Stress Inoculation Training (SIT) for Posttraumatic Stress Disorder (PTSD)

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Description of Posttraumatic Stress Disorder (PTSD)

Some trauma survivors continue to have symptoms of the trauma long after the trauma occurred. These symptoms may include:

- "Reliving" the traumatic experience
- Feeling numb to emotions
- Avoiding things related to the trauma
- Anxiety and related body effects such as heavy breathing, sweating, shaking, etc.

For these people, trauma-related fear and distress can be so severe that they interfere with social functioning and holding a job. A person suffering from PTSD often describes going back and forth between feeling really overwhelming emotions and feeling complete numbness. The symptoms may start occurring within a month of the trauma. For others, some of the symptoms may not occur for six months or more after the trauma.

Diagnosis of PTSD requires that:

1. the individual experienced, witnessed, or was confronted with an injury or a threat to oneself or others
2. the individual responded to the injury or threat with fear, horror, or helplessness
3. the individual "relives" the traumatic event (e.g., distressing thoughts, nightmares, or flashbacks)
4. the individual avoids people, places, thoughts, or situations related to the trauma
5. the individual feels numb or is emotionally withdrawn
6. symptoms of arousal occur (e.g., having difficulty sleeping and having problems concentrating)

These symptoms occur frequently and are severe enough to cause impairment with daily living. Researchers estimate that about 9 to 12 percent of people in the United States will suffer from PTSD during their lifetime (e.g., Breslau, Davis, Andreski, and Peterson, 1991; Resnick, Kilpatrick, Dansky, Saunders, & Best, 1993).

Treatment Comparison

Stress Inoculation Training (SIT) is a treatment program that involves teaching the patients stress coping techniques (Meichenbaum, 1974). SIT has been found to reduce PTSD symptoms in different types of studies (e.g., Foa, Rothbaum, Riggs, & Murdock, 1991, Foa, Dancu, Hembree, Jaycox, Meadows, & Street,

1999; Resick, Jordan, Girelli, Hutter, & Marhoefer-Dvorak, 1988). These reductions were maintained for at least one year after treatment was over. In two well-controlled studies, SIT demonstrated more improvement in PTSD symptoms than supportive counseling or having no treatment (Foa, et al., 1991, 1999). In a study comparing SIT, prolonged exposure (PE), and PE/SIT, SIT demonstrated significant reduction in PTSD and related symptoms. There was a trend for PE, however, to result in more clients obtaining good end-state functioning. This was calculated by assessing PTSD, depressive, and general anxiety symptoms all together.

Given the evidence for its success, SIT is a good option for the treatment of PTSD. However, because PE seems to impact a broader spectrum of symptoms, this treatment may lead to larger treatment gains. PE, therefore, may be considered a good first option for many clients. In addition, all of the studies examining the benefits of SIT have focused on female assault survivors. While these results are expected to relate to other individuals experiencing traumas, studies examining this expectation should be conducted before SIT can be recommended as a general treatment for PTSD.

Treatment Description

SIT was first developed as an anxiety management treatment (Meichenbaum, 1974). It was later modified for use with sexual assault survivors. SIT programs include education along with training in several anxiety management techniques. The treatment is based on the idea that the anxiety tied to the traumatic event will extend to many situations over time. By using anxiety management techniques, the client learns to cope more effectively with anxiety. The specific techniques vary from one SIT program to another, but typically include:

- breathing retraining
- muscle relaxation training
- role-playing
- thinking about and changing negative behaviors
- learning to talk to yourself (silently)
- stopping negative thoughts

Assertiveness training also is included in some SIT programs. SIT originally included instructions to confront feared situations through role-playing and other exercises. This part of SIT, however, was removed in some of the comparison studies because it was too much like exposure therapy. The treatment usually lasts for 9 to 12 sessions, each 90-minutes in length. SIT has been conducted in both group and individual therapies. The majority of the well-controlled studies with SIT have been done using individual treatment.

Education. This part of SIT is always used in the initial sessions of SIT. Education teaches the patient about the nature of fear and anxiety. Patients are taught about the three channels of fear and anxiety as well. The three channels

include a body-response component, a behavioral component, and a thought-process component. The patient and therapist discuss common reactions to trauma, as well. This is done to practice appropriate behaviors and to understand the different parts of the treatment.

After completion of education, six new parts of the therapy are introduced. They each address one or more of the three channels of anxiety.

Breathing Retraining. The therapist directs the client through exercises to learn deep breathing from the diaphragm. These exercises are usually tape-recorded and the client practices the breathing technique between sessions to master the skill.

Relaxation Training. The client is taught how to relax all the major muscle groups by creating and releasing tension. Again, the therapist directs the exercises and records them for the client to practice between sessions in order to master the skill.

Role-Playing. The client and therapist role-play successful coping in anxiety provoking situations practicing effective strategies for anxiety management.

Thinking About and Changing Behaviors. In this part of therapy, the client imagines successfully coping in stressful situations by going through the entire situation in his/her imagination.

Learning to Talk to Yourself. This technique focuses the patient on his/her internal sense of talking to him/herself. The patient recognizes negative or unhelpful statements about themselves. He or she then learns to replace them with more helpful internal "talking".

Stopping Negative Thoughts With this part of treatment, the patient thinks about the feared situation. He or she then interrupts those thoughts with a distraction. At first, the distraction is the therapist loudly saying, "stop", or clapping. Later the client repeats this to himself/herself.

Edna B. Foa, Ph.D., Professor at the University of Pennsylvania Health System, Director of the Center for the Treatment and Study of Anxiety, is an internationally renowned authority on the psychopathology and treatment of anxiety. Her research aiming at delineating etiological frameworks and targeted treatment has been highly influential and she is currently one of the leading experts in the areas of post-traumatic stress disorders. The program she has developed for rape victims is considered to be the most effective therapy for post-trauma sequela. She has published several books and over 200 articles

and book chapters, has lectured extensively around the world, and was the chair of the PTSD work group of the DSM-IV. Dr. Foa is the recipient of numerous awards and honors, including the Distinguished Scientist Award from the Scientific section of the American Psychological Association, the First Annual Outstanding Research Contribution Award from the Association for the Advancement of Behavior Therapy, the Distinguished Scientific Contributions to Clinical Psychology Award from the American Psychological Association and the Lifetime Achievement Award from the International Society for Traumatic Stress Studies.

Sheila A.M. Rauch, Ph.D., Assistant Professor at the Center for the Treatment and Study of Anxiety (CTSA) in the Department of Psychiatry at the University of Pennsylvania Health System, received her Ph.D. in clinical psychology from the University of North Dakota upon completion of her clinical internship at the University of Florida Health Science Center in 2000. Dr. Rauch has published many scholarly articles and book chapters in the areas of sexual aggression and posttraumatic stress disorder. Dr. Rauch is involved in both research and clinical treatment of anxiety disorders. She is co-coordinator of a study examining cognitive-behavioral treatments to augment SSRIs for anxiety disorders in primary care settings as well as coordinator of a PTSD treatment study. Dr. Rauch is also involved in developing treatment programs for traumatized children and adolescents. Her current research interests include examination of factors related to the development and effective treatment of anxiety disorders, the relationship between physical health and anxiety disorders, and cognitive factors in anxiety disorders.