

## Defense Health Agency (DHA) Clinical Communities Speaker Series JUN 2022 CCSS: Enhancing Primary Care: Refining Proficiencies to Improve Patient Outcomes

S02: Innovations in Treatment of Combat Related Traumatic Brain Injury and Co-Morbid Psychological Health Conditions

## **Resource List**

The journal article <u>Disability and the COVID-19 Pandemic: A Survey of Individuals With Traumatic Brain Injury</u> (2021) intends to identify how infection with the coronavirus 2019 (COVID-19) affects individuals with traumatic brain injury (TBI). The article focuses particularly on the unique effects for those with chronic disability. Participants with a history of TBI were identified via a web-based survey between May and June 2020. Non injured comparison (NC) participants also completed the survey. The survey included multiple choice and open-ended questions about how the pandemic and stay-at-home orders affected their work, education, medical care, physical and mental well-being and a variety of other areas. The results indicated that those with a history of TBI indicated less pandemic-related change related to their daily habits, social life and masking. The findings of the study were used to recommend that health care providers tailor education and reduce social isolation for patients with disability during the pandemic.

The Long-Term Impact of Military-related Brain Injury Consortium (LIMBIC) (2019) 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 mild traumatic brain injury (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.

The awareness of TBI within the public domain has greatly increased in the last two decades, due to research related to sports-related concussions and injuries incurred in combat in Iraq and Afghanistan. However, the Substance Abuse and Mental Health Services Administration (SAMHSA) Advisory article Treating patients with traumatic brain injury (2021) identifies an all too critical knowledge gap. The understanding of the implications of behavioral health conditions resulting from TBI are still limited. TBIs vary greatly in severity, however the impacts can alter cognition, affect and emotion due to the frequent damage in the frontal lobes and anterior tips of the temporal lobes. Classifications of TBIs are commonly diagnosed as mild, moderate or severe, and the effects can range from a concussion including confusion to loss of consciousness or coma. The cognitive domains may be impaired, and this can include attention, processing speed, memory and executive functioning. All these factors would be essential to more appropriately select a behavioral health treatment plan.

Johns Hopkins University has a dedicated webpage for the <u>Johns Hopkins Medicine Traumatic Brain Injury Research Center</u> (2022) that provides resources on current research, news, links and support related to TBI. The multidisciplinary TBI Research Center (TBIRC) is located in the Pathology Department and consists of a diverse group of experts in clinical neuropsychiatry, human neuropathology, animal models and cellular and molecular biology. The goal of the TBIRC is to discover the pathological mechanisms causing TBI and use this understanding to develop and test new and more effective treatments. The approach is to develop and analyze animal models of brain injury in parallel with studies of patients with TBI in order to create diagnostic or prognostic biomarkers and novel therapies.



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The Centers for Disease Control and Prevention's National Center for Injury Prevention and Control has a useful tool called <u>"Get the Facts about TBI"</u> (2022). This is a great resource for patient education that includes TBI data, health disparities and prevention. It also includes information specifically for Service Members and Veterans. It reports that studies suggest that service members and Veterans who have suffered a TBI may have persistent symptoms, complicated by concomitant PTSD and depress.

## References

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