



Defense Health Agency (DHA) Clinical Communities Speaker Series

Resource List – Sept 2020

Military Health Care: Select Promising Practices

Improving Treatment Outcomes for Patients with Acute Concussion: A Defense Health Agency Quadruple Aim Performance Process (QPP) Initiative

Traumatic brain injury (TBI) presents in a wide range of symptoms and outcomes, therefore treatment protocols and modalities can vary drastically depending on the case. [Traumatic Brain Injury: Current Treatment Strategies and Future Endeavors](#) provides a review of management guidelines from the clinical and research standpoints. This article also provides a surface review of the subtypes of TBI, their ideal management strategies including invasive and non-invasive interventions.

The Defense and Veterans Brain Injury Center (DVBIC) has studied the benefits of the [Fusion Brain Assessment System](#) in addressing diagnosis and management of service members with concussion. This innovative technology is an additional tool in the management of mild traumatic brain injury (mTBI), which provides objective information through the assessment of eye reaction time. Following a brain trauma eye reaction time is often inconsistent or erratic and slower than normal, based on additional studies by DVBIC. The Fusion technology has been used to assess brain changes of rehabilitation patients who have had a TBI or post-traumatic stress disorder (PTSD). The goal of this added tool in TBI assessment is to detect and mitigate TBI-related problems at an earlier stage of intervention.

The [Long-Term Impact of Military-related Brain Injury Consortium \(LIMBIC\)](#) is a five-year project composed of researchers and resources from more than 20 organizations, including the U.S. Department of Veterans Affairs (VA), the Department of Defense (DoD) and the National Institutes of Health (NIH). These organizations have pledged funds to support the research of mTBI or concussions. The LIMBIC efforts will expand on a current project, the Chronic Effects of Neurotrauma Consortium, which consists of a research cohort of more than 2 million Veterans and service members. This research is dedicated to the study of military TBI, to further explore the link between combat concussions and other neurological deficits.

In the retrospective cohort study [Risk of Alcohol Use Disorder or Other Drug Use Disorder Among U.S. Service Members Following Traumatic Brain Injury, 2008-2011](#) it was found that the cohort had an elevated rate of developing alcohol use disorder (AUD). Active duty U.S. service members were identified after suffering from a TBI between the timeframe of January 2008 to December 2010. Once variables such as TBI severity, history of PTSD or comorbid mental health outcomes were adjusted for, a relationship was found between the diagnosis of TBI and an increased risk of developing AUD within 1 year.



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References

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