Treatment of Substance Abuse in Military Hampered by "Old-fashioned" Approach

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To combat emerging substance use problems among military personnel and veterans, the Department of Defense (DOD) must abandon outdated treatment practices, strengthen its clinician workforce, and promote early treatment through screening and confidential care, according to a report from the Institute of Medicine (IOM) (http://tinyurl.com/cqngzkz).

Substance use disorders have long been a major concern for the military, as personnel grapple with the stresses of deployments and the physical and psychological traumas of war. But recent anecdotal reports and data suggest that risky alcohol consumption and prescription drug abuse have increased substantially in the military over the past decade. Nearly half of the service men and women surveyed in 2008 reported binge drinking (defined as drinking 5 or more drinks on the same occasion) in the past month, compared with 35% in 1998, according to data from the DOD Surveys of Health Related Behaviors among Military Personnel. Additionally, reported misuse of opioid pain medications has increased from 2% in 2002 to 11% in 2008.

Congress mandated an outside review of substance abuse care for members of the military as part of the National Defense Authorization Act, and the DOD commissioned the IOM to conduct the review. Senator Claire McCaskill (D, Mo) proposed the review and other measures to overhaul care for substance abuse in the military following a whistle-blower report of inadequate staffing and other problems hindering substance abuse treatment at Fort Leonard Wood in Missouri.

The IOM found that the care being offered for substance abuse disorders in the military is decades behind the times. Committee member Dennis McCarty, PhD, professor of public health and preventive medicine at Oregon Health & Science University in Portland, explained that clinicians in the TRICARE program, which serves most active-duty service members, are bound by regulations enacted in the 1980s that were based on the treatment paradigms of the 1970s and 1980s. The result, he said, has been an overemphasis on inpatient care that not only limits access to care but also fails to account for the chronic and often relapsing nature of substance abuse disorders. Current evidence-based care reserves inpatient treatment for the most medically complex cases and emphasizes multidisciplinary outpatient care, according to the report.

McCarty noted that TRICARE clinicians are also prohibited from treating substance abuse disorders with agonist medications such as buprenorphine, which have become a key tool for managing cravings in patients with these disorders.

"Modern treatment of substance abuse disorders does involve medications," said Charles P. O'Brien, MD, PhD, chair of the IOM committee that developed the report and director of the Center for Studies of Addiction at the University of Pennsylvania in Philadelphia. "The approach to treatment of substance use disorders in the military tends to be old-fashioned."

The IOM called for better adherence to the 2009 Clinical Practice Guideline for the Management of Substance Abuse Disorders created by the Department of Veterans Affairs (VA) and the DOD (http://tinyurl.com/cc4eqt4), noting that this has helped improve care at VA facilities. However, adherence in TRICARE has been low because there has been no requirement to provide evidence-based care, according to the report.

Inadequate staffing levels, particularly of clinicians with appropriate training, have also impaired the military's response to increasing rates of substance abuse disorders. The report calls for the adoption of a model in which multidisciplinary teams, each led by a primary care physician, provide sub-

Samuel King Jr/US Air Force

Despite elevated rates of heavy drinking and other substance use problems in the military in recent years, the military's system for treating such problems is outdated, an Institute of Medicine report found.

stance abuse care as a routine part of primary care. O'Brien said that screening for substance abuse disorders should become a standard component of the medical workup, and that the Affordable Care Act will help boost such screening in the military and society at large. Making such screening routine should help reduce the stigma of substance abuse and also reduce the cost of providing care by facilitating early intervention.

"Right now, we do a poor job of identifying substance use disorders until the condition becomes very expensive to treat," O'Brien said.

McCarty noted that despite the increased rates of substance abuse in the military and high tempo of current military operations, the numbers of service men and women accessing care remains low. This may in part result from the lack of confidential treatment options and concerns about disciplinary actions. The committee cited the Army's Confidential Alcohol Treatment and Education Pilot as a good model for increasing access to confidential care, noting that a wider range of service members, including officers, have sought care through the program.

Provisions must also be made to ensure continuity of care for veterans as they depart the military and for reservists as they leave active duty, the report notes. In addition, the report called for limits on alcohol, noting that the availability of cheap alcohol on many military bases may encourage risky behaviors, as well as more prevention efforts, including the implementation of prescription monitoring programs. □

Record Heat May Have Contributed to a Banner Year for West Nile Virus

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With nearly 4000 cases of West Nile virus reported to the US Centers for Disease Control and Prevention (CDC) as of early October, more than 5 times the number of cases reported in 2011, the 2012 West Nile virus season has been one of the worst since the virus emerged in the United States in 1999.

This surge in cases—which was concentrated in Texas, Mississippi, Michigan, South Dakota, Louisiana, Oklahoma, and California—likely resulted from a confluence of ecological factors, including higher-than-normal temperatures, that may have influenced mosquito and bird abundance, the replication of the virus in its host mosquitoes, and interactions of birds and mosquitoes in hard-hit areas, according to Lyle Petersen, MD, MPH, Director of the CDC's Division of Vector-Borne Diseases. Petersen discussed this year's resurgence of West Nile virus with *JAMA*.

JAMA: Was what happened this year unexpected?

Dr Petersen: Outbreaks of arboviruses, like West Nile virus, historically are very episodic in nature. When West Nile virus marched across the country, we didn't really know what was going to happen, but St Louis encephalitis, a similar arbovirus tracked since the 1930s, is a good model of how West Nile virus may behave in the United States. In some years, there are very few cases of St Louis encephalitis, but it periodically causes focal or regional outbreaks big and small, including a huge epidemic in the Midwest in the 70s. People are still trying to figure out why. It's very difficult to predict when and where arbovirus epidemics will occur.

James Gathany/CDC

Ecological changes likely led to outbreaks of West Nile virus infection in 2012, said Lyle Petersen, MD, MPH, Director of the Division of Vector-Borne Diseases at the Center for Disease Control and Prevention.

JAMA: What trajectory has West Nile taken since it was introduced here?

Dr Petersen: From its 1999 discovery in New York City through 2001, West Nile virus spread across the eastern United States but caused relatively few human cases. Big outbreaks occurred in 2002 and 2003, when the virus spread into the Midwest and mountain states where all the birds were susceptible, sufficient water existed to breed many mosquitoes, and weather was warm. It was the perfect storm. The virus spread to the West Coast in 2003 and has become endemic nationwide. But in the last few years, West Nile virus seasons have been less active, so this year's outbreak came as a surprise to those not familiar with the sporadic nature of arboviruses. The bottom line is that West Nile virus is here to stay and it will cause large and small outbreaks for years to come.

JAMA: Has West Nile virus behaved differently in the United States than in other regions where it is endemic?

Dr Petersen: West Nile virus is endemic in Africa. What is interesting is