UNC awarded \$5 million to Assess Intervention for Acute Stress Reactions

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The \$5-million dollar initiative, led by UNC and funded through the U.S. Department of Defense, will test the efficacy of an intervention developed at the Walter Reed Army Institute of Research originally designed to help service members who experience acute stress reactions during military operations.



Sam McLean, MD, MPH

CHAPEL HILL, NC –During severe stress, people can become so overwhelmed by panic and fear that they have difficulty functioning for a period of time. This is called an Acute Stress Reaction (ASR). It's a normal response to extreme events. However, when ASRs occur in military service members or civilian first responders (e.g., EMTs, police), this response can potentially impair the ability of these individuals to perform life-saving operations and may endanger them and those around them.

Co-developed by researchers at the Walter Reed Army Institute of Research (WRAIR), iCOVER (<u>https://rb.gy/bw7l3</u>) is a brief peer-based intervention designed to help service members overcome an ASR and continue performing their operational duties. iCOVER has been adapted for use by the militaries of allied nations including Canada, Czechia, Mexico, Norway and the UK. While iCOVER has received positive feedback from military personnel, the effectiveness of iCOVER in reducing emotional distress and restoring performance has not yet been tested.

To address this gap, the U.S. Department of Defense's Congressionally Directed Medical Research Program awarded UNC a new \$5 million grant to test the effectiveness of the iCOVER intervention in a randomized clinical trial. This clinical trial will recruit individuals experiencing an ASR in the emergency departments of major trauma centers around the US. Such an approach allows the research team to examine the impact of iCOVER in a way that is not feasible with service members in the midst of high-intensity military operations,

The study is led at UNC by <u>Sam McLean, MD, MPH</u>, director of the UNC Institute for Trauma Recovery, and performed in collaboration with co-principal investigator Christopher Jones, MD, of Cooper University Hospital in Camden, New Jersey and investigators Amy Adler, PhD and Emily Lowery-Gionta, PhD of WRAIR in Silver Spring, MD.

"We are very fortunate to have the opportunity to test the utility of the iCOVER intervention in civilian trauma survivors." said McLean, Professor of Psychiatry and Emergency Medicine at the UNC School of Medicine and co-principal investigator of the study. "It's challenging to assess interventions for ASRs, but this trial is a critical step in ensuring that we are doing our best for our military service members, who are doing so much for our country and putting themselves in harm's way for us. Results from this trial can also be used to help civilians in stressful occupations."

ASRs are common in military service members, as found by a recent survey of previously deployed soldiers. One in six Soldiers with combat experience reported experiencing a possible ASR and 45% reported seeing a fellow Soldier unable to function during combat because of a possible ASR. "We know that in the future, service members may be in situations in which rapid medical evacuation is not possible. So it is especially important to develop tools like iCOVER to support them at the front lines," said Emily Lowery-Gionta, PhD, Section Chief and Research Psychologist at the Center for Military Psychiatry and Neuroscience at WRAIR. "This kind of tool can equip service members with an effective and simple method for helping one another under extreme circumstances. This tool can also potentially be useful for the civilian medical community as well," said Amy Adler, Ph.D., Senior Scientist at the Center for Military Psychiatry and Neuroscience at WRAIR.

To test iCOVER, the team will use the AURORA network of major civilian trauma centers. This network, developed over the past 20 years, includes Cooper University Hospital in Camden, New Jersey. Dr. Christopher Jones, Director of Clinical Research in the Department of Emergency Medicine at Cooper, is a noted emergency medicine researcher and an expert in successfully operationalizing challenging studies in emergency department settings. Dr. Jones will work with McLean as co-PI of the study. "We are fortunate to have partnered with several world-class trauma centers from around the country to study ASRs in a civilian trauma population. The AURORA network is a real strength that makes this type of research possible," said Jones. "The goal is to rigorously test whether the iCOVER intervention can help individuals recover their functional ability when faced with extreme stress. The best part is that if found to be effective, the iCOVER intervention can be used to manage ASRs in civilian as well as military settings."

"We are just at the beginning of work to address ASRs, enhance individual resilience, and prevent persistent neuropsychiatric symptoms after extremely stressful events," Dr. Lowery-Gionta said. "Effective interventions will fill a major gap in our ability to manage extreme stress reactions in both military and civilian populations. This clinical trial of iCOVER is key to combatting ASRs and through this work, lives will be changed."

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