



Combat and Operational Stress Control in the Prolonged Field Care Environment

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As the nature of conflict evolves to unified land and multi-domain operations (MDO) against a near-peer adversary, critical medical support capabilities are likely to be disrupted. Advanced air defense systems and other antiaccess/area denial means in large-scale combat operations (LSCO) will limit patient movement capabilities, medical evacuation (MEDEVAC), and the circulation of low-density medical specialists among units.¹ This disruption of MEDEVAC capability will necessitate more prolonged field care (PFC) in which nonspecialty personnel must sustain a patient in a field medical environment for an extended period. Special operations medicine already has explored many of the necessary capabilities for PFC of traumatic injuries; however, disease and nonbattle injuries—combat and operational stress and other behavioral health conditions in particular—have not yet been addressed in planning medical capabilities for future warfare.² Behavioral health personnel will need to adapt combat and operational stress control (COSC) models for the future war.

Background on Combat and Operational Stress Control

Combat and operational stress reactions (COSR) are common temporary negative responses to the conditions inherent in military settings. They may develop due to direct combat exposure, coping with the austerity of a deployment environment, or difficulty managing issues at home while deployed. Symptoms of COSRs often include sleep disruption, anger outbursts, fatigue, problems concentrating, anxiety, and behavior problems. Although COSRs may be reminiscent of other mental health conditions such as posttraumatic stress disorder (PTSD), these stress reactions represent short-term responses to significant stressors. If not addressed in a timely manner, risk increases for soldiers to be operationally ineffective and/or develop other more limiting mental health conditions such as PTSD. COSRs are common; between 42 percent and 52 percent of currently and previously deployed U.S. Army soldiers report having witnessed COSRs among fellow soldiers, with the most commonly observed symptoms including the soldier “freezing” in mission duties or becoming mentally detached.³

Previous page: Photo by Erin Bolling; modified from original version.

Priority for medical intervention always will go toward soldiers with traumatic injuries that threaten life, limb, or eyesight. However, the potential impact on readiness from COSRs cannot be ignored. Even with robust behavioral health support from combat stress control detachments and organic behavioral health officers, psychiatric conditions are among the leading categories of disease and nonbattle injuries resulting in medical evacuation from combat environments, accounting for almost 12 percent of all service members evacuated from Iraq between 2003 and 2011.⁴ This rate increased to 19 percent between 2013 and 2015 as combat operations were curtailed and fewer behavioral health assets were available.⁵ In recent years, the draw-down of forward behavioral health support has been associated with significant increases in the proportion of psychiatric evacuations, accounting for 24 percent of medical evacuations in 2017 and 28 percent in 2018.⁶ These rates indicate that behavioral health support is an ongoing necessity in deployment settings.

COSC seeks to mitigate the impact of psychological factors such as COSRs that may impede readiness. A number of specific interventions are captured under the broad concept of COSC, including relaxation techniques, problem-solving, specific psychological interventions, and establishing regular meals, sleep, and exercise. COSC interventions throughout the wars in Afghanistan and Iraq were primarily delivered through providers and technicians organically assigned to brigade combat teams and regional combat stress control detachments.⁷ This model of behavioral health care generally has shown positive results throughout recent conflicts. More than half of a large sample of behavioral health patients treated in Al Anbar Province

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Capt. Kelly Drake (*far left*), behavioral health officer for the 2nd Infantry Brigade Combat Team (2IBCT), 4th Infantry Division (4ID), talks to soldiers about stress management 11 July 2018 at Kandahar Airfield, Afghanistan. Drake and Sgt. Kert Lang (*not pictured*), behavioral health noncommissioned officer for 2IBCT, 4ID, provided classes for service members throughout the airfield to help mitigate stressors that could arise. (Photo by Staff Sgt. Neysa Canfield, U.S. Army)

received more than one treatment visit, with services available for the most commonly occurring disorders.⁸ Even far-forward, intensive treatment of PTSD at Role 2 facilities (i.e., a limited field hospital staffed by the brigade support medical company) was possible in both Afghanistan and Iraq.⁹ Return to duty rates for behavioral health patients are typically above 90 percent when forward treatment is available.¹⁰

These results notwithstanding, the current model for behavioral health care delivery in deployment settings has several potential weaknesses. Due to the low-density nature of behavioral health assets, the provision of care relies heavily on battlefield circulation, with centrally located providers and technicians regularly traveling to fixed forward operating bases. Furthermore, this care model is dependent on reliable patient movement to

facilitate referrals to restoration centers and evacuation of service members exhibiting acute psychiatric risk. Due to their semipermanent nature, restoration centers lack mobility within an area of operations. Although telehealth can overcome challenges regarding patient and provider movement, this treatment model relies on dedicated bandwidth and established network capability in a mature battlespace. These potential weaknesses carry significant implications for the implementation of behavioral health care in future wars, particularly if forward behavioral health care is disrupted.

Historical Necessity of Combat and Operational Stress Control

Several historical examples illustrate the impact of psychiatric casualty rates when forward behavioral

health support is not available. Early approaches to combat stress reactions (then termed “shell shock”) by the British army during World War I emphasized rapid evacuation of psychiatric patients out of France.¹¹ The majority of these evacuees would never return to military duties, accounting for 15 percent of all discharges and hundreds of thousands of war pensions.¹² The U.S. Army mitigated this critical loss of manpower by implementing forward psychiatry units within a few

Future State: The Next War and Its Impact on Combat and Operational Stress Control

U.S. Army doctrine establishes the need to prepare for a future conflict against a near-peer adversary that will contest battlefield communication and movement. Such a conflict may involve large-scale irregular warfare or unrestricted warfare that targets several operational domains simultaneously. Alternatively, near-peer

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miles of the front and emphasizing a return to duty as a treatment goal for individuals experiencing COSRs, and rates of psychiatric losses significantly improved.¹³

Subsequent conflicts showed similar patterns. In World War II, high initial rates of personnel losses due to COSRs were significantly reduced by “relearning” and implementing principles of forward treatment.¹⁴ The high rates of psychiatric casualties during the first year of the Korean War were reduced by creating the modern division psychiatry cell that provided forward treatment of combat stress reactions.¹⁵ During Operation Desert Storm, rates of evacuation due to COSRs were significantly higher in those areas that did not have forward psychiatric support.¹⁶ Taken together, when forward treatment options are not available, COSRs may account for up to half of all battlefield casualties, severely impeding mission readiness.

As the Army prepares for future LSCO, it may be tempting to adopt a policy that all soldiers experiencing COSRs should be rapidly evacuated to benefit from definitive care in specialized stateside programs with a goal of long-term rehabilitation. However, this approach ignores the lessons of LSCO without forward behavioral health support during previous wars. As 80 percent of psychiatric evacuees do not return to theater, an approach that evacuates all personnel experiencing COSRs (along with required escorts) may run the risk of unsustainable rates of losses due to treatable and transient conditions.¹⁷

adversaries may engage in a series of gray-zone conflicts leveraging state-sponsored or nonstate actors. The setting for these future wars potentially ranges from austere environments to dense urban settings; in many of these scenarios, a smaller force that does not rely on large stationary bases is indicated. Regardless of the specific format of the next war, near-peer adversaries are likely to employ antiaccess/area denial technologies such as long-range precision munitions and advanced air defense systems that prevent access to and mobility within operational areas. Furthermore, near-peer adversaries are likely to contest all U.S. cyber capabilities, interrupting the systems on which most current battlefield technology rely.

These aspects of projected future warfare have significant implications for military behavioral health. The most serious consideration is contested air superiority, resulting in disrupted aeromedical capabilities. Without clear air superiority, maintaining the “golden hour” for trauma care will no longer be possible, driving requirements for PFC of trauma patients for up to seventy-two hours.¹⁸ If serious trauma patients—those who are the highest priority for definitive care—experience this degree of delay, then ambulatory patients experiencing suicidal ideation, emerging psychosis, or acute substance-related problems may need to be managed in forward environments for a week or more. These same disruptions due to contested airspace will prevent low-density behavioral health providers and technicians

from circulating to forward locations to provide direct support. Compounding this problem, greater demands for unit mobility and interrupted signal capability likely will prevent combat stress prevention teams from traveling alongside forward battalions. Due to the threat of precision munitions and the aforementioned interference with patient movement, restoration clinics will not be feasible at large, fixed locations. The total impact of these factors will be greater demand on forward medical assets and line commanders to address the impact of COSRs for longer periods without specialty behavioral health support. Therefore, commanders must prepare for several potential scenarios.

First, the largest number of soldiers requiring behavioral health support will exhibit transient, temporary symptoms that can be resolved quickly with a supportive intervention. Most common among these will be sleep disruption, emerging episodes of depression, acute stress reactions, and problems with anger management. In some cases, these symptoms will be an acute reaction to combat exposure. However, the majority of these reactions will be due to coping with family problems, relationship strain, or financial issues.¹⁹ If these reactions are not addressed, then risk increases for the soldier to develop more serious conditions that will require MEDEVAC. Even if these soldiers are not evacuated, operational stress and burnout will decrease effectiveness of the fighting force.

Second, while soldiers with a history of previous behavioral health treatment will have cleared predeployment screening requirements (or received deployment waivers) for behavioral health conditions, they may experience a recurrence of symptoms and are four times more likely to require MEDEVAC.²⁰ Follow-up support from deployed behavioral health assets typically would be provided for these soldiers. Without ready access to specialty behavioral health care, additional support for these soldiers will need to be in place.

Third, a small minority of soldiers will have their first instance of serious psychiatric illness while deployed, including psychotic disorders, suicide attempts, and bipolar disorder.²¹ Although soldiers with a history of these conditions are nondeployable, the initial onset of these conditions can be precipitated by the stressors of a forward military environment. In a mature battlespace, these cases would require immediate MEDEVAC to definitive care. Disruption in MEDEVAC capability may

require extended management of these cases in forward settings for a period of several days. If procedures for managing these patients are not planned in advance, additional soldiers may need to be pulled from frontline duties to maintain patient safety.

In addressing these scenarios without the availability of specialty mental health providers in a PFC setting, a continuum of forward intervention will be required. This continuum includes greater training for and utilization of self-aid and buddy aid, a baseline of training in forward behavioral health intervention for medics and battalion-level medical providers, and greater involvement of paraprofessionals and chaplains in forward settings.

Self-aid. Future warfare will increase the need for self-management of psychological stressors on the battlefield. These resources will rely on predeployment training and implementation to enhance efficacy downrange. Although initiatives such as the Master Resilience Training (MRT) program have been implemented for the past decade, they will need to account for the application of identified techniques to specific stressors in austere MDO and PFC environments. Whereas the current MRT curriculum includes several factors associated with individual resiliency such as mental agility and character strength, these concepts need to be better ingrained in the day-to-day training and deployment environment.²² Resiliency may need to evolve beyond “mandatory training” to focus on long-term coping skills and dependable leader engagement.

Stress inoculation training (SIT) is another self-administered preventative intervention against developing stress-related symptoms after exposure to trauma through “inoculating” individuals to potential traumas.²³ SIT incorporates techniques such as relaxation training and stress management to reduce arousal levels. The techniques in SIT can be adapted for virtual simulation training of combat scenarios, and have been associated with decreased rates of PTSD when administered prior to deployment.²⁴ Through realistic predeployment training, SIT principles can be leveraged to ensure a degree of predictability and preparedness that prevents combat stress reactions.

Several mobile applications for self-management of psychological symptoms in military settings have been developed, with good results in empirical evaluations.²⁵ The purpose and intent of these applications vary. Some applications such as PTSD Coach were



developed to provide education, self-assessment, and tools for the treatment of symptoms associated with a specific disorder.²⁶ Other applications may be utilized to allow patients to utilize coping tools in the absence of a professional. For example, the Breathe2Relax application provides diaphragmatic breathing exercises used to control heart rate and breathing even in tactical settings.²⁷ The Virtual Hope Box mobile application contains simple tools such as relaxation exercises and reminders of reasons for living during crisis moments.²⁸ These mobile applications for self-aid may also overcome some of the barriers to technology use in field settings as they employ data-at-rest encryption, are preloaded onto devices, and do not require access to the internet.

Buddy aid. In addition to self-management techniques, a greater emphasis on buddy aid may help to ameliorate the effects of acute stress reactions (ASRs). For example, the Israel Defense Forces developed a sixty-second buddy aid protocol to address ASRs and freezing during firefights.²⁹ Given the identified

Capt. Christopher Lehr, chaplain of the 2-104 General Support Aviation Battalion, 28th Expeditionary Combat Aviation Brigade (ECAB), prepares for a ride on a C-130J Super Hercules 26 November 2020 before visiting several locations within the 28th ECAB's area of operations in the Middle East on Thanksgiving, ministering to soldiers and conducting religious site surveys. (Photo by Sgt. 1st Class Justin Shaffer, U.S. Army)

benefits, the U.S. Army adapted the protocol into iCOVER.³⁰ iCOVER training consists of a ninety-minute module with practical exercises that outline a six-step sequence for intervening during an ASR:

1. Identify and recognize the signs of ASR resulting in functional impairment;
2. Connect with the soldier by speaking his or her name, making eye contact, and holding his or her arm;
3. Offer commitment, such as indicating that he or she is not alone;
4. Verify facts through asking simple fact-based questions to stimulate thinking;



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5. Establish an order of events in short phrases to ground him or her in the present moment; and
6. Request action, such as a direct and simple request, to restore him or her to purposeful behavior.

The use of iCOVER has shown positive results in facilitating buddy aid to recognize and intervene during an ASR and may be employed by any available soldier with training.³¹

Similar to the Army's MRT program, the U.S. Marine Corps has implemented Generation III of its Operational Stress Control and Readiness (OSCAR) program. OSCAR extends the footprint of Marine Corps behavioral health personnel through training unit officers and noncommissioned officers to recognize and assist personnel affected by combat-related stress. OSCAR is unique in that it complements the Marine Corps tradition of small-unit leadership through the use of in-unit buddy aid.³²

Similar to the Marine Corps requirement for 20 percent of all unit members to receive OSCAR training, more widespread use of iCOVER, OSCAR, and tailored MRT in the U.S. Army is recommended to prepare for the future battlespace. To implement this level of training, current Tier 1 and Tier 2 Tactical Combat Casualty Care (TCCC) for nonmedical occupational specialties could be augmented with one to two hours of training in techniques such as iCOVER or OSCAR. Although the current curriculum for TCCC does not include any training related to COSRs, adding a small baseline would significantly expand a unit's ability to address common psychosocial stressors and promote resiliency in the absence of a specialty behavioral health provider.

Medics and Role 1 medical providers. Although greater self-aid and buddy aid will potentially alleviate the burden of treating COSRs on forward medics and providers, individuals with emerging or recurring behavioral health concerns invariably present for sick call or seek care at battalion aid stations. With the potential for decreased access to rotational behavioral health providers at Role 1 facilities (i.e., battalion aid stations), medics

and battalion-level medical providers will need greater training in addressing psychological concerns. Less than half of combat medics report that their training in addressing behavioral health concerns at Role 1 facilities is adequate.³³ Akin to nonspecialty medical personnel in emergency room settings, medics must be prepared to manage acute agitation due to mania or emerging psychosis in forward settings. Common diagnoses such as adjustment disorders and depressive episodes also can be effectively managed by nonspecialty providers and medics.³⁴ Whereas it is not ideal to increase the workload of frontline medical providers in Role 1 settings, this additional training will minimize reliance on immediate MEDEVAC for psychiatric reasons.

The current distribution of medical care also necessitates the location of definitive psychiatric medications at Role 3 facilities (i.e., combat support hospitals) with only limited prescription drug formulary available at frontline locations. With delayed transportation to higher echelons of care, Role 1 medical providers may need additional training and education in the off-label use of available prescriptions for short-term management of serious behavioral health concerns for several days while waiting for available MEDEVAC. There also may be a greater reliance on established telebehavioral health models for supporting Role 1 facilities in short-term management of serious cases. Due to bandwidth and signal interruption concerns, telebehavioral health is more likely to leverage a consultative model between frontline providers and specialty care providers at Role 2 and Role 3.

Behavioral health technicians. Behavioral health technicians (enlisted Military Occupational Specialty 68X) are organic paraprofessionals who serve as immediate access points for care for deployed troops, more readily establishing trust with other enlisted service members due to innate familiarity with the unit culture. Their advanced individual training encompasses twenty weeks of behavior health-specific training prior to embedding into units, resulting in the capacity to function as service extenders. Service extenders practice basic

Previous page: Pfc. Armando Solano (*left*), a mental health specialist, and Capt. Rebecca Blood (*right*), a clinical psychologist, both with Headquarters and Headquarters Company, 1st Air Cavalry Brigade, 1st Cavalry Division, speak with Sgt. John-Paul Gorcyca and Sgt. 1st Class Chad Farris, both health care specialists with C Company, 2nd General Support Aviation Battalion, 227th Aviation Regiment, 1st Air Cavalry Brigade, 1st Cavalry Division, 28 February 2014 during a routine walkabout as Gorcyca and Farris perform maintenance on a UH-60 Blackhawk helicopter at Hood Army Airfield, Fort Hood, Texas. Walkabouts are a method commonly used by behavioral health teams to interact with soldiers on an informal basis. (Photo by Staff Sgt. Christopher Calvert, U.S. Army)

psychological services under the remote supervision of a licensed provider to increase access to care and the reach of health services. Under adequate supervision, 68Xs can perform a number of core functions in forward settings to include initial assessment of behavioral health symptoms, patient education, and interventions

role that oversees various levels of training and implementation fidelity. In garrison, the COSC provider should be focused on providing realistic, experiential training to service members, behavioral health technicians, medics, and other medical providers based on the framework outlined herein. In deployment settings, the

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to decrease suicide risk. However, a recent report found significant inconsistency in the utilization of behavioral health technicians.³⁵ More forward utilization and semi-autonomous functioning of embedded behavioral health technicians will be necessary in future conflicts. These enlisted technicians are a critical asset for recognizing early signs of maladaptive coping in individual soldiers and promoting better coping units, and can be more readily utilized if aligned at the battalion level.³⁶

Role of chaplains. The confidential nature of pastoral counseling generally precludes direct command consultation about particular soldiers or recommendations such as limited duty or MEDEVAC. Nonetheless, chaplains play a crucial role in providing supportive, confidential counseling to soldiers, and they have been integrated into combat stress control detachments throughout the past two decades. About 8.5 percent of soldiers report receiving counseling from a chaplain in a given year.³⁷ Because battalion chaplains serve alongside soldiers, they are able to relate to the day-to-day experiences in many forward-deployment settings. As part of a collaborative care model, chaplains also can play a crucial role in facilitating contact with other treatment specialties. Rather than solely viewing counseling with a chaplain as related to spiritual concerns, commanders in future combat scenarios should account for the chaplain perspective when making decisions about fitness for duty in deployment settings.

Behavioral health officer role. As psychological health promotion is facilitated through self-aid, buddy aid, medics, and technicians, the behavioral health officer role in future conflicts will develop into a consultative

behavioral health officer will primarily provide supervision and consultation to Role 1 assets, assessing whether implementation fidelity is maintained, while remotely consulting on serious cases prior to MEDEVAC.

Additional Psychological Factors

Commanders also will need to account for two other psychological factors that will affect unit mission readiness in a potential future near-peer conflict. First, mobility requirements to avoid the threat of precision munitions likely will affect the availability of restorative sleep. If a given unit cannot be at a static location for more than a few hours, sleep may only be available in short increments or during transport, creating a poor sleep environment. Although service members may be encouraged to “sleep whenever they can” in operational settings, it is unlikely that sleeping in tactical vehicles, military aircraft, large transient tents or hangars, or near machinery is restorative. Service members who are sleep deprived report a number of negative sequelae, including physical and neuropsychological decrements, that directly impact mission readiness and increase risk of accidents.³⁸ These factors potentially can be mitigated through specific emphasis of “sleep leadership” principles, including commitment to sleep as part of mission planning, facilitating sleep banking and recovery sleep when mission requirements prohibit sufficient sleep, taking steps to monitor caffeine use by service members, and decreasing environmental disruption in sleep areas.³⁹

Second, the threat of large-scale casualties and diminished survivability may have significant effects on combat stress. High survivability rates during the past two

decades have increased confidence in military medicine. However, the realities of PFC imply that service members may have decreased confidence in the availability of definitive care following a battlefield injury. The number of potential casualties projected as a result of near-peer attacks using precision munitions or other weapons of mass destruction could significantly exceed those incurred in most mass casualty (MASCAL) situations in recent wars.⁴⁰ Such attacks could result in an “ultra-MASCAL” situation overwhelming medical capacity, with hundreds to thousands of casualties and a shift in focus from “saving every life” to stabilizing patients with less severe, but survivable, injuries. If ultra-MASCAL events occur, involved units need to specifically address the psychological toll of such large-scale casualties to mitigate the peaks in psychiatric evacuations from theater that frequently follow significant operational events.⁴¹

Conclusion

As the nature of combat evolves into conflict with a near-peer adversary in the MDO environment, contested air superiority, diminished signal capability,

and precision-guided munitions will disrupt current military medical capabilities. By planning for behavioral health support based on the limitations outlined herein, the U.S. Army can counter the historical trend to ignore the impact of combat and operational stress reactions in LSCO. Although preliminary steps have been taken to address these factors through enhanced trauma care and PFC, particularly within the special operations community, disease and non-battle injuries such as behavioral health concerns will remain critical problems that must be preemptively addressed. Although the past capabilities of COSC likely will be diminished in future conflicts, this risk can be mitigated through greater attention to self-aid, buddy aid, and training of frontline paraprofessionals, particularly in garrison settings during preparation for a deployment. Strategic leaders will need to account for these factors as they consider the impact of psychological readiness throughout the next conflict. The U.S. Army is on the precipice of new and modern warfare, and its future force must be prepared for the psychological impact of these changes. ■

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