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Mental Health Problems among Iraq and Afghanistan Veterans: Prevalence Among Those Who Have Received VA Services and Those Who Have Not

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Abstract

Objective—Roughly half of OEF/OIF veterans have not received VHA services. This study assessed probable posttraumatic stress disorder (PTSD) and depression among VA-eligible OEF/OIF veterans by receipt of VHA services.

Methods—In 2010 a mixed-mode survey assessing symptoms of PTSD and depression and VHA services utilization was fielded in a random sample of 913 New York state VA-eligible OEF/OIF veterans.

Results—Probable PTSD and depression were roughly three times more common among veterans who had received VHA services ($N = 537$) (PTSD: $N = 123$, 23%; depression: $N = 114$, 21%) than those who had not ($N = 376$) (PTSD: $N = 21$, 6%; depression: $N = 29$, 8%).

Conclusions—Studies of veterans receiving VHA services likely overstate the prevalence of mental health problems among the broader OEF/OIF veteran population. However, many veterans with mental health problems are not receiving VHA services. Policies that improve outreach to this population may improve health outcomes.

High rates of posttraumatic stress disorder (PTSD) and major depressive disorder have been documented in several studies of veterans of Operation Enduring Freedom/Operation Iraqi Freedom (OEF/OIF) relative to the general population (1–3). However, some have suggested that the prevalence is relatively low, similar to the general population (4). One

review of studies on PTSD documented that estimates of the prevalence of PTSD in previously deployed OEF/OIF service members ranged across studies from five to 20% (5). These authors suggested that a major reason for this discrepancy is that individual studies may over- or under-represent veterans who seek health services. These divergent conclusions suggest the need for additional research on the prevalence of mental health problems among Iraq and Afghanistan veterans.

The Veterans Health Administration (VHA) has shown very high rates of diagnosed PTSD (22%) among those OEF/OIF veterans who have sought health care services in the VHA system (3). However, prevalence in a service seeking sample may differ dramatically from the entire OEF/OIF veteran population because roughly half of these separated veterans have not received VHA services (6). Unfortunately, almost no published data exist on the health of individuals who have separated from military service, but have not enrolled in the Veterans Affairs (VA) system (5). Because this under-studied population constitutes a large group of OEF/OIF veterans, documenting their health status is a critical step in determining the prevalence of mental health problems among the entire OEF/OIF veteran population.

Research on this under-studied population of veterans is also important when evaluating the health system that is designed to serve all veterans. Individuals excluded from the existing studies may be precisely those veterans who are not connected with the VHA system. Shedding light on the prevalence of mental health problems within this potentially underserved population is critical to identifying improvements in the health system. To help fill this gap, a survey was fielded to assess the prevalence of probable PTSD and depression in a random sample of VA-eligible OEF/OIF veterans, many of whom had not received VHA services.

Methods

Potential study participants consisted of all individuals who had previously deployed for OEF/OIF, became eligible for VA services between the summers of 2004 and 2009, and who had a New York address at the time they left active-duty. Individuals who had since re-enlisted in the military or been called back into active-duty were considered eligible for the study. Potential participants were identified from a list of names and addresses of all individuals who became eligible for VHA services. The list was obtained via a release of names and addresses (RONA) request as part of a larger project to conduct outreach and assess the needs of veterans residing in New York State. For this study, a random sample of 7,400 veterans was selected for contact from the complete list of approximately 45,000 individuals.

The mixed-mode survey included web-based and computer-assisted telephone interviewing (CATI) modes. All sampled individuals were initially mailed an invitation to participate which contained instructions for accessing the web-based survey. The invitation was accompanied by a letter of support from the New York State Division of Veterans Affairs. The contact information included a substantial number of inaccurate mailing addresses and did not include telephone numbers. When possible, invalid addresses were replaced and land-line phone numbers were obtained using commercial databases. Individuals who did

not respond via the web and had a valid telephone number were subsequently called, screened for study eligibility, and asked to participate in a CATI or web survey. Of those screened by phone, 47% were eligible; ineligibility was due to lack of deployment (36%) or no longer living in New York (16%). All respondents (N = 913) were provided \$30 for participating. The survey was fielded between August and October of 2010.

The recruitment of participants via phone and mail produces an unconventional sampling procedure with two sampling frames, a dual-mode sampling frame and a web-only sampling frame (i.e., those without a telephone number). The dual-mode sampling frame, which comprised 2,536 individuals with a valid telephone number, had an estimated response rate of 53% (American Association for Public Opinion Research [AAPOR], definition RR3) (7). A total of 728 respondents were recruited from this sampling frame. The web-only sampling frame, for which study eligibility is unknown, provided the remainder of participants. This study was approved by the Institutional Review Board of the institution at which the study was conducted. All respondents provided informed consent to participate after the procedure had been explained.

Participants reported a range of socio-demographic and service characteristics. Utilization of VHA services was assessed by asking participants to indicate whether they had used VA health care since leaving the military.

PTSD symptoms were assessed with the Posttraumatic Symptom Checklist (PCL), an instrument that contains 17 symptom items keyed directly to the Diagnostic and Statistical Manual, Fourth edition (DSM-IV) (8). The PCL has been used to study posttraumatic distress in various military samples (9, 10). Respondents rated the extent to which they had been bothered by symptoms during the past 30 days on a 5-point scale. Symptoms were considered present if respondents had been at least “moderately (3)” bothered by them. Probable diagnoses of PTSD were derived following the cluster scoring method (11), which corresponds to the DSM-IV definition and has been shown to have high specificity and sensitivity (12).

Major depression was assessed with the Patient Health Questionnaire-8 (PHQ-8), a well-validated, widely used brief screening measure (13, 14). Items correspond to DSM-IV criteria for major depressive disorder excepting thoughts of suicide. Responses indicate the frequency of symptoms experienced in the past four weeks on a 4-point (0–3) scale. Probable depression was indicated by a total score of 10 or above, which yields a sensitivity of .99 and a specificity of .92 (13).

Most respondents were male (N = 814, 89%), white (N = 661, 73%), married (N = 482, 53%), 35 years old or younger (N = 492, 54%), had no college degree (N = 612, 67%), and had no children under 18 living at home (N = 503, 55%). Most respondents had been enlisted personnel (N = 744, 82%), had experienced only a single deployment (N = 540, 60%), had returned from their most recent deployment more than two years ago (N = 668, 75%), and reported that their most recent deployment lasted for at least seven months (N = 656, 73%). Slightly over half of respondents were in the Army at the time of their most recent deployment (N = 497, 55%), and just under a fifth of respondents were in the Navy

(N = 123, 14%), Air Force (N = 149, 17%), or Marine Corps (N = 130, 14%). Slightly more than half of respondents reported having received VHA services (N = 537, 59%). The sample closely resembled the national population of military personnel previously deployed for OEF/OIF on a wide range of socio-demographic characteristics as determined by comparison to data from the 2008 Contingency Tracking System Deployment File and the Work Experience File from the Defense Manpower Data Center (DMDC).

Results

Rates of current probable PTSD and depression in the entire sample were both 16% (PTSD: N = 144; 95%CI[13–18]; depression: N = 143; 95%CI[13–18]). Roughly a fifth (22%) of veterans in this sample met criteria for one or both conditions (N = 200; 95%CI[19–25]). Of the 16% of individuals with probable PTSD, most (60%) also met criteria for probable depression.

Table 1 shows rates of probable PTSD and depression stratified by utilization of VHA services. For both disorders, the rates were approximately three times greater among respondents who had received VHA care relative to those who had not. Our prevalence estimates of probable PTSD and depression among respondents who had received VHA care are very similar to those reported in a census based on Veterans Administration data that documented prevalence estimates of 22% for PTSD and 17% for depression among OEF/OIF veterans seen in the VHA in between 2002 and 2008 (3).

Discussion

Overall, the rates of mental health problems observed in the current sample of OEF/OIF veterans residing in New York state closely resemble those observed in an earlier national study of OEF/OIF veterans and service members(1), both of which attempted to obtain a representative sample of those who had previously deployed to Iraq or Afghanistan, regardless of their current military status. The current study also closely replicates VHA administrative data on the rates of PTSD and depression diagnoses for those who have sought VHA services (3).

This study is the first to examine rates of mental health problems among OEF/OIF veterans who have not received VHA services, a subgroup that constitutes approximately half of the OEF/OIF veteran population. The veterans who had received VHA services showed rates of probable PTSD and depression that were approximately three times greater than the rates observed among veterans who had not. This helps to explain the relatively large gap in prevalence estimates across studies that sample from the military and those that sample from the VHA (5). These findings suggest that estimates based on VHA administrative records are not particularly useful for documenting the scale of the public health problem, although they are likely useful for internal VHA planning and resource allocation decisions.

Although PTSD and depression are more prevalent among veterans who have sought VHA services than among their peers who have not, a substantial proportion of the latter group (11%) have PTSD or depression. Given the size of the previously deployed force (15), and the low rate of VHA enrollment (6), this represents a significant number of veterans whose

treatment needs are not being met by the VHA. Considerable improvement in the health status of veterans may be achievable if these veterans can be connected with quality services. Additional research is needed to identify the barriers to care for these individuals and the extent to which they are accessing services through the private health care system.

The primary limitations of this study pertain to the sampling procedures. Many of the addresses obtained through the RONA request were out of date, which impeded our ability to contact potential participants. Because individuals in the web-only sampling frame self-screened, it is unclear how many of these individuals were eligible. The extent to which the current results based on NY veterans are representative of the larger population of OEF/OIF veterans is not currently known. However, the prevalence estimates of this study are generally similar to those of other studies. In particular, the prevalence of PTSD and depression among veterans who have received VHA services in our study is almost identical to research on veterans accessing VHA services (3).

Conclusions

The current study observed relatively high rates of PTSD and depression among previously deployed OEF/OIF veterans. However, these rates of mental health problems varied substantially across segments of this population, with rates of mental health problems approximately three times higher among veterans who had sought VA services than those who had not sought services. Although the rates of problems are lower among those who are not engaged in the VA system, many of these individuals may benefit from treatment and services provided by the VA. Improving the health outcomes for these veterans may require additional research to document the barriers to treatment for this group, as well as improving treatment outreach.

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Table 1

Rates of Probable PTSD and Depression by VHA Services Utilization (N = 913)

Condition	VHA services received (N = 537)			VHA services not received (N = 376)		
	N	%	95% CI	N	%	95% CI
Probable PTSD	123	23	19–27	21	6	3–8
Probable depression	114	21	18–25	29	8	5–10
Probable PTSD or depression	159	30	26–34	41	11	8–14

Notes. PTSD = Post-Traumatic Stress Disorder; VHA = Veterans Health Administration; CI = confidence interval.