

## Improving primary care for military personnel and veterans with posttraumatic stress disorder—the road ahead<sup>☆</sup>

In an excellent study appearing in this issue of the *General Hospital Psychiatry*, Magruder et al. [1] report on a systematic regional VA primary care sample of military veterans and find that 11.5% of the subjects meet research interview criteria for posttraumatic stress disorder (PTSD). This is the largest study of PTSD in primary care to date and reveals substantial room for improvement in services. For example, only 18% of primary care patients not receiving specialty mental health care but meeting research criteria for PTSD were recognized to have PTSD, although these patients averaged 3.5 primary care visits a year. How this compares with the primary care management of PTSD in other health care systems is unknown, but one might speculate that PTSD care in the VA, a system designed for the care of war veterans, is probably better than most.

What should be our clinical and health policy response? The need for primary care PTSD screening may seem obvious. Successful primary care screening and management of PTSD has the potential to improve care for the majority of the general population [2], and this appears to hold true for military personnel as well. In the Department of Defense system, nearly all military personnel access primary care annually, with automated data from the military health care system documenting approximately 12 million visits per year for roughly 2.4 million active component and activated reserve component military personnel (Colonel Mark Rubertone, personal communication, December 6, 2004). Many questions remain, however, regarding the optimal timing and tools for PTSD screening in military and veteran populations. For example, the only brief primary care screening tool with published data supporting its use employs four items [3]. In most primary care settings, even four questions is too cumbersome for routine use as a screening tool because of limited time and many competing priorities. In addition, the diagnostic criteria for PTSD are more complex than those for major

depressive disorder, and nothing is known regarding primary care clinicians' capacity to use a screening result to formulate a preliminary PTSD diagnosis without specialist assistance.

Even given field-tested screening tools and primary care clinicians who can use them to make a valid PTSD diagnosis, aggressive case finding may be inadvisable until feasible and effective primary care therapies for PTSD are identified. An important lesson from the literature on depression in primary care is that specialty mental health patients manifest more severe illness than primary care patients do [4]. Furthermore, depressed primary care patients who are recognized have more severe and persistent depression than depressed primary care patients who are not recognized [5]. When used for more mildly ill primary care patients, the risk–benefit profile associated with various treatments may be less favorable than in specialty settings. To date, virtually all PTSD treatment studies have been completed in specialty settings; without proven primary care therapies for PTSD, primary care screening may not help those suffering from PTSD and may even do harm by detecting insoluble cases that compete for clinician time and resources with illnesses and injuries for which effective solutions already exist.

The need to base psychological trauma care on setting-specific evidence is perhaps best illustrated by our evolving understanding about the use of debriefing to prevent adverse consequences of traumatic stress. For years we have practiced critical incident stress debriefing and other common sense notions of “psychological first aid,” only to learn that clinical trials show no evidence of benefit [6,7]. Some of the best studies with the longest follow-up periods even suggest that individuals debriefed early after traumatic experiences do more poorly than those who are essentially left to their own healing process [6]. One potential explanation for this finding is that mental health outcomes are favorable for the significant majority of those who experience a traumatic event. Because most individuals do well, they cannot derive much benefit from debriefing. This lack of benefit renders the potential for adverse effects more important and drives down the overall risk–benefit profile of

<sup>☆</sup> All opinions expressed are the private views of the author and are not necessarily the views of the Walter Reed Army Medical Center, Uniformed Services University, the U.S. Army, the Department of Defense or the U.S. Government.

the debriefing. A similar phenomenon may occur if we use specialty care PTSD therapies in primary care without first testing them in primary care settings.

There are now at least three evidence-based practice guidelines for PTSD available, and an empirically derived standard of care has evolved [8–10]. However, as we look to improve the primary care management of PTSD, we must remain circumspect. Evidence-based therapeutic options for PTSD remain limited and the empirical literature on this disorder is sparse compared with that on major depression or panic disorder. While almost all clinical PTSD research have been done in specialty care settings, Magruder et al. find that only 48% of VA primary care patients with PTSD received specialty mental health care. The reasons for low rates of specialty PTSD care are likely to be complex [1]. For example, even when recognized and referred to specialty care, many depressed patients fail to follow through [11]. Some simply do not want specialty care. Still others with less severe or self-limited illness may be appropriately managed in primary care. In short, simplistic attempts to achieve universal referral of primary care patients with PTSD to specialty settings are likely to create rather than solve problems.

The challenges associated with improving PTSD care in primary care settings are arguably even more formidable in the defense health system [12]. In the military, for instance, primary care is delivered in clinical settings as diverse as unit-based battalion aid stations (essentially a tent with no automation), busy troop medical clinics, community hospitals and large tertiary care medical centers. Some of these settings have little or no local specialty mental health resources available to them, further heightening the need for a primary care improvement focus. In most military and VA system facilities, however, specialists are available and collaborative care models hold promise for improving the intensity and continuity of care for some PTSD patients. Zatzick et al. have successfully tested one such model for victims of severe physical trauma emergently sent to a Level 1 surgical trauma facility [13]. Their collaborative management model is noteworthy for its emphasis on injury-related PTSD as well as on substance misuse and depression. The importance of attention to common PTSD comorbidities in collaborative management models is underlined by Magruder et al. finding that 87% of VA primary care patients with PTSD suffered from one or more additional psychiatric disorders and that over half reported suicidal ideation [1].

Magruder et al.'s research represents one more important step toward a population health approach to PTSD prevention and management for military personnel and veterans. The issue has enormous currency given that America is now in the midst of its most significant military conflict since the Vietnam War. Hoge et al. reported that 5%–9% of deploying soldiers and 13%–18% of military personnel returning from Iraq met survey criteria for PTSD [14]. A large majority (78%–86%) of returning personnel who met survey criteria for PTSD, major depression or

generalized anxiety disorder acknowledged having a problem, but only 13%–27% had received specialty mental health care in the previous year [14]. These data suggest that PTSD care must be pushed forward in time, treatment settings and across the systems of care that military personnel and veterans use most frequently.

Comprehensive population-based models of care for symptoms and disability after war, disaster and terrorist attacks have emerged from previous conflicts and other national security challenges [15–18]. These models have used the best available evidence to inform when, where and how screening and intervention should occur following community trauma and may offer a sense of direction for improving preclinical and clinical PTSD care across the Department of Defense and VA health care systems. Key strategies employed are population surveillance, targeted screening, stepped intervention and the use of automated data for coordinating and improving care, implementing guidelines and identifying unmet needs.

Achieving comprehensive population-based PTSD care for military personnel and veterans will require ongoing strategic planning, resource sharing and collaboration in service delivery and health services research across the Department of Defense and VA systems. Clearly, more research is needed, particularly studies on preclinical and primary care populations, screening tools and interventions. In the meantime, we must balance mental health services research with carefully planned health service delivery. Enormous progress has occurred since the 1991 Gulf War, but more is needed. The men and women who risk their lives for our nation deserve nothing less.

Charles C. Engel, M.D., M.P.H.  
*F. Edward Hébert School of Medicine*  
*Bethesda, MD 20814-4799, USA*  
*E-mail address: cengel@usuhs.mil*

## References

- [1] Magruder KM, Frueh BC, Knapp RG, et al. Prevalence of posttraumatic stress disorder in VA primary care clinics. *Gen Hosp Psychiatry* 2005;27:169–79.
- [2] Green LA, Fryer Jr GE, Yawn BP, Lanier D, Dovey SM. The ecology of medical care revisited. *N Engl J Med* 2001;344(26):2021–5.
- [3] Prins A, Ouimette P, Kimerling R, et al. The primary care PTSD screen (PC-PTSD): development and operating characteristics. *Prim Care Psychiatry* 2004;9:9–14.
- [4] Wells KB, Burnam MA, Camp P. Severity of depression in prepaid and fee-for-service general medical and mental health specialty practices. *Med Care* 1995;33(4):350–64.
- [5] Simon GE, VonKorff M. Recognition, management, and outcomes of depression in primary care. *Arch Fam Med* 1995;4(2):99–105.
- [6] Rose S, Bisson J, Wessely S. A systematic review of single-session psychological interventions ('debriefing') following trauma. *Psychother Psychosom* 2003;72(4):176–84.
- [7] van Emmerik AA, Kamphuis JH, Hulsbosch AM, Emmelkamp PM. Single session debriefing after psychological trauma: a meta-analysis. *Lancet* 2002;360(9335):766–71.

- [8] VA/Dod Clinical Practice Guideline Working Group. Management of post-traumatic stress. Washington, DC. Veterans Health Administration, Department of Veterans Affairs and Health Affairs, Department of Defense, December 2003. Office of Quality and Performance publication 10Q-CPG/PTSD-03.
- [9] Ursano RJ, Bell C, Eth S, et al. Work Group on ASD and PTSD; Steering Committee on Practice Guidelines. Practice guideline for the treatment of patients with acute stress disorder and posttraumatic stress disorder. *Am J Psychiatry* 2004;161(Suppl 11):3–31.
- [10] Foa EB, Keane TM, Friedman MJ, editors. Effective treatments for PTSD: practice guidelines from the International Society for Traumatic Stress Studies. New York: Guilford Press; 2000.
- [11] Grunebaum M, Luber P, Callahan M, Leon AC, Olfson M, Portera L. Predictors of missed appointments for psychiatric consultations in a primary care clinic. *Psychiatr Serv* 1996;47(8):848–52.
- [12] Engel CC, Kroenke K, Katon WJ. Mental health services in Army primary care: the need for a collaborative health care agenda. *Mil Med* 1994;159(3):203–9.
- [13] Zatzick D, Roy-Byrne P, Russo J, et al. A randomized effectiveness trial of stepped collaborative care for acutely injured trauma survivors. *Arch Gen Psychiatry* 2004;61(5):498–506.
- [14] Hoge CW, Castro CA, Messer SC, McGurk D, Cotting DI, Koffman RL. Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *N Engl J Med* 2004;351(1):13–22.
- [15] Engel CC, Katon WJ. Population and need-based prevention of unexplained symptoms in the community. In: Institute of Medicine, editor. Strategies to protect the health of deployed U.S. forces: medical surveillance, record keeping, and risk reduction. Washington (DC): National Academy Press; 1999. p. 173–212.
- [16] Engel CC, Jaffer A, Adkins J, Sheliga V, Cowan D, Katon WJ. Population-based health care: a model for restoring community health and productivity following terrorist attack. In: Ursano RJ, Fullerton CS, Norwood AE, editors. Terrorism and disaster: individual and community mental health interventions. New York: Cambridge University Press; 2003. p. 287–307.
- [17] Engel CC, Jaffer A, Adkins J, Riddle JR, Gibson R. Can we prevent a second ‘Gulf War syndrome’? Population-based healthcare for chronic idiopathic pain and fatigue after war. *Adv Psychosom Med* 2004; 25:102–22.
- [18] Clauw DJ, Engel CC, Aronowitz R, Jones E, Kipen HM, Kroenke K, et al. Unexplained symptoms after terrorism and war: an expert consensus statement. *J Occup Environ Med* 2003;45(10):1040–8.