



Special Issue Assesses Strengthening Our Soldiers

The Special Issue of the *Journal of Clinical Psychology in Medical Settings*, published in June 2011, found that, while treating for psychological and/or physical trauma, clinicians need to address other physical illnesses in the same context to properly treat the whole patient. It also found that veterans who are too far from or have difficulty getting to treatment facilities can be treated using virtual reality (VR) and telehealth.

Data from the issue stated that the veterans who experience post-traumatic stress disorder (PTSD) and traumatic brain injury (TBI) will find it challenging to re-enter the workforce while managing lingering symptoms of their injuries of war. This will, in turn, force restructuring of jobs to offer opportunities to veterans who may have limited concentration, have impaired memory capacity, or who may become distracted.

Addressing depression and reducing anxiety in soldiers who are regaining function after injury are goals of the Functional and Occupational Rehabilitation Treatment (FORT) Program. Data from the issue also note that preparing for and reducing trauma in affected soldiers can be accomplished partly through the use of VR and telehealth, as already has been demonstrated in army and navy settings.

Because long-term effects of the physical exertion on a veteran's body will need to be addressed later in life as related chronic health problems surface, it is critical that clinicians become vigilant in monitoring for long-term risk factors.

Other areas of concern that were discussed included identifying which military veterans are most at risk for psychological conditions; determining optimum delivery methods for treating PTSD, TBI, and pain experienced by active duty members and veterans; determining the best approach for effectively training clinicians by disseminating evidence-based practices to address the specific training needs of the population; and confirming current priorities for medical delivery, research, and funding.

PTSD Screening Available for Veterans With Neck or Back Pain

According to a study that appeared in a recent issue of the *Journal of Rehabilitation Research and Development*, the rates of posttraumatic stress disorder (PTSD) have been increasing among recently returning Operations Iraqi Freedom and Enduring Freedom (OIF/OEF) veterans. Because PTSD is often accompanied by chronic pain, clinic settings that address pain complaints among veterans may provide opportunities for PTSD screening.

The study evaluated the use of the PTSD Checklist (PCL) to identify an optimal cutoff score for recently returning OIF/OEF veterans seeking care for neck or back pain.

In a specialty care clinic setting, 46.8% of OIF/OEF veterans with diagnosis of neck or back pain also reported experiencing PTSD. Variation has been reported regarding how the PCL is used based on populations, setting, and research methods. The study authors suggest that the link between

chronic pain and the high prevalence of PTSD presents a clinical challenge to both patients and health care providers, and that further research into PTSD screening for OIF/OEF veterans who have chronic pain is necessary.

Korean Veterans Affected by New Benefits Policy

Although 40 years has passed, the VA has recognized that even more veterans were exposed to Agent Orange while serving on Korea's demilitarized zone (DMZ). Military personnel assigned to certain military units in Korea on the DMZ between April 1, 1968, and August 31, 1971, are now eligible to apply for compensation if they were exposed to herbicides. As many as 30,000 veterans who served in Korea's DMZ during the new 3½-year time frame may be eligible for benefits.

Fourteen conditions are now presumed to have been caused by exposure to Agent Orange. In August 2010, 3 diseases were officially added to the VA's list: hairy (or B) cell leukemia, ischemic heart disease, and Parkinson disease.

Veterans no longer need to prove that there's a link between their military service and their illness as a result of the new "presumption" ruling. "This 'presumption' simplifies and speeds up the application process for benefits and ensures that veterans receive the benefits they deserve," according to the VA's statement announcing the new regulation.

For information on diseases and birth defects caused by exposure to Agent Orange, go to <http://www.publichealth.va.gov/exposure/agentorange>

/diseases.asp. For information on filing a claim with the VA for Agent Orange exposure, go to <http://www.vba.va.gov/bln/21/AQ/claimherbicide.htm>.

Researchers Seek Better Methods for Diagnosing Brain Injuries

Imagine diagnosing brain injuries immediately on the battlefield using advanced technology. Research is already under way to develop 2 new methods for more quickly diagnosing traumatic brain injury (TBI) in the field. Thanks to \$6 million in grants from the DoD, the work is being performed by researchers from the University of Virginia (UVa) in federal laboratories.

TBI has been diagnosed in nearly 202,300 service members since 2000, and the number of cases has increased each year since 2005, according to the Defense and Veterans Brain Injury Center in Washington, DC. They do note, however, that a number of these cases turn out to be mild concussions.

According to Dr. James Stone, assistant professor of radiology and medical imaging at the UVa School of Medicine, a TBI can include structural injury or be a disruption of brain function which is caused by an external force. A possible result of this new research, therefore, could be better protective gear or more focused treatments.

"We're looking at ways to better diagnose TBI with imaging," Stone said. "We have this idea and baseline research and we're now in the process of seeing what is possible."

Researchers are first exploring whether it is possible to perform ultrasound in the field with hand-held machines, providing quicker diagnosis. They also hope to develop probes that may be able to identify TBI at a cellular level.

The second main focus of research centers on a method to provide a more detailed view of the area of the brain where a TBI is present. This would provide a more precise method of detection than what is currently possible with magnetic resonance imaging or computed tomography scans.

By studying the medical scans of active service members who frequently experience blast exposure, researchers seek to better understand such occupational hazards, although diagnostics and rehabilitation are still mainstays of treatment, which is determined on an individual basis, according to Stone.

PTSD May Lead to Higher Risk of Heart Disease

A recent study of U.S. war veterans now has confirmed earlier data that found those who experience post-traumatic stress disorder (PTSD) were more likely to also have coronary artery disease (CAD) as a result of fatty buildup, or plaque, in the arteries leading to the heart. According to the National Institute of Mental Health, about 1 in 30 adults in the general population experience PTSD annually and the incidence is much higher in war veterans.

In addition to the increased incidence of the disease in mentally troubled veterans, other comorbidities were more likely to cause death in this population than in their peers who hadn't experienced PTSD.

With returning service members plagued by combat flashbacks, fearful and avoidant behavior, and with depression becoming more and more frequent, the onus has been on the military to find better ways of proactively addressing PTSD. According to the research published in *The American Journal of Cardiology*, making a quick diagnosis that integrates med-

ical and psychological treatments is key to identifying those at risk for heart disease as well.

A group of 637 veterans suspected of having heart disease and signs of CAD were screened in the Greater Los Angeles Veterans Administration Medical Center area. Their psychological health status (PTSD vs non-PTSD) was also evaluated. The veterans were an average age of about 60 years, and most were men. The criteria for PTSD was met by 88 of the men and of those, most already had plaque buildup in their arteries, as determined through calcium scans of their hearts. The veterans with PTSD were more likely to have narrowed arteries than those without PTSD.

MRIs Moving to the Front Lines

It is estimated that between 17% and 22% of returning soldiers from Afghanistan have experienced some level of brain injury. Now, troops fighting in Afghanistan will soon have better access to cutting-edge technology to help diagnose and treat traumatic brain injuries (TBIs), as the Naval Medical Logistics Command (NMLC) announced the award of a contract for 2 mobile magnetic resonance imaging (MRI) systems.

Having MRI capabilities in the battlefield will allow clinicians to provide an overall comprehensive approach to diagnosing and treating concussive injuries.

Still in development, the self-contained units will be designed to function in the diverse working environments that exist in combat zones, including extreme temperature changes, blowing sand, and power issues. Unlike commercially designed systems, they will also need to meet requirements to be able to be airlifted into remote locations. ●