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STRONG STAR

a Beacon of Hope

Post-Traumatic Stress Disorder Program

By Julie Collins



US Army Sgt. 1st Class Sean Brack among the concrete-reinforced barracks of his base in Afghanistan, October 2011.

Back at Fort Hood from his third deployment to Iraq with news that he would deploy to Afghanistan in 2011, U.S. Army Sgt. 1st Class Sean Brack suddenly felt like his life was falling apart. He could only describe the feeling in metaphor.

"I was standing at the top of a deep slope looking down, and I couldn't see the bottom. I knew I was going to fall; I just didn't know how far," he said.

Living with traumatic memories from his first tour in 2003, he would cope by pushing those memories out of his mind and moving forward with his wife's encouragement. However, like an estimated 100,000 to 300,000 veterans of our nation's current war, he soon found himself overwhelmed by symptoms of one of its signature wounds: posttraumatic stress disorder, or PTSD.

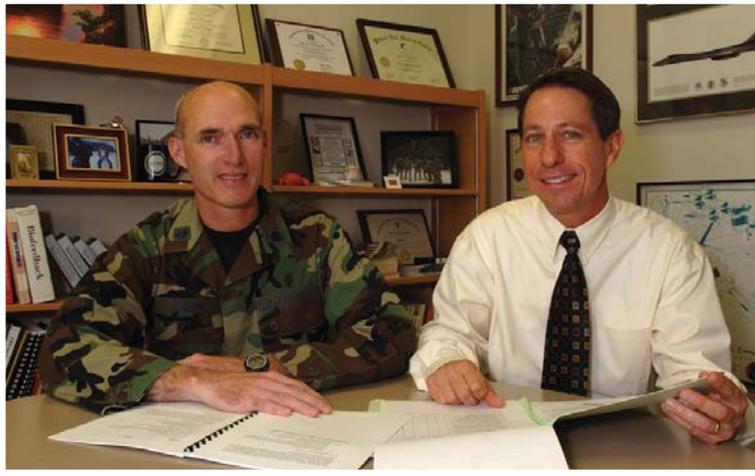
"I was angry about anything having to do with the Army," Brack recalls. "I didn't trust my chain of command or anyone around me. I started taking preventive measures for things that generally don't happen in America, like watching out for IEDs (improvised explosive devices) while driving to work. Even at home, which I saw as my 'safe place,' I was withdrawn and didn't talk much. I lost my motivation and energy, and I was miserable all the time. Finally, I started to entertain thoughts of suicide."

Right help, right place, right time

Brack knew he needed to seek help, but it was not easy to find. The process was confusing and unproductive, until he walked into the Resiliency Campus at Fort Hood. There, Brack saw a behavioral health specialist who diagnosed him with PTSD and referred him to STRONG STAR.

STRONG STAR, or the South Texas Research Organizational Network Guiding Studies on Trauma and Resilience, is a multidisciplinary, multi-institutional research consortium under the leadership of The University of Texas Health Science Center at San Antonio. Funded by the Department of Defense through the Office of Congressionally Directed Medical Research Programs, it brings together the skills of civilian, military, and Veterans Administration (VA) experts at more than 20 collaborating institutions. All are working together to prevent PTSD from becoming a chronic problem for a new generation of war veterans.

In that effort, STRONG STAR is taking the leading, evidence-based PTSD therapies from the civilian world; tailoring them to meet the unique needs of the military, and evaluating their efficacy with combat-related PTSD and comorbid conditions, such as depression, insomnia, alcohol dependence, and chronic



Alan Peterson, PhD, (on right) Professor of Psychiatry and STRONG STAR Director, consults with fellow STRONG STAR investigator United States Air Force (USAF) Lieutenant Colonel Jeffrey Cigrang, PhD, (on left) who is currently stationed at Minot Air Force Base in North Dakota. Both deployed to Iraq when they were with Wilford Hall Medical Center, and as USAF psychologists, treated Posttraumatic Stress Disorder (PTSD) in theater. They later co-authored a journal article on the success of PTSD treatment in the deployed setting. (See references on page 30.)

- the delivery of therapy in a primary care setting, where there may be less fear of stigma
- combining PTSD treatment and couples therapy to help service members and their spouses
- combining psychological therapy with medication
- and delivery of psychological treatment in theater in Afghanistan.

Besides the study based in Afghanistan, all of these clinical trials are being conducted in South Texas, which has the largest concentration of Operation Iraqi Freedom and Operation Enduring Freedom veterans in the country. They are made possible by the collaboration of Darnall Army Hospital at Fort Hood; Brooke Army Medical Center and Wilford Hall Medical Center in San Antonio; and the South and Central Texas VA hospitals in San Antonio and Waco. Study outcomes are expected to guide future DoD and VA treatment policies and practices.

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pain. Complementary biological and epidemiological studies are looking at the root physiological causes of PTSD--and even the biological effects of PTSD treatment--to enlighten new and improved ways of preventing and treating the disorder.

"Civilian studies have proven two PTSD treatments to be effective," said STRONG STAR Consortium Director Alan Peterson, PhD, a retired lieutenant colonel and psychologist with the U.S. Air Force who now serves as Professor and Chief of the Division of Behavioral Medicine in the School of Medicine Department of Psychiatry.

"Data from civilian studies shows that in 80 percent of cases, PTSD patients can be treated to the point of recovery with Prolonged Exposure (PE) or Cognitive Processing Therapy (CPT)," Dr. Peterson explained. "We believe these same therapies will be effective with combat-related PTSD. But the problem is that no one has ever studied them with the military before, and no one has looked at the best way to deliver them to make them most effective for active-duty service members. STRONG STAR is the first to do that."

Among STRONG STAR's 14 research projects are several treatment studies that adapt and apply these two treatments to meet the needs of active-duty service members or recently discharged veterans

These studies are evaluating:

- the delivery of individual versus group treatment
- traditional treatment over 10 weeks vs. condensing treatment into two weeks

Prolonged Exposure Therapy (PE)

Prolonged Exposure therapy, often called PE, was designed by Edna Foa, PhD, director of the Center for the Study and Treatment of Anxiety at the University of Pennsylvania and one of the principal investigators working with the STRONG STAR Consortium. PE is a cognitive-behavioral therapy that has been shown to alleviate PTSD and its symptoms by helping patients confront the traumatic memories they have been trying to avoid. The therapy typically involves 10-12 sessions of 90 minutes each, beginning with education about the therapy and normal reaction to trauma; instruction in breathing techniques for relaxation; and therapist-guided "imaginal" and "in vivo" experiences that expose patients in safe ways to distressing memories, thoughts, feelings and situations that relate to their trauma. Imaginal exposure involves the repeated retelling of the patient's trauma story, and in vivo exposure experiences engage the patient in safe activities that serve as trauma reminders. Over time, the traumatic memories lose their grip and cause less distress, and related PTSD symptoms simultaneously decline, helping patients gain a new lease on life.

Cognitive Processing Therapy (CPT)

Cognitive Processing Therapy, or CPT, was designed by Patricia Resick, PhD, director of the National Center for PTSD with the VA Boston Healthcare System and one of the principal investigators working with the STRONG STAR Consortium. CPT is a cognitive-behavioral therapy that gives patients an understanding of how their thoughts about a traumatic event influence their feelings and reactions to it, then helps them develop a new way of thinking that alleviates their distress and allows them to regain control of their lives. Over the course of 12 one-hour sessions, patients receive education about PTSD and CPT; write an impact statement describing their trauma and identifying associated thoughts and feelings; retell their story as the therapist uses Socratic questioning and other techniques to challenge faulty thought processes (e.g., blaming themselves for something over which they had no control); receive cognitive skills training to help them cope with their current situation and new difficulties in the future; and work through issues specific to PTSD, such as maladaptive safety concerns and problems with trust, intimacy, and self-esteem.

From despair to hope: A wounded warrior begins to heal

STRONG STAR's two major treatment studies at Fort Hood were preparing to launch when Brack came looking for help. Each of these studies is led by the renowned psychologists who developed the two evidence-based therapies for PTSD:

- Edna Foa, PhD, of the University of Pennsylvania, developer of PE
- Patricia Resick, PhD, of the National Center for PTSD, VA Boston Healthcare System, developer of CPT.

Brack voluntarily sought treatment as a STRONG STAR clinical case and was assigned to group Cognitive Processing Therapy, but he had some hesitations.

"I wasn't sure about group therapy," he said. "It was difficult even to have to think about the events that caused my PTSD. So I was uncomfortable having to talk with other soldiers about them and how I was feeling. I thought they might think I was nuts." His attitude soon changed.

"By the second or third session, it already felt like a big weight had been lifted off of me," he said. "It felt good to get these things off my chest, and it was helpful to see that other soldiers were thinking and reacting the same way I was. I knew I wasn't going crazy. I was having a normal reaction to bad things that happen during war."

Understanding trauma, key to recovery

A fellow group member identified a key "trigger" for Brack's symptoms.

"One of the things that hit me hard during my first deployment happened on Thanksgiving night," he said. "A couple of young girls were caught in the crossfire of a fight that erupted when we were on patrol. It became my job to bag the bodies, and when I looked at the face of this 12-year-old girl, I saw my own daughter. That was an ugly night."

Once home, he found himself getting depressed more as the holidays approached.

"Now it seems logical that it was because Thanksgiving reminded me of that night in Iraq, but I'd never made the connection before because I didn't want to think about it. It was someone in my group who pointed that out to me. He identified one of my triggers."

Triggers are events and situations that remind you of a traumatic event you experienced and bring on PTSD symptoms.

"In therapy, they taught us to recognize triggers before they happen so we can see them coming and step over them," Brack explained.

Another aspect of his therapy helped him with his anger and his mistrust of Army leadership. He saw that it stemmed from a disagreement with his commander on how to respond to a family that had been attacked and appeared at the gate of their forward operating base seeking help.

"One of the things I really like about the STRONG STAR program is that my therapist didn't try to make me change my mind and agree with my commander's decision," Brack said. But he learned to react differently.

"I no longer blame myself for things over which I have no control," he said, "and I don't fault my commander for a difficult decision that had to be made in a split second, especially when I don't know

everything that he had to consider.

"Also, this is war. It's impossible to plan and prepare for every eventuality, but you can know that bad things will happen. Mistakes will be made. There will be some failures. Afterwards, you can't change it; you can only learn from it and have some control over how it affects you."

Brack has done just that. Since his treatment, he no longer has PTSD, and he's not the same person he was before – he's stronger. "I feel so much better now, and I know that my family is so much happier with my being a more engaged part of it," he said. "Now, I'm more fun and spontaneous. I'll tell my son, 'Let's go play catch,' or my wife, 'Let's meet for lunch,' or 'Let's grab the kids and take them to Enchanted Rock.' This year, she even talked me into taking our first family vacation. We never had since we were married on September 12, 2001. I never wanted to before; I preferred to be at home in my comfort zone. This year, we traveled to Colorado and had a great time, and now I'm looking forward to more family vacations."

He believes the insight he's gained from his experiences has made him a better platoon leader and better at training young soldiers.

"Work is still work, but I take a lot more satisfaction in what I do," he said.

In June 2011, as he prepared to leave for Afghanistan, he was glad to have renewed confidence in his chain of command. "I'm not excited about leaving my family for a year, but if I have to, the idea of spending a year in a combat zone with folks I trust is a universe better than the alternative," he said. "And I know I can trust my commanders. They're smart guys. They've gotten to where they are through ability. I can depend on them, and I'm proud to serve with them. Ours is a hard job, but I'll do the hard job, and I'll go through the hard experiences so that other Americans don't have to."

Could wounded warriors become our strongest warriors?

Dr. Peterson believes that, with access to the right treatment, other service members affected by the psychological wounds of war can gain the same new lease on life that Brack has, not only recovering from PTSD but emerging even more resilient than before.

"They have learned and grown and become stronger through their experience, and as a result, they may now be some of our best service members and leaders," Dr. Peterson said. "That is a primary goal of STRONG STAR -- to help our psychologically wounded warriors heal and strengthen and be able to continue and excel in their military careers, or if they separate from the military, to live happy, productive civilian lives."

School of Medicine Faculty Advancing STRONG STAR's Mission

Fourteen principal investigators from eight separate military, civilian, and Veteran's Administration institutions are working with more than 100 collaborators to carry out STRONG STAR's important mission. Below is a list of STRONG STAR leaders from the UT Health Science Center and the School of Medicine, along

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with a description of their research efforts:

- **Peter Fox, MD**, Director of the Research Imaging Institute
Department of Radiology: Director of the STRONG STAR
Neuroimaging Core; principal investigator of a research study
applying neuroimaging methods to study PTSD in the context of
treatment to learn more about the pathophysiology of PTSD and
the neurobiological changes associated with treatment.
- **Stacey Young-McCaughan, RN, PhD**, Department of Psychiatry:
STRONG STAR Consortium Coordinator; principal investigator
of an epidemiological study investigating how PTSD treatment
impacts comorbid insomnia; principal investigator of an affiliated
study evaluating the benefits of exercise on PTSD treatment.
- **Jim Mintz, PhD**, Department of Psychiatry: Director of the
STRONG STAR Biostatistics, Data, and Computing Services Core;
principal investigator for the STRONG STAR Data Repository,
which will help address STRONG STAR research questions for
years to come.
- **Alan Peterson, PhD**, Department of Psychiatry: STRONG
STAR Consortium Director; STRONG STAR Administrative
Core Director; principal investigator of a pilot study evaluating
the delivery of evidence-based psychotherapies in theater in
Afghanistan.
- **John Roache, PhD**, Department of Psychiatry: STRONG STAR
Deputy Director; principal investigator of a clinical trial with the
VA evaluating the combined use of psychotherapy and medication
to treat comorbid PTSD and alcohol dependence and looking for
ways to predict who will respond well to medication and who will
be neutrally or negatively affected by it.
- **J. Randy Strong, PhD**, Department of Pharmacology, principal
investigator of a preclinical study looking at the role of early life
stressors in PTSD susceptibility.
- **Douglas Williamson, PhD**, Department of Psychiatry: Director
of the STRONG STAR Genomics and Basic Science Core; principal
investigator of a research study examining the interaction of genes
and the environment on susceptibility to, and resilience against,
PTSD.

