Chapter 10

COMBAT STRESS CONTROL IN JOINT OPERATIONS

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Hans H. Helweg *Patients Being Loaded on C-54, England* 1944

Air-evacuation of the wounded, as depicted in this painting by Hans H. Helweg from World War II, is a critical joint operation among the military services during combat. Of equal importance in a joint operations arena is the providing of restorative services to soldiers, sailors, and airmen suffering combat stress reactions.

Art: Courtesy of US Army Center of Military History, Washington, DC.

INTRODUCTION

As most recently seen in the Persian Gulf War and the peacekeeping mission to Somalia, U.S. Army combat operations in the post-Cold War will inevitably involve joint operations with the U.S. Air Force, and often with the U.S. Navy and U.S. Marine Corps.[1] Even peacetime power projections, such as humanitarian and civil assistance, foreign internal defense training missions, peacekeeping, and narcotics interdiction will commonly include members from several military services. Other federal and civilian agencies, such as the Federal Emergency Management Agency (FEMA), the State Department, the Central Intelligence Agency (CIA), the Federal Bureau of Investigation (FBI), Coast Guard, Public Health Service, Merchant Marine, Department of Veterans Affairs, Red Cross, and others, may also play important roles. In joint operations, U.S. Army Mental Health/Combat Stress Control (MH/CSC) personnel and units may be in a position to provide mental health support for personnel from other U.S. services. Conversely, U.S. Army personnel who are at risk to develop, or who are developing, stress disorders may benefit from assistance from another service.

INHERENT PROBLEMS IN JOINT OPERATIONS

Joint operations have proved difficult and dangerous down through history. Recent U.S. experience in the aborted Iranian hostage rescue attempt in 1980 and Operation Urgent Fury (Grenada) provided painful lessons learned when U.S. Army, U.S. Air Force, and U.S. Navy teams who had not previously worked and drilled together had to cooperate in complex, integrated operations. In part, the difficulties arose from incompatibilities of materiel: radios that could not communicate between the different service components even when frequencies were known, "incompatible" computer systems, and lack of spare parts and trained mechanics for each other's equipment. Difficulties also arose from the lack of shared standing operating procedures. To some extent, the services spoke different "languages"—service-specific vocabularies and especially acronyms which the users found so familiar that they did not even realize that their words were unintelligible to the other services or, worse, might have quite different meanings to them. Lack of a common training base raises doubts of the other's reliability and safety—these are not necessarily unrealistic when dealing with highly dangerous tasks requiring special skills such as landing U.S. Army medevac helicopters on ships in the dark. More subtle, and harder to counteract, are the suspicion and mistrust that arise from different nonverbal and verbal communication patterns, and different culturally-encouraged styles of leadership and comradeship. There is the natural human prejudice to favor one's own tradition and fellow service members. Even when leaders are trying to be impartial, subordinates may perceive favoritism. This resentment can further interfere with open communication, morale, and cohesion.

The Department of Defense, the U.S. Congress, and the civilian leadership have directed that serving in joint staff positions be an important criterion for promotion to senior command positions in each service, as well as to the joint major commands. Increased familiarity and experience may go far to resolve some of these inherent problems. Psychiatrists and other mental health professionals and noncommissioned officers (NCOs) who provide consultation to joint commands and staffs should use their behavioral science and communications skills to identify the problems and facilitate the solutions. Ideally, some mental health experts will become members of those joint staffs.

COMMON COMBAT PSYCHIATRY PRINCIPLES AND POLICIES

The medical support systems of all four services share the basic principles for the prevention and treatment of the dysfunctional combat stress reactions—"battle fatigue" and the disorders of frustration and loneliness, which are presented in greater detail in Chapter 1, Psychiatric Lessons of War. In all four services, control of stress and the prevention of stress casualties is a command and leadership responsibility. Psychiatric and other mental health expertise in the services' medical systems

have the key role in supporting command with prevention and in evaluating and treating cases.

The U.S. Army expresses the basic principles for intervention for battle fatigue in the memory aid "Treat with PIES" (Proximity, Immediacy, Expectancy, Simplicity).

- ***P***roximity*:* treat in or close to the service member's unit.
- ***I***mmediacy: begin intervention immediately on recognition.
- ***E***xpectancy: give positive expectation of rapid recovery and return to duty.
- ***S***implicity: use straight-forward, nonmysterious interventions.

The U.S. Air Force and U.S. Navy often teach the same principles with the acronym "BICEPS" (Brevity, Immediacy, Centrality, Expectancy, Proximity, Simplicity). The additional concepts, brevity and centrality, are defined as:

- ***B***revity: everyone involved knows from the beginning that treatment will be brief (hours to days).
- ***C***entrality: stress casualties are treated at a central location separate from the sick and wounded and they are not evacuated until evaluated by skilled professionals to prevent inappropriate evacuations.

The U.S. Army also subscribes to brevity and to the clear separation of stress cases. However, the "central location*s*" (plural) will usually be dispersed, as far forward as possible (in accordance with the principles of proximity and immediacy), but under "central control." In addition, a central processing facility will reevaluate those being evacuated to determine whether they can remain in the combat zone.

The simple (austere) intervention methods for treating battle fatigue are summarized by the "Five Rs":

- ***R***eassurance of normalcy.
- ***R***est from extreme stress.
- ***R***eplenishment of physiologic well-being.
- ***R***estoration of confidence by treating the person as a service member, not a "patient"; by debriefing (retelling the stressful events); and by work activities.
- ***R***eturn to duty, if possible, in the service member's own unit.

All cases of serious misconduct, *including* those that are attributable to combat stress (for example, substance abuse, insubordination, atrocities, absence without leave, and malingering) must be returned to the line units for administrative and disciplinary action in the theater of operations. They are evacuated according to "BICEPS" (brevity, immediacy, centrality, expectancy, proximity, simplicity) only if they have other medical, surgical, or psychiatric conditions that require medical treatment prior to administrative disposition.

True neuropsychiatric (NP) cases, for example major depression and persistent schizophrenic-type psychotic disorders, who have a poor chance for rapid return to duty should be evacuated as soon as they can be stabilized and reliably distinguished from battle fatigue. Post-traumatic stress disorder (PTSD) should be prevented by routine unit (team) debriefings. The debriefings should be accomplished as soon after trauma as is tactically feasible, and again during homecoming. Deployed service members can tolerate high stress best when they know that the unit, the service, and the government are assuring that their families are well cared for and informed.

Six Combat Stress Control Mission Functions

Six combat stress control (CSC) functions are defined by U.S. Army doctrine.[2,3] The relative requirement for each function varies depending on the scenario and mission, and especially on the type and intensity of conflict involved. The six functions, listed in usual order of priority, are as follows:

1. *Consultation-Liaison:* preventive advice, education, and interventions to unit leaders, staffs, medical personnel, chaplains, and troops.
2. *Reorganization/Reconstitution Support* to attrited units at field locations.
3. *Proximate Neuropsychiatric Triage:* sorting of stress and NP cases based on where they are best treated to maximize return to duty according to the PIES principles, where the "S" stands for safety—that of the soldier, the unit, and mission accomplishment.
4. *Stabilization* of seriously disturbed cases, for patient and unit safety and to evaluate return to duty potential;
5. *Restoration:* 1 to 3 days of holding treatment in forward, austere medical facilities.
6. *Reconditioning/Retraining:* additional 1 to 2 weeks of treatment at more secure (usually rearward) combat stress control facilities as needed by some cases.

All six combat stress control functions could call for joint operations, in somewhat the same order of priority as listed. Reconditioning is the least likely or desirable for joint sharing. Neuropsychiatric triage and stabilization may be especially important in some joint situations.

CSC Preventive Methods

The primary focus of combat stress control and mental health in a theater of operations (whether in combat or in operations other than war) is preventive. The mental health/combat stress control (MH/CSC) personnel must be proactive. They must diplomatically demonstrate their preventive value to line unit leaders. Specific methods include (but are not limited to) the following:

- Attending and providing input at staff meetings and planning sessions.
- Conducting frequent (routine) unit survey interviews.
- Keeping command informed of stress, morale, and leadership issues that concern the troops; advising and teaching stress control measures.
- Training and encouraging routine after-action debriefing by leaders of small units.
- Conducting critical event debriefings following any especially traumatic events.
- Training chaplains, medical personnel, and line personnel to do critical event debriefings, too.
- Coordinating and participating in end-of-deployment debriefings, memorial and closure ceremonies, and reunion preparation.

Limitations of and Need for Joint CSC Operations

Each service must have its own MH/CSC personnel, organic to its own structure (active and reserve) for the following reasons. MH/CSC personnel must have mutual positive identification and cohesion with the unit leaders and service members they support. More than any other medical specialty (except flight surgeons), they must know the mental and physical demands and stressors of the service members' mission duties in order to judge them psychologically able to return to duty. They must understand the organizational structure, individual and group dynamics, and leadership issues involved. Assuming equal training and experience within their own services, the MH/CSC person who is working within his *familiar* service can be expected to be significantly more effective than the one who is working with service members and organizations of a *different* service.

However, in joint operations, there will surely be times and places where each service will not have its own MH/CSC personnel on the spot when combat stress control support is needed. Immediacy and proximity are basic principles in combat stress control interventions. Another service may have combat stress control resources nearby. One service may also have a highly experienced combat stress control expert in the area of operation, while the other services may have only novices locally available. It is therefore important that there be contingency plans and, when feasible, standing operating procedures to permit efficient sharing of combat stress control resources. The cross-fertilization of ideas and techniques, as well as the professional moral support, will make all the participants more effective.

All stress casualties who are evacuated to another service's facility should receive the same treatment as that service's own cases: provide immediate reassurance, and initiate rest, replenishment, and activities to restore confidence. Successful 1- to 3-day restoration can probably be accomplished with mixed service groups. Care may need to be taken to assure that any interservice rivalry is used constructively, not destructively, in the program. The treatment is provided until the casualties can return to duty to their original units or be transferred to their own service's backup combat stress control facility.

In theory, longer-term reconditioning is best done by the casualties' own service, where it can maximize the common identity, traditions, and culture of that service. If limited resources require a single, joint reconditioning center, it would be best to have both (or all) services represented on the treatment staff. If the number of cases were sufficient, the cases could be organized into single-service working groups (squads). Here, especially, interservice rivalry and competition could be therapeutic, but would require careful modulation to keep it constructive. Joint reconditioning could also be applied to alcohol and drug rehabilitation in theater for cases with potential for useful return to duty.

This chapter will review the MH/CSC assets that the services may deploy to the theater. It will also suggest ways of using them jointly.

MILITARY BRANCHES IN JOINT OPERATIONS

Each of the four military services has its own applicable rules and regulations for the delivery of mental health care to its service members. These rules and regulations are "living" documents in the sense that they are modified through the course of time and experience. The following discussion of the structure and delivery of mental health care in the various services provides a snapshot view from the period immediately after the Persian Gulf War. The emphasis is not on the specific structure, although these structures are detailed for the reader, but rather on how the delivery of this vital care is coordinated between the various military services. It is expected that these configurations will change according to mission and available staff.

U.S. Air Force MH/CSC Capability

Overview

In World War II, U.S. Army Air Corps psychiatry was primarily concerned with "operational fatigue" in flight crews (especially bomber crews) who flew many high-casualty combat missions. The mental health of flight crews was (and is) the responsibility of the unit's flight surgeon.

In more recent wars, the flight crews have become increasingly "professional"—that is, highly selected, trained, and motivated officers and senior NCOs flying in highly sophisticated aircraft. Their living facilities (when they are not flying) and crew rest policies have usually been sufficient to minimize cumulative sleep loss and physiologic deprivation. Such factors have made these "elite" personnel relatively resistant to battle fatigue, even when flying high-risk missions over prolonged periods. However, they may still be subject to battle fatigue during surge conditions, or when there are serious problems at home, or as a "short-timer syndrome."

Recently, stress control concern in the U.S. Air Force has focused more on the ground personnel. These are potentially at high risk for stress casualties because they may work extremely long hours at complex, dangerous tasks. They may come under attack, including nuclear, biological, or chemical (NBC) attacks, unable to move from the center of the "bull's eye." They may receive little training in self-protection and have no way to strike back. The U.S. Air Force perspective on combat stress is described in *U.S. Air Force Combat Psychiatry*[4] and Chapter 8 of this volume, U.S. Air Force Combat Psychiatry.

U.S. Air Force Echelon II CSC

The U.S. Air Force Echelon II level of care is roughly equivalent to the U.S. Army's Echelon II (field medical treatment companies—with a surgical team added), but is less mobile on the ground. The Air Combat Command may deploy a 50-bed air transportable hospital (ATH) to provide Echelon II medical capability (or to reinforce existing air base dispensary medical personnel) at forward tactical air fields or air bases. The ATHs are each designated a numbered "Tactical Hospital."

Each 50-bed ATH includes a Combat Stress Unit (CSU) with one psychiatrist (*or* pediatrician with combat stress training, *or* clinical psychologist); one clinical psychologist *or* social work officer; and two mental health specialists (914s, equivalent to the Army's MOS 91G [social work technician]). This CSU is therefore similar to the U.S. Army CSC prevention teams in the CSC medical detachment and CSC medical company (previously described), except that it may not have its own vehicle.

The Combat Stress Unit is expected to provide consultation-liaison in the hospital and to nearby units. It may form a Disaster Response Team. It should be able to conduct outpatient treatment and a 1- to 3-day restoration holding treatment program. This program may be in tents collocated with the air transportable hospital's medical and surgical capability, in the hospital staff's quartering area, or perhaps separate from the hospital but still within the air base perimeter. This latter location would usually be in an available "building of opportunity." If there is an NBC threat, the building could be given some degree of collective protection. Cases who cannot be held at this echelon, or who fail to return to duty within 3 to 7 days (depending on the likelihood of return to duty and available space and personnel), would be transferred by air to Echelon III or IV.

U.S. Air Force Echelon III CSC

The U.S. Air Force Echelon III care is roughly equivalent to the U.S. Army's Echelon III (Combat Support Hospital) hospital care, but further to the rear, in the theater or communications zone (COMMZ). This care may be provided by a contin-

gency hospital. This is a deployable medical systems (DEPMEDS) facility that, in some cases, may be in storage in the COMMZ prior to mobilization. Contingency hospitals can have over 250 beds and a neuropsychiatry section, staffed by psychiatrists, clinical psychologists, social work officers, and enlisted specialists (914s). The numbers of the specific professionals will vary according to the mission, the availability of staff, and evolving CSC doctrine.

This staff can provide consultation within and around the hospital, and deploy a disaster response team. It can supervise care of neuropsychiatric patients and medical/surgical patients who have psychiatric complications on the medical wards. If augmented with psychiatrically trained nursing personnel, it can staff a 16-bed neuropsychiatry ward. It could also establish a 1- to 3-day restoration program or a longer duration reconditioning program separate from the medical and surgical facilities. In a preestablished theater, Echelon III care might also be provided by a preexisting small base hospital; this might not have the combat stress control restoration/reconditioning capability unless augmented with MH/CSC personnel.

U.S. Air Force Echelon IV CSC

The U.S. Air Force Echelon IV is roughly equivalent to U.S. Army Echelon IV, general and field hospitals in the communications zone. For the U.S. Air Force, this care would be provided by large, fixed hospitals near major air bases. Approximately one in four such hospitals would have inpatient psychiatric capability. These might also have other mental health (psychology, social work, and occupational therapy) personnel. The other hospitals without the neuropsychiatric wards might still have some neuropsychiatric/mental health staff to provide consultation and triage. The neuropsychiatric-staffed facility should be configured to be able to conduct a reconditioning program which maintains a nonpatient care atmosphere.

U.S. Marine Corps and Navy MH/CSC Capability

Overview

Each U.S. Marine Corps Division is part of a task-organized Marine Expeditionary Force (MEF), whose medical planning is the responsibility of the MEF surgeon. All medical support in U.S. Marine Corps units is provided by U.S. Navy personnel. Each U.S. Marine Corps division has a U.S. Navy psychiatrist as division psychiatrist/assistant division surgeon, and a petty officer psychiatric technician. The psychiatrist is usually at the division's home base at Camp Lejeune, North Carolina; Camp Pendleton, California; or in Okinawa. On full deployment, he would deploy to the theater of operations. He might be augmented with a second U.S. Navy psychiatrist.

The U.S. Marine Corps can task organize into a Marine Expeditionary Force (MEF) which has an infantry division, a Marine Expeditionary Brigade (MEB) which has an infantry brigade, or a Marine Expeditionary Unit (MEU) which has an infantry battalion. The U.S. Marines deploy by way of ships at sea with a U.S. Naval task force, usually on a 6-month rotation; ships sailing directly from their base to the theater; and air transportation as reinforcements to the theater of operations where they rendezvous with units that deployed by ship to meet pre-positioned ships loaded with the equipment.

Each U.S. Marine Corps battalion has a battalion aid station (BAS) roughly similar to those of U.S. Army battalions. Within the MEF, additional medical support is task organized in the Force Service Support Group (FSSG) which includes the medical battalion.

U.S. Marine Echelon II Medical Battalion Assets

Each Marine medical battalion in a Marine Expeditionary Force has four surgical companies. The headquarters platoon of each company includes a combat stress platoon, each of which includes a U.S. Navy psychiatrist, two psychologists, and three psychiatric technicians.

These U.S. Navy mental health professionals only join the medical battalion on mobilization. As with the U.S. Army professional officer filler system (PROFIS) or Individual Ready Reserve fillers, such a late-arriving officer will take days to weeks to become a fully effective CSC consultant or treatment team leader.

If a MEF is at sea, the organic U.S. Marine Corps medical resources are controlled by the U.S. Navy's Commander, Amphibious Task Force (CATF) and function to some extent while aboard transport ships, caring for U.S. Marines. Once the amphibious force has established a beachhead, the CATF surgeon and the U.S. Marine Corps' Commander Landing Forces (CLF) surgeon meet to plan the landing of the beach evacuation station.

The troop transport ships have medical and surgical capability varying with size and type. Some ships (especially the helicopter assault ships or

hover craft mother ships), would become emergency surgical or medical care sites (primary casualty receiving and treatment ships) in the first hours of an opposed landing. Any other transport or landing ship whose troops and cargo have disembarked could be used as a restoration site for stress casualties. It is recognized, however, that return to duty from a ship would be much more difficult than from a shore facility, both logistically and psychologically.

As the beachhead expands, additional medical assets are landed. A U.S. Marine brigade would usually be followed by one of the medical collecting and clearing companies as it moves further from the beach. The beach evacuation station might be expanded by landing the surgical support company.

There is currently no formal mental health doctrine as to whether U.S. Marine Corps battle fatigue casualties should be held/restored at the medical collection and clearing companies, the surgical support companies, or on the troop transport ships offshore. The U.S. Marine Corps division psychiatrist and the medical battalion's combat stress centers must train physicians, corpsmen, and other medical or line personnel to provide this treatment. The U.S. Marine Corps line units' Drug and Alcohol NCOs can be a valuable resource for cross-training.

Combat Stress Centers

When high-intensity conflict is expected and lead-time is sufficient, the combat stress platoon will implement a combat stress center. Four such combat stress center teams were improvised and fielded during the Persian Gulf War. Each such center was staffed by one or two psychiatrists, from one to three clinical psychologists, up to three psychiatric technicians, and corpsmen or nursing personnel who received on-the-job training. These teams were supplied with tents and cots at the surgical support centers to provide restoration, as well as providing preventive consultation and neuropsychiatric triage. In the Persian Gulf War, they did not deploy forward to augment the collecting and clearing companies.

U.S. Navy Echelon III/IV Afloat—Hospital Ship

A major U.S. Marine Corps or joint operation will be supported by a 1,000-bed hospital ship. Each hospital ship may have a neuropsychiatry ward and staff, including a psychiatrist, a clinical psychologist, two or more psychiatric nurses plus on-the-job-trained medical/surgical nurses, a social work officer, and petty officer psychiatric technicians plus on-the-job-trained corpsmen. The mental health/neuropsychiatric staff can staff a mixed medical/psychiatric ward on one of the ship's light care bays. They may establish a separate section of the ship for restoration of stress casualties who reach the ship. This section carefully avoids any patient care atmosphere. The hospital staff may also deploy task-organized teams, including special psychiatric rapid intervention teams (SPRINTs) to provide reconstitution support to ships which suffer heavy casualties from accidents or enemy action. The USS *Comfort* deployed such a team to the helicopter amphibious assault ship *Iwo Jima* following a boiler explosion with fatalities during the Persian Gulf War.

U.S. Navy Echelon III/IV Ashore—Fleet Hospital

The Combat Zone Fleet Hospital comes in two sizes—it can be a 250-bed or a 500-bed deployable medical systems (DEPMEDS) facility, roughly equivalent to the U.S. Air Force 250-bed Contingency Hospital and U.S. Army 500-bed General Hospital. These receive patients from U.S. Navy ships and U.S. Marine Corps units in the combat zone. The COMMZ Fleet Hospital (500-bed) has a convalescent mission which makes it roughly similar to the U.S. Army's 500-bed Field Hospital.

All fleet hospital staffs include a neuropsychiatry mental health team, consisting of one psychiatrist with the 250-bed facility and two psychiatrists with the 500-bed facility. No psychiatric nurses are specifically assigned, but a charge nurse and several ward nurses may be provided, and some could be psychiatric nurses. In addition there are three psychiatric technicians with the 250-bed facility and six with the 500-bed facility. There is also one clinical psychologist with the 500-bed facility only. This team staffs a neuropsychiatric ward. It can also establish a restoration or reconditioning program which maintains a nonpatient atmosphere, if provided with general purpose tents. Such a facility was established at two fleet hospitals during the Persian Gulf War, one in Saudi Arabia, and one in Bahrain.

U.S. Navy CSC Capability in Peacetime Disasters

For peacetime training accidents, airplane crashes, ship collisions, disasters, and other brief traumatic contingencies short of war, the U.S. Navy deploys SPRINTs, which are discussed in further detail in Chapter 9, U.S. Naval Combat Psychiatry.

Special psychiatric rapid intervention teams are task organized from a multidisciplinary pool of mental health personnel at large U.S. Navy hospitals. These personnel maintain a rotation in order to be available for deployment on 24-hour notice. Teams usually are led by a psychiatrist and may include a social work officer, psychologist, psychiatric nurse, chaplain, and enlisted technicians.

The SPRINT members provide on-site consultation to command. They assist local shipboard, port, or air station medical, mental health, and chaplain personnel with critical incident stress debriefing. The SPRINT concept is based on brief, immediate, proximate, positively expectant intervention following a critical incident. The teams have not been trained or equipped to provide restoration or reconditioning support to an ongoing combat operation.

U.S. Army MH/CSC Capability

U.S. Army Echelon II MH Sections

All divisions, brigades, and area support battalions have mental health sections. Each combat division's main support medical company or medical battalion has a mental health section consisting of a psychiatrist, a clinical psychologist, a social worker, and six or seven behavioral science specialists (91Gs). The Table of Organization and Equipment (TO&E) authorizes the mental health section three 1¼ ton vehicles. By doctrine, the section should deploy an NCO or an officer/NCO team to work consistently with each deployed maneuver brigade. The separate brigade's medical company has one NCO and two junior 91Gs (social work technicians) for a heavy (armor or mechanized infantry) brigade, and one NCO 91G for a light infantry brigade. Armored Cavalry and Ranger Regiments currently have no organic mental health personnel. Future U.S. Army plans will make a mental health officer/NCO team organic to all maneuver brigade and armored cavalry regiment medical companies, while keeping the division psychiatrist at division level to supervise all combat stress control operations. Each area support medical battalion in the corps has a psychiatrist, a social work officer, and eight 91Gs (E-3 to E-7) The section has one 2½ ton and three ¾ ton trucks. It should routinely assign a 91G NCO to each of the three area support medical companies. These are supervised and, when needed, reinforced by the officers from the area support medical battalion's headquarters and medical support company.

U.S. Army Echelon II/III CSC

The medical CSC detachments and companies provide U.S. Army Echelon II/III care. The medical detachment CSC has 9 officers, 14 enlisted, one 2 ½ ton and six 1¼ ton trucks with trailers. Basis of allocation is one per division or one per two or three separate brigades. It is composed of three CSC prevention teams (each with a psychiatrist, social work officer, two 91Gs); and one CSC restoration team (each with a psychiatric nurse and two psychiatric technicians, an occupational therapist and two occupational therapy technicians, a clinical psychologist and three 91Gs, plus a patient administration specialist).

The CSC prevention teams usually reinforce the brigade support areas to prevent stress casualties and unnecessary evacuation, and to assist the return to duty of recovered cases and unit reorganization efforts. The CSC restoration team usually provides neuropsychiatric triage, stabilization, and 1- to 3-day restoration at a medical company in the division rear or forward corps. This team also provides consultation and reorganization support there, and reinforces forward as needed. These multidisciplinary teams are not unbreakable atoms. Their specialist personnel should be combined or cross attached flexibly to make mission-specific "task-organized CSC elements." In operations other than war, the CSC detachment may be only partially deployed, and support the echelon-above-division units as well as reinforcing the division MH assets.

The Medical Company, CSC has 27 officers, 58 enlisted, one ¼ ton, six 2½ ton, and ten 1¼ ton trucks. Basis of allocation is one per two or three divisions for high-intensity war, or one per corps or theater for prolonged low-intensity conflict. The CSC company has a company headquarters; six CSC prevention teams (psychiatrists, social work officers, 91Gs); four CSC restoration teams (psychiatric nurses, psychologists, occupational therapists, technicians). Personnel from these teams should be switched flexibly across the CSC prevention and CSC restoration teams to tailor for specific missions.

The company headquarters (HQ) assists medical brigade or medical group HQ with CSC planning and with command/control and administrative/logistic support of its dispersed teams and the CSC detachments. The cook and vehicle mechanics are usually divvied out to the dispersed CSC working elements. The CSC HQ has a staff chaplain to provide the religious/spiritual perspective to the

MH/CSC team and to help coordinate with the chaplain network of unit ministry teams, HQ staff chaplains, and hospital chaplains.

The company's six CSC prevention and four CSC restoration teams are task organized into larger elements to provide comprehensive CSC support behind each division. The CSC elements can staff reconditioning centers (usually collocated with combat support hospitals); deploy teams to reinforce the area support medical battalion mental health section in corps; detail teams to provide direct CSC support to the corps' brigades or to units undergoing reconstitution; deploy its personnel or teams forward by air ambulance or ground vehicle to rapidly reinforce or reconstitute the CSC detachments at the divisions and brigades as needed.

U.S. Army Echelon III Corps-Level Hospitals

Each 300-bed combat support hospital (MedForce 2000 model) in the corps is a DEPMEDS facility which has a neuropsychiatry ward and consultation service. This service has a social work officer, three psychiatric nurses and one medical/surgical nurse, seven psychiatric ward aids (MOS 91F), one behavioral science specialist (MOS 91G), and an occupational therapy specialist (MOS 91L). The section provides consultation throughout the hospital and to nearby units. They staff a 20-bed intermediate care ward module which may also treat medical cases.

The current 60-bed (and the future 30-bed MedForce 2000) Mobile Army Surgical Hospitals and the current 200-bed combat support hospitals (CSHs) have no MH/CSC staff, although a psychiatric nurse could be filling a vacant medical/surgical nurse slot. The current 400-bed evacuation hospital has a psychiatrist, a psychiatric nurse, and two psychiatric technicians (MOS 9lFs). It will be replaced by the MedForce 2000 CSH.

U.S. Army Echelon IV General and Field Hospitals

The 500-bed general hospital and 500-bed field hospital (MedForce 2000 models) are DEPMEDS facilities which will usually be established in the communications zone. Each has the same neuropsychiatry ward and consultation service as the MedForce 2000 model CSH described above. The field hospital also has a clinical psychologist with two 9lGs, and an occupational therapist with two 9lLs. The mission of the MedForce 2000 field hospital is to be a convalescent facility which returns soldiers to duty in the theater within 30 days. It should have a reconditioning facility, kept separate from the "patient care" area. It may also provide a drug and alcohol rehabilitation program for soldiers with good return to duty potential (the current field hospital has no neuropsychiatry staff). The mission of the MedForce 2000 general hospital is primarily to prepare soldiers for safe evacuation to the continental United States (CONUS), including the severe neuropsychiatric disorders who cannot return to duty in theater.

U.S. Army CSC in Medical Command/Control Headquarters

The MedForce 2000 organizational structure provides for mental health staff sections in the theater and corps-level medical headquarters units. The medical command and the medical brigade each will have a psychiatrist, a social work officer or psychologist, an occupational therapy officer, and a 91G NCO. The subordinate medical groups each will have a psychologist, a social work officer, and a 91G NCO.

These MedForce 2000 positions will not be officially implemented until 1995. However, the precedent has been established for having some neuropsychiatry staff at headquarters level. In the Persian Gulf War, the U.S. Army Central Command Surgeon requested and received a staff neuropsychiatry consultant from the Office of The Surgeon General as an interim measure. Seventh Corps also requested and deployed to the Persian Gulf with a staff corps psychiatrist. The medical brigade at Fort Bragg, North Carolina, requested and received a psychiatrist (rank of colonel) for their relief mission in South Florida following Hurricane Andrew, and now has PROFIS staff on post. The Medical Group headquarters at Fort Lewis, Washington, took its authorized social work officer, psychologist, and 91G NCO to Somalia, then sent them home early. The Medical Group in Europe has directed its PROFIS social worker to plan contingency CSC support for Bosnia peace enforcement.

Situations for CSC Cooperation Between the U.S. Army and Air Force

A number of situations have occurred or will occur in which U.S. Army and U.S. Air Force personnel must cooperate in the treatment of stress psychiatric casualties, as well as in preventive stress control activities.

U.S. Air Force Liaison Personnel in U.S. Army Units

U.S. Air Force personnel routinely work as air liaison officers in U.S. Army headquarters units down to the brigade level. Under special circumstances, they might function further forward as observers calling in air strikes.

These personnel should receive preventive consultation support along with their U.S. Army headquarters. If these personnel develop battle fatigue, they should be treated in the same way and in the same facilities close to their units as their U.S. Army coworkers, with positive expectation of return to their same duty in 1 to 3 days. If they fail to respond to treatment, they should be transferred to U.S. Air Force facilities.

Downed U.S. Air Force Pilots

U.S. Air Force forward air controllers (FACs) fly small aircraft above the battlefield and guide high performance attack aircraft against ground targets close to U.S. units. Other U.S. aircrews attack targets far behind enemy lines. Both FACs and attack aircrews may be forced to crash-land or bail out, and may subsequently show symptoms of battle fatigue which could harden into post-traumatic stress disorder (PTSD). Transport aircraft crews could crash or be disabled while making air drops or flying into forward U.S. Army air strips. Some U.S. aircrews may be shot down behind enemy lines and reach U.S. lines only after extended periods of escape and evasion under conditions of extreme physical and mental stress. Other downed airmen may be extracted from behind enemy lines by U.S. Army helicopters or Special Operations. Some may be brought to U.S. Army medical facilities after being rescued or exchanged as prisoners of war.

The line unit leaders and medical personnel who encounter U.S. Air Force aircrews first should automatically apply all of the principles and methods of treating battle fatigue: reassurance; rehydration; nutrition; sleep; restoring hygiene; opportunity to talk about and ventilate the experience; and appropriate self-care duties that restore confidence. It is important *not* to predict psychopathology, and to instead convey the quiet expectation of return-to-duty. The airman should be transported (not "evacuated") back as soon as possible to their unit's air base or to the U.S. Air Force medical facilities (described earlier) which support that base.

If more serious signs of battle fatigue develop or persist while the airman is awaiting transportation, combat stress control personnel talk with the airman to reinforce the initial crisis intervention. They emphasize the normality of the symptoms and the likelihood of their rapid improvement.

U.S. Army Units Stationed near U.S. Air Force Bases

U.S. Army units, especially combat-support/service-support units, may be located on or close to U.S. Air Force bases. These may lack organic mental health support and be distant from U.S. Army combat stress control unit elements. The combat stress unit of the U.S. Air Force's tactical hospital should provide proactive consultation and mental health support to the U.S. Army units. For example, in the Persian Gulf War one combat stress unit provided such outreach support to an U.S. Army transportation battalion whose drivers drove very long, dangerous convoys on the Tapline Road and a Patriot air defense artillery battalion under heavy stress defending against the Scud missiles.[5]

Forward U.S. Air Force Bases under Attack

U.S. Air Force bases will be located in the corps and communication zone, and perhaps even in division areas as the battle progresses or in unconventional counterinsurgency conflict. The air bases' ability to function may be severely degraded in high-intensity conflicts. Air bases are natural targets for air and long-range missile attack, including time bombs, cluster bomblets, persistent chemical and/or nuclear weapons. Even in low-intensity conflicts, they are targets of mortar, short-range rocket and sapper attacks. Because of their stockpiles of munitions and fuel, even small attacks on air bases can produce catastrophic disasters. Even in peacetime, air crashes can also produce sudden mass casualties and widespread devastation.

U.S. Army units will be located next to air bases, both in the corps areas and communications zone, and may be detailed to reinforce their organic ground defense (air police) and antiair/antimissile defense capability. Forward air bases, especially those that do not have an area theater hospital, will have very limited medical/surgical resources, and may need routine support from nearby U.S. Army medical units. This could include combat stress control consultation and neuropsychiatric triage/stabilization from the MH/CSC personnel of the area support medical battalion; CSC company; or CSH, field, or general hospital. Only after careful coordination

might U.S. Army combat stress control units provide restoration or reconditioning for air base personnel, in preference to evacuation to rear echelon U.S. Air Force facilities.

In the event of mass casualties at the air base, U.S. Army combat stress control teams, along with other medical units, could provide emergency triage and reconstitution support. As soon as possible, these teams would be joined by (and continue to work with) additional U.S. Air Force combat stress unit (CSU) disaster response teams sent to the site. As suggested above, mass casualties or traumatic crashes can occur in peacetime. The following case history illustrates support by U.S. Army Combat Stress Control teams to a U.S. Air Force base.

Case Study 1: Mass Murders at a U.S. Air Force Base

A disgruntled ex-airman who had been discharged from the U.S. Air Force on psychiatric grounds entered the hospital of Fairchild Air Force Base (Spokane, Washington) with an automatic weapon. He killed the psychiatrist while the doctor was providing therapy to a patient, killed the psychologist, then stalked through the hospital, randomly shooting patients and staff in the corridors and waiting rooms. He was finally shot and killed in the parking lot by U.S. Air Force security police. On hearing the news, the psychiatrist commander of the U.S. Army's 98th combat stress control detachment (Fort Lewis, Washington) contacted the surviving members of the Fairchild mental health section and offered to send a team to assist. The hospital commander concurred, but the initial reaction at a higher U.S. Air Force echelon was that the U.S. Air Force was sending its own teams and a U.S. Army team would be superfluous. The Fairchild and Fort Lewis mental health personnel mobilized general officer support to reemphasize the potential mutual value of the U.S. Army team's participation, and approval was quickly granted. A four-person CSC preventive team (a psychiatrist, social worker, and two enlisted personnel) deployed by commercial air within 2 days. Their orders had been pushed through the system by their higher TO&E headquarters over a weekend, and their travel funding provided by the medical activity.

At Fairchild Air Force Base, the U.S. Army team interfaced well with, and provided debriefing support to, the surviving U.S. Air Force social work officer and behavioral science technicians. While reinforcing U.S. Air Force stress teams worked in consultation and debriefing with other hospital staff, patient, and community groups, the U.S. Army team was given responsibility for assisting the U.S. Air Force Security Police who had been involved in the incident. They also assisted the mental health section in scheduled and special psychotherapy for their outpatients, who were deeply distressed by the deaths of their therapists. Those sessions were conducted in a temporary clinic away from the hospital, which was closed for forensic evidence collection and necessary cleanup and repairs.

While these activities were still ongoing, a B-52 bomber crashed on base while practicing low-altitude stunt maneuvers. All the crew were killed. A second four-person team of the 98th CSC detachment was hastily deployed from Fort Lewis, Washington. It assisted with debriefings of the emergency crews and others who rushed to the crash site and recovered the bodies. Upon completion of their work, both teams returned to Fort Lewis.

Comment: The nature of the horrible mass murder was such as to impact on the entire Fairchild Air Force Base community and the surrounding retiree outpatient population. While the U.S. Air Force could have mobilized sufficient stress and mental health teams from other bases and medical centers, that would have put a greater strain on quality of care elsewhere in the U.S. Air Force system. It made tactical and economic sense to include in this relief effort the teams from a relatively nearby U.S. Army unit that had been trained in the mission of quick deployment to deal with critical events. The tragic opportunity provided excellent clinical experience for the U.S. Army teams. It also provided administrative experience in coordinating a rapid joint operation in the peacetime, garrison force. When the B-52 crash compounded the trauma for the Fairchild Air Force Base community, it was simple to reinforce the effort.

Initial Rapid Deployment Contingency Operations

In rapid deployment contingency operations, such as Operation Just Cause (Panama, 1989), medical care at the airhead may at first be provided only by the U.S. Air Force personnel of the Aeromedical Evacuation Squadron (operating a mobile aeromedical staging facility). These may be augmented by U.S. Army surgical squads (forward surgical teams). None of these units have organic MH/CSC personnel, although psychiatric nurses may have been assigned to fill surgical nurse vacancies. Battle fatigue and neuropsychiatry cases for all services will probably be brought to this facility along with the seriously wounded, ill, and injured. Many cases may have had no prior MH/CSC evaluation.

The ability of this facility to prevent the overevacuation of simple stress casualties (including battle fatigue, minor heat exhaustion, mild concussion, and other conditions) is severely limited by its preoccupation with the seriously injured. However, training the triage officers and other patient care providers in combat stress control principles can enable them to hold and return to duty stress casualties. This is normally accomplished after the initial rush of surgical cases has been treated. In Operation Just Cause, the U.S. Air Force nursing personnel did hold and return to duty a U.S. Army battle fatigue casualty on the third to fourth day of the operation. The following case is taken from the Persian Gulf War.

Case Study 2: Chaplain's Assistant

In the Persian Gulf War, the medical company of the U.S. Army armored brigade had moved into Kuwait close behind the armored battalions. Battles against Iraqi armor and infantry were still going on. Several kilometers away, U.S. air power attacked Iraqi forces that had dug in around a mosque. In the aftermath, it was discovered that Kuwaiti civilians had taken refuge in that mosque, and some had been killed or wounded by the "collateral damage." The medical company hastily sent a mass casualty response team, which included the brigade's U.S. Army psychiatrist, the forward support battalion chaplain, and the chaplain's assistant. The psychiatrist remembers vividly the image of the chaplain's assistant coming out of the wreckage carrying two very young girls, one dead and the other seriously injured. Over the next several hours as the surviving casualties were transported to the medical company and given emergency care, there was no time to conduct an immediate debriefing. The chaplain's assistant became silent and preoccupied, withdrew from the group, and finally began to shake uncontrollably, barely able to communicate. The psychiatrist would have preferred to treat him on site, but armored battles were still occurring nearby and there was the possibility of another mass casualty or emergency move. He could neither devote full attention to this one stress casualty nor trust that casualty to respond appropriately and safely in an emergency. Reluctantly, he sent him with the other casualties on a truck going back to the U.S. Marine surgical support company (and combat stress center) in Saudi Arabia.

Several days later, the chaplain's assistant was returned to duty in the forward support battalion. By this time, the ground campaign had concluded, but the unit was still occupied with the dangerous and often gruesome process of securing the battlefield. The chaplain's assistant was able to participate in the unit's new missions in his original role, and demobilize and return home with it.

Comment: This case illustrates the constraints that the tactical situation can impose on preventive and treatment intervention at far-forward medical facilities. The U.S. Marine Corps/U.S. Navy backup system was able to function and return the soldier to duty quickly. This reduced (if not eliminated) the risk of PTSD developing from what was a highly traumatic event for all the medical personnel, and arguably an even higher psychological trauma for a young man in the chaplain corps.

The capability to return stress casualties to duty at a forward deployed aeromedical evacuation squadron and U.S. Army surgical team task force could be greatly improved at little cost. This could be accomplished by providing one or two NCO or officer personnel (preferably with MH/CSC training), plus some very spartan "sheltering" (not formal "patient holding") and supplies. Local buildings, hangers, or improvised shelter may be sufficient. The supervisory personnel could be either from a U.S. Army unit mental health section, from a U.S. Army medical combat stress control detachment or company, or from a U.S. Air Force unit. To be fully effective, this augmentation must be present at the outset of the operation. If it arrives later, the majority of stress casualties who arrived with the first, second, or third rush of badly wounded cases will already have been evacuated.

In addition to preventing the loss of "pure" battle fatigue cases, this austere restoration capability could also permit holding and return to duty of some minor disease nonbattle injuries whose overevacuation could result in psychological harm. Such cases include members of elite units (such as U.S. Army Airborne, Ranger, and Special Operations Forces, and U.S. Navy SEALs ["SEa Air Land"], descendants of the World War II Underwater Demolition Teams) who tend to regard evacuation for minor orthopedic jump injuries, heat exhaustion, dehydration, or mild concussion as dishonoring. Such patients may often volunteer to be allowed to remain at the mobile aeromedical staging facility (MASF) for one to three days, eating meals-ready-to-eat (MREs), sleeping on ground pads, providing local security, and helping out within the limits set by their minor disability, rather than be evacuated far from their comrades. This could be medically permissible, provided the delay does not increase the risk of death or permanent disability from an inadequately diagnosed condition. If such selected cases *are* held, and later evaluation indicates that they can still not return to limited or full duty in their units, they could then be evacuated without feeling shame or guilt. The MH/CSC personnel who supervise such cases would also initiate stress debriefing for those wounded in action (WIA) who were awaiting evacuation and for the medical staff.

Ongoing Combat Operations

As the theater stabilizes, the aeromedical evacuation squadrons will continue the primary role of staffing mobile air staging facilities. These facilities, located at air bases and simple landing strips, receive patients from the combat zone hospitals. They hold the patients for several hours, providing continuity of care until the patients can be loaded onto aircraft for air evacuation to the communications zone or the continental United States (CONUS). Some of the airframes may be dedicated medical aircraft; however, most aircraft that depart from the combat zone will be general purpose cargo aircraft (C130s, C141s, a few C5As, the future C17) hastily reconfigured with litter sets. The MASF also

serves as the rest and staging area for the in-flight nursing personnel.

The MASFs will deal with three types of patients who pose stress or psychiatric issues:

1. *True, severe neuropsychiatric patients*. By doctrine, these will arrive and be transported on litters, in restraints, well medicated and sedated. Only if departure is delayed by weather or other mishap will these patients pose problems.
2. *Wounded or injury cases with significant psychological distress or organic mental disorder.* These may create a considerable strain on the MASF staff and the in-flight nursing crews. Both the patients and the staff could benefit from special MH/CSC advice regarding their psychological and pharmacologic management.
3. *Battle fatigue cases who have not responded to restoration or reconditioning and who are being evacuated to COMMZ or CONUS for further reconditioning or treatment for PTSD.* These soldiers should be ambulatory, but may have been given long-acting antianxiety medication (such as diazepam) for the flight. It is important that the MASF and in-flight personnel maintain the sense of positive expectation of full and rapid recovery. They, too, should treat these cases as service members being transferred temporarily to the rear, not as sick or "mental" patients. However, unless the flight personnel have been thoroughly briefed and reassured by the neuropsychiatry or MH/CSC consultants, they may insist that these battle fatigue cases be restrained on litters, causing some psychological harm. (If that *must* be done, it should be explained as giving the service member better opportunity to sleep on a long and possibly bumpy flight.)

Personnel from the combat support hospital's neuropsychiatry ward and consultation service, the area support medical battalion mental health section, and/or the medical combat stress control detachment or company should maintain regular contact with the MASF personnel. This is important both to assure the correct management of the stress and neuropsychiatric evacuations and also to assist the MASF and in-flight U.S. Air Force nursing staffs with processing their own, high-stress experiences.

During a Major Buildup

In the buildup phase of a rapidly developing contingency theater, one or more airfields will be major points of entry for U.S. Army (and perhaps Marine) forces into the country. The U.S. Air Force 50-bed air transportable hospitals at the airfields are likely to be the first U.S. Echelon II/III hospitals set up in the country. U.S. Army clearing companies and mobile army surgical hospitals, if they arrive by air, will probably move quickly off the airfields to support the maneuver units. U.S. Army unit medical and CSC personnel should determine what U.S. Air Force medical facility is supporting the airfield and its vicinity. If possible, this information should be provided before the units leave CONUS. As U.S. Army units continue to pour into the points of air debarkation, any soldiers who develop serious stress, physical, or neuropsychiatric symptoms in flight or soon after landing could be brought to the U.S. Air Force facilities for evaluation and care.

If feasible after landing, the U.S. Army medical and combat stress control personnel should visit the U.S. Air Force facility to review basic doctrine for the triage and treatment of stress casualties. They should coordinate the procedures for returning *duty* battle fatigue cases to their units immediately (prior to the unit's departure from the airfield or temporary assembly area). They should coordinate where restoration battle fatigue (*rest* battle fatigue) cases can be sent for 1 to 2 days' light duty with the soldier's unit's own combat service support elements. Depending on staffing and workload, it may be possible for the area theater hospital's combat stress unit to provide 1- to 2-day observation and restoration for any *hold* battle fatigue cases. Here, too, coordination for how to return recovered cases to their units (which are themselves in transit) will be critical.

In the unlikely event that many stress casualties developed in flight or soon after arrival, it may be useful for the U.S. Army division mental health section, area support medical battalion mental health section, or combat stress control detachment or company to temporarily reinforce the U.S. Air Force combat stress unit at the area theater hospital while many units are flowing through the airhead.

Every reasonable effort should be made to apply the principles of PIES and the method of the Five Rs to prevent the unnecessary evacuation of stress, fatigue, jet lag, and minor somatic and orthopedic overuse syndromes from the theater soon after their arrival. Most of these cases will

present with physical, not emotional, complaints. Over-evacuation may cause permanent psychological harm to the patients. It may also grow into an "evacuation syndrome" (see Chapter 1) as other new arrivals under stress consciously or unconsciously develop the same symptoms. Malingerers, who are deliberately faking or self-inflicting symptoms, should be returned to their units in the theater for disciplinary action.

During Redeployment Home

To a lesser extent, U.S. Army units may also need to rely on U.S. Air Force area theater hospitals or contingency hospitals at the airheads during some phases of redeployment to CONUS after the conflict is over. In this case, the stress issue will not be apprehension over impending battle but rather impatience to get home, perhaps mixed with apprehension in some soldiers over what they will find there.

U.S. Air Force and U.S. Army medical/combat stress control personnel should coordinate their preventive consultation and triage practices to discourage the tendency for some soldiers and airmen to develop stress syndromes in the unconscious or conscious wish to get home before the rest of their unit. The MH/CSC personnel may also provide or facilitate prereunion briefings and discussion groups to defuse potential homecoming stress. Coordination with the chaplains of both services is essential to this effort.

Post-traumatic stress symptoms may also be present, but are more likely to be mentally suppressed by the focus on putting the unpleasant experiences behind one and going home. U.S. Army and U.S. Air Force MH/CSC personnel may be able to cooperate and pool dwindling resources (along with the chaplains) to provide preventive after-action stress briefings or critical event debriefings to individuals, groups, or units at special risk.

Situations for CSC Cooperation Among the U.S. Army, Navy, and Marine Corps

As with the U.S. Air Force, a number of situations will require cooperation between U.S. Army, U.S. Navy, and U.S. Marine Corps personnel.

U.S. Navy/Marine Corps Liaison Personnel in Army Units

In combat actions close to the ocean, where U.S. Army units can receive close air support or gunfire support from U.S. Navy ships offshore, the U.S. Army headquarters units may be augmented by U.S. Navy or U.S. Marine Corps air liaison teams and naval gunfire liaison teams. If these personnel develop battle fatigue, they should be treated in the same way as the U.S. Army and U.S. Air Force personnel and in the same facilities close to the U.S. Army unit.

Downed Pilots

If U.S. Navy or U.S. Marine Corps aviators are shot down over U.S. Army territory or are recovered from behind enemy lines, they should be treated as indicated above while they are being returned to their units or to U.S. Navy/U.S. Marine Corps medical facilities. Conversely, U.S. Army aviators who are recovered or rescued by U.S. Marine Corps or U.S. Navy units should receive similar treatment from their rescuers and, if necessary, from U.S. Marine Corps/U.S. Navy MH/CSC personnel until returned to the U.S. Army.

Neighboring Units

If U.S. Marine Corps and U.S. Army units are fighting alongside each other, as happened in the World War II Pacific Theater, Korea, Vietnam, and Southwest Asia, they may use each other's medical/surgical facilities. This would most likely occur as a result or side effect of the air evacuation of serious surgical wounded cases.

The U.S. Marine Corps/U.S. Navy medical battalion does not have dedicated medical evacuation vehicles. Evacuation of any casualties by air must use general purpose helicopters or request U.S. Army "dustoff" medevac. In the latter case, they may be brought to U.S. Army medical treatment facilities. Ground evacuation must be coordinated using ground vehicles in backhaul. This latter is the U.S. Army's doctrinally preferred way to transport *all* battle fatigue cases. Stress casualties traveling by truck will naturally be brought to their own service's medical clearing facilities. However, in the confusion of real operations, doctrine restricting the air evacuation of stress casualties may be set aside. In crisis situations, line commanders and forward medical personnel will seek to clear the battlefield of all noneffective casualties.

Those stress cases who show symptoms of amnesia, loss of motor or sensory functions or agitation (in particular), may be sent immediately by air or ground to a hospital to rule out serious physical causes. This could be the hospital of the other

service. It will be necessary to extract any such stress cases from the evacuation chain and return them to suitable battle fatigue restoration facilities. In this situation, it is important to get the service member back to his own service as soon as possible.

In a large-scale operation near the ocean, a U.S. Navy hospital ship is quite likely to reach the theater before U.S. Army combat surgical hospitals have arrived and been set up. On one hospital ship in the Persian Gulf during Operation Desert Shield/Storm, 9% of psychiatric admissions were U.S. Army personnel and 5% were U.S. Air Force personnel.[6]

While the hospital ship's neuropsychiatric ward provides a suitable place to stabilize true neuropsychiatric cases for further evacuation, it is not well suited to restoring U.S. Army battle fatigue casualties to duty. The shipboard environment, even of the non–patient-care combat stress control bay, would be both unfamiliar and seemingly remote from the soldiers' units. Extra effort would be necessary to maintain positive expectation and the sense of proximity. The potentially recoverable U.S. Army soldier should be transferred to a restoration and reconditioning center ashore as soon as possible. The same concerns are probably relevant to U.S. Air Force stress casualties evacuated to a hospital ship.

The shipboard setting may be less significant for U.S. Marines treated for stress on the hospital ship's combat stress center, as they are accustomed to going directly from ships to ground combat. It may be even less a problem for U.S. Navy shipboard sailors who are recovering from battle fatigue incurred in ship disasters or combat. Prompt return to the service member's original unit or ship remains crucial to maximizing recovery.

Cross-Attached Units

U.S. Army battalions or brigades may be cross-attached to U.S. Marine Corps task forces or divisions, and U.S. Marine Corps elements may be cross-attached to U.S. Army units. For Operation Desert Storm, a U.S. Army armored brigade was attached to a U.S. Marine Corps division to give it M1A1 (Abrams) tank capability. The U.S. Army Operations and Sea Force concepts for the post-Cold War world make such cross-attachment increasingly likely.

U.S. Army personnel who are evacuated to a U.S. Marine Corps/U.S. Navy/U.S. Air Force facility, such as to the psychiatric or combat stress center at an MH/CSC should receive the correct treatment for battle fatigue there. In the Persian Gulf War, a U.S. Army combat stress control officer/NCO team (from the division mental health section) with the U.S. Army armored brigade had to refer four combat stress casualties back through U.S. Marine Corps/U.S. Navy channels. One, who proved to have additional neuropsychiatric problems, was evacuated to a U.S. Air Force hospital in England. Three returned to duty with their U.S. Army unit in days, proving that joint combat stress control interventions can work.

Case Study 3: Light Battle Fatigue

During the Persian Gulf War, a soldier arrived at night by helicopter, along with several wounded soldiers. He had the 1,000 yard stare, sat passively, and responded slowly to questions in one or two words only with firm prompting. He knew his name, rank, serial number, and unit, but was unable to describe what had happened. The medical/surgical nurses who triaged him knew the principles of BICEPS, and it was feasible to hold him for the night because the initial surge of surgical mass casualties had slowed and a holding tent with cots had finally arrived. The orthopedic surgeon they consulted trusted their triage judgment. The soldier was given verbal reassurance and taken to lie down and sleep. The next morning the nurses found the soldier at the mess line, wolfing down breakfast. He said he was "fine," and had to get back to his unit. He was still unclear about what had happened when the unit had "taken heavy flak," and only vaguely remembered being brought by helicopter and talking with someone in the night. He was assigned to performing work details around the MASF while waiting for his unit to pick him up. Indeed, he complained so much about the menial duties that the U.S. Air Force nurse reminded him that she was the officer and he the enlisted soldier, that one of them had to do these duties, and she said it was to be he. Both were happy when his unit's truck arrived to take him back to duty.

Comment: Had this soldier been evacuated to San Antonio, Texas and home base, it is quite likely that he would have become a true psychiatric casualty, left the U.S. Army, and perhaps developed long-term disability.

Battle fatigue casualties in U.S. Marine Corps combat units that are working under U.S. Army command/control should be transported to their own medical units if such units have been included in the task force from the Force Service Support Group. These medical units could be augmented by combat stress control personnel or teams from the U.S. Army division mental health section, combat stress control detachment, or combat stress control company. If no U.S. Marine Corps medical battalion companies are included, U.S. Marine Corps stress casualties should be sent to the nearest U.S. Army brigade, division, or area support clearing company with combat stress control capability.

During a Major Buildup

The U.S. Army now has cargo ships with preconfigured unit sets of equipment pre-positioned strategically around the world. These are a seagoing version of the European theater's "POMCUS" (pre-positioned overseas material configured unit sets) sites. The ships can sail to a suitable port at the threatened host nation, to which the soldiers can be flown from their units in CONUS. Other U.S. Army units will load their heavy equipment onto fast cargo ships at ports of embarkation in CONUS (or Europe, as in the Persian Gulf War). The ships sail to the theater, while the troops finish predeployment preparation at home station and fly to the theater in time to meet the ships at the port of debarkation. U.S. Army transportation units have the mission and equipment to unload these ships at the port. If hostilities have begun, the port is likely to be the target of a long-range missile, air, or terrorist attack, adding to the stress of very long, hard working hours in crowded spaces.

Initial U.S. Army units assembling at a seaport of entry could utilize the combat stress unit of a U.S. Air Force air-transportable hospital at the airfield. Alternatively, they might utilize the medical collection and clearing company or surgical support company of a U.S. Marine Expeditionary Force if any of those have been landed. Those facilities could have the U.S. Navy psychologist and/or psychiatric corpsmen. The U.S. Army contingent in the port could eventually receive echelon II medical support from a U.S. Army area support medical company, which should have a 91G NCO and perhaps the social worker or psychiatrist of the area support medical battalion. These could also support the U.S. Navy, U.S. Marine Corps, and U.S. Air Force units.

Later in the buildup, U.S. Army troop units that are landing from ships at a port of embarkation or awaiting the arrival of their equipment by ship could receive MH/CSC consultation and treatment support from a nearby Fleet hospital if no U.S. Army MH/CSC or combat support hospital neuropsychiatric assets are available. In the Persian Gulf War, the fleet hospital in Bahrain did provide the neuropsychiatric ward capability for a nearby U.S. Army combat support hospital which (having the pre-MedForce 2000 TO&E) had no organic mental health/neuropsychiatry personnel. Conversely, a U.S. Army combat support hospital's neuropsychiatric ward and consult service could care for U.S. Navy and U.S. Marines (and U.S. Air Force) cases if no fleet hospital had arrived.

During Redeployment Home

Some U.S. Army combat service support units may have to remain longer in the theater than other units to load equipment on ships for transport home. These units should be supported by U.S. Army combat stress control teams, but could also be supported by personnel from the U.S. Navy fleet hospital if it has not already been redeployed. This will work best if the fleet hospital neuropsychiatry personnel practice preventive outreach consultation. Conversely, the U.S. Army combat stress control teams could provide proactive prevention and treatment as needed by U.S. Navy dockside or shipboard personnel in the port, if the fleet hospital or other U.S. Navy combat stress control is not available or needs reinforcement.

Joint SPRINT Operations

In peacetime or military operations short of war, joint special psychiatric rapid intervention teams may be hastily task-organized to support a major U.S. Navy, U.S. Marine Corps, or U.S. Army reorganization/reconstitution support mission. For example, following the Iraqi Exocet missile attack on the *USS Stark*, a joint U.S. Navy-U.S. Army team was deployed to debrief surviving crew members. Crew members were debriefed as they worked on the damaged ship next to a tender at Bahrain. The team consisted of U.S. Navy SPRINT personnel out of Spain, plus members of a U.S. Army stress management team from 7th Medical Command, Europe. The U.S. Army team had had extensive experience in responding to terrorist and hostage incidents. The activities of that joint team have been published.[7]

JOINT OR COMBINED OPERATIONS OTHER THAN WAR

Overview

The post-Cold War world will continue to call upon the U.S. armed forces to conduct peacekeeping, humanitarian civil assistance (international disaster relief), and nation assistance (public health, engineering, and other projects) in which no combat is anticipated. Alternatively, the unstable situ-

ation may call for peace enforcement ("peacemaking"), noncombatant evacuation operations, or foreign internal defense training missions to countries that are experiencing terrorism or insurgency warfare. In these situations, U.S. forces are at higher risk of having to fire in self-defense, but with very restrictive rules of engagement. While some of these operations may be of brief duration and clear objective, others may be greatly prolonged, with no clear endpoint. Most such operations will be joint operations, and many may be coalition operations under multinational or United Nations auspices.

CSC Mission Priorities

The combat stress control mission in stressful operations other than war (in usual order of priority because of relevance) is to:

1. *Prevent post-traumatic stress disorder (PTSD).* This is a risk for the service members who must encounter extreme human suffering, victims of injustice or atrocity, and perhaps confused combat under ambiguous, restricting rules of engagement. Preventive activities are indicated routinely, because stress or PTSD symptoms may not be evident at the time.
2. *Prevent misconduct stress behaviors.* Stress-induced misconduct can be due to tension, high ambiguity of friend vs foe, reaction to atrocities seen or casualties sustained, cultural friction, frustration, boredom, tedium, and let-down. There may be special temptations for alcohol or drug abuse, because of local availability, lack of routine urine screening as a deterrent, and casual use of substances by coalition allies or the local population. Unless prevented, weakening discipline could escalate to use of excessive force and even commission of atrocities. Such misconduct would invalidate the humanitarian mission in the eyes of the local population, the media, and U.S. and world opinion. Because criminal violation of the Uniform Code of Military Justice and international law *must* be publicly investigated and punished, combat stress control preventive advice to leaders in how to recognize and defuse early signs of stress is critical to success.
3. *Prevent and treat (return to duty) battle fatigue or contingency fatigue.* This is done in the usual ways. In static operations other than war, it is expected that most such cases can be helped in their own units while still on duty, or be rested for a day or two in a nonmedical support element. Few will normally need medical holding, and very *few* should be evacuated.
4. *Prevent, diagnose, stabilize, and evacuate or return to duty any neuropsychiatric disorders (environmental or substance-induced organic ones, and the endemic functional disorders).* These may include cases with psychiatric disorders who were on medication from civilian sources without wanting it on their military records. They may relapse when supply runs out, or have medication side effects aggravated by the local climate. If feasible, they should be tapered off medication or shifted to drugs that can be continued safely in theater. In some soldiers, the situations observed in the operation may activate PTSD from prior combat, childhood, or inner city experiences. If PTSD is reactivated from prior traumatic exposure it would be best to treat in the theater, working through past and current trauma simultaneously, if that is feasible.

CSC Staffing

The CSC support for an operation other than war should be tailored to the specific mission, the expected stressors and the size and mix of forces deployed. This will have to be determined by experience and perhaps at first by trial and error. For instance:

Vignette 1: Sinai peacekeeping missions involve about 1,000 U.S. troops in a multinational coalition on 6-month rotations in desert observation. Conditions are stable, with no combat, but occasional accidental injury or deaths occur. While no mental health support is required, having a mental health/combat stress control NCO, an officer or an officer/NCO team on site significantly reduces problems in the unit. These personnel are frequently requested by command. Social workers, psychologists, psychiatrists, occupational therapists and 91G behavioral science NCOs have filled these assignments.

Vignette 2: Medical support for U.N. peacekeeping troops in Croatia involved a U.S. mobile army surgical hospital (MASH) augmented with a social worker/91G team, located in Zagreb. These provide MH/CSC services to sick, injured, or wounded peacekeepers from many countries, often working through translators. They also support the hospital staff and cooperate with allied (British, Dutch) mental health personnel. A 50-bed U.S.

Air Force air-transportable hospital staff replaced the U.S. Army MASH in the rotation plan. Six months later, staff from a U.S. Navy fleet hospital took over the facility, including a psychiatrist, psychiatric nurse, and psychiatry technicians.

Vignette 3: Operation Restore Hope in Somalia was initially "front-end loaded" to support about 28,000 troops with a U.S. Army light infantry division's mental health section of a psychiatrist, social worker, psychologist and several 9lGs supporting one brigade (plus) at several locations; a U.S. Army medical group headquarters with a social worker, psychologist, and 91G; a U.S. Marine Corps medical battalion (minus) with a filler U.S. Navy psychiatrist, psychologist, and corpsman. No shipboard mental health neuropsychiatric personnel were involved. A U.S. Army medical combat stress control detachment's preventive section with three psychiatrists, three social workers, and six 9lGs (social work technicians), was deployed. A U.S. Army combat support hospital (minus) with a psychiatrist, psychiatric nurse, and two 9lFs (psychiatric ward aids) was also deployed. No U.S. Air Force mental health personnel were deployed to Somalia with the U.S. Air Force's MASF team. A 50-bed air-transportable hospital with a social worker supported the staging facility at Cairo West, Egypt.

The various elements coordinated activities to provide mental health outpatient and brief inpatient therapy, mobile preventive consultation and education, and critical event debriefing (CED). The CEDs followed deaths of unit members, deaths of Somali civilians under stressful circumstances, and other highly traumatic events. The U.S. Army CSC teams debriefed U.S. Marine Corps companies following two combat deaths and a suicide. (They also debriefed an Australian unit following a death by accidental weapons discharge.) They provided consultation to the U.S. Air Force AeroMedical Evacuation Squadron.

As the situation in Somalia became clearer, the U.S. Navy/U.S. Marine Corps and the U.S. Army Medical Group quickly sent their mental health personnel home. The U.S. Army division mental health section and combat stress control detachment sent their personnel home later by increments, each replacing them eventually with one social work officer each and one 91G each as the force in country sank below 4,000. The U.S. Army combat support hospital neuropsychiatric section rotated home with the hospital, being replaced by a field hospital with no mental health/neuropsychiatric personnel.

Vignette 4: Operation Continue Hope (in Mogadishu, Somalia under United Nations auspices) began with the two U.S. Army social workers and two 9lGs as above, supporting 4,000 U.S. Army troops plus a few U.S. Marines, U.S. Air Force, and U.S. Navy personnel in the U.N. headquarters. The division social worker was then recalled home on compassionate grounds.

The combat stress control detachment social worker and 91G worked out of the field hospital, providing case evaluation and treatment plus active preventive education and critical event debriefing to units. Workload increased as ambushes caused mass casualties among the coalition allies and sporadic injuries and eventually deaths to U.S. service members. Nocturnal mortar and rocket attacks also harassed the five United Nation's cantonment areas in the city. The combat stress control officer also assisted with debriefings and prebriefings of the Swedish hospital's personnel, and of coalition wounded at the U.S. Army CSH.

Efforts to reinforce the combat stress control detachment officer and NCO rapidly with an occupational therapist and NCO were frustrated. Eventually, after 3 months, the combat stress control detachment team rotated, replaced by two social workers and two 9lGs, while fighting and U.S. casualties continued to escalate. The 10th Mountain Division replaced its one 91G with two. The new U.S. Army combat stress control team later provided training and debriefing supervision to the U.S. Navy corpsmen supporting a 50-man U.S. Marine Corps detachment at the United Nations headquarters after three U.S. Marines were wounded and a Somali interpreter was killed by a command-detonated mine. There were still only the two U.S. Army mental health social work officers and three 9lGs in Somalia when U.S. casualties escalated markedly in early October 1993, followed by a rapid U.S. Army troop buildup. These worked as best they could to provide mobile, preventive consultation and debriefings until rotating home late in the withdrawal of U.S. troops.

Lessons Learned from Recent Experience

1. Joint coordination in planning total combat stress control staffing capability in theater can be improved.
2. It is relatively easy to "front end load" MH/CSC personnel into operations other than war, when the combat arms aren't dictating that their personnel and warfighting logistical needs require all the transport capability.
3. It is relatively easy to send people or increments home early.
4. It may be almost impossible to reinforce the theater rapidly with more CSC assets (at least by the U.S. Army). Therefore don't send too much home too soon.
5. U.S. Army CSC detachments can be deployed in increments and maintain a rotation schedule. There is still resistance (prejudice) against sending occupational therapy and psychiatric nursing expertise on CSC missions, which must be overcome.
6. Preventive workload estimate is that there should be no less than two MH/CSC officers and two NCOs for a brigade-sized (joint) force; and sufficient officer/NCO

teams to visit each company-sized unit (approximately 100 men) for 1 hour weekly, and more often and longer when critical event or end-of-tour debriefings are needed.

Joint Special Operations

Overview

Special Operations Forces prepare for and support battle in all levels of open conflict. They also play a major role in military operations other than war, including nation assistance ("building") and humanitarian civil assistance, disaster or refugee relief, counternarcotics, counterterrorism, intelligence gathering, peacekeeping/peacemaking, search and rescue (open and covert), strikes and raids, and noncombatant evacuation operations. While some of these operations may be well-publicized after the fact, most of them (and especially the Special Operations aspects of them) generally keep a low profile and avoid attention. Some are covert, and some are deeply covert.

Special Operations Forces

The U.S. Army has Special Operations Forces ranging from the well-known Airborne Ranger Battalions and the Special Forces ("Green Berets" of the 1960s) to the secretive but highly publicized Delta Force (counterterrorist team), the Psychological Operations (PSYOPS) units which provide printing and broadcasting capability, the Civil Affairs units, Long Range Surveillance Companies, and a special helicopter aviation unit. The U.S. Navy has the SEALs, and the U.S. Marines have Force Recon. The U.S. Air Force has Special Operations Forces aviation units. There may be other military and government intelligence and covert operations units whose very existence is a secret.

Mental Health Capability in Special Operations Forces

Because of the strict requirement for secrecy, Special Operations Forces (SOF) units have their own psychologists and perhaps other mental health personnel, who also avoid publicity. The psychologists have an important role in screening applicants for suitability for special operations, monitoring the high stress training and selection process, and providing ongoing personnel reliability and readiness-for-duty evaluations. They may debrief SOF teams after critical events. Many of these tasks cannot be done by regular MH/CSC personnel who lack the necessary organizational trust and security clearances. The SOF MH personnel presumably also provide or arrange mental health psychiatric treatment for whatever neuropsychiatric disorders arise among their highly selected but highly stressed and somewhat atypical populations. The families of the SOF personnel (and SOF personnel in nonsensitive positions) are presumably cared for by the routine mental health/medical system.

Contact Between Special Operations and Conventional MH/CSC

In deployments and combat, Special Operations Forces personnel can develop disabling battle (conflict) fatigue, misconduct stress behaviors, posttraumatic stress disorders, and stress-induced functional or organic neuropsychiatric disorders. They may then be brought to conventional MH/CSC personnel or facilities because they need urgent management or care, and the few Special Operations MH/CSC personnel are not immediately on hand. Wounded or sick Special Operations Forces personnel will usually be evacuated through conventional channels. This can create a problem for those in highly covert units because they and their organizations go to great lengths to maintain secrecy (even to the extent of deleting the cases from the medical record and patient flow statistics).

The conventional MH/CSC clinician (U.S. Army, U.S. Navy, or U.S. Air Force) could find himself trying to diagnose whether the service member who refuses to tell him anything about himself or his unit (or who is rambling deliriously about his "secret mission") has a paranoid or grandiose delusion, is deliberately faking for personal reasons or to get over on the system (malingering), or really does belong to the Special Operations Forces. The answer may not be easy to get quickly.

If the latter case is true, it would be best to get the service member back under the care of Special Operations Forces specialists. Like the downed U.S. Air Force, U.S. Navy, or U.S. Army pilots who are best returned to their own roots, the return to the Special Operations Forces environment may be more therapeutic than keeping the case further forward among strangers. This may be a situation where SOF-trained MH/CSC personnel of a different service could be more effective than non-SOF personnel of the same service.

For less dramatic SOF cases that qualify as routine battle (conflict) fatigue, the Five Rs should still work to get the service member back to his own forward-deployed unit in 1 to 3 days. The primary modification would be not to push the debriefing phase to the point of describing a secret mission in great detail. The main effort is to restore and build on the SOF ethic of resilience and elite reputation. Because of that SOF elite identity, SOF personnel may be more likely to present with the loss of physical abilities forms (somatoform disorders) of battle fatigue than with the overtly emotional forms. This adds to the problems of differential diagnoses.

Joint Prisoner of War or Hostage Repatriation

Prisoner or hostage repatriation is often a joint operation. The prisoners of war (POWs) may come from two or more services. The U.S. Air Force is likely to fly the survivors from their release point to one of the service's hospitals for a thorough physical examination and treatment of any injuries or illnesses. There, they will be subjected to intensive intelligence debriefings whose primary purpose is to document facts about their captors and captivity. They will also be the subject of intensive media interest and perhaps interviews. Their families may also be involved in the nationwide or worldwide attention and may be flown to the medical facility.

U.S. Army stress management teams have had extensive experience in hostage release scenarios, such as:

- A cruise ship and airliners briefly seized by terrorists (with loss of life).
- Military and civilian embassy personnel held by Islamic fundamentalists for over a year.
- Individual hostages held for years under extreme hardship and deprivation.
- POWs repatriated at the end of the Persian Gulf War.

The stress control challenge in this hectic process is to provide therapeutic critical incident stress debriefing (CISD) and reunion assistance in the midst of conflicting demands while minimizing secondary trauma from the repatriation process itself. The principles of PIES apply. Contact with an MH/CSC team should begin as far forward as possible. Ideally, the same MH individuals will travel back with the victims to complete the process. If that is not possible, the "hand off" to a second team should be clear and positive to the victims. Joint coordination and participation in this process is essential.

This chapter has thus far discussed various administrative structures and programs to prevent and treat psychiatric casualties. A main theme has been that unit troop morale and cooperative coordinate interservice efforts are critical in both prevention and treatment of combat stress reactions. Chapter 16 provides additional information regarding interventions with POWs.

Civil Disaster Relief and Civil Disturbance Response

Similar cooperation between military and civilian agencies is seen in disaster relief efforts. National Guard units (U.S. Army, U.S. Navy, U.S. Marine Corps, and U.S. Air Force) have often been called up by their state governors to maintain law and order and provide emergency medical and engineer support following natural disasters. Experience after Hurricanes *Hugo* and *Andrew* suggests that the active component of military services will also be increasingly called upon to provide quick and massive response following major disasters in the United States.

Case Study 4: Hurricane Andrew

After Hurricane *Andrew* (1992), a joint task force (JTF) was given extensive responsibility for coordinating and implementing emergency relief and cleanup activities. It included active component U.S. Army divisional and corps assets, U.S. Marine Corps units, U.S. Navy ships, U.S. Air Force aircraft, and ground personnel. The mission included setting up and running tent cities to house and feed homeless victims, and clearing wreckage to restore essential infrastructure, providing medical and preventive medical support. All of this was in complicated relationship to state, local, volunteer, and other federal agencies, the media, and the victims themselves.

The U.S. Army medical brigade commanded the medical task force. It requested and received an experienced neuropsychiatry consultant. U.S. Army division mental health section personnel from three divisions deployed with their division units to the disaster area with the following functions:

- To provide stress control support to the corps-level units along with those of their divisions.
- To train U.S. Army personnel who were canvassing areas block-by-block to identify potential mental health problems and cases.
- To relay this information every evening from the medical brigade to the state mental health authorities who directed civilian mental health teams to fill the need.

A U.S. Navy SPRINT team was initially requested by the U.S. Coast Guard to provide critical incident stress debriefing to U.S. Coast Guard families, and later it became a joint task force resource. U.S. Air Force stress teams deployed to assist at Homestead Air Force Base which was heavily damaged by the storm, but did not later join the JTF. U.S. Army combat stress control personnel from a corps-level detachment were standing by to deploy but were not required as civilian mental health assets became available. U.S. Army Reserve combat stress control units were also preparing to send volunteer teams on temporary tour active duty if called upon. (A U.S. Army Reserve combat stress control company did activate 12 persons to assist the Red Cross at refugee shelters following the January 1994 Los Angeles, California earthquake. The organizational, cross-cultural, and language skills of the U.S. Army reservists proved especially helpful.)

Comment: The JTF that responded to Hurricane *Andrew* provided a coordinated response, in conjunction with the efforts of the civilian community, to alleviate the various hardships that survivors were experiencing. These responses lessened long-term problems for these communities.

Mass Casualty Disasters

In a disaster that kills and injures thousands, as well as devastating property, additional military mental health/combat stress control would be needed as follows:

- To provide or supervise stress debriefing and follow-up of the service members who are pulling the bodies of living and dead from the ruins and providing emergency care.
- To provide combat stress control support to mobilized service members (especially those in the local National Guard units) whose own families are in the disaster area, and whose fates may be unknown for some time.
- To assure stress control support to those service families, once located.
- To coordinate the military effort with the many other agencies and resources.

Effective coordination under high stress conditions is the key to success. U.S. Army corps-level combat stress control detachments and companies (both active and reserve components) should have this as a contingency mission with written standard operating procedures.

In a major mass casualty disaster that devastated all medical facilities over a large area, U.S. Air Force area theater hospitals and contingency hospitals, U.S. Army medical companies and CSHs, U.S. Marine Corps surgical support companies (SSCs), and perhaps U.S. Navy Hospital ships might also be deployed, bringing their additional neuropsychiatric/mental health personnel.

While physical trauma cases may have to be evacuated some distance for definitive surgery, any civilian stress cases (and secondary military ones) should be kept close to their homes or displaced families (or their units). As with battle fatigue, these cases need to be treated according to PIES and the Five Rs in a non–patient-care atmosphere.

Recovery of Dead Human Bodies

One mission that is common across the services, in war and in many operations other than war, is the requirement to recover and process dead human bodies. These may be the bodies of fellow service members, perhaps even personal friends. They may be the bodies of enemies killed in combat, either by oneself or by other combat forces. They may be civilians, including children, adult men and women, and elderly people with whom one naturally identifies and empathizes. The number of bodies may range from intimately few to appallingly many. Depending on the cause of death, time elapsed, and weather, the state of the bodies may be grossly mutilated and decomposed (as in the Jonestown massacre) or unnervingly intact and seemingly unharmed ("as if only asleep"). The sights and smells (and perhaps touch) in the work of processing human bodies invoke an arguably innate horror and revulsion, especially on first exposure. Prolonged exposure may produce cumulative horrors or a numbing of all feeling. The intense sensory experiences, often combined with emotion-provoking thoughts, can form extremely vivid, painful memories that become the seeds of post-traumatic stress disorder.

Extensive studies have been conducted on military and civilian units that were unexpectedly required to recover human remains, and on mortuary affairs personnel and other specialists who process human remains on a routine basis.[8,9] Even the latter can be adversely impacted by special individual bodies or by mass casualties. The research has focused on what specific aspects of the task cause the greatest distress. It has recorded the ways that those recovering and processing the bodies have found to protect themselves. Exhibit 10-1 summarizes and condenses recommendations from a number of sources, most notably McCarroll et al[8] and Ursano and McCarroll.[9] This was prepared in pocket

EXHIBIT 10-1

WHEN THE MISSION REQUIRES RECOVERING DEAD HUMAN BODIES

HOW TO PREPARE YOURSELF, YOUR BUDDIES, AND THE UNIT

THE MISSION

One consequence of many humanitarian and peace support missions, as well as of war, is coming in contact with bodies which have died under tragic or horrible circumstances. All soldiers, in all types of units, may be assigned the mission of recovering, processing and perhaps burying human remains.

- We may collect the bodies of fellow service members so that the Mortuary Affairs specialists can return them to the United States for identification and burial.
- We may gather and perhaps bury the bodies of enemy or civilian dead, to safeguard public health.
- The numbers of dead may be small and very personal, or they may be very, very large.
- The victims may include service members much like ourselves, or young men and women, elderly people, small children and infants for whom we feel an innate empathy.
- Being exposed to children who have died can be especially distressing, particularly for individuals who have children of their own.

Extensive experience has been gained during such missions, and in working with the body recovery teams afterwards to help them cope with the memories. This experience can help you, your buddies and your unit take such a difficult mission in stride. You can complete the mission proud of what you have done, and return to your usual duties, career and family life without being unduly troubled by the memories, even when those memories include some very sad, unpleasant or distressing details.

WHAT TO EXPECT

Some body recovery missions involve situations where there are no living survivors. Other situations are in concert with ongoing rescue, emergency medical care, and survivor assistance activities. In the latter case, the reactions of the living victims may include grief, anger, shock, gratitude or ingratitude, numbness or indifference. Such reactions may seem appropriate or inappropriate to you, and may interact with your own reactions to the dead.

In some situations, the bodies may be distorted or mutilated. Seeing mutilated bodies invokes an innate horror in most human beings, although most of us quickly form a kind of tough mental "shell," so that we won't feel so badly. To some extent, we come to see the remains simply as objects, without reflecting that they were once people.

- The dead bodies may be wasted by starvation, dehydration, and disease (eg, Rwanda refugees or some POW and concentration camp victims).
- They may have been crushed and dug out from under rubble, (eg, the Beirut barracks bombing or earthquake victims).
- They may be badly mutilated by fire, impact, blast or projectiles (eg, the victims of the air crashes at Gander, Newfoundland, and Sioux City, Iowa; the civilians killed by collateral damage and fire near the Commandancia in Panama City, or the Iraqi army dead north of Kuwait).
- They may be victims of deliberate atrocity (eg, the Shiites of south Iraq, or any side in Bosnia).

Sometimes, however, the cause of death leaves few signs on the bodies (eg, the mass suicide with cyanide at Jonestown, Guiana [South America], or victims drowned in floods). The caregivers often say this is harder to adapt to, because it is harder to form that "shell."

Of course, the degree of decomposition of the bodies will be determined by the temperature and climate, and by how long it has been before you can reach them and begin collection.

In addition to seeing mutilated or nonmutilated bodies, you will often have to smell the bodies and other associated strong odors. You may have to touch the remains, move them, and perhaps hear the sounds of autopsies being performed, or other burial activities. These sensations may place a strain on your capacity to do the work, and may trouble you in memories. We will list below things you can do to help this.

Being exposed to large numbers of dead bodies is not a normal part of human experience. Therefore, when you are exposed to bodies, you should not be surprised to be feeling things you are not used to.

- When you are exposed to bodies, you may experience sorrow, regret, repulsion, disgust, anger, and futility. REMEMBER, THESE ARE NORMAL EXPERIENCES GIVEN THE SITUATION IN WHICH YOU HAVE BEEN PLACED.

In fact, it would be surprising if you did not have at least some of these emotions.

- You may start to see similarities between yourself (or others you love) and those who have died. This could lead to feelings of guilt ("Why wasn't it me?" or "Why can't I do more to stop it?") or anxiety ("It could have been me"). Again, these feelings are NORMAL given the situation.
- Humor is a normal human reaction or "safety valve" for very uncomfortable feelings. In body handling situations, it naturally tends toward what is aptly called "graveyard humor." Don't be surprised at finding this in yourself or others.

GUIDELINES FOR HOW TO WORK WITH HUMAN REMAINS

Prepare yourself, as much as time and access to information allows, for what you will be seeing and doing. It is better to be prepared for the worst and not have to face it than to be underprepared.

- Learn as much as you can about the history, cultural background, and circumstances of the disaster or tragedy. How did it come to happen? Try to understand it the way a historian or neutral investigating commission would.
- Look at videos and photographs of the area of operation and of the victims. The television news networks and news magazines may be sources. If pictures of the current situation are not available, look up ones from previous similar tragedies in the library archives. Share them as a team, and talk about them.

Understand the importance and value of what you are doing.

- Remember that you are helping the deceased to receive a respectful burial (even if in some cases, it must be a hasty and mass burial). You are saving their remains the indignity of simply being left on the ground to decay.
- In some cases, you are helping survivors know their loved ones have died, rather than remain for years in uncertainty. Those relatives or friends can then take the bodies for private burial, or at least know where they are buried.
- By collecting or burying the bodies of those who have already died, you are providing a safer, healthier environment for those individuals still living.

EXHIBIT 10-1 (continued)

When you are seeing or working with the bodies, think about the larger purpose you are serving, without attempting to relate to each individual who has died. By not focusing on each individual, you will be able to do your important job more effectively.

- Remember that the body is not the person, but only the remains.
- Some people who have done this important work have found it helpful to think of the remains as wax models or mannequins (as if in a training exercise), or as memorial models to which they were showing the respect due to the original person who was no longer there.
- If your job requires you to collect personal effects from the bodies for identification, intelligence or other official purposes, do not let yourself look closely at or read those personal effects. (The people who need to examine those effects are advised to do so remote from, and preferably without having seen, the body.)
- Needless to say, do not desecrate or take souvenirs from the bodies. Those are criminal acts.
- Humor, even graveyard humor, is helpful if it remains on a witty and relatively abstract level. It is unhelpful when it becomes too gross, too personal (eg, comments or practical jokes which pick on members of the team who need support, not ridicule), or too disrespectful of the individual dead. Some members of the team may become upset at excessive graveyard humor, and even the joker may remember it with guilt years later.
- Each of you can say prayers for the dead, and conduct whatever personal ceremonies your own beliefs and background recommend. The unit chaplain and/or local clergy may also conduct rites or ceremonies. Even very brief rites at the time can help, perhaps to be followed by larger, formal ceremonies later.

Take steps to limit exposure to the stimuli from the bodies.

- Have screens, partitions, covers, body bags or barriers so that people don't see the bodies unless it is necessary to their mission.
- Wear gloves if the job calls for touching the bodies.
- It may help to mask the odor with disinfectants, air-fresheners, or deodorants in some locations. Using other scents such as perfume or aftershave lotions is of limited value in the presence of the bodies, and is perhaps better saved for when taking breaks away from the work area. Don't be surprised if the scents bring back memories of the experience for a while thereafter.

Take care of yourself and each other.

- When the mission allows, schedule frequent short breaks away from working with or around bodies.
- Drink plenty of fluids, continue to eat well, and especially maintain good hygiene. To the extent possible, Command should assure facilities for washing hands, clothing, and taking hot showers after each shift. (If water must be rationed, Command should make clear what can be provided and how it should be used and conserved.)
- Hold team after-action debriefings frequently to talk out the worst and the best things about what has occurred, sharing thoughts, feelings and reactions with your teammates.
- A mental health/stress control team or chaplain may be able to lead a Critical Event Debriefing after a particularly bad event or at the end of the operation.
- Plan team as well as individual activities to relax and get your mind off the tragedy you are helping to correct. Do not let yourself feel guilty about this, or about not being able to fix all the tragedy immediately. YOU MUST PACE YOURSELVES FOR THE TASK, AND DO WHAT CAN BE DONE WITH THE RESOURCES AVAILABLE, ONE STEP AT A TIME.
- Stay physically fit.
- Keep your Unit Family Support Group fully informed about what is happening, and make sure your family members and significant others are included in and supported by it.
- Take special care of new unit members, and those with recent changes or special problems back home.

If the stress caused by working with the dead bodies begins to interfere with your performance or your ability to relax, or if you feel that you are becoming overwhelmed, TAKE ACTION. Do not ignore the stress.

- Seek out someone to talk with about how you are feeling. This might be a buddy or someone else. Other people are likely to be feeling the same things you are. The important thing is not to withdraw from others and become isolated.
- The unit chaplain, medic, or a combat stress control/mental health team member can often help.

Likewise, it is important to help your buddy, coworker, subordinate or superior if he or she shows signs of distress.

- Give support and encouragement, and try to get the other person to talk through the problems or feelings that they are having. By working with each other, you both will be better able to cope with the situation in which you must work.

After you have completed your mission and are no longer working around the bodies, you may experience a variety of feelings. These may include feeling bad about not treating each body as an individual, and needing to express the emotions that were pent up while you were doing the work of body recovery. DO NOT KEEP THESE EMOTIONS INSIDE. They are normal, and are best worked through by talking with your fellow unit members.

- Take an active part in an end-of-tour debriefing and pre-homecoming information briefing within your unit prior to leaving the operational area.
- Follow through with Family Support Group activities which recognize and honor what the unit has done and shares the experience (and the praise for a hard job well done) with the families.
- Don't be surprised if being at home brings back upsetting memories from the operation. You may find it hard to talk about the memories with family or friends who weren't there. This is very common. Try to talk about them anyway. Also stay in touch with your teammates from the operation.
- If you still find yourself upset, don't hesitate to talk with a chaplain or with the community mental health or stress control team in your area. This is just wise preventive maintenance.

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card format for the Rwanda refugee relief mission. The card was subsequently used by the commander of the second of two National Guard medical companies activated and deployed to conduct body recovery and processing at a civil airline crash site and nearby armory. In initial follow-up, the company reported that the recommendations had proved very helpful. The first National Guard medical company deployed to the same site had not had the card, and within a month of demobilization it had made seven referrals for treatment of PTSD. Follow-up of both companies is continuing.

RECOMMENDATIONS

The U.S. Army, U.S. Air Force, U.S. Marine Corps, and U.S. Navy are all working to improve their capability to prevent stress casualties across the continuum of operations. Their efforts are directed toward providing immediate intervention close to the battle or high-stress activity and the service members' units. The organizational and written doctrine are still evolving, but all recognize and adhere to the basic time-proven principles. Because cooperation and coordination are the guiding principles of combat stress control, the following actions should be taken to achieve an effective Joint Operations CSC capability.

Joint Coordination. For any joint operation, combat stress control (neuropsychiatric, mental health) personnel from each service should seek out and coordinate with their counterparts in the other services. The following actions should occur:

- Coordination should be initiated by the joint command staff early in the contingency planning and operations. Each joint command surgeon should have triservice (multidisciplinary) CSC consultants. These should be on staff or available by telecommunication or temporary duty, even in operational security (OPSEC) situations.
- Each service should be encouraged to deploy sufficient MH/CSC personnel to support its own major contingent.
- Arrangements should be made for MH/CSC backup from other services to support small elements that do not bring their own CSC assets.
- All headquarters and MH/CSC personnel being deployed should be informed about all the other CSC personnel on the way as quickly as possible (consistent with operational security).
- Coordination should be continued and fostered by the joint headquarters during mobilization and deployment.
- Coordination must be an important mission for U.S. Army mental health staff sections of major command or medical command headquarters, medical brigade (combat zone and communications zone), and medical group.
- Coordination must be actively considered and, when feasible, be accomplished by the mental health section or neuropsychiatric ward/section of U.S. Army divisions (mental health section of main support medical company or medical battalion); U.S. Marine Corps divisions (psychiatrist of division HQ, psychologist of surgical support company); U.S. Air Force tactical (air-transportable) hospital (combat stress unit); area support medical battalion (MH Section); U.S. Army medical CSC companies and detachments; U.S. Army combat support, field, and general hospitals; U.S. Air Force contingency hospitals; U.S. Navy field hospitals; and U.S. Navy hospital ships.

Initiative at the Operator Level. In the spirit of joint operations, direct coordination between junior MH/CSC officers and NCOs in the theater of operations should be actively encouraged by all higher headquarters. The MH/CSC personnel at the operator level should take the initiative to make such contacts even in the absence of coordination from higher echelons. They should, of course, inform their higher HQ of all such contacts as soon as possible.

Conferences and Symposia. When the tactical situation allows, formal conferences or symposia should be scheduled to bring together representative MH/CSC personnel from all the services in the theater of operations (plus allies and the host nation) to share their experiences. Joint participation should also be actively sought in peacetime conferences and continuing health education courses.

Doctrine Development. In preparation for joint contingencies, doctrinal material on joint CSC operations should be drafted, staffed through all necessary channels, and incorporated into the relevant

manuals and training programs of all services. Joint CSC involvement should be practiced whenever possible in field exercises and training deployments. The lessons learned in these, and in true contingency deployments, should be systematically staffed and incorporated into the evolving doctrine.

Periodically, the lessons learned from recent conflicts are reviewed to facilitate doctrine development and more productive operations in the future. Such reviews commonly consider the substantial logistical assets, including medical services, in a combat zone. The usual rationale for the establishment of medical assets (aside from moral and morale considerations) has been that returning medically noneffective service members to duty is the most efficient way to mitigate losses due to attrition, that is, to conserve the fighting strength.

Conventional medical support in the theater of operations, however, is a substantial undertaking—the hospitals are heavy, require huge spaces, and are difficult to move; they are staffed by a large number of personnel; and they have extensive requirements for food, fuel, and unique equipment and supplies not usable by any other component of the deployed force. Thus their setup occupies significant quantities of personnel, space, time, and "lift."

The most likely future war-fighting scenarios for the U.S. military describe discrete combat actions of strictly limited duration fought by small elite forces. Only a small portion of the full spectrum of medical support is likely to be available at the onset of an unexpected war, or an operation other than war, that is likely to be of short duration. Furthermore, in these future scenarios, few service members who become medically noneffective for more than 1 to 3 days are likely to return to duty before the fighting ends and the unit withdraws. Thus, there is little need, from the viewpoint of many in the line, to establish extensive medical support in the combat zone for the purposes of returning medically noneffective service members to duty.

A possible medical operational scenario following from these scenarios would be to immediately evacuate all service members who become medically noneffective to existing bases outside of CONUS or to CONUS where they would be treated. The only service members who would receive medical treatment in the combat zone would be those with critical injuries who would not survive evacuation. Small, rapidly deployable surgical hospitals would be available to provide resuscitative surgery. What little additional medical support present in the combat zone would be at the unit level and except for treating the most minor medical and surgical problems, would be used for triage and preparation for evacuation. Almost all of the conventional third echelon medical support would be absent.

These review processes periodically suggest that mental health personnel not be deployed for supposedly brief combat scenarios and that any combat stress casualties and lightly injured casualties be rapidly evacuated from the combat zone, perhaps as far as CONUS. In such scenarios, service members manifesting combat stress reaction would not be kept at the unit level as required by existing doctrine but would be evacuated. The proponents of such scenarios maintain that although less than optimal from the standpoint of the current tenets of military psychiatry, the number of such service members expected would be minimal; first, because only elite units, the members of which seem to have a greater tolerance to combat stress, will be deployed, and second, because the expected duration of combat will be short.

There are substantial fallacies in this argument. First, the mental health personnel who are organic or attached to the critical combat and combat support units can be crucial in their primary mission of helping leadership sustain and enhance combat performance. They will exercise primary prevention by reducing the negative impact of stressors and by prophylactic debriefings to minimize PTSD and other post-deployment difficulties. These delayed problems can occur in service members who show no dysfunction during the operation. Avoidable attrition of combat-experienced service members, due in part to post-traumatic stress, was observed following the successful 1983 Grenada and 1989 Panama operations (see Chapter 1, Psychiatric Lessons of War). The mental health personnel in theater will also exercise secondary prevention by enabling temporarily overstressed service members to regain optimal effectiveness without leaving their tactical teams or their organic combat service support elements. There the overstressed service member is aided by his own buddy, immediate leader, medic, chaplain, or a general medical professional. These helpers must receive technical supervision and mentoring from a mental health officer or NCO. Mental health expertise is required to triage and make initial interventions in some cases. In a pinch, the battalion surgeon, if already well-mentored and knowledgeable, can subsume the mentoring role. The service members who are restored to effectiveness in this manner within their own units never become medical casualties because they are not absent from duty.

Secondly, some overstressed service members will require 1 to 3 days of restoration activities before return to their units. It must be emphasized that these combat stress cases, although casualties because they are temporarily absent from their units, are not medical patients. The forward-deployed mental health personnel will perform neuropsychiatric triage to identify and stabilize the small number of true neuropsychiatric patients for prompt evacuation. Of major significance to the issue of deployment of assets in a theater of operations, the support for combat stress casualties is minimal: a sleeping bag, MREs, and a trained helper. These stress casualties can be temporarily assigned to a combat service support unit, if no level II medical company is suitable. At the combat service support unit, these stress casualties remain under the technical supervision of mental health personnel or the CSC team. This practice is in accordance with the doctrine of some North Atlantic Treaty Organization (NATO) countries. Years of hard experience have confirmed the importance of not evacuating overstressed (or minimally injured) service members from the theater without a brief (1- to 3- day) period of restoration. The restoration program poses minimal logistical burden beyond the subsistence of the participants who pay for their keep by performing necessary labor. The entire program is deliberately not medical, and has no necessary relationship with large hospitals.

Finally, and most importantly, any behavior that allows an honorable exit from combat can become an evacuation syndrome, no matter how elite the troops. In addition, combat stress casualties would likely occur in greater numbers in combat support troops, which are necessary to any deployment, as was seen in the 1973 Yom Kippur War, the 1982 Lebanon War, and the 1989 invasion of Panama. Lightly wounded casualties react much the same as combat stress casualties when evacuated. The point most often overlooked by the line, and by many in the medical profession, is that nonevacuation of combat stress casualties *is* the treatment. An evacuated combat stress casualty may become a chronic mental cripple. His best chance for recovery is in the early proper management of the syndrome.

Any proposed deletion of psychiatric support brings to mind the World War II psychiatrically disastrous early North African campaign. A few brief battles resulted in large numbers of psychiatric casualties, many of whom were evacuated to CONUS to fill VA hospitals for years after the war ended. Such a policy, seemingly compassionate, is medically inhumane.

CONCLUSION

The U.S. Army, U.S. Air Force, U.S. Marine Corps, and U.S. Navy are all working to improve their capability to prevent stress casualties. Their efforts are directed toward providing immediate intervention close to the battle and the service members' units. The organizational and written doctrine are still evolving, but all recognize and adhere to the basic time-proven principles.

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