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Winter 2012

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Peterson in Iraq in 2004.

Road to War Also the Path to Recovery:

Faculty member's tour of duty leads to help for service members with PTSD

By Julie Collins

On Sept. 11, 2004, at the start of his second deployment in support of our nation's war on terror, Lt Col Alan Peterson, PhD, and his comrades were greeted with an unwanted 9/11 anniversary gift from the enemy: mortar and rocket attacks that caused many casualties, including Senior Airman Brian Kolfage, a young Air Force Security Forces member who was also on his second deployment.

"He had just stepped out of his tent, and a mortar landed right at his feet," recalled Dr. Peterson, who had deployed with a group of medics from Wilford Hall Medical Center to establish the Air Force Theater Hospital at Balad, Iraq. "The explosion almost severed both of his legs and one of his hands. Dozens of people came running out, providing first aid, pulling off boot laces and putting on tourniquets.... Within 15 minutes, he was being treated by some of the best surgeons in the world, who saved his life ... but that was something that we all took very hard, and it left many of the first responders pretty traumatized."

Dr. Peterson now serves as chief of the Division of Behavioral Medicine in the UT Health Science Center Psychiatry Department. The events that day and what happened to this young airman were indicative of how this tour would go and why posttraumatic stress disorder (PTSD) has become a signature wound of Operation Iraqi Freedom, Operation Enduring Freedom, and Operation New Dawn.

"[The forward operating base at] Balad was affectionately known as 'Mortar-itaville,'" said Dr. Peterson. "It's a large installation; it had about 30,000 people there at the time. Its size made it an easy target, so almost every day there were mortar attacks."

Alan L. Peterson, PhD, ABPP

Professor and Chief of the Division of Behavioral Medicine in the Department of Psychiatry

Deputy Chair for Military Collaborations

Director of the STRONG STAR Multidisciplinary PTSD Research Consortium.

Besides attacks on the installation itself, hundreds of convoys a day went out from this supply depot, subjecting themselves to ambushes and to attacks with improvised explosive devices, or IEDs.

Home to an Air Force theater hospital and a staging area for aeromedical evacuations, the Balad base saw patients with the worst of injuries; service members in Iraq who needed extended treatment that could not be handled in theater were sent there for evaluation and evacuation. When mass casualties came in, particularly in November 2004, during the Battle of Fallujah, all hands were on

deck to help.

"When there was a mass casualty, anybody who wasn't involved in emergency room or trauma work became manpower," Dr. Peterson explained. "It became your job to head out to the helicopter landing pad and help move injured patients from the helicopters, transport them to the emergency department, and then stay there with them and help the team do whatever was needed while they were providing care for these patients. So everybody got exposed to patients with traumatic injuries, including burns, facial injuries, amputations and other severe injuries."

Master Sergeant Kenneth Belinfante makes a mail run with Lt Col Peterson during their deployment to Iraq in 2004-2005. Both were deployed with the 59th Medical Wing at Wilford Hall Medical Center, Lackland Air Force Base, to Balad, where Peterson served as chief and MSgt Belinfante as the noncommissioned officer in charge of the mental health clinic.

Combat support hospitals also treat enemy fighters injured in battle in accordance with rules of the Geneva Convention, so some hospital workers found themselves caring for hostile insurgent patients.

For Dr. Peterson, a psychologist, and his team of six mental health care personnel assigned to the hospital, this deployment was one that called on every skill they had. They treated service members who came to the mental health clinic seeking care; made daily rounds to visit personally with each patient at the hospital; made daily rounds to check in with staff members at the hospital to see how people were holding up and "normalize" having a conversation with a mental health professional; provided unit consultation, or targeted outreach, to units on base that had the highest-stress jobs; and met with patients sent to Balad for psychiatric evaluation and potential aeromedical evacuation for psychiatric disorders.

To help prevent aeromedical evacuation of psychiatric patients suffering from combat stress but who wanted to remain in theater, Dr. Peterson utilized his training in a type of therapy called Prolonged Exposure. This treatment is known to be effective for various stress-related disorders in civilian patients, so Dr. Peterson quickly tried to adapt it to treat combat-related PTSD in a deployed setting. "To the best of my knowledge, this had never been done before, so I needed to figure out how many sessions would be needed, what length the sessions should be, how to compress the full treatment into a more limited number of sessions, and those sorts of things," he recalled.

He had great success. "Basically, in almost every case, the outcomes were very good," Dr. Peterson said. "Within two or three weeks, after three or four sessions, people were saying, 'I'm good to go.' It was remarkable."

Dr. Peterson and one of his colleagues, Lt Col Jeffrey Cigrang, eventually published an article in a scientific journal about their success with Prolonged Exposure, but more evidence was needed to show other military psychologists that this treatment could be delivered safely and effectively in theater.

When Dr. Peterson retired from the Air Force and joined the Psychiatry Department faculty at the School of Medicine, he started submitting research grants to support PTSD research. Soon afterwards, the Department of Defense (DoD) announced a great new opportunity: Its Office of Congressionally Directed Research Programs, through a new Psychological Health and Traumatic Brain Injury Research Program, was funding national consortia to advance prevention and treatment of combat-related PTSD and traumatic brain injury.

"So I took what I was used to doing in the military, which was finding a civilian expert to collaborate with the military on research important to the DoD, and I applied that on a much grander scale," Dr. Peterson said.

Again, he was successful. In 2008, the DoD awarded approximately $35 million to STRONG STAR, the South Texas Research Organizational Network Guiding Studies on Trauma and Resilience, the country's largest PTSD research consortium and the only one working with active-duty military. Today, its 14 separate research projects are run by an expert team of military, civilian, and Veterans Administration (VA) investigators who are developing and evaluating the most effective early interventions possible for combat-related PTSD. Studies are based in South Texas at Fort Hood, Brooke Army Medical Center, Wilford Hall Medical Center, and the South and Central Texas VA hospitals.

"We're seeking to develop treatments that will allow us to treat combat-related PTSD to the point of remission, but many people believe that PTSD cannot be 'cured,'" said Dr. Peterson. "But anything less would be a disservice to our troops. Just as a cancer researcher wants to cure cancer, not simply help with the symptoms, we want to treat PTSD to the point of recovery. And the reality is, we have a good chance of doing that."

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A sample of journal articles on Post Traumatic Stress Disorder
Cigrang, J. A., Rauch, S. A. M., Avila, L. L., Bryan, C. J., Goodie, J. L., Hryshko-Mullen, A., Peterson, A. L., and the STRONG STAR Consortium. (2011). Treatment of active-duty military with PTSD in primary care: Early findings. Psychological Services, 8(2), 104-113. doi:10.1037/a0022740.

Cigrang, J. A., Peterson, A. L., & Schobitz, R. P. (2005). Three American troops in Iraq: Evaluation of a brief exposure therapy treatment for the secondary prevention of combat-related PTSD. Pragmatic Case Studies in Psychotherapy, 1(2), 1-25.

McGeary, D., Moore, M., Vriend, C. A., Peterson, A. L., & Gatchel, R. J. (2011). The evaluation and treatment of comorbid pain and PTSD in a military setting: An overview. Journal of Clinical Psychology in Medical Settings, 18, 155-163. doi:10.1007/s10880-011-9236-5.

Peterson, A. L., Luethcke, C. A., Borah, E. V., Borah, A. M., & Young-McCaughan, S. (2011). Assessment and treatment of combat-related PTSD in returning war veterans. Journal of Clinical Psychology in Medical Settings, 18, 164-175. doi:10.1007/s10880-011-9238-3.

Peterson, A. L., Wong, V., Haynes, M. F., Bush, A. C., & Schillerstrom, J. E.(2010). Documented combat-related mental health problems in military noncombatants. Journal of Traumatic Stress, 23(6), 674-681. doi:10.1002.jts.20585.