## Adapted Protocol Leads to Remission of PTSD

BY MIRIAM E. TUCKER

BALTIMORE - A brief adaptation of trauma-focused cognitive-behavioral therapy was more effective than childcentered therapy for treating domestic violence-related posttraumatic stress disorder and anxiety in a study involving children who remain in the setting where the violence is ongoing.

Initial findings from the National Institute of Mental Health-funded, community-based study were presented by Dr. Judith A. Cohen at the annual meeting of the Anxiety Disorders Association of America.

In a previous study for which Dr. Cohen was a coauthor, TF-CBT was more effective than child-centered therapy in reducing symptoms of PTSD among children who had been sexually abused (J. Am. Acad. Child Adolesc. Psychiatry 2006;45:1474-84). However, the key difference in this study population is that unlike sexual abuse, domestic abuse is not legally considered a form of child abuse, and therefore, the children often continue to live with the perpetrator and continue to be exposed to the violence.

In this study, TF-CBT was revised to focus more on reducing hyperarousal and general anxiety, and less on addressing avoidance, since in ongoing domestic violence situations, some degree of avoidance might actually be a helpful adaptation for the child, said Dr. Cohen, medical director of the Center for Traumatic Stress in Children and Adolescents at Allegheny General Hospital, Pittsburgh.

The study was conducted at the Women's Center and Shelter of Greater Pittsburgh, a community domestic violence center that holds up to 20 families at time, with a usual 30-day duration of stay. The center provides many different types of services, including advocacy, counseling, housing and immigration assistance, and child protection. Typically, only a minority of the more than 10,000 women and their children seen at the Women's Center and Shelter annually receives mental health counseling,

Typically, child-focused therapy is provided over 12 sessions, but this project was limited to 8 sessions. An initial group of 124 children aged 7-14 years were randomized to either TF-CBT (64) or the "treatment as usual" child-centered ther-

apy (60). Their mothers all had experienced violence from an intimate partner and had come to the Women's Center and Shelter seeking any type of service—not necessarily counseling. For inclusion, the children had to have at least five PTSD symptoms on the Kiddie Schedule for Affective Disorders and Schizophrenia (Kiddie-SADS) scale, with at least one symptom from each of the PTSD "clusters."

There was a significant dropout rate, with just 75 completers (43 in the TF-CBT group, 32 with child-centered therapy). But that is typical in this type of setting. Of note, retention was higher in the TF-CBT group, she said.

No significant differences were found between the two groups in the child's age (9.6 years for both), gender (45% of TF-CBT and 53% of child-centered therapy were male), or race (45% of TF-CBT and 67% of child-centered therapy were white, and 41% and 25%, respectively, were African American). In more than 60% of both groups, the domestic violence had been going on at least weekly for more than 5 years, and in more than half of both groups, the perpetrator was the child's biological father.

More than 90% reported physical and emotional violence, and 80% of both groups had ongoing contact with the perpetrator.

The treatment itself was based on the TF-CBT, described using the acronym PRACTICE:

- ► Psychoeducation and parenting skills
- ► Relaxation
- ► Affective expression and modulation
- Cognitive coping
- ► Trauma narrative and processing
- ► In vivo mastery of trauma reminders
- ► Conjoint parent-child sessions
- ► Enhancing safety and future devel-

Adaptations made to the usual protocol specific to the domestic violence/ongoing trauma situation included discussing a 'safety plan" earlier in the process, and having the parent hear the child's description of the situation.

Also important was working to address the children's maladaptive cognitions about why the violence was occurring, and to help them distinguish between real danger and overgeneralized fear. Often, these children are so hyperaroused that they perceive danger in minor stimuli and tend to overreact. The adapted treatment protocol focuses far less than does other PTSD therapy on re-experiencing, since they actually never stop "experiencing" the trauma, she explained.

The child-centered therapy also was an active treatment. Through use of active listening and validation, it focuses on empowerment of both the mother and child to improve their own problemsolving abilities. It has been shown to be effective in treating PTSD, but just less so than TF-CBT, she noted.

In the intent-to-treat analysis, TF-CBT was significantly superior to child-centered therapy in improving avoidance, hyperarousal, and total PTSD scores on the K-SADS, and in improving total PTSD scores on the Child PTSD Reaction Index (RI), a child self-report measure. They also showed a significantly greater reduction in anxiety symptoms as measured by the Screen for Child Anxiety Related Disorders (SCARED), and, surprisingly, greater improvement in cognitive function measured by the Kaufman Brief Intelligence Test (KBIT).

Among just the 75 completers, greater

improvements also were seen for TF-CBT vs. child-centered therapy in hyperarousal and total PTSD on the K-SADS and total PTSD on the RI. The difference in RI was a clinically meaningful reduction of 7.3 points with TF-CBT. Anxiety scores on the SCARED were 7.1 lower with TF-CBT, compared with child-centered therapy, and IQ on the KBIT was an average 11.45 points higher (where 100 is average) with TF-CBT.

Remission of PTSD diagnosis occurred in 24 of 32 TF-CBT completers (75%), vs. 8 of 18 who completed CCT (44%). Serious adverse events—such as reportable child abuse, serious violence episodes, or hospitalization of the child for suicidal behavior—occurred in 2 of 43 in the TF-CBT group (5%), compared with 10 of 32 with child-centered therapy (31%), also a significant difference.

In addition to the NIMH funding, Dr. Cohen has also received research grants from the Substance Abuse and Mental Health Administration, and royalties from "Treating Trauma and Traumatic Grief in Children and Adolescents" (New York: Guilford Press, 2006), a book on

## Focus on Hyperarousal Makes Sense

This information is very relevant talked about hyperarousal probably to my public practice. I'm a being a target symptom, because

child psychiatrist and recently became medical director of a very large family-centered mental health clinic in southeast Washington, D.C. Psychiatry has been privatized here to a great degree, so we have received a very large caseload. We need more effective treatments. We

have the support and the personnel, but I don't think we have the method. As I work with this more closely, I think the issue is having a method that's both acceptable and effective. To me, "treatment as usual" is not effective.

We have homeless people; we have domestic violence, hyperaroused children, drug abuse, you name it. I really like how Dr. Cohen

being a target symptom, because

that really leads to dysfunction in all the do-

As the psychiatrist, clients come to me for medication management. They do use community support workers, but they don't come to the therapist, so there's a big disconnect. The community

support workers are basically bachelor's level. I advocate that type of treatment to get people services, but the method has to be consistent. That's where we are right now.

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## Impact of Childhood Trauma on Startle Response Persists

BY DAMIAN MCNAMARA

ATLANTA — A single traumatic event when children are 8-12 years old might trigger neurophysiologic changes that predispose them to long-lasting vulnerability for a heightened startle response.

Dr. Robert S. Pynoos, director of outpatient trauma psychiatry at the University of California, Los Angeles, said he and his colleagues assessed 17 children who met the full criteria for posttraumatic stress disorder (PTSD), 8 with partial PTSD, and 16 age- and gender-matched controls without PTSD. They measured the startle magnitude to a binaural acoustic startle.

The groups with PTSD had experienced a single, circumscribed traumatic event in the past 14 months, Dr. Pynoos reported at the annual meeting of the International Society for Trauma Stress Studies. The traumatic events were serious one child had been kidnapped and witnessed the rape of his or her mother.

Elapsed time since the event, IQ, ethnicity, and socioeconomic status had no significant effect on the findings. "Children with trauma but partial PTSD still [showed a] significant difference" he said, noting they could re-

duce their startle response by only 40%, compared with 50%-60% in controls. Children with full criteria PTSD were more severely impaired in their response, able to modulate it by only 30%, which is similar to a 3-year-old.

Humans and animals use the same four-neuron connection in startle; in humans, however, the amygdala can alter the response or the cortical system can inhibit it through many different mechanisms, said Dr. Pynoos. "All this is involved in modifying the startle reaction at the same point before motor action. It is important to educate parents they cannot teach their children out of their responses. And we need to know [patients] may carry vulnerability into the future based on neurobiologic changes during this critical period."

Dr. Pynoos said that he had no relevant disclosures.