

Play, Stress Management Work in Childhood PTSD

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SAN FRANCISCO — A behavioral medicine program of play combined with stress reduction and management techniques significantly reduced symptoms of posttraumatic stress disorder in a group of children whose community had been decimated by two consecutive hurricanes.

Play is a natural healing force for children, Carmen Russoniello, Ph.D., said at the annual meeting of the Society of Behavioral Medicine. “We believed that since recreation is inherently healing, we could perhaps meld it into a structured program that would help these kids learn to cope with what had happened to their school and community.”

In 1999, two consecutive hurricanes flooded eastern North Carolina, destroying homes and schools; 51 people died. Dr. Russoniello, director of the psychophysiology and biofeedback lab at East Carolina University, Greenville, N.C., created the program in response to pleas from school administrators in one of the flood-devastated communities. Their elementary school was destroyed; all the students were relocated to trailer classrooms near the federal disaster management site.

“These children had lost their school, and almost 40% had their homes flooded,” he said. Many of the children watched helicopters flying in and out of the community rescuing their families and feared that they would die. “They had experienced a terrifying event,” he said. It was a perfect opportunity not only to try and help the children cope with their experience but also to study posttraumatic stress disorder (PTSD) in children—an area that has received little attention.

“Until rather recently, we thought PTSD didn’t occur in children,” he said. “We now know that it does and that the symptoms can have devastating effects on their health and performance, including depression and anxiety, and school and social problems.”

The intervention began with a baseline assessment of PTSD symptoms in the school’s fourth-graders, 6 months after the hurricanes hit, said Susan McGhee, Ph.D., also of East Carolina University. In the group of 150 children (mean age 9.5 years), PTSD (as measured by the Posttraumatic Stress Reaction Index, child version) was very severe in 9%, severe in 25%, and moderate in 36%.

Another one-quarter had mild symptoms, while the diagnosis was doubtful in about 5%. All of the children reported symptoms of reexperiencing; 85% reported symptoms of hyperarousal; and 64% reported symptoms of numbing/avoidance. Symptoms were worse in girls and in children whose homes had been flooded.

The intervention consisted of five weekly hour-long sessions. Each session opened with a recreational activity, which was followed by a 20-minute learning session that focused on stress reduction or management, including overview of childhood stress, positive thinking, deep breathing and relaxation, stress-reduction activities, and emotional regulation. Each session

closed with more play, during which children were encouraged to use the techniques they had just learned.

Postintervention assessment showed a significant decline in PTSD symptoms. Only 3% had very severe symptoms, while symptoms were severe in 22%, moderate in 30%, mild in 28%, and doubtful in 15%. There were significant reductions in reexperiencing and numbing/avoidance, but hyperarousal symptoms were resistant, especially in boys.

The program also affected the children’s coping mechanisms, as measured by the KidCope checklist. Children reported less blaming of themselves, less withdrawal into television watching, less anger and lashing out, and being less likely to try and fix the problem.

Dr. Russoniello and Dr. McGhee designed the behavioral intervention, but it was delivered at the school by students of the university’s recreational therapy program. Using college students had unex-

pected benefits, Dr. Russoniello said. “The children bonded with them instantly, perhaps because they were closer in age or because they could see the possibility of their own future success in them.”

The students also gained experience and proved their worth in times of emergency. “When we are responding to large-scale disasters, there aren’t enough professionals to go around,” he said. “This study showed us that trained college students might be able to fill some of these gaps.” ■



TR Metabolic Disorders

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