Enhancing Current Treatments for Anxiety Disorders

Martin M. Antony, St. Joseph's Hospital and McMaster University

Although there continue to be new developments in cognitive behavioral treatments for anxiety disorders, most of these advances have focused on refining existing treatments, rather than on developing new techniques. Many of the fundamental strategies that are successfully used for treating anxiety disorders today (e.g., cognitive restructuring, in vivo exposure, interoceptive exposure, imaginal exposure, relaxation training, response prevention, skills training) have been established for some time now. Instead of developing novel treatments for anxiety disorders, the focus of recent research has been on improving existing treatments and disseminating empirically supported interventions. Examples of recent innovations have included (a) using existing cognitive-behavioral therapy (CBT) techniques for new anxiety-based problems, such as hypochondriasis (Clark et al., 1998; Visser & Bouman, 2001), (b) using CBT in new settings, such as primary care (Power, Simpson, Swanson, & Wallace, 1990; Price, Beck, Nimmer, & Bensen, 2000), (3) delivering existing treatments in new ways, such as incorporating new technology (Newman, Consoli, & Taylor, 1999; Rothbaum, Hodges, & Smith, 1999), (4) delivering treatments more quickly (e.g., Clark et al., 1999), and (5) broadening cognitive and behavioral treatments to include aspects of other approaches, such as family therapies (Daiuto, Baucom, Epstein, & Dutton, 1998; Van Noppen, Steketee, McCorkle, & Pato, 1997).

Roemer and Orsillo's proposed treatment (this issue) for generalized anxiety disorder (GAD) is an example of how traditional CBT can be modified and (ideally) improved upon for a particular problem. The treatment described by the authors is exciting for a number of reasons. First, GAD is often considered to be among the most treatment resistant of the anxiety disorders, suggesting that existing treatments are not as effective as they could be. Adding mindfulness and acceptance-based strategies to standard GAD treatments makes practical sense in light of the fact that these approaches appear to be useful for a number of other conditions previously thought to be resistant to long-term change (e.g., borderline personality disorder; substance use disorders). More important, as reviewed by Roemer and Orsillo, the proposed treatment makes theoretical sense in the context of recent research on the nature and treatment of worry and GAD.

Still, Roemer and Orsillo's article (this issue) gives rise to a number of important issues and questions regarding which strategies should be most helpful for treating anxiety disorders, based on current theory and research; what common and unique elements exist across various psychological treatments for anxiety-based problems; and what directions should be taken as existing treatments continue to be refined and improved upon. The remainder of this commentary provides a brief summary of these issues.

WHICH APPROACHES SHOULD BE EFFECTIVE FOR TREATING GAD AND OTHER ANXIETY DISORDERS?

Roemer and Orsillo (this issue) argue that relying on acceptance-based strategies may be a more effective way of dealing with psychological distress than relying on control-oriented strategies. For example, acceptance of physical or emotional discomfort may be more useful in the long run than trying to control or eliminate uncomfortable feelings. The authors cited a recent study by Heffner et al. (2000) in which participants who received an acceptance-based rationale for dealing with anxiety were less likely to show signs of avoidance and distress during a carbon dioxide inhalation challenge than were participants who received a control-oriented rationale (i.e., breathing retraining). This finding is not surprising; other investigators have also questioned the value of including breathing retraining in the treatment of panic disorder (e.g., Antony & Swinson, 2000; Schmidt et al., 2000), and anxious patients treated with CBT are typically encouraged to tolerate their uncomfortable feelings rather than to fight them.

However, this discussion gives rise the question of what is a "control-oriented" strategy and what isn't. Roemer and Orsillo include diaphragmatic breathing and progressive muscle relaxation in their integrated treatment for GAD, grouping these with mindfulness exercises (progressive muscle relaxation and breathing retraining each

Address correspondence to Martin M. Antony, Ph.D., Anxiety Treatment and Research Centre, 6th Floor, Fontbonne Building, St. Joseph's Hospital, 50 Charlton Ave. East, Hamilton, Ontario L8N 4A6, Canada. E-mail: mantony@stjosham.on.ca.

include a meditation component). On the other hand, breathing retraining and relaxation are meant to reduce symptoms of tension and arousal, whereas techniques such as cognitive restructuring and exposure to arousal symptoms are often used to facilitate acceptance of uncomfortable symptoms. It is not clear how to delineate whether any of these strategies are in fact control oriented or acceptance oriented.

Despite the evidence supporting relaxation training for the treatment of GAD, relaxation training is less effective than other behavioral treatments for fear-based problems such as panic disorder (Marks et al., 1993) and obsessive-compulsive disorder (Fals-Stewart, Marks, & Shafer, 1993). Furthermore, models of emotional processing (e.g., Foa & Kozak, 1986) might argue against combining relaxation training with exposure-based treatments for fear. Given that the treatment proposed by Roemer and Orsillo includes exposure to fearful imagery, it is possible that relaxation training may interfere with the effects of the exposure-based component of treatment, depending on how these components are integrated. Perhaps the relaxation exercises have different effects on outcome if they are used simultaneously with exposure exercises, versus at other times to deal with chronic worry and arousal. This possibility remains to be studied.

It may also be true that teaching patients to be more aware of their inner experiences is helpful only for particular individuals, under certain circumstances. Not all anxious individuals attempt to avoid experiencing their uncomfortable feelings. Miller (1980) identified two strategies for dealing with threat-related information: monitoring (i.e., attending to and seeking out threat-related information) and blunting (i.e., avoiding threat-related information). Although many people use both strategies to cope with threat, some individuals tend to prefer one style over the other. Whereas a blunter with panic disorder might do things to avoid experiencing symptoms of arousal (e.g., distraction, avoiding talking about the symptoms), a monitor with panic disorder would engage in behaviors that increase awareness of the symptoms (e.g., measuring his or her pulse and heart rate, talking about the symptoms). Perhaps strategies that increase awareness of uncomfortable experiences might have different effects on monitors versus blunters. Perhaps monitors, who are already excessively aware of threat-related cues, might benefit more from learning to be less focused on the stimuli that make them uncomfortable (see Antony, McCabe, Leeuw, Sano, & Swinson, 2001).

There are a number of cases in which the theoretically predicted effects of a particular treatment have not been born out by the research. For example, although emotional processing theory predicts that distraction should interfere with the effects of exposure treatment, research findings regarding these issues have been mixed (for a review, see Antony & Swinson, 2000). It is possible that the effects of distraction are different depending on the circumstances and characteristics of the individual. As we improve upon our current treatments for anxiety disorders, it will be important to determine the conditions under which a particular strategy is likely to facilitate symptom improvement for a particular individual.

WHAT ARE THE COMMON ELEMENTS ACROSS DIFFERENT TREATMENTS?

Another issue that needs to be addressed as cognitive behavioral treatments continue to develop and change is that of terminology. In fact, as the range of treatment strategies used by CBT therapists continues to broaden, one can even question the utility of continuing to use the term "CBT." It is not unusual for two therapists using very different treatments (e.g., progressive muscle relaxation versus cognitive restructuring) to both call their treatments CBT. Similarly, cognitive and behavioral treatments have come to include components from other modalities, such as interpersonal psychotherapy and family therapy. Perhaps a term such as "empirically supported" or "evidence-based" psychological treatment is more appropriate for describing the large number of treatments that have been shown to be effective for treating anxiety-related problems.

The issue of terminology is also important when discussing the particular techniques that are used by proponents of CBT. Frequently, similar treatment strategies often reappear in the literature, sometimes presented with new names or in the context of a somewhat different theoretical rationale. As they point out, the treatment proposed by Roemer and Orsillo (this issue) includes elements that have previously been used to treat GAD. Specifically, their proposed treatment includes psychoeducation, relaxation and mindfulness training, and mindful action, which is composed of exposure to fearful imagery, problem-solving training, and reducing subtle avoidance

behaviors such as checking and reassurance seeking. Recently, other authors have proposed similar treatments. For example, Craske (1999) and Brown, O'Leary, & Barlow (2001) each recommend a protocol for treating GAD that includes psychoeducation, relaxation training, cognitive restructuring, problem-solving training, and prevention of worry behaviors. Even though these other protocols do not explicitly include a mindfulness- or acceptance-based component, it is not clear exactly how such a component might overlap with other components of treatment, such as cognitive therapy (e.g., teaching a patient to ask "so what if I feel worried?" to reduce his or her anxiety over worrying) and relaxation training. Although the treatment proposed by Roemer and Orsillo does not include structured cognitive therapy, can encouraging patients to accept their internal experiences be conceptualized as a cognitive intervention?

FUTURE DIRECTIONS: TARGETING CORE DIMENSIONS IN TREATMENT

Despite the fact that each strategy recommended in the proposed treatment has a strong theoretical rationale, it is possible that too many techniques are taught to patients. This concern is not unique to this protocol; overloading patients with treatment techniques is a feature of many CBT treatments. Treatments that emphasize too many different components run a risk of having patients learn a little bit about a lot of interventions, without mastering the most important or relevant techniques for that individual. Rather than using a large number of interventions for all patients with a given diagnosis, the challenge in the next few years may be to identify which patients are likely to benefit from which interventions. Although there have been some attempts to predict who will respond to particular psychological strategies, these attempts have met with mixed success (e.g., Jerremalm, Jansson, & Öst, 1986; Mersch, Emmelkamp, Bogels, & van der Sleen, 1989; Mersch, Emmelkamp, & Lips, 1991; Öst, Jerremalm, & Johansson, 1981; Öst, Johansson, & Jerremalm, 1982).

A shortcoming of the empirically supported treatment movement has been the tendency to focus on diagnostic entities rather than on symptoms or core dimensions. For example, treatments have been developed for particular conditions, such as panic disorder, social anxiety disorder, and generalized anxiety disorder, rather than the key features that comprise these disorders. A disadvantage of developing a single treatment for a given *DSM-IV* disorder is the need to include strategies that target all possible components of the disorder, even if they are not relevant for a given patient.

An alternative approach would be to identify the core dimensions that are relevant to a particular patient and to choose treatments that target those dimensions. In anxiety disorders, a number of dimensions exist that cut across disorders, including the presence of fear, anticipatory anxiety, worry, situational avoidance, avoidance of thoughts and feelings, interoceptive anxiety (i.e., anxiety sensitivity), compulsive rituals, and overprotective behaviors. These symptoms are moderated by such factors as skills deficits, family issues, life stress, and medical complications. To improve treatment outcome for a given individual, it is important to be able to measure the most salient symptoms and to select the most appropriate interventions for those symptoms, regardless of the diagnosis. For example, exposure to arousal sensations is likely to be helpful for any individual who fears these symptoms, regardless of whether the fear occurs in the context of panic disorder, social anxiety disorder, or a specific phobia of enclosed places.

In summary, the article by Roemer and Orsillo in this issue gives rise to important questions about the best ways to improve current treatments for GAD and other anxiety disorders. A substantial number of people respond only partially to existing treatment protocols, and it is important that we learn to better tailor our treatments to each individual's unique pattern of symptoms. A dimensional approach to understanding and treating anxiety problems may be a step in that direction.

REFERENCES

Antony, M. M., & Swinson, R. P. (2000). *Phobic disorders and panic in adults: A guide to assessment and treatment*. Washington, DC: American Psychological Association.

Antony, M. M., McCabe, R. E., Leeuw, I., Sano, N., & Swinson, R. P. (2001). Effect of exposure and coping style on in vivo exposure for specific phobia of spiders. *Behaviour Research and Therapy, 39,* 1137–1150.

Brown, T. A., O'Leary, T. A., & Barlow, D. H. (2001). Generalized anxiety disorder. In D. H. Barlow (Ed.), *Clinical handbook of psychological disorders* (3rd ed.). New York: Guilford.

Clark, D. M., Salkovskis, P. M., Hackmann, A., Wells, A., Fennell, M., Ludgate, J., Ahmad, S., Richards, H. C., & Gelder, M. (1998). Two psychological treatments for hypochondria-

sis: A randomized controlled trial. *British Journal of Psychiatry, 173,* 218–225.

Clark, D. M., Salkovskis, P. M., Hackmann, A., Wells, A., Ludgate, J., & Gelder, M. (1999). Brief cognitive therapy for panic disorder: A randomized controlled trial. *Journal of Consulting and Clinical Psychology, 67,* 583–589.

Craske, M. G. (1999). *Anxiety disorders: Psychological approaches to theory and treatment*. Boulder, CO: Westview.

Daiuto, A. D., Baucom, D. H., Epstein, N., & Dutton, S. S. (1998). The application of behavioral couples therapy to the assessment and treatment of agoraphobia: Implications of empirical research. *Clinical Psychology Review, 18,* 663–687.

Fals-Stewart, W., Marks, A. P., & Schafer, J. (1993). A comparison of behavioral group therapy and individual behavior therapy in treating obsessive-compulsive disorder. *Journal of Nervous and Mental Disease, 181,* 189–193.

Foa, E. B., & Kozak, M. J. (1986). Emotional processing of fear: Exposure to corrective information. *Psychological Bulletin, 99,* 20–35.

Heffner, M., Eifert, G. H., Spira, A. P., Tennis, K. K., Burnworth, J., & Tenney, L. (2000). *The effects of acceptance and control contexts on avoidance of an aversive event*. Poster presented at the annual meeting of the Association for Advancement of Behavior Therapy, New Orleans, LA.

Jerremalm, A., Jansson, L., & Öst, L.-G. (1986). Individual response patterns and the effects of different behavioral methods in the treatment of dental phobia. *Behaviour Research and Therapy, 24,* 587–596.

Marks, I. M., Swinson, R. P., Basoglu, M., Kuch, K., Noshirvani, H., O'Sullivan, G., Lelliott, P. T., Kirby, M., McNamee, G., Sengun, S., & Wickwire, K. (1993). Alprazolam and exposure alone and combined in panic disorder with agoraphobia: A controlled study in London and Toronto. *British Journal of Psychiatry, 162,* 776–787.

Mersch, P. P., Emmelkamp, P. M., Bogels, S. M., & van der Sleen, J. (1989). Social phobia: Individual response patterns and the effects of behavioral and cognitive interventions. *Behaviour Research and Therapy, 27,* 421–434.

Mersch, P. P., Emmelkamp, P. M., & Lips, C. (1991). Social phobia: Individual response patterns and long-term effects of behavioral and cognitive interventions. A follow-up study. *Behaviour Research and Therapy, 29,* 357–362.

Miller, S. M. (1980). When is a little information a dangerous thing?: Coping with stressful life-events by monitoring vs. blunting. In S. Levine & H. Ursin (Eds.), *Coping and health* (pp. 145–169). New York: Plenum.

Newman, M. G., Consoli, A. J., & Taylor, C. (1999). A palmtop computer program for the treatment of generalized anxiety disorder. *Behavior Modification, 23,* 597–619.

Öst, L.-G., Jerremalm, A., & Johansson, J. (1981). Individual response patterns and the effects of different behavioral methods in the treatment of social phobia. *Behaviour Research and Therapy, 19,* 1–16.

Öst, L.-G., Johansson, J., & Jerremalm, A. (1982). Individual response patterns and the effects of different behavioral methods in the treatment of claustrophobia. *Behaviour Research and Therapy, 20,* 445–460.

Power, K. G., Simpson, R. J., Swanson, V., & Wallace, L. A. (1990). Controlled comparison of pharmacological and psychological treatment of generalized anxiety disorder in primary care. *British Journal of General Practice, 40,* 289–294.

Price, D., Beck, A., Nimmer, C., & Bensen, S. (2000). The treatment of anxiety disorders in a primary care HMO. *Psychiatric Quarterly, 71,* 31–45.

Rothbaum, B. O., Hodges, L., & Smith, S. (1999). Virtual reality exposure therapy abbreviated treatment manual: Fear of flying application. *Cognitive and Behavioral Practice, 6,* 234–244.

Schmidt, N. B., Woolaway-Bickel, K., Trakowski, J., Santiago, H., Storey, J., Koselka, M., & Cook, J. (2000). Dismantling cognitive behavioral treatment for panic disorder: Questioning the utility of breathing retraining. *Journal of Consulting and Clinical Psychology, 68,* 417–424.

Van Noppen, B., Steketee, G., McCorkle, B. H., & Pato, M. (1997). Group and multi-family behavioral treatment for obsessive compulsive disorder: A pilot study. *Journal of Anxiety Disorders, 11,* 431–446

Visser, S., & Bouman, T. (2001). The treatment of hypochondriasis: Exposure plus response prevention vs. cognitive therapy. *Behaviour Research and Therapy, 39,* 423–442.

Received April 30, 2001; accepted May 7, 2001.