Combat Operational Stress Control in Iraq and Afghanistan: Army Occupational Therapy

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ABSTRACT One of the primary roles for U.S. Army Occupational Therapists (OTs) during combat operations is the Behavioral Health (BH) mission. Army OTs have been involved in Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) providing BH treatment to service members, serving in Brigade Combat Teams, and Combat Stress Control Units, however, the impact of the OT BH mission has been scarcely documented. Although the theoretical deployment role of OTs in Combat and Operational Stress Control (COSC) operations has been described, the literature provides minimal experiential application of OTs in the COSC role. This article describes the deployed operational roles of three OTs, two deployed during OIF and one in OEF during 2008–2010. Deployed assignments included positions as Officers in Charge of restoration centers, and of prevention centers to include animal-assisted therapy, and disaster response. Occupational therapists play a vital role within the COSC unit as they add the unique perspective of assessing the service member's functional performance in daily living occupations.

INTRODUCTION

In a deployed environment, the Army's Behavioral Health (BH) focus is on Combat and Operational Stress Control (COSC). Combat stress is the emotional and physiological stress experienced as a result of exposure to the inherent dangers and demands of serving in a combat environment.[1–3] COSC is geared to prevent, identify, and manage adverse combat and operational stress reactions.[1,2]

Combat Occupational Stress Reactions (COSR) are the expected, predictable, intellectual, physical, emotional, and/or behavioral reactions of service members (SMs) who have been exposed to stressful events in combat or military operations other than war.[2] A stress reaction can be either adaptive for survival and mission accomplishment or maladaptive and potentially lead to misconduct and disciplinary action leading to the SM's removal from duty, and possible incarceration.[2] The COSR casualties are SMs experiencing a stress reaction in combat or operational environment. The COSC interventions are organized into functional areas that cover the full spectrum of care, from prevention to clinical intervention. Traditionally, Occupational Therapists (OTs) have worked primarily as part of the "restoration" team. However, with the increasing need for BH providers in prevention teams during the Iraq war, a decision was made in early 2005 by the Army's BH leadership in Iraq, to add OTs to prevention teams to reduce COSR casualties.[4]

OTs deployed in the COSC mission are routinely assigned to either a Medical Company or Medical Detachment. These COSC units provide direct support to combat brigades without organic BH officers and area support in their area of operation and may afford a second-line soldier restoration center.[2] This second-line soldier restoration center is tailored with 72-hour holding capacity stable enough to receive SMs from first-line medical companies and from nearby units.[2] The COSC units are comprised of multiple BH specialties.[2,3]

Gerardi and Newton[5] described the theoretical role of OTs in Combat Stress Control (CSC) operations, before Army doctrine update in 2006, from FM 8-51 to FM 4-02.51.[2] However, the literature provides scant experiential application of OTs in the COSC role. This article describes the deployed operational roles of three OTs, two deployed during Operation Iraqi Freedom (OIF) and one in Operation Enduring Freedom (OEF) during 2008–2010.

We begin by describing a COSC unit in Iraq with its restoration and outpatient programs, and the role of the OT personnel in Iraq. This is followed by the depiction of a Restoration Program in Afghanistan. Finally, we explain the role of OT in prevention and animal-assisted therapy to include disaster response.

COMBAT STRESS CONTROL UNIT IN IRAQ

From May 1, 2008 to March 18, 2009 the CSC Medical Detachment deployed in support of OIF 08-09 and replaced the previous COSC unit. This was one of the first units to apply the concepts of the updated Army doctrine FM 4-02.51.[2] U.S. Navy BH providers augmented the unit. The detachment sent 5 prevention teams to outlying bases. The prevention teams provided COSC services, prevention services, and

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clinical services. There was one restoration/fitness team located in central Iraq, which provided COSC services and preventive and clinical services within a catchment area of 50,000 SMs. The mission was to coordinate the delivery of Combat Health Support to U.S. forces in the Multi-National Corps – Iraq sector to conserve the fighting strength by prevention, treating, and when necessary, evacuating combat operational stress casualties.

Restoration Program

The Restoration Program in central Iraq operated 24 hours/day, 7 days a week, admitting SMs with COSRs for a 24- to 72-hour stay.[2,3] SMs were either from the outlying operating bases and had failed their local Restoration Programs, or from the local camps in the vicinity. SMs living in the local area were permitted to come for a day program and return to their unit in the evenings.

The Army began using the COSC management principles for COSR: "brevity" (usually less than 72 hours); "immediacy" (as soon as symptoms are evident); "contact" (chain of command remains directly involved in the SM's recovery and return to duty); "expectancy" (COSC unit personnel expectation that casualties will recover); "proximity" (of treatment at or as near the front as possible); and "simplicity" (the use of simple measures such as rest, food, hygiene, and reassurance).[2] These terms makeup the "BICEPS" acronym and replaced the traditional "PIES" (proximity, immediacy, expectancy, and simplicity) when it became the approved joint service terminology as mandated by the Department of Defense Directive 6490.5 in 1999.[2,4] This program operated 7 days a week to fulfill the COSC principles of proximity and immediacy providing intervention as soon as the SM was admitted to the program.[2] The 3-day program began on Monday and finished on Wednesday, and repeated Thursday through Saturday, allowing for anyone to start at any given day and complete the program in 3 to 4 days. On Sunday mornings, SMs were permitted (if desired) to participate in religious services, and there was a group outing in the afternoon. The daily schedule began with physical training at 6:00 a.m. followed by an array of nine life skills classes, broken into three classes given each day. These classes were on resiliency, anger management, depression/grief bereaving, communication/conflict resolution, positive thinking/problem solving, anxiety/post-traumatic stress disorder (PTSD)/COSR awareness, goal setting, relationship maintenance, and relaxation/sleep hygiene throughout the day. There was 1 hour of OT activity daily; used for either leisure activity, cognitive tasks, or physical activity depending on the needs of the individual and the makeup of the group. There were structured breaks for meals and free time at the end of the day to include lights-out at 10:00 p.m.[2,3]

Although the Restoration Program was voluntary, it required a referral from a health care provider and implied the SM's willingness to engage in the program with the goal to return to duty. On arrival, the SM was oriented to the facility and to the rules. His/her personal belongings were inspected; sharp objects and all medications were locked in a safe place and returned after completion of the program. Escorts organic to their unit were used for SMs with suicidal or homicidal ideation with no active intent or plan. The SMs would sign in their weapons on entering the facility and sign out when leaving for meals, or any activity outside the building. This was done to maintain a military environment and to ensure no SMs assumed the "patient role"; however, weapons of SMs with suicidal ideation were not functional (no bolt or ammunition) to eliminate concerns for harm to self or others.

At the end of the first month in theater, the Restoration Facility relocated from four attached small trailers next to the Troop Medical Clinic to a larger facility with multiple treatment rooms. The Restoration Facility had housing for up to sixteen SMs overnight, compared to six before the move. There was a large classroom, a day room with sofas and television, and indoor plumbing restrooms for men and women (considered a luxury at the time).

Outpatient Program

The Outpatient Clinic was located in the same building as the Restoration Center, each one at either end of the building. There were four rooms for the providers to see SMs and two rooms for the technicians to do intake assessments or follow-ups. OTs, Psychiatric Nurses, and Social Workers took care of SMs with COSR conditions, freeing the Psychologists and Psychiatrists to focus on conditions that required intense therapy and medication management.

At the time, the central Iraq facility was considered the largest BH Clinic in the theater of operations, offering a Restoration Program that sustained 24-hour operations, providing a military environment that allowed for appropriate rest for SMs.[2]

Role of OT Personnel in Central Iraq

All SMs seen in the Restoration Program completed an OT assessment as part of their admission into the program. The unique contribution of the OT to the CSC was to evaluate the SM's occupational performance and to implement intervention to enhance performance.[5] Both the OT and Occupational Therapy Assistant (OTA) instructed classes on life skills, performed one-on-one counseling, performed physical training with the SMs, and assessed progress of each individual in the program. All SMs admitted to the Restoration Program were discussed in the daily morning multi-interdisciplinary meeting.

One challenge encountered was to provide 24-hour coverage and run both the Restoration and Outpatient Clinic with the same staff. This was resolved by cross-training the Psychiatric Technicians and the OTAs. The OT and Nursing

Staff trained Psychiatric Technicians on how to conduct life skills classes, during the first month of arrival.

The Psychiatrist provided ongoing instruction on how to perform a full intake for the OTs, Psychiatric Nurses, and OTAs. All officers rotated on the weekly on-call roster with the Troop Medical Clinic for psychiatric emergencies. The enlisted staff and some officers rotated for the night shift, front deskwork, and clinic maintenance.

The Restoration Officer in Charge (OIC) and Non-Commissioned Officer in Charge (NCOIC) were an OT and certified OTA, respectively, performing both administrative and clinical duties. The duties of the Restoration OIC were to lead the officer staff, manage staff schedules, manage the administrative portion of medical evacuations, command consultations, lead morning meetings, and conduct administrative meetings. The duties of the Restoration NCOIC were to lead the NCO staff, complete end-of-month reports, lead the morning meetings in the absence of the OIC, assist with the administrative portion of medical evacuations, and assist with command and consultation. Another certified OTA served as the lead restoration NCO that taught a greater portion of the life skills classes and reported on the progress/regress of SMs seen during the classes. This information proved invaluable providing input on the SMs return-to-duty status, quality of sleep, and progress with medications, if prescribed.

Iraq Cases

Demographic data collected on SMs showed an average age of 26 years. Active duty personnel were the primary beneficiaries of care with an approximately 80% nonbattle injury to 20% battle injury mix. Most beneficiaries were on their first combat deployment. Eight civilians were seen before necessary evacuation out of Iraq. The Restoration Program had a monthly 95% to 98% return-to-duty rate throughout the deployment period. See Table I for the number and types of BH visits at the central Iraq facility.

There were common BH diagnoses seen as well as commonalities in reported stress reactions. The general reasons SMs came to the restoration center were (1) home front issues; (2) leadership issues; (3) unit/peers; and (4) combat exposure, operation tempo /mission, and environment. The types of treatment, beginning with normalizing reactions and reinforcing coping mechanisms, included life skills classes similar to those military-tailored treatments provided in nondeployed locations.[1,5,6] In contrast, the warrior resiliency class combined rational emotive behavior therapy, resiliency, and positive psychology.[7] See Table II for a full description.

TABLE I. Number and Types of Behavioral Health Visits at the Central Iraq Facility from May 2008 to March 2009

Outpatient Visits	3-Day Intense Inpatient Restoration Program	3-Day Intense Outpatient Program	Walk-In Visits, Life Skills Classes Only
6,500	150	125	85

Participants in the Restoration Program: 150 service members, return to duty in 3–5 days varied monthly between 95% and 98%.

A COMBAT STRESS RESTORATION PROGRAM IN AFGHANISTAN

The U.S. Air Force provided the majority of BH care to OEF during 2008–2009. When a request for more resources was issued, the U.S. Army provided one OT and one OTA to open and manage the first Restoration Program in Afghanistan. The program was modeled after the program in central Iraq.

Program Planning

Central Iraq's Restoration Center provided contact information for a nongovernmental organization that supplied art and craft materials. The United Service Organizations in Bagram provided four TV's, four DVD players, and computer speaker systems. One large flat-screen TV and computer speakers were used for the group/class presentations, whereas the others were used for recreation/entertainment.[1,5] The biggest help came from another nongovernmental organization that supplied electric blankets, sheets, a coffee maker, a microwave, games, gaming systems (X-Box, Guitar hero, a Wii plus games), movies, board games, personal hygiene items, various unique requests, and snack foods throughout the year.

As this was a new program in Afghanistan, an aggressive marketing campaign was necessary. The staff knocked on every door on post to make personal contact with others and to spread the word. They also established an American Forces Network radio spot for a "stress tip of the week," met with chaplains during weekly luncheons, participated in orientation for all SMs coming to Bagram, and published articles in the *Afghanistan Watch* magazine and the Medical Brigade's newsletter.

Afghanistan Program

The Afghanistan program was similar to the one in central Iraq, with the same goal of returning the SM to duty and the same military atmosphere.[2,5] Data collected on the demographics of beneficiaries showed an average age of 24 years; in addition, most beneficiaries were on their first combat deployment. Combat exposure was not the primary reason these SMs required restoration. Rather, the top two reasons were (1) high operation tempo (back-to-back missions, working long hours, pulling exhaustive guard duty) and (2) relationship issues. The Restoration Program had a 98% return-to-duty rate with soldiers having the tools and resources in place to help them manage their stressors while deployed. See Table III for full details.

Generally, the staff noted it was not a single event that led SMs to the program, but rather it was a multitude of stressors. To reduce stressors, staff gave practical assistance: normalizing reactions, reinforcing coping mechanisms, taking SMs to the Finance Office or to acquire new uniforms, visiting a Chaplain, or going to get new military identification

TABLE II. Common Stressors to Service Members and the Typical Treatment Interventions Provided

Common Stressors	Treatment Interventions
Home Front Issues (Relationship Problems, Family Concerns, Homesickness)	Relationship Maintenance Communication/Conflict Resolution Resiliency Goal Setting
Grief-Producing Losses (Bereavement for Service Members or Relationships)	Depression/Grief Bereaving
Leadership Issues (Organizational Dynamics and Changes, Compensating Efforts for Loss of Team Member, Ambiguity, Time Pressure, or Waiting)	Positive Thinking/Problem Solving Anger Management Communication/Conflict Resolution Resiliency
Interpersonal Conflict (Unit, Buddy)	Anger Management Communication/Conflict Resolution
Combat Exposure (Fear and Anxiety-Producing Threats of Death, Injury, Failure, or Loss)	Anxiety/PTSD, COSR Awareness Positive Thinking/Problem Solving
Operational Tempo and Frequent Missions	Resiliency
Unresolved Anger (Resentment, Rage-Producing Frustration and Guilt)	Anger Management Anxiety/PTSD, COSR Awareness Positive Thinking/Problem Solving Goal Setting
Stressful (Austere) Environment (Sleep Deprivation, Dehydration, Poor Hygiene, Overuse or Underuse of Muscles, Heat, Cold, Dust)	Relaxation/Sleep Hygiene Physical Exercise Group (PT) Occupational Therapy Activity Group Opportunity for Hygiene/Showers
Substance Abuse (Smoking, Caffeine, Alcohol)	Relaxation/Sleep Hygiene Anxiety/PTSD, COSR Awareness Positive Thinking/Problem Solving Goal Setting One-on-One Counseling
Obesity/Poor Physical Condition	Physical Exercise Group (PT) Goal Setting

cards made.[1,2,5,6] Occasionally, staff held SMs for an extra day or two to further address individualized issues.

There was an instance of a mobilized Reservist, who was placed in an office job requiring the use of unfamiliar computer programs, such as Microsoft Excel. This caused the SM undue stress and anxiety. The restoration team identified the particular computer programs the SM needed to successfully complete the job and gave the SM a 2-day computer tutorial class. This increased the SM's confidence and competence to complete the mission.

OT Role in Prevention

OTs deployed with COSC units typically serve restoration roles; however, OTs are also well suited for the prevention roles. The primary mission of the prevention team is to prevent BH casualties by developing positive relationships with neighboring units and Commanders, so that, in times of need, the COSC unit is trusted to respond to crises. The prevention team goes out to meet with SMs in their respective area of operations, offering support via coping skills classes, command consultation, or "help-in-place" counseling.[2] In this role, the prevention team is essentially always working; for example, encounters at the local Dining Facility or at the Gym offer opportunities for interaction and for building camaraderie with other units.

TABLE III. Data Collected at the Restoration Center From February to December 2009

SMs	Gender	Reason for Referral (Top 3)
138	110 Male 28 Female	53% Occupational 12% Relationship Issues 12% Depression

Participants in the program: 138 service members (SMs) enrolled with 135 SMs returned to duty in 3–5 days, 98% return to duty.

OTs and Animal-Assisted Therapy

In December 2007, Army OTs began including therapy dogs in COSC units. The intention was to complement the therapists by using a well-trained dog to achieve therapeutic goals. Two dogs, SFC Boe and SFC Budge, were donated from America's Vet Dogs, a subsidiary of Guide Dogs of America, to deploy in support of OIF that year. Therapy dogs are trained to provide individuals a pleasurable interaction via animal-assisted activities or animal-assisted therapy. According to the Delta Society, animal-assisted activities provide opportunities for motivational, educational, recreational, and/or therapeutic benefits to enhance quality of life.[8] Animal-assisted therapy is a goal-directed intervention in which an animal that meets specific criteria is an integral part

of the treatment process.[9] This therapy is directed or delivered by a health/human service provider working within a given scope of practice. The goal of animal-assisted therapy is to promote improvement in human physical, social, emotional, and/or cognitive functioning.[8,9]

SFC Budge and SFC Boe served an 18-month tour, 3 months with one COSC unit and another 15 months with the replacing unit. On the dogs' arrival, it was determined that their role would fit best in the unit's prevention team. The dogs allowed the handlers to be more approachable. Normally, the prevention team introduces themselves to SMs and commanders, explaining their services and offering support. In contrast, with the dogs in hand, the prevention team found that they were often approached first. Inquiries about the dogs' purpose and role in a combat environment opened the door for handlers/OTs to introduce COSC services. SMs often relayed stories about their own pets back home or about the loss of a beloved pet. These conversations tended to progress into conversations about the recent loss of a comrade or other current stressors.

SFC Budge and SFC Boe, who traveled throughout northern Iraq, quickly became popular in the area. In addition to visiting these northern Iraq COSC units and providing educational services, the prevention team was invited to neighboring unit functions, such as barbeques, promotions, and re-enlistment ceremonies. Attending these events became vital for COSC prevention teams to build strong bonds with the SMs they serve.

Networking and Disaster Response

A strong connection with the community allows COSC teams to be trusted and turned to in times of need. COSC prevention teams are trained to conduct traumatic event managements (TEMs), responding to units when a critical incident occurs.[2] TEMs help SMs directly involved in the incident to process the events, to support each other, and finally, to understand that an unusual stress reaction may be their body's normal response to an abnormal situation. This COSC unit conducted 20 TEMs during its 15-month deployment in 2008–2009. See Table IV for a breakdown o prevention encounters seen. After-action reports noted that the most successful TEMs were those in which the prevention team had previously formed a solid relationship with the afflicted unit. Becoming affiliated with local organizations before a disaster increases program credibility and facilitates involvement when a disaster occurs.[10,11] An ideal example of the power of relationship building and of networking is the events that took place after the shooting incident at a COSC in Baghdad, Iraq in the spring of 2009.[12]

TABLE IV. Prevention Team Encounters, Northern Iraq 2008–2009

Walk-abouts, Visits With Neighbor Units	308
Command Consultations	179
Coping/Stress Management Classes	167
Help-in-Place	30
TEM	20
Conferences/Health Fairs	6

In May 2009, a U.S. Army Soldier opened fire at a COSC Clinic in Baghdad, resulting in the death of five fellow SMs, including two health care providers.[13] As with any tragic event, many are quick to respond and to offer assistance in any way possible. On the evening of that tragic event, the OT Prevention Team and therapy dog arrived along with a line of Chaplains, and other health care providers to support the mourning unit. The unit respectfully requested to be left alone but allowed the OT Prevention Team and therapy dog to stay, partially because the team had previously built a relationship with the unit and also because the therapy dog provided unconditional comfort for those who preferred not to speak but to pet SFC Boe.

More COSC members arrived the next day in support of the prevention team and the affected COSC unit. The response team included the OT and therapy dog, a Psychologist, a Social Worker, and a Mental Health Technician. At the time, the central Iraq COSC provided services for a population of over 50,000 SMs living in the area; to cover such an expansive reach, the visiting members split into teams of two. Because the local COSC was grieving and unable to provide services, the team's goal was to assist as many personnel as possible. They met with SMs who were directly or indirectly involved, offered TEMs, help-in-place, reassurance, and at times, respite.[2] The prevention team visited the neighboring camp's BH providers who were overwhelmed with the increased number of visits, and offered to watch their SMs one night so that they may get some relief. To honor the deceased members, the COSC Prevention Team attended the memorial services. In addition, the team participated in recreational events with the affected unit, to help improve morale. Activities included socials, unit runs, karaoke, volleyball, and boxing games at the local Morale, Wellness, and Recreation Center. The assistance provided by the prevention team and the support received in this scenario depicts the benefits of having prevention teams in deployed environments.

SUMMARY

We have described the deployed 2008–2009 COSC experiences of three OTs in Iraq and Afghanistan applying the updated Army doctrine FM 4-02.51. During this period, the role of OTs in COSC expanded from restoration team clinicians to leadership and clinical roles in the restoration and prevention programs. Although these experiences serve as a guide of what OTs have done in COSC units, the ever-changing demands of the deployed environment will warrant continued adaptation. Combat environments can be extremely stressful, and on occasion, overwhelming. OTs with their background in BH can play a vital role as force multipliers

to ensure SMs stay mentally and physically strong during deployment and return home safely.

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