

Light therapy helps veterans treated for traumatic brain injury

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A new study by researchers at the VA Portland Health Care System in Oregon found that augmenting traditional treatment for traumatic brain injury (TBI) with morning bright light therapy (MBLT) improved

physical and mental symptoms for participants. The team will present their work virtually at the American Physiological Society's (APS) annual meeting at Experimental Biology 2021.

According to the U.S. Department of Veterans Affairs (VA), over 185,000 veterans have been diagnosed with at least one TBI. TBI is both a common and complex injury. Because of the circumstances surrounding the brain injury, TBI frequently coincides with posttraumatic stress disorder (PTSD). Cognitive and memory impairments and poor sleep quality often result from these paired conditions. Unfortunately, the current treatment methods for TBI, which focus on improving the [cognitive symptoms](#), have inconsistent results.

Noting the reciprocal relationship between sleep disruption and cognitive function, the research team focused on addressing the sleep quality in the experimental group. Over the course of eight weeks, one group received group [cognitive therapy](#), while the other received cognitive therapy as well as 60 minutes of MBLT within two hours of waking each day.

The MBLT group reported improvements to cognitive function, sleep, depression and neuropsychiatric trauma symptoms. The traditional therapy group did not report improvements in any of these areas.

Jonathan Elliott, Ph.D., a member of the research team, said that the study "demonstrates a highly feasible mechanism to improve cognitive function and the efficacy of [current treatment] ... and ultimately overall quality of life in U.S. veterans."

More information: Abstract title: "Morning bright light therapy for sleep to augment cognitive rehabilitation in veterans with comorbid traumatic brain injury and post-traumatic stress disorder: A pilot study,"

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