



A QUARTERLY PUBLICATION / SPRING 2009

MINDLINES

NAVAL CENTER FOR COMBAT & OPERATIONAL STRESS CONTROL

INSIDE



Targeting Suicide

We are All on Watch

BY CAPT. PAUL S. HAMMER,
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The Navy does a bang-up job of maintenance. Surface ships, nuclear subs, the finest fleet of high-performance aircraft — we are force ready in gunmetal gray.

What about people maintenance? How are we figuratively checking the oil and kicking the tires on that score? We're getting better. In just the last few years, the military has invested billions of dollars in programs for the betterment of our troops' psychological health, and there are encouraging signs to show it's working.

Training for suicide prevention is one area where there is a renewed focus, and it comes as all services are seeing a rise in completed suicide. In 2008, 41 Sailors committed suicide, one more than the year before.

Our Marine Corps fared poorly as well: 41 active-duty suicides in 2008, compared with 33 in 2007.

Most are young enlisted men who are despondent over a failed relationship, money problems or disciplinary actions. They typically die by hanging or turning a weapon on themselves.



These collective numbers translate to profound individual losses impacting families and loved ones for decades to come, and they represent a great sense of failure within our services.

If we are to reverse this, we need to change the paradigm of how we think about the problem. Often we look at risk factors, statistics and trends but it might be more productive to look at stress behavior — the individual factors that indicate something is very, very wrong with one of our Sailors or Marines.

Here is what I can tell you about people contemplating suicide: They are in terrible psychological pain for which they have no tolerance. Their minds

are constricted and they believe that either the pain stops or they have to die. They become isolated, pushing people away, and they are consumed with hopelessness.

These signs of despair are likely to first be noticed by our deck-plate leaders — chiefs and petty officers, staff NCOs and NCOs — those who daily interact with the rank and file. The responsibility of senior leadership here is three-fold: Actively encourage an environment that supports awareness of abnormal stress behavior, facilitate the necessary steps for an individual to receive mental-health help, and follow-up to ensure that help happens. There is no room for harassment, mockery or ridicule.

The importance of a human connection cannot be overstated in dealing with a person contemplating suicide. Just to know that someone cares and is concerned can make a remarkable difference.

Reach out. This is the first major step in suicide prevention, and it is the mark of a true and committed leader who takes it.



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WOMEN & PTSD

COMBAT IS THE GREAT EQUALIZER

In the population at large, women are more than twice as likely as men to develop post-traumatic stress disorder (PTSD), although the reasons why are not clearly understood.

There are several theories that often are mentioned:

- The most common trauma for women is sexual assault or childhood sexual abuse, and women are more likely than men to suffer these offenses.
- Women also are more likely to be the victim of domestic violence or to have a loved one suddenly die.
- There are differences in the way men's and women's brains work in processing emotions and actions and this, too, might be a contributing factor.

Certain PTSD symptoms seem to be more common in women than men, according to the National Center for PTSD. Women with PTSD are more likely to be jittery and anxious and to have more trouble feeling emotions. Men are more likely to feel anger and to have trouble controlling their anger. They also are more likely to experience the nightmares and flashbacks associated with PTSD.

Men with PTSD are more prone to alcohol and drug abuse, while women are more likely to suffer from depression. One good statistic that women have going for them when

it comes to PTSD: They are more likely than men to seek treatment for their symptoms. Some studies also indicate that women respond faster to treatment than do men.

COMBAT-RELATED PTSD

In the wars in Afghanistan and Iraq, male and female troops suffer from PTSD at about the same rate. Of the more than 1.6 million U.S. troops who have been deployed to Operation Enduring Freedom and Operation Iraqi Freedom, about 15 percent are women. While females are barred from ground jobs in infantry and from armor and artillery units, they perform important support roles that — in these wars where no formal combat lines exist — put them in highly dangerous posts.

Female troops are driving supply convoys, guarding checkpoints, searching combat-area neighborhoods — situations that can put them under direct fire. Women also comprise a large percentage of other highly stressful combat-related roles, such as mortuary workers and health-care personnel. In 2006, nearly 3,800 women who had deployed to Iraq were diagnosed with PTSD and treated by the Department of Veterans Affairs. These women accounted for 14 percent of a total 27,000 recent veterans treated for PTSD in 2006.

Like male service members, women may be reluctant to get treatment for combat-related stress injuries because they are concerned it will negatively affect their careers or make them appear weak.



“A potential barrier for women needing treatment for mental-health issues related to combat trauma is their need to show the emotional strength expected of military members,”

says the 2007 report of the Department of Defense Mental Health Task Force.

“The self-image of the woman veteran may serve as an additional obstacle in obtaining treatment for military-related PTSD. After their military service, many women no longer see themselves as veterans. Moreover, they may not associate symptoms of trauma exposure with their military service.”



MILITARY SEXUAL TRAUMA AND PTSD

Military sexual trauma, known as MST, is a serious concern for all branches of the armed forces. Just how widespread a problem it represents is hard to gauge for a variety of reasons.

In a report delivered to Congress in March 2009, the Pentagon says there were 2,908 reports of sexual assaults involving either a military victim or perpetrator in fiscal year 2008. This is an 8.18 percent increase from the previous year, according to the Pentagon. The offenses range from wrongful sexual contact to rape.

The latest number could indicate that sex offenses are on the rise, more reports of offenses are being filed as service members are encouraged to report them, or a combination of both.

The military definition of sexual trauma is more inclusive than the civilian term. MST refers to both sexual harassment and sexual assault that occurs in military settings. Both men and women can experience MST, and the perpetrator can be of the same or opposite gender.

MST is associated with higher rates of mental-health problems. A study from the Department of Veterans Affairs looked at healthcare screening data of about 90,000 vets of the Iraqi and Afghanistan wars who were treated at a VA health facility between October 2001 and October 2006. Of these, about 14.5 percent of the women and 0.6 percent of the men report experiencing MST.

Both women and men with a positive MST screen were three times more likely to be diagnosed with a mental-health condition than patients who did not report MST, the study says. The most frequently reported mental-health conditions among OEF and OIF veterans were depression, PTSD and other stress disorders, and substance abuse.

The relationship between MST and specific mental-health conditions did not differ by gender with the exception of PTSD; the report says women who experience MST are significantly more likely to have PTSD than men who experience MST.

FUTURE RESEARCH

In a commentary* written in 2007, Charles W. Hoge, a leading researcher in the field of PTSD, summarizes what needs to be studied regarding women and combat-related PTSD. To better understand the relationship of direct combat to mental-health issues among women compared with men, he suggests researchers look at

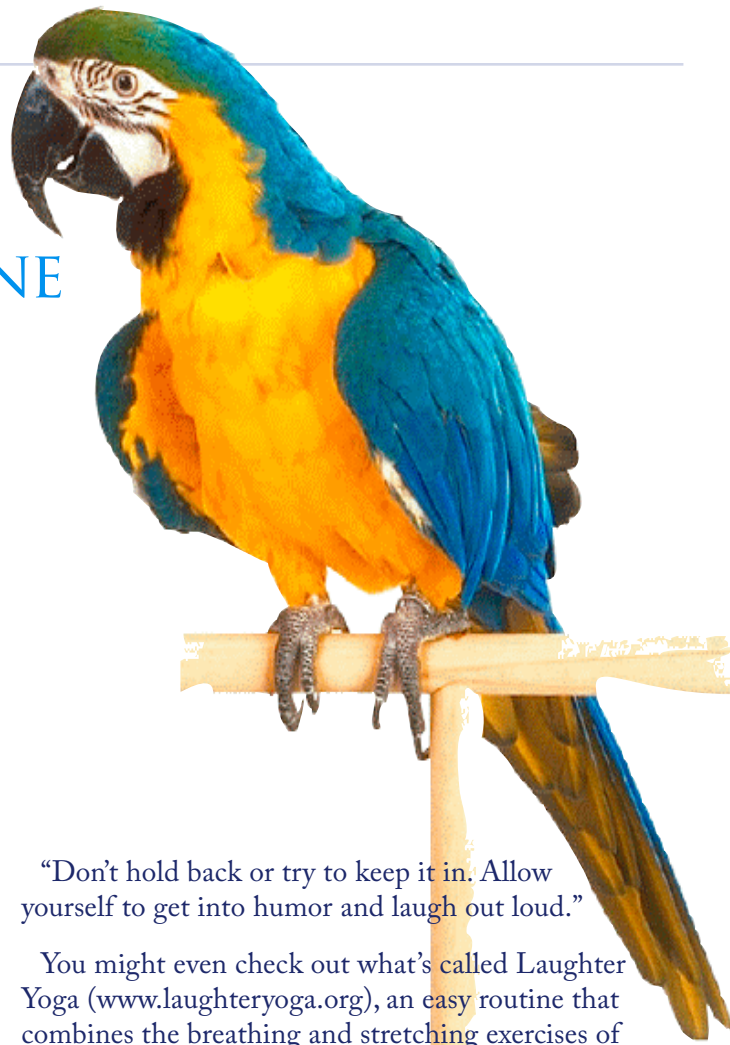
...the specific nature of the combat experiences, the prevalence of mental-health problems prior to deployment, complicating factors such as sexual harassment or abuse in the deployed environment, and the trajectory of gender differences over time following return from deployment.

As further studies emerge it is likely that there will not be a simple conclusion about the relationship of gender and combat to the mental health of veterans of this war. The available data point to an important hypothesis that combat duty in Iraq or Afghanistan, due to the high intensity and persistent level of threat, acts as a great equalizer of risk, resulting in similar rates of PTSD and depression for men and women.

*Published in the *International Journal of Epidemiology*, March 2007



LAUGHTER



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SO, A SAILOR, A MARINE AND A PARROT ARE SITTING AT A BAR...

...and the parrot says, “When it comes to stress, it’s time to get serious about laughter.”

Whether it’s a giggle or a guffaw, laughter in all its forms is good for you. Even gelotology, the scientific name for the study of laughter, is a word that lends itself to a smile.

Here are just a few of the benefits of a good laugh: It lowers blood pressure, boosts the immune system and reduces pain. Laughter decreases the levels of the stress hormones cortisol and epinephrine, cushioning mood disturbances and uplifting our spirits.

“Make a plan to expose yourself to as much humor as possible. Make laughter a part of the therapy process,” says Dr. Bart Jarvis, a clinical psychologist and head of the NCCOSC Programs Division.

Jarvis has written about laughter as a treatment for Vietnam veterans with post-traumatic stress disorder. “Laughter helped me overcome PTSD, and I wanted to study its effects on others,” he says. “Emotional resilience is something that can be acquired, and one of the best tools we have to build it is humor.”

Laughter is especially useful for putting space between yourself and a horrible situation, Jarvis adds. “With hindsight, most of the bad things we go through in life have a hilarious element to them when looked at with some distance.”

But these are dark days, you say. What’s there to laugh about? Rent funny movies, watch old sitcoms, go to a comedy club, form a humor group among friends, Jarvis says.

“Don’t hold back or try to keep it in. Allow yourself to get into humor and laugh out loud.”

You might even check out what’s called Laughter Yoga (www.laughteryoga.org), an easy routine that combines the breathing and stretching exercises of yoga with ha-ha-ha rather than om-om-om. With such fans as Oprah Winfrey and noted medical author Dr. Andrew Weil, the movement claims to have more than 6,000 laughter yoga clubs around the world.

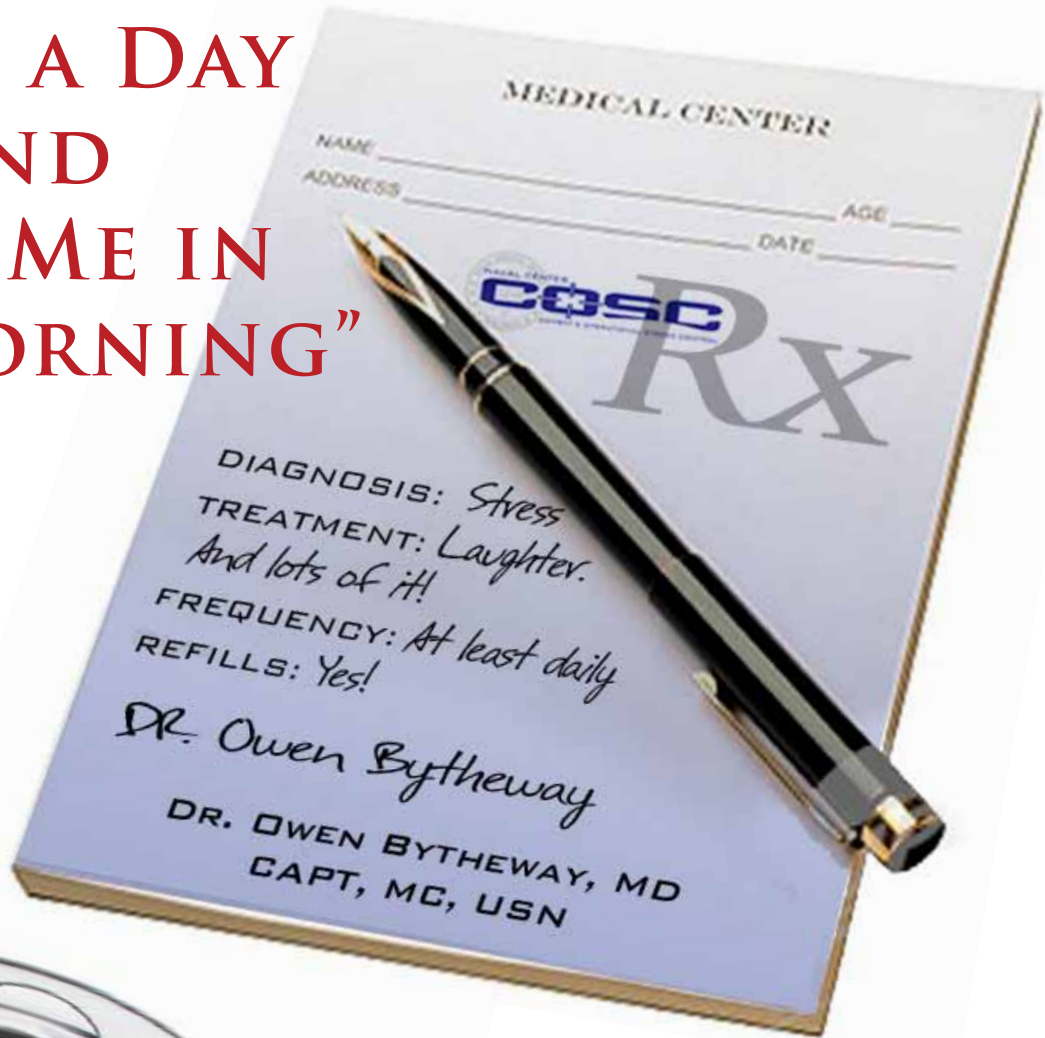
When all else fails, fake it. Research shows that the body cannot distinguish between real, deep laughter and bogus belly laughs. The positive benefits of a good laugh are the same either way.

Whether it’s a giggle or a guffaw, laughter in all its forms is good for you.

Even gelotology, the scientific name for the study of laughter, is a word that lends itself to a smile.



“TAKE TWO JOKES A DAY AND CALL ME IN THE MORNING”



Everybody loves lists, so the *Mindlines* crew thought it would be fun to publish a collection of all-time favorite comedies — as selected by the good-humored staff at NCCOSC.

A few selections follow, and the entire compilation is at: <https://www.nccosc.navy.mil/PTSD-TBI/Pages/Healthy-Habits.aspx>

Our funny flick faves include :

- Adventures of Buckaroo Banzai
- Dr. Strangelove,
- What About Bob?
- Naked Gun
- Tootsie
- Duck Soup
- There's Something About Mary

PTSD & ACUPUNCTURE

Sticking it to PTSD

Procedure Now Offered at Military Treatment Facilities

The ancient Chinese application of acupuncture is gaining new attention as a treatment for post-traumatic stress disorder (PTSD). While the therapy has not been studied in depth for PTSD treatment, limited research has shown impressive results and more studies are planned.



The Pentagon, for example, is spending \$5 million to investigate whether acupuncture and other so-called complementary and alternative therapies are effective measures in the fight against combat-related PTSD.

"We are increasingly willing to take a hard look at even soft therapies," Dr. S. Ward Casscells, the Pentagon's assistant secretary for health affairs, recently told a newspaper.

Sailors and Marines diagnosed with PTSD are now able to receive acupuncture at military treatment facilities, according to Dr. Paul Miller, M.D., a clinical researcher and consultant to the Naval Center for Combat & Operational Stress Control. He helped clear the way for the program to begin at MTFs.

"I've observed numerous cases where acupuncture has been helpful in treating mental-health issues, and this includes PTSD," says Miller, who is on the teaching faculty of Pacific College of Oriental Medicine in San Diego.

Acupuncture is a technique of inserting and gently manipulating tiny, thin needles into specific points on the body to relieve pain or for other therapeutic purposes.

Successful treatment for PTSD may require just a few sessions of acupuncture for mild symptoms or more than 10 for more severe symptoms, Miller says.

One study that highlights the effectiveness of acupuncture for PTSD patients compared results from a group that underwent cognitive behavioral therapy (one of the more common "talk therapies" for PTSD treatment) with a group that only received acupuncture. Both sets of patients reported a similar reduction in symptoms — a finding that held up three months later when the groups were tested again.

Researchers hope that the availability of acupuncture and other less traditional treatments will help lessen the resistance that keeps a sizeable percentage of service



members with PTSD and other stress-related injuries from seeking treatment.

Common reasons service members give for not getting treatment include distrust toward mental-health professionals, concern they will be perceived as weak among their command leadership and fellow troops, reluctance to make a commitment to the time some talk therapies require, and an unwillingness to take prescribed anti-depression medication.

"For some people, seeing a psychiatrist just isn't acceptable," Miller says. "Acupuncture could be a very good alternative for them."

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A Holistic Approach to PTSD

A small but growing body of evidence suggests that some holistic treatments are useful in relieving the symptoms of post-traumatic stress disorder (PTSD). This is especially important news in light of reports that a sizeable percentage of service members in need of mental-health treatments don't get them because they do not believe in traditional psychological approaches.

Compiled by the NCCOSC Research Facilitation Division, here is a quick recap of research related to PTSD and alternative treatments:

Massage therapy is well-established as a stress-reducing technique. Studies show that the stress hormone cortisol, which increases blood pressure and blood sugar, is reduced following massage, while the neurotransmitter

serotonin, which moderates body temperature, mood and sleep, is increased.

At least one study shows that feelings of mental fatigue (after performing a stressful task) significantly decline when **aromatherapy massage** is performed, more so than with massage alone.

Yoga has been shown to be effective in reducing stress and anxiety and adds to a general improvement in overall mental health. Although no research has been conducted with individuals suffering from PTSD, **tai chi** appears to reduce cortisol levels and improve mood just as well as a brisk walk.

Another alternative therapy tool that has been suggested for PTSD treatment is **mindfulness-based stress reduction (MBSR)** through meditation and mantras, which is the repetition of a word or a phrase. Studies have shown that repetition can have soothing effects that may help in reducing the symptoms of anxiety disorders and improve spiritual well-being.

MBSR — where participants are taught to draw on their inner resources and to actively take care of themselves — has been reported to reduce anxiety in a broad range of clinical populations. Its effectiveness in alleviating symptoms of specific anxiety disorders, however, is not well established.

While some claim that certain herbal and dietary products (such as kava root, lemon balm, lavender, passion flower and valerian) reduce PTSD symptoms, none has been proven to help PTSD.

WORK TOPS THE STRESS LIST FOR WOMEN SAILORS

Occupational concerns are the top cause of stress among active-duty female Sailors, according to a survey conducted by the NCCOSC Programs Division. Just over 30 percent of women participating in the survey say work conditions are their No. 1 source of stress.

Other significant sources of stress listed by the women:

- **Financial hardship, 16.7 %**
- **Children & family issues, 13.6 %**
- **Relationships, 13.6 %.**

Also capturing spots on the top-stress list were quitting smoking, inadequate time to finish tasks and finding time for physical fitness.

The survey was conducted among Navy enlisted and officers attending a women's health symposium held at Naval Base San Diego, where NCCOSC gave a presentation on identifying and relieving stress symptoms.

"We were gratified to see that nearly all of the survey respondents said they found the presentation useful,"

says Shannon Lelakes, of the Programs Division.

"Currently, there is minimal data regarding stress specific to Navy women, and NCCOSC will be using this presentation and survey results as the first steps to develop information that meets the unique needs of female personnel."



Yes, You Need an **S!**

The NCCOSC website is now available at

<https://www.nccosc.navy.mil>

Type it exactly as shown to find dozens of informative, interesting stories. Remember to bookmark the site so you no longer must remember that pe-S-ky S.



Seeing Double

Both genetic and environmental factors increase the risk of developing PTSD, according to the results of a 10-year investigation that studied 100 combat veterans of the Vietnam War, each of whom had an identical twin who did not serve in combat.

“Because twins have the same genes and the same family upbringing, (it was assumed) that the twin who did not serve in combat represents what the combat-exposed twin would be like except for the combat exposure,” says Dr. Roger Pitman, a psychiatry professor at Harvard Medical School and the study’s author. “We discovered a number of abnormalities in PTSD combat veterans not shared with their twins and we infer that the abnormality was caused by combat.”

These findings include an increased heart rate when the combat vet is startled. Researchers also found that combat vets lost gray matter in an area of the brain that plays a role in inhibiting the fear response, and an area in the brain used for decision-making is smaller in the combat vets in comparison to their twins.

The combat-exposed vets had an array of psychiatric symptoms that were not seen in their twins. “This tends to refute (the theory) that persons with PTSD would have had psychiatric problems if they hadn’t been exposed to a traumatic event,” Pitman says.



Speaking of Heredity

Vulnerability to PTSD, anxiety and depression runs in families, according to a UCLA research team that studied 200 participants from 12 multigenerational families that survived a devastating earthquake in Armenia.

BRIEFINGS

The results showed that a significant amount of genes are shared between PTSD and depression, PTSD and anxiety and between depression and anxiety.

“It’s very hard to do family studies on PTSD because typically only single individuals, not whole families, are exposed to a particular trauma,” said one of the researchers. “In our study, we were able to avert this problem since all the subjects were exposed to the same severe trauma at the same time.”

The 200 study participants all saw destroyed buildings, 90 percent witnessed dead bodies lying in the streets, and 92 percent saw severely injured people.



Moderate, Severe TBI and Long-term Health Effects

Military personnel who suffer severe or moderate traumatic brain injury (TBI) face an increased risk for developing several long-term health problems, including Alzheimer’s-like dementia, aggression, memory loss, depression and symptoms similar to those of Parkinson’s disease. That’s the finding in a report recently released by the Institute of Medicine regarding one of the most common dangers for troops in Afghanistan and Iraq — explosive blasts without a direct blow to the head. The blasts may or may not cause loss of consciousness.

The report, based on a study by the Department of Veterans Affairs, warns that TBI may be under-diagnosed due to a lack of research on blast injury. It calls for the Department of Defense and the VA to step up clinical studies on what’s called BINT, blast-induced neurotrauma.



Go For the Green!

A pocket version of the **Stress Continuum** is included in this issue of *Mindlines*. The z-fold style is useful for display on your desk or to carry with you.

The continuum is a quick reference tool to promote psychological health among service members, families and commands. It is color-coded to help identify behaviors and to detect and defuse stress reactions before they become stress injuries.



Ready Reacting Injured Ill

The Stress Continuum
Know it. Love it. Use it!



Comments? Questions?

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Mindlines is a publication of the NCCOSC Communications Division