

Noteworthy Briefs from the Field

HIGH RATES OF PSYCHIATRIC DISORDERS FOUND IN THE WIVES OF DEPLOYED SOLDIERS

Active military deployment can be a stressful period for both the family member on active deployment as well as family members at home waiting for a safe return. The mental health status of the wives of active military personnel, including those soldiers that are still at home and those that are deployed, has not frequently been studied.

Alyssa Mansfield, PhD, and colleagues reviewed the electronic medical records of >250,000 female spouses of active duty Army personnel receiving outpatient care between 2003 and 2006. Of the wives studied, ~31% had husbands that were currently home, ~34% were stationed overseas between 1–11 months, and 35% were deployed for >12 months.

Mansfield and colleagues found higher rates of mental health diagnosis in the wives of soldiers who were deployed for >12 months compared to those deployed for shorter periods of time or still stationed at home. The Table provides the adjusted analysis of wives whose husbands were not deployed and whose husbands were deployed between 1–11 months compared to the wives whose husbands were deployed for >12 months. When converting the excess cases to potential patients, Mansfield and colleagues found that the 41.3 excess cases would attribute to 3,474 mental health diagnoses and the 60.7 excess cases would attribute 5,370 mental health diagnoses.

Although there are limitations to this study, Mansfield and colleagues believe that this data proves that treatment options and preventive measures not only need to be offered to returning soldiers, but also to all military family members. (N Eng J Med. 2010;362(2):168-170.) –CN

HYPERTENSION, WHITE MATTER BRAIN LESIONS, AND DEMENTIA RISK IN OLDER WOMEN

Older women with hypertension may be at greater risk for abnormal white matter lesions in the brain that can cause dementia. The relationship between hypertension, blood pressure, and blood pressure control with white matter abnormalities in the Women’s Health Initiative (WHI) Memory Study—MRI Trial was studied by Lewis H. Kuller, MD, PhD, at the University of Pittsburgh.

The study’s sample included 1,403 women, ≥65 years of

TABLE
ADJUSTED ANALYSIS OF DISORDERS IN WIVES OF DEPLOYED AND NON-DEPLOYED SOLDIERS

Wives of Soldiers Not Deployed and Deployed between 1–12 Months

<i>Diagnosis</i>	<i>Excess Cases (Per 1,000)</i>	<i>95% CI</i>
Depressive disorders	27.4	22.4-32.3
Sleep disorders	11.6	8.3-14.8
Anxiety disorders	15.7	11.8-19.6
Acute stress reactions and adjustment disorders	12	8.6-15.4

Wives of Soldiers Deployed for >12 Months

<i>Diagnosis</i>	<i>Excess Cases (Per 1,000)</i>	<i>95% CI</i>
Depressive disorders	39.3	33.2-45.4
Sleep disorders	23.5	19.4-27.6
Anxiety disorders	18.7	13.9-23.5
Acute stress reactions and adjustment disorders	16.4	12.2-20.6

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age, from the WHI study. All participants had no dementia at baseline and received blood pressure, cognitive, and magnetic resonance imaging (MRI) assessments.

According to MRI, women receiving hypertension treatment, with blood pressure $\geq 140/90$ mm Hg, had the greatest number of abnormal white matter lesions. Women receiving no hypertension treatment, with blood pressure $\geq 140/90$ mm Hg, had “intermediate” levels of abnormal white lesions. The white matter lesions were more likely to appear in the frontal lobe, compared to the occipital, parietal, or temporal lobes, and baseline blood pressure was strongly associated with white matter lesion volumes.

Previous evidence, combined with the current study, continues to suggest that maintaining health blood pressure levels consistently and sooner in life is the best preventive measure against dementia.

The WHI program is funded by the National Heart, Lung, and Blood Institute of the National Institutes of Health. (*J Clin Hypertens. Epub Dec. 16, 2009*) –LS

SUDDEN INFANT DEATH SYNDROME LINKED TO LOWER LEVELS OF SEROTONIN

Sudden infant death syndrome (SIDS) is the leading cause of postneonatal infant death in the United States. During a critical developmental period, SIDS is speculated to result from abnormalities in brainstem control of autonomic function and breathing. It has been reported that irregularities

of serotonin (5-HT) and tryptophan hydroxylase (TPH2) receptor binding in regions of the medulla oblongata have been documented in infant deaths resulting from SIDS.

The hypothesis that SIDS is connected with reductions in tissue levels of 5-HT, TPH2, or both was tested by Jhodie R. Duncan, PhD, and colleagues at the Children’s Hospital Boston and Harvard Medical School in Massachusetts. For biochemical analysis, the study involved 35 infants who had died from SIDS, five infants with acute death from known causes, and five hospitalized infants with chronic hypoxia-ischemia. Through autopsy, tissue samples were obtained and several enzymes, including 5-HT and TPH2, were analyzed and measured.

In the raphé obscurus and the paragigantocellularis lateralis regions of the brain, the researchers found that 5-HT levels were 26% lower in SIDS cases compared with age-adjusted controls. TPH2 levels were 22% lower in the raphé obscurus in the SIDS cases, and 5-HT levels were 55% higher in the raphé obscurus and 126% higher in the paragigantocellularis lateralis in the hospitalized group compared with the SIDS group.

According to the authors, SIDS can be viewed as possibly being caused by a defect in one or more parts of the medullary 5-HT system.

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