY FOR SOCIAL ANXIETY DISORDER

In the Heimberg Cognitive Behavioral Group Therapy (CBGT) model, groups of 6 or 7 people are typically placed with 2 therapists, a man and a woman.[1] Cognitive restructuring is conducted by addressing misconceptions of social interactions, using exposure to simulated social situations while in session, and incorporating cognitive restructuring before, during, and after the simulated exposures. Behavioral and cognitive homework assignments are given for intervals between sessions. Comprehensive Cognitive Behavioral Therapy (CCBT), the model developed by Foa and Franklin (E.B.F.; M. E. Franklin, Ph.D.; unpublished manual; 1994), is tailored specifically for patients with generalized SAD and includes all of the components of CBGT as well as social skills training. The latter was included because patients with the generalized type of SAD are thought to have social skills deficits as well and would benefit from training in this area.

Several studies have been conducted to examine the relative efficacy of various treatment modalities in social anxiety disorders. A 1998 study by Heimberg et al.[2] compared CBGT with the monoamine oxidase inhibitor phenelzine sulfate, pill placebo, and educational-supportive group therapy for SAD. In this study, 133 patients from 2 sites received 12 weeks of one of the treatments. It was found that phenelzine therapy and CBGT each achieved superior outcome compared with either control condition.

However, it was also apparent that symptom reduction as measured by the Liebowitz Social Anxiety Scale (LSAS) ratings was not marked. Pretreatment scores between 60 and 70 indicate that the study patients were not severely impaired, perhaps due to the fact that the study included SAD patients with both specific and generalized conditions.[2]

In a 14-week study of patients with generalized SAD by Davidson et al.[3] comparing CCBT, the selective serotonin reuptake inhibitor fluoxetine, the combination of the 2 modalities, and placebo controls, there was no difference among the active treatments, and all of them performed better than placebo.

In summary, both studies demonstrated that active treatments were more effective than placebo. There were no differences among active treatments in the Davidson et al. study[3]; in addition, combining fluoxetine and CCBT did not improve the outcome of monotherapy. On the other hand, phenelzine was more effective than CGBT in Heimberg and colleagues' study,[2] and combining phenelzine with CGBT was more effective than CGBT alone. While CBT treatments were superior to controls, the overall results for group therapy were somewhat disappointing; on the average, patients remained quite symptomatic. Furthermore, it is often difficult to collect 6 people to form a group, and even once a group is formed, there are often scheduling difficulties or individual absences that are difficult to adequately reconcile for evaluation in clinical trials.

INDIVIDUAL THERAPY FOR SOCIAL ANXIETY DISORDER

A study by Haug and colleagues[4] randomly assigned 375 patients with SAD to treatment with the selective serotonin uptake inhibitor sertraline or placebo for 24 weeks, with or without the addition of exposure therapy. The results demonstrated a greater effectiveness when exposure was combined with sertraline as opposed to placebo as evidenced by a reduction in score on the severity subscale of the Clinical Global Impressions–Social Phobia

scale at the end of the treatment period. However, the effect was lost at 28-week follow-up, at which time exposure therapy alone resulted in further improvement and patients receiving exposure therapy combined with sertraline or sertraline alone showed tendencies toward deterioration.[4]

Clark and colleagues[5] describe an individual therapy that takes full advantage of the conceptualization of CBT. It emphasizes the role of safety behaviors and self-focused attention in the maintenance of SAD. Treatment consists of videotaping feared social interactions, using confederates, eliminating safety behaviors, and shifting attention outward. Videotaped feedback and confederate feedback are used to help patients disconfirm erroneous impressions of how they are perceived by others.[5] By viewing their taped conversations, patients are able to witness how they actually appear. These efforts are directed toward overcoming the inability to provide disconfirming evidence for what these patients misperceive as happening. In addition, confederates are asked to rate patients on a variety of scales including performance and appearance of anxiety. One of the ratings, for example, asks confederates if they would like to meet the person again or if they enjoyed the conversation with the person. Even if the person appeared anxious, most confederates respond positively.

Patients are also asked to experiment with role playing or with conversations incorporating or abandoning safety behaviors and to compare their experiences. The hope is that the patients will realize that they do better without the safety behaviors. Often, after 4 to 5 sessions, the safety behaviors lessen, and the patients realize that they function better without these behaviors. Patients are also asked to focus attention on themselves and on others and to compare various states of anxiety. These specific CBT techniques are tailored to patients with SAD and not, for example, to those with other anxiety disorders.

Clark and colleagues[5] blindly assigned 60 patients to cognitive therapy, fluoxetine plus self-exposure, or placebo plus self-exposure for 16 weeks; at 16 weeks, the medication blind was broken and the cognitive therapy patients and fluoxetine plus self-exposure patients entered a 3-month evaluation phase. Significant improvements were found on most measures for all 3 treatments. The fluoxetine plus self-exposure and placebo plus self-exposure groups did not differ, but cognitive therapy was found to be superior to fluoxetine plus self-exposure at the end of the 3-month phase as well as at 12-month follow-up.[5]

Individual CCBT, developed by Foa and colleagues, administers treatment over 16 to 20 1.5-hour sessions and incorporates Clark's emphasis on safety behaviors and self-focused attention and combines it with in vivo and imaginal exposure as well as with social skills training.[6] Treatment is modularized and can be adapted to each patient's unique concerns. Patients are exposed to feared social situations for which videotaped feedback and feedback from confederates are incorporated. Imaginal exposure, social skills training, and assertiveness training are also included when indicated. Goal setting and relapse prevention efforts at the end of treatment are added. Treatment emphasizes eliminating safety behaviors and shifting the focus of attention outward in order to facilitate encoding new information that is discrepant with the patient's beliefs. By being more present in social situations, the patient learns to more accurately interpret ambiguous information and to better examine whether estimates of cost and probabilities are exaggerated.

Initial (unpublished) data (E.B.F.; J. D. Huppert, Ph.D.; D. A. Ledley, Ph.D.; 2005) using 20 patients with SAD receiving individual CCBT appear encouraging. On the average, the group therapy and individual therapy studies described above report pretreatment patient LSAS scores of around 75; posttreatment group therapy scores are close to 60 for group therapy, whereas individual treatment scores are close to 30, which is considered in remission range.

In summary, both large studies on group therapy with SAD (Davidson et al.[3] and Heimberg et al.[2]) showed only moderate reduction of symptoms following group CBT. After group CBT, patients on average were still quite symptomatic, meeting the severity criterion for SAD. After individual therapy (Clark et al.[5] and E.B.F.; J. D. Huppert, Ph.D.; D. A. Ledley, Ph.D.; unpublished data, 2005), patients on average did not meet the severity criterion for SAD. These findings underscore the difference in results between group and individual therapy. In essence, there was double the effect in the individual-treatment patients compared to the group-treatment patients.

COMORBID DEPRESSION

Patients with comorbid major depressive disorder (MDD) were excluded from the studies discussed, including the study by Davidson et al.[3] Nevertheless, 30% of the individuals with SAD who were interviewed for the Davidson et al. study had comorbid depression. In a study by Erwin and colleagues[7] in which 69 persons with uncomplicated social anxiety disorder, 39 persons with an additional anxiety disorder, and 33 persons with an additional mood disorder were evaluated, those with comorbid mood disorders reported greater duration of social anxiety than those with uncomplicated social anxiety disorders. In another study by Chambless et al.[8] in which predictors of response to CBGT for SAD were evaluated in a sample of 62 patients, depression was found to be predictive of poorer outcome. Both studies found that depressed patients with SAD completed treatment with more severe social anxiety than nondepressed patients with SAD.

When data from the study by Davidson et al. (in which MDD was excluded) were reanalyzed, 32% of moderately depressed patients were classified as treatment responders compared to 58% of nondepressed patients. When the same data were reanalyzed for treatment dropout rate, 21% of the nondepressed dropped out compared to 35% of the moderately depressed group. Thus, there were fewer responders and more dropouts in the moderately depressed patient group (E.B.F.; J. D. Huppert, Ph.D.; D. A. Ledley, Ph.D.; unpublished data, 2005).

From examining the Foa et al. unpublished data using individual CCBT with 8 depressed patients and 8 nondepressed patients (E.B.F.; J. D. Huppert, Ph.D.; D. A. Ledley, Ph.D.; 2005), it is apparent that the depressed group began the treatment with much higher LSAS scores. However, at posttreatment, the difference was no longer apparent. Thus, it seems that individual CCBT works for depressed as well as nondepressed patients. Because depressed patients are often unmotivated to complete their homework, behavioral activation was added, overcoming the barriers that depression may pose during CBT.

The CCBT manuals include several modules, the selection of which is contingent on symptom presentation. Whereas some modules are used for all patients with SAD—for example, videotaping and behavioral experiments with safety behaviors—behavioral activation is used only with depressed patients. Additionally, imaginal exposure is applied either to patients who are "stuck" and unable to progress in therapy or to patients who emphasize the cost of criticism and rejection such that even minimal criticism would elicit extreme anxiety and distress. The manual specifies when each module should be applied.

Although the Davidson et al.[3] study showed no advantage in combining medication with CBT, combining the 2 therapies in sequence could be of benefit for poor responders or for those with more severe comorbid presentations. For example, depressed patients are more difficult to motivate and could potentially benefit from initial treatment with an antidepressant. If the antidepressant is found to be effective, behavioral activation may then be unnecessary.

CONCLUSIONS

Unfortunately, the dissemination of CBT is limited due to multiple challenges including policy issues, funding mechanisms, proficiency in the use of CBT methods, the level of difficulty of work in executing it properly, and competition with training interests in other schools of psychological treatment. Hopefully, raised awareness of SAD through improved physician recognition of the condition and a greater understanding of the efficacy of treatment with CBT will increase application of this therapy in the future.

In summary, group CBT is moderately effective in ameliorating SAD severity but leaves many patients with significant residual symptomatology. Individual CBT, focusing on using videotaped feedback, eliminating safety behaviors, and incorporating exposure exercises, is believed to be superior to group CBT. Individual CCBT that includes behavioral activation is quite effective in reducing severity of SAD in depressed patients with SAD.

Drug names: fluoxetine (Prozac and others), phenelzine (Nardil), sertraline (Zoloft).

Disclosure of off-label usage: The author has determined that, to the best of her knowledge, no investigational information about pharmaceutical agents that is outside U.S. Food and Drug Administration–approved labeling has been presented in this article.

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