Psychotherapy in the Overall Management Strategy for Social Anxiety Disorder

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Cognitive-behavioral therapies (CBTs) are effective treatments for social anxiety disorder/social phobia. Although a variety of procedures are included under the term *cognitive-behavioral treatment*, it is, however, clear that the key factor influencing treatment outcome for social anxiety disorder is exposure to feared situations. Two formalized CBT programs are cognitive-behavioral group therapy (CBGT) and social effectiveness training (SET). They both involve exposure, but differ in that CBGT focuses on correction of cognitive errors, whereas SET uses social skills training in addition to exposure to feared social situations. CBGT is more efficacious than a psychological placebo and has shown efficacy comparable to that of phenelzine in a double-blind, placebo-controlled study. The onset of effect of phenelzine was more rapid, whereas the effect of CBGT was more sustained. The major component of SET, imaginal and/or in vivo exposure, has been demonstrated to be more effective than pill placebo or the beta-blocker atenolol. Many questions remain regarding CBT strategies and their place in the overall management of patients with social anxiety disorder. Depending upon the particular patient profile, various combinations of drug and/or CBT may prove to be the optimal treatment strategy.
(J Clin Psychiatry 1998;59[suppl 17]:39–44)

Behavioral therapies are less well studied in patients with social anxiety disorder/social phobia than in those with panic disorder, agoraphobia, or obsessive-compulsive disorder (OCD) and, compared with pharmacologic treatments, are far less widely available. This article reviews principles for the application of cognitive-behavioral therapy (CBT) for anxiety disorders and the evidence for efficacy in patients with social anxiety disorder, with emphasis on 2 of the most recently developed interventions, cognitive-behavioral group therapy (CBGT)[1] and social effectiveness therapy (SET).[2] These treatments have, to date, been chiefly assessed in adults. A study of CBGT in adolescents has recently been completed[3] and an evaluation of a children's version of SET, known as SET-C, is ongoing (D.C.B., unpublished data, 1998). A practical approach to the use of CBT and its place in the overall management strategy for social anxiety disorder is discussed below.

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The International Consensus Group on Depression and Anxiety held the meeting "Focus on Social Anxiety Disorder," April 23–24, 1998, in New York, N.Y. The Consensus Meeting was supported by an unrestricted educational grant from SmithKline Beecham Pharmaceuticals.

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PRINCIPLES OF APPLICATION OF CBT FOR ANXIETY DISORDERS

Cognitive-behavioral interventions target all of the different components of anxiety. They address the physiologic activation that accompanies anxiety, the negative predictions and expectations about social consequences, and the escape and avoidance behaviors that are the hallmark of the disorder. By helping the patient understand the symptoms and reducing fear, CBT also reduces the sense of uncontrollability. However, different types of behavioral intervention provide different techniques for accomplishing these goals.

It is clear from the literature on behavior and psychology that the key factor influencing outcome of CBT for patients with social anxiety disorder is exposure to feared situations. In a series of studies[2,4–6] and a meta-analysis of 42 treatment-outcome studies,[7] the largest effect sizes were always seen in the groups that involved some form of exposure. In these studies, the exposure was sometimes gradual, sometimes intensive, sometimes in vivo (done in real life), and sometimes imaginal. Although exposure is clearly important, the mechanism by which it works is not known. Habituation, initially thought to be the explanation, is a biological process by which repeatedly confronting a conditioned fear stimulus without a negative consequence leads to a reduction in reactivity to the stimulus. Often, when phobic persons are exposed to an anxiety-provoking cue, their anxiety increases initially and then gradually decreases if they are maintained in that situation

for a period of time. Habituation implies a physiologic process. In contrast, the assumption underlying cognitive therapies is that anxiety reduction may also occur through changing the individual's interpretation of a situation with disconfirming information.

Other procedures used in conjunction with exposure for the treatment of social anxiety disorder have not been shown to affect outcome to any significant degree,[8–12] but they may nevertheless play a role in the treatment process. Anxiety management training helps the individual to feel more comfortable in stressful situations and facilitates exposure. Anxiety management strategies include relaxation exercises, breathing retraining, and attention focusing. The latter may be important: the literature indicates that during the exposure session, if attention is directed away from the feared object or situation, habituation will not occur.[13] Another variation, cognitive restructuring, aims to identify, challenge, and change negative beliefs. Such an intervention has substantial face validity because social anxiety disorder is characterized by fear of negative evaluation by others and negative evaluation of personal performance by the subject. Finally, studies have suggested that at least some individuals with social anxiety disorder have deficient social skills possibly as a result of their long history of social isolation. Inability to make useful judgments about a specific social environment is particularly relevant and is targeted in SET, described below. Lack of social skills can increase anxiety in social interactions, and social skills training can therefore be helpful, particularly for the generalized subtype of social anxiety disorder.

METHOD OF APPLICATION OF CBT FOR SOCIAL ANXIETY DISORDER

An advantage of CBT is that it is a short-term and symptom-focused intervention strategy. Success of the intervention hinges upon careful assessment, which includes the identification of physical symptoms and anxiety-provoking cues. All forms of behavior therapy[14] include a formal educational component that addresses the nature of anxiety, its various components, its natural course, and potential etiologic factors. In addition, patients are educated about the active nature of the treatment, including the fact that homework assignments are an important and necessary part of the treatment program.

Exposure is a cornerstone of treatment for anxiety. In a phobic disorder, by definition, behavioral treatment must entail doing activities and entering feared situations on a repeated basis. However, re-creating relevant exposure situations is inherently more complex in social anxiety disorder than in other types of phobia; in particular, in vivo exposure necessitates the re-creation of the specific fear cues that include the presence of other people. For example, the feared situation may be the initial 5 minutes of an encounter with a stranger perceived to be of higher social status. It is then necessary to find a way to repeatedly confront the initial 5 minutes of such an interaction. These specific requirements mean that the availability of the in vivo exposure situations may be limited or, at best, difficult to engineer. For this reason, imaginal exposure and/or role playing is often used. Situations that are difficult to configure in real life can be re-created imaginally. As in in vivo exposure, during imaginal exposure individuals will experience an increase in arousal, although perhaps not to the same intensity, and the increase in anxiety will alleviate over time.

Another aspect of in vivo exposure sometimes considered as a procedural limitation is that social situations are inherently variable and unpredictable; the behavior of the other person in a naturalistic interaction cannot be controlled. However, such variability actually may be an advantage because it allows formalized practice with a variety of interpersonal partners. Furthermore, a feared situation sometimes involves only a brief interchange, making extended contact with a brief encounter difficult. The solution is to use repeated exposure. For example, in the case of a person who has difficulty saying "hello" to others, he or she can go to a crowded area (e.g., a park or shopping mall) and greet many different people until habituation occurs.

Finally, social fear often centers on the response of others. Most people are not as negative towards others as the subject with social anxiety disorder expects; however, it can be difficult to elicit from other people the particular response that is needed. Again, this limitation can be overcome by using imaginal exposure where the situation can be crafted to the patient's specific needs and/or cognitive therapy focused specifically on the negative expectations.

These difficulties with in vivo exposure have implications for treatment. Both CBGT and SET use exposure, although the manner in which they do so is somewhat different. CBGT uses in vivo exposure simulations and exposure homework as a means to identify and dispute negative cognitions. In CBGT, simulated exposure is brief (about 10 minutes). Therefore, habituation is not the goal of these exposure situations. In contrast, SET uses prolonged exposure (in vivo and/or imaginal) to decrease physical arousal and subjective distress. Sessions last 90 minutes, and although negative cognitions are included as a part of exposure, there is no attempt to actively refute the cognitions. The major features of the 2 programs are outlined in Table 1.

Both CBGT and SET employ similar introductory procedures, which revolve around educating patients to understand the condition of social anxiety disorder and the treatment rationale. This educational experience is important because patients learn that they are not the only ones who feel the way they do; as one patient put it, "I can't believe there is a name for this, other people have it and somebody knows how to treat it."[13] The specifics of the individual patient's social fears are then delineated, and the

Table 1. Cognitive Behavioral Therapy for Social Anxiety Disorder: 2 Approaches*

CBGT	SET
Cognitive restructuring	Social skills training (social environment awareness, interpersonal skills, presentation skills)
Exposure simulations	Exposure
Group situation	Individual session
	Imaginal and in vivo
Homework	Homework (flexibility exercise)
Daily practice	
Cognitive monitoring	
Cognitive preparation for exposure	
Exposure	
	Programmed practice

*Abbreviations: CBGT = cognitive-behavioral group therapy, SET =social effectiveness training.

Table 2. CBGT: Examples of Common Exposure Simulations

Initiating conversation with a member of the opposite sex
Public speaking
Writing or using a keyboard in front of others
Eating or drinking in front of others
Working or playing with others watching
Assertion and interaction with authority figures
Job interviews
Joining ongoing conversation
Giving or receiving compliments
Making mistakes
Revealing personal information
Expressing opinions
Feeling trapped in a social situation

patient is trained to use the Subjective Units of Distress Scale (SUDS) to help gauge progress. Both of these treatments utilize a group therapy approach. Eliciting and addressing fears about being in a group is therefore necessary, because being in a group is usually a source of anxiety for patients with social anxiety disorder. Still, as with other illnesses, patients with social anxiety disorder invariably gain comfort from sharing experiences with others suffering from the same disorder. Expectations regarding the group are discussed thoroughly because CBT groups are very different from traditional group psychotherapy. CBT groups are not simply discussion groups; they require active patient participation.

Cognitive-Behavioral Group Therapy

CBGT is usually conducted in 12 to 15 sessions, each lasting about 2½ hours. The group is led by two therapists, preferably 1 female and 1 male, since either or both sexes may need to be represented in the different exposure situations. The group usually comprises 6 patients balanced as much as possible for sex, types of fears, and degree of impairment in the feared situation.

Exposure simulations are done in the group to give patients the opportunity to identify and dispute their cognitions and to practice interactions. The group setting has many advantages. Other people are always available, for example, to listen to an individual give a presentation. Simulated exposures are controllable because group members who are role-playing can modify their behavior to make the exposure situation more or less comfortable. The specifics of the exposure can be designed to fit the needs of the optimal therapeutic encounter for a given individual at a given time. Being present at the session permits the therapist to witness and respond to what happens. The fact that every group member is himself or herself the focus of an exposure exercise and also helps with exposure of others helps provide a perspective on the feared situation. In addition, the group setting makes it difficult to avoid exposure and gives the socially anxious individual a chance to interact with many different people.

Exposure simulations in CBGT are based on the person's core fear in a particular situation as shown by some common examples in Table 2. Essentially, individuals are encouraged to do things they fear in the relatively safe setting of the group before they are sent out into the real world.

Cognitive restructuring is a major component of CBGT. Individuals are taught to identify their automatic thoughts, logical fallacies, misperceptions, misinterpretations, or unrealistic expectations and then to dispute them. For example, if an individual approaches a bank teller who has always been very friendly, starts to have a conversation and then finds the teller very aloof, the individual may think, "I wonder what I did to make that person act that way toward me." Cognitive restructuring teaches patients to recognize that this thought may be a cognitive distortion and encourages them to question this interpretation of the teller's behavior by considering other reasons why the teller might be aloof, especially reasons having nothing to do with them. For example, the teller may have had a fight with his spouse, or may have made a mistake the day before on his job, or maybe he is not feeling well. Having considered other possibilities, the patients are then asked to reconsider the likelihood that their automatic self-blaming responses were correct. After thinking through the situation, the patients are asked to plan an exposure and to set a performance goal for how they will think when they encounter the situation itself.

Group members are encouraged to do cognitive work during exposure sessions. A typical example might be for an individual who has started to give a presentation to say, "I have had a negative thought. I saw Jim in the corner writing and my thought was that he is really bored and is writing a letter to a friend while I'm talking. Now I have to consider the alternatives to that." If needed, the therapist will help the individual to explore alternative explanations for Jim's writing, such as making a note of something that he had forgotten, writing a question, making a note of something particularly interesting the speaker has said, or writing down some helpful feedback he plans to give.

Patients gain confidence from group exposure sessions with the therapist present, but homework is an important element of CBGT, with considerable emphasis placed on daily practice. Patients are encouraged to do 30 minutes of cognitive preparation before an in vivo exposure by imagining the situation, identifying accompanying negative automatic thoughts, disputing these thoughts, deriving rational responses, and then setting goals for exposure. Patients then conduct the in vivo exposure homework using cognitive coping strategies.

Social Effectiveness Therapy

SET uses 28 treatment sessions over a 16-week period. A key component of SET is social skills training. Many social anxiety disorder patients have common skills deficits, thus allowing this training to be conducted in a group session. However, each person also has a unique profile of problems, and SET includes individual exposure sessions directed at each patient's fear pattern. SET is organized so that there is 1 group session per week which focuses on skills training, and 1 individual session per week, which focuses on individualized exposure and on reinforcing individual skills.

A major feature of SET, which is not as direct a focus in CBGT, is teaching of social environment awareness. SET helps contextualize social interaction. For example, the group might discuss when, why, and how to initiate and terminate conversations. Interpersonal skills as well as verbal and nonverbal communication strategies also are taught. In addition to traditional social skills such as initiating and maintaining conversations, there are other skills deficits that may be more specific to patients with social anxiety disorder. For example, patients often complain that they find it difficult to listen when they are in a conversation because they are so anxious anticipating having to speak. They then find it difficult to respond because they are not aware of what the other person has said. SET targets this problem and provides techniques to enhance listening skills. The social skills training component of SET also includes presentation skills. A person who has confidence that he or she knows how to give a good, effective presentation will feel less anxious when presenting. Many individuals with social anxiety disorder avoid classes in which they might learn to make an effective presentation, and this skills deficit further increases their presentation anxiety. SET teaches how to write a good speech, as well as techniques for effective delivery and strategies for decreasing anxiety.

The exposure sessions for SET are based on individualized fears, especially focusing on the core fear (see Table 2). Initially (but not invariably), the exposure sessions use an imaginal format, and individually scripted scenes have elaborate detail. One example is that of a lawyer who is trying to argue a case before a judge and jury with all the most important people in his law firm present. When he stands up, he finds he is unable to speak. He turns to see all the partners in the law firm shaking their heads and thinking "we're going to have to let him go, he's never going to make partner so we might as well make him a clerk." The patient is exposed to this material until it no longer elicits distress. Typically, in vivo or imaginal exposure sessions average about 90 minutes. In SET, the therapist accompanies the patient during the first 12 weeks of in vivo exposure.

The final four weeks of SET are devoted to independent programmed practice, which is a way of turning over the treatment to the patients themselves and having them start to take responsibility for continuing the exposure. The patients are encouraged to find ways to put themselves in social situations, such as becoming readers in church or for the blind, or calling meetings at work and giving short presentations.

The homework component of SET includes practice in social skills and flexibility exercises. Flexibility exercises are aimed at helping patients to think in more dimensional ways.[2] Individuals with social anxiety disorder tend to think categorically—there is a right and a wrong way of doing things and nothing in between. Such thinking leads to rigidity of behavior so that it seems like there is only one way to properly accomplish a given social interaction. Flexibility exercises force patients to generate a variety of ways to accomplish a particular task. For example, a patient might be asked to find 10 different ways to say hello to the same person or 10 different places where he or she could meet new people, each in a different way. These experiences are then brought back to the group where members compare notes, further impressing upon patients the variety of ways to complete a task.

EVIDENCE FOR EFFICACY

Efficacy of CBT for patients with social anxiety disorder has been clearly documented, although the quantity of studies is somewhat smaller than for some other anxiety disorders. In several controlled studies, exposure treatment alone has been demonstrated to be more effective than a psychological placebo,[5,6] and in a double-blind comparison with a pill placebo, or atenolol, exposure was more effective than placebo, whereas atenolol was not.[14] This finding concerning atenolol, however, is not surprising, because beta-blockers are not efficacious for generalized social anxiety disorder.[15]

Efficacy has been demonstrated for cognitive-behavioral combinations compared with psychological placebos (waiting list or credible nonspecific treatment).[4,14] In addition, a recently completed 2-site study compared CBGT with phenelzine, pill placebo, and psychological placebo (expressive/support) in 133 patients.[16] Patients were randomly assigned to 1 of the 4 groups for 12 weeks of acute treatment, after which responders to ac-

tive treatment entered a 6-month maintenance phase followed by a 6-month treatment-free period.

For patients who completed the acute treatment, active treatment was more effective than placebo, and there were no differences in response rates between the 2 active treatments or between the 2 placebo treatments, with about 75% of patients in either group showing improvement compared with about 35% in control groups. A similar result was found for the intent-to-treat analysis, although the proportions of responders were lower in all groups.

There was a notable difference between active treatments over time. Phenelzine had a more rapid onset of effect, with significantly more responders at 6 weeks than CBGT. This difference disappeared at 12 weeks and during maintenance therapy. During the treatment-free follow-up period, more patients in the phenelzine group relapsed than in the CBGT group.

The finding of a lower relapse rate for CBGT compared with phenelzine in this study should be interpreted with caution because of the small number of patients remaining in the study at endpoint. However, there is evidence to support the long-term efficacy of various types of CBT.[17] A 5 to 7 year follow-up of patients who received CBGT is the longest reported to date, confirming that most patients maintained their gains over pretreatment functioning, with some actually showing further improvements.[18]

SUMMARY AND PRACTICAL APPROACH TO USE OF CBT

CBT is clearly helpful for patients with social phobia, as it is for other anxiety disorders. For patients who are interested in a nonmedication treatment, CBGT is a rational option with proven efficacy. Still, questions remain regarding optimal CBT strategies and the routine place of CBT in the overall management of patients with social anxiety disorder. The minimal dose and duration has yet to be determined, and it is not clear if a twice-a-week treatment with individual as well as group sessions is superior to CBGT alone. Similarly, one dismantling study of CBGT did not show any additive effects of cognitive interventions over exposure alone.[19] There is good initial evidence of maintenance of treatment gains, but maintenance treatment strategies and long-term outcome require further study. In addition, management of treatment nonacceptance has not yet been resolved.

CBGT has clear efficacy for the treatment of both generalized and nongeneralized social anxiety disorder. Other innovative strategies, such as SET, although less well studied, show good initial results and promise to add other tools for the treatment of this debilitating condition. Combinations of drug therapy with CBT or combinations of CBT with other types of social intervention need to be explored. The few reported studies comparing CBT with drug treatments for social anxiety disorder suggest that although drugs produce a more rapid response, the effects of CBT may be more durable, raising the possibility that combined drug and CBT may provide the optimal treatment strategy.

One of the major problems with CBT is the limited availability of therapists trained to use these procedures appropriately and effectively. Recent studies have shown that CBGT can be applied effectively by researchers outside the center where it was developed,[17] making it feasible for this, and other CBT programs, to become more widely used in the future. Marks[20] has developed a self-help manual in which he explains how to confront panic-evoking social cues for prolonged periods without avoidance. The practice requires daily self-exposure, for at least 1 hour or more over weeks or months, until habituation to the initial cues occurs, at which point exposure to new cues can be arranged. Progress can be tracked by recording completed exposure homework tasks in a daily diary, and when real-life exposure is difficult to arrange, tape-recorded imaginal exposure can be substituted. Although exposure by patients with social anxiety disorder may be more successful if a therapist is present for the first couple of sessions, the use of a self-help manual provides a cost-effective way of delivering CBT to larger numbers of patients. If CBT is used in combination with some form of pharmacologic treatment, response may be faster and positive results could further increase motivation. Combination treatment might prove to be an effective and practical approach to the management of social anxiety disorder.

Drug names: atenolol (Tenormin), phenelzine (Nardil).

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