

National Guard Families After Combat: Mental Health, Use of Mental Health Services, and Perceived Treatment Barriers

Lisa A. Gorman, Ph.D.

Adrian J. Blow, Ph.D.

Barbara D. Ames, Ph.D.

Philip L. Reed, Ph.D.

Objective: National Guard forces have deployed in large numbers to Iraq and Afghanistan since September 11, 2001. The purpose of this cross-sectional study was to assess mental health symptoms, utilization of mental health services, and perceived barriers to service use among National Guard members and their significant others (including spouses and others with whom they share a committed relationship) from a Midwestern state. **Methods:** Participants were recruited for the study at military-sponsored reintegration workshops, which took place 45–90 days after service members' return from deployment. A sample of 332 National Guard members and 212 significant others volunteered to complete a survey that assessed mental health symptoms, service utilization, and barriers to treatment. **Results:** Forty percent of National Guard members and 34% of significant others met the screening criteria for one or more mental health problems. Of those meeting the criteria, 53% reported seeking help of some kind (50% of soldiers; 61% of significant others). Stigma associated with mental health care and concerns about service utilization appearing on military records ranked high as barriers among service members. Concerns about the influence of mental health issues on career advancement were of note. For significant others, barriers included the costs of mental health care, trouble with scheduling appointments, difficulty in getting time off work, and not knowing where to get help. **Conclusions:** The mental health effects of combat on the soldier and his or her significant other remain a challenge for National Guard families, who often reside in communities that show little understanding of the psychological costs of war. Barriers remain for mental health service utilization. (*Psychiatric Services* 62:28–34, 2011)

National Guard and reserve service members are an integral part of the military and represent up to 50% of the U.S. forces serving in Iraq and Afghanistan. Collectively they equal 883,000 members nationwide, and nearly 75%

have been mobilized since 2001 (1). Unique challenges for reserve component members include civilian employment, economic security, health care, and community reintegration. National Guard families are dispersed geographically and do not

have the same access to military resources as those living near installations and often feel isolated from the military community. There is limited information pertaining to family members' mental health status along with their usage of services and their perceived barriers to care.

Service members who deploy are at risk of mental health problems, including posttraumatic stress disorder (PTSD) and depression (2–4). Hoge and colleagues (5) reported that after deployment to Iraq, National Guard (21%) and reserve (21%) troops screened positive for a mental health problem at a higher rate than active-duty (18%) members. Combat deployment for reserve and National Guard members has been associated with the onset of binge drinking and alcohol-related problems (6). Symptoms of mental disorders place all veterans at additional risk of suicide (7), up to eight times higher than that of the general population (8,9).

Deployment to a combat zone also places stress on troops' families and can affect the mental health of spouses or significant others (10,11). Military spouses receiving primary care on military installations showed mental health problems at rates similar to those of their Operation Enduring Freedom (OEF)–Operation Iraqi Freedom (OIF) service member (10). Among the National Guard and reserve members, 21% expressed concerns about interpersonal conflict on their Post Deployment Health Reassessment (PDHRA), whereas only 4% did so three to six months earlier

Dr. Gorman is affiliated with University Outreach and Engagement–National Guard Project, Dr. Blow and Dr. Ames are with the Department of Human Development and Family Studies, and Dr. Reed is with the Department of Epidemiology and the Biomedical Research Informatics Core, all at Michigan State University, 22 Kellogg Center, East Lansing, MI 48824 (e-mail: gormanl1@msu.edu).

on the initial postdeployment assessment (PDHA)—a significant difference (12). Negative interactions within the family system can intensify the development and continuation of PTSD (13,14). With 51% of National Guard and reserve members being married (13), considerations should be made for the mental health problems of the family in addition to that of the service member.

Mental health utilization is associated with a high level of stigma within the military (4,15). Studies indicate that although nearly one in five veterans screen positive for some mental health impairment, less than 40% with an identified mental health problem seek treatment. Service members express real and perceived fears that notations about mental health service use in their military records would prevent them from completing missions, redeploying, or receiving an earned promotion (2,15,16).

The purpose of this study was, first, to identify symptoms of mental health problems in a sample of National Guard members and their significant others after service members' return from OEF-OIF deployment and, second, to identify whether mental health services were utilized in the 12 months before the study assessment, the types of mental health services utilized by National Guard members and their significant others, and perceived barriers that would affect the participants' decisions to receive treatment. The guiding research question for the study was, "What are the mental health problems identified in a sample of National Guard service members and their spouses after returning from OEF-OIF, what types of mental health services do they report using, and what barriers do they identify related to mental health service utilization?"

Methods

Participants were recruited from among National Guard members and their spouses or significant others who were participating in one of nine reintegration workshops between October 2007 and August 2008 at conference centers in the Midwest. The reintegration workshop was mandatory for all returning National Guard

service members and was optional for all family members. The two-day programs took place approximately 45–90 days after service members' return home from a 12-month deployment. Service members may have had additional time away from family for pre-mobilization training. The sample included members from the following Military Occupational Specialties: infantry, transportation, service personnel, medical, military police, and security force. Attendance at the nine reintegration programs included 826 National Guard members and 588 family members. Workshop participants were told about the study during a general session. Service members and persons in a committed relationship with them ("significant others" used hereafter) were invited to participate. Of the National Guard and family members present during study recruitment, 332 National Guard members (40%) and 212 significant others (36%) volunteered to participate.

The study was conducted with consideration for human subject protection and followed the protocol approved by the Michigan State University Institutional Review Board. Informed consent information was provided to potential participants, who were briefed about their rights as participants and the potential risks associated with participation. Even though data were collected at the site of a military meeting, this meeting was formally adjourned and participants were free to leave the room before data collection. Emphasis was placed on the voluntary nature of the study. All data were collected with no identifying information and with an emphasis on anonymity. Participants deposited their completed surveys into a closed box; however, absolute anonymity could not be assured because study team members were involved in data collection. Participants received a \$10 gift card for their voluntary participation.

We assessed psychiatric symptoms in relation to PTSD, depression, suicidal ideation, and hazardous alcohol use. The Posttraumatic Stress Disorder Checklist—Military Version (PCL-M) (17) is a 17-item self-report measure of PTSD symptoms. Using the reference point of the previous 30

days, respondents were asked to answer each item in regard to their most distressing military event. A 5-point Likert scale was used, with responses ranging from 1, "not at all," to 5, "all the time" (5). The PCL-M can be used as a continuous measure of symptom severity by summing scores across the 17 items. Congruent with similar studies, participants were identified as meeting the criteria for a likely PTSD diagnosis if they had a PCL-M score of 50 or higher (2,17). The Cronbach's alpha for this study was .95. The PCL-M correlates strongly with other measures of PTSD, such as the Mississippi Scale, the PK scale of the Minnesota Multiphasic Personality Inventory–2, and the Impact of Events Scale for PTSD (correlations range from $r=.77$ to $r=.93$) (18).

The Stressful Life Event Screener was used to identify and reference traumatic life events of significant others in relation to nonmilitary events. This screening measure was adapted from Goodman and colleagues' Stressful Life Events Screening Questionnaire (19). Presented with a list of 15 stressful life events, respondents indicated whether they had experienced any of the events, as well as the event that was most distressing. In reference to their most distressing life event, significant others were asked to complete the Short Screening Scale, which assessed for PTSD symptoms (20). The Short Screening Scale for *DSM-IV* PTSD (20) is a seven-item self-report measure of PTSD symptomatology. In this study the Cronbach's alpha for the scale was .84. Significant others were identified as meeting the criteria for likely PTSD if they had a score of 4 or higher (20).

The Beck Depression Inventory—Second Edition (BDI-II) (21) was used to identify depression symptoms. This 21-item self-report inventory is effective in discriminating among individuals with various levels of depression, ranging from minimal to severe. The BDI-II has a high internal consistency, with a Cronbach's alpha of .91. Similar to other studies (22–25), in this study a total score of 14 or greater on the BDI-II was the criterion for having depression.

Suicidal risk was assessed with the

Table 1

Demographic characteristics of National Guard service members and their significant others^a

Characteristic	National Guard members (N=332)		Significant others (N=212)		Total sample (N=544)	
	N	%	N	%	N	%
Age group						
18–21	16	5	7	3	23	4
22–30	93	28	64	30	157	29
31–40	101	30	77	37	178	33
41–50	102	31	48	23	150	28
≥51	20	6	16	8	36	7
Gender						
Female	43	13	201	96	244	46
Male	283	87	8	4	292	54
Race or ethnicity						
African American	39	12	19	9	58	11
Caucasian	263	79	173	82	436	80
Hispanic	7	2	3	1	10	2
Native American	6	2	2	1	8	2
Asian American	6	2	4	2	10	2
Multiethnic	4	1	5	2	9	2
Other	5	2	4	2	9	2
Education						
High school diploma or GED	55	17	40	19	95	18
Some college	124	37	71	34	196	36
Technical certificate	23	7	12	6	35	6
Associate's degree	37	11	24	11	61	11
Bachelor's degree	74	22	50	24	124	23
Master's degree	15	5	11	5	26	5
Doctoral degree	4	1	3	1	7	1
Military rank						
Enlisted E1–E4	102	31			102	31
Enlisted E5–E9	168	51			168	51
Officer O1–O9	60	18			60	18
Warrant officer WO1–WO5	2	<1			2	<1
Marital status						
Married	214	65	177	85	392	73
Engaged	14	4	12	6	26	5
Divorced	23	7	5	2	28	5
Cohabiting	6	2	5	2	11	2
Separated	4	1	1	<1	5	1
Widowed	2	<1	3	1	5	1
Single	66	20	6	3	72	13
Family income						
≤\$20,000	30	9	19	9	49	9
\$20,001–\$30,000	42	13	29	14	71	13
\$30,001–\$40,000	57	17	33	16	90	17
\$40,001–\$50,000	52	16	28	14	80	15
\$50,001–\$75,000	75	23	42	21	117	22
\$75,001–\$100,000	36	11	29	14	65	12
>\$100,000	36	11	26	12	62	12
Rearing children						
Yes	216	65	163	79	379	70
No	116	35	43	21	159	30

^a Some participants did not answer every question; valid percentages are reported.

BDI-II question assessing suicidal thoughts. Individuals were considered to have risk associated with suicidality if their responses endorsed one of the following statements: “I have thoughts of killing myself, but I would not carry them out,” “I would

like to kill myself,” or “I would kill myself if I had the chance.”

The Alcohol Use Disorders Identification Test (AUDIT) (26) was used to assess for hazardous drinking. This ten-item self-report measure has been found to provide good discrimi-

nation across genders and multiple cultures and socioeconomic groups. The AUDIT showed a high reliability ($r=.86$) with a sample of nonhazardous drinkers, cocaine abusers, and persons with alcohol dependence (27); the Cronbach's alpha was .80 for this sample. Total scores of 8 or more indicated hazardous and harmful alcohol use.

An additional dichotomous variable was created to ascertain the presence of one or more identified mental health problems. A positive response was recorded for an identified mental health problem if someone met the study criteria for PTSD, depression, suicidal ideation, or hazardous alcohol use. Health care utilization was assessed by asking participants whether they had received mental health services during the prior 12 months for a problem related to stress, emotional issues, alcohol, or family. Participants indicated a yes or no response to a list of ten military and civilian providers. Questions assessing perceived barriers to seeking mental health services were adapted from a study by Hoge and colleagues (2) to address not only concerns of the National Guard service member but also to include issues relevant to significant others. Respondents were asked to rate each of the possible concerns that might affect their decision to receive mental health services. Five possible responses ranged from strongly disagree to strongly agree. Agree and strongly agree were considered an indicator of a perceived barrier to care.

Results

Service members ranged in age from 18 to 60, with 89% of respondents in the 22–50 range (Table 1). A majority of the service member respondents (87%) were male, Caucasian (79%), and relatively well educated, with 83% having education beyond a high school diploma. Seventy-one percent were either married or in a committed relationship. Demographic characteristics for significant others were similar, with a majority being 22–50 years old, female, and Caucasian. When demographic characteristics of our participants were compared with those of the Army National Guard

(13), some differences were notable, including an underrepresentation of people from racial-ethnic minority groups and young soldiers aged 18–21, as well as more married service members and more participants with children. At the reintegration event, younger soldiers were less interested in completing a survey, whereas soldiers who were married seemed more willing to volunteer. Only 5% of the sample was in the 18–21 age group, although nationally there are reportedly 31% under the age of 25 (13). Sixty-five percent of the service member participants were married, 65% were parents, and 21% were from minority groups, compared with national figures of 51%, 43%, and 20%, respectively (13).

Table 2 presents the incidence of mental health problems in our sample. Forty percent of National Guard members and 34% of their significant others met the screening criteria for at least one mental health problem. Significant others indicated symptoms that met the criteria for a PTSD diagnosis (17%), depression (22%), suicidal ideation (10%), and hazardous alcohol use (3%). National Guard mem-

Table 2

National Guard service members and their significant others who met screening criteria for a mental health problem^a

Mental health problem	National Guard members (N=332)		Significant others (N=212)		Total (N=544)	
	N	%	N	%	N	%
Posttraumatic stress disorder						
Military event	36	11			36	11
Stressful life event			35	17	35	17
Depression	68	21	45	22	113	21
Suicidal ideation	17	5	21	10	38	7
Hazardous alcohol use	66	20	7	3	73	14
One or more problems	133	40	72	34	205	38

^a Some participants did not answer every question; valid percentages are reported.

bers indicated symptoms that met the criteria for PTSD diagnosis related to a military event (11%), depression (21%), suicidal ideation (5%), and hazardous alcohol use (20%).

Table 3 summarizes utilization of mental health–related services. Findings indicate that among those meeting the criteria for a mental health problem, 47% reported no utilization of mental health care services in the past year. During the previous 12 months, which included deployment

to a combat zone and approximately 45–90 days of reintegration into the family, the four services used most frequently by all National Guard members in the sample were from a medical doctor at a military facility (71 of 330, 22%), a military chaplain (52 of 329, 16%), a mental health professional at a military facility (48 of 329, 15%), and a medical doctor at a civilian facility (38 of 329, 12%). Significant others reported receiving services mostly in the private sector,

Table 3

Utilization of mental health services by National Guard members and their significant others^a

	Total group						Persons with a mental health problem					
	National Guard members (N=332)		Significant others (N=212)		Combined (N=544)		National Guard members (N=133)		Significant others (N=71)		Combined (N=204)	
Professional service utilized	N	%	N	%	N	%	N	%	N	%	N	%
Mental health professional at a military facility	48	15	1	1	49	9	27	20	1	1	28	14
Medical doctor at a military facility	71	22	9	4	80	15	39	29	5	7	44	22
Military chaplain	52	16	6	3	58	11	31	23	3	4	34	17
Mental health professional at a civilian facility	18	6	39	19	57	11	15	11	21	30	36	18
Medical doctor at a civilian facility	38	12	76	37	114	21	22	17	36	51	58	29
Civilian clergy	14	4	16	8	30	6	8	6	10	14	18	9
Military One Source referral	18	5	17	8	35	7	12	9	9	13	21	11
Readjustment counseling at a veterans center	12	4	1	1	13	2	10	8	1	2	11	6
TRICARE referral	17	5	15	7	32	6	10	8	10	14	20	10
Other	6	2	7	3	13	2	3	2	4	6	7	4
Utilized at least one of these services	124	37	96	46	220	41	66	50	43	61	109	53

^a Some participants did not answer every question; valid percentages are reported. Participants were asked whether they had received during the prior 12 months mental health care from a list of potential providers.

largely from a medical doctor at a civilian facility (76 of 206, 37%) or a mental health professional at a civilian facility (39 of 207, 19%). Mental health services intended to support families during deployment and reintegration stresses were underutilized by this sample: Military One Source (35 of 533, 7%); TRICARE referral (32 of 532, 6%); and readjustment counseling at a veterans facility (13 of 532, 2%). Of those with at least one mental health problem, only 53% reported talking to someone on the list.

Perceived barriers to mental health care for National Guard members and their significant others are shown in Table 4. Our data indicate the perceived barriers to receiving mental health care for National Guard soldiers were less than those perceived by active U.S. Army and Marines sampled in 2003 (2). For example, 28% of National Guard members with identified mental health prob-

lems and 13% without identified mental health problems responded that "My unit leadership might treat me differently," compared with 63% of the earlier sample of soldiers and marines who met screening criteria for mental problems and 33% of those who did not meet the screening criteria for a mental problem (2). The greatest concern in our sample of National Guard members was having mental health care appear on their military records. This concern was reported by 45% (59 of 132) of soldiers who met the screening criteria for at least one mental health problem and 22% of soldiers who did not. Stigma (43 of 195) continues to be an important factor in the decision to receive mental health care. To test the relationship between having an identified mental health problem and perceived barriers to seeking mental health care, we used a chi square test of independence. Many barriers were sig-

nificant ($p < .001$) for soldiers: difficulty scheduling appointment, possibly harming career, too embarrassing, being viewed as weak, mental health care seems ineffective, unit members having less confidence in him or her, leaders might treat soldier differently or blame him or her, and not wanting mental health care to appear on the military record.

Findings for the sample of significant others indicated other concerns (Table 4). In this group, mental health care cost was most likely to affect their decision to receive mental health counseling. Cost was an issue for 37% (26 of 71) meeting the screening criteria for at least one mental health problem and 20% (27 of 136) not meeting those criteria. Other statistically significant barriers for significant others included difficulty scheduling an appointment, difficulty getting time off work, being viewed as weak, and having to

Table 4

Barriers to seeking mental health services for service members and their significant others who screened positive for a mental health problem and those who screened negative for a mental health problem^a

Perceived barrier	National Guard members					Significant others				
	Positive for mental health problem (N=133)		Negative for mental health problem (N=196)		χ^{2b}	Positive for mental health problem (N=71)		Negative for mental health problem (N=137)		χ^{2b}
	N	%	N	%		N	%	N	%	
I don't trust mental health professionals	29	22	25	13	4.64	5	7	7	5	— ^c
I don't know where to get help	12	9	7	4	4.35	15	21	13	9	5.54
I don't have adequate transportation	11	8	6	3	4.39	6	9	1	1	— ^c
It is difficult to schedule appointment	28	21	12	6	16.48**	19	27	14	10	9.59*
It is difficult to get time off work	27	21	20	10	6.45*	11	16	19	14	.10
Mental health care costs too much	29	22	28	15	2.91	26	37	27	20	7.04*
It might harm my career	33	25	22	11	10.45**	5	7	3	2	— ^c
It would be too embarrassing	32	24	17	9	14.74**	12	17	9	7	5.59
I would be seen as weak	41	31	18	9	24.92**	15	21	8	6	11.25**
Mental health care doesn't work	18	14	7	4	11.31**	6	9	4	3	— ^c
There are no providers in my community	9	7	6	3	2.54	8	11	6	4	— ^c
I would have to drive great distances	20	15	10	5	9.40*	12	17	7	5	8.05*
It might harm my spouse's career						8	11	2	2	— ^c
Members of unit might have less confidence in me	38	29	23	12	14.81**					
Unit leaders might treat me differently	37	28	25	13	11.70**					
Leaders would blame me for problem	26	20	11	6	15.22**					
I don't want it on my military records	59	45	43	22	19.51**					

^a Some participants did not answer every question; valid percentages are reported. Respondents were asked to "rate each of the possible concerns that might affect your decision to receive mental health counseling or services." The five possible responses were coded such that "agree" and "strongly agree" were positive responses and "neutral," "disagree," and "strongly disagree" were negative.

^b df=1

^c One cell (25%) had an expected count of <5.

* $p < .01$

** $p < .001$

drive great distances to receive high-quality care. Compared with those without mental health concerns, the only barrier that was significant at the $p < .001$ level for significant others with such concerns was being viewed as weak.

Discussion

The prevalence of mental health problems among returning service members (40%) in our sample is similar to earlier screening results on the PDHA and PDHRA, in which 42% of reserve component soldiers (12) were identified as needing treatment of some kind. Our study extended earlier findings of an increase in depression diagnoses among Army wives with each 12-month deployment (11). And like significant others of active-duty members (10), with National Guard significant others the prevalence of mental health problems was similar to that of service members postdeployment. In this study, nearly one in five significant others reported symptoms of PTSD and depression in a clinical range, and one in ten reported suicidal thoughts. Because there are substantial differences by sex in the prevalence of disorders such as depression and PTSD, interpretation of similarities or differences between National Guard members and significant others in this sample should be done with caution, given that 87% of National Guard members in our sample were male and 96% of significant others were female.

Even though mental health services to help families cope with deployment and reintegration were underutilized as a whole, of those with an identified mental health problem, significant others (61%) were more likely than soldiers (50%) to have talked to someone about their mental health problem in the prior 12 months. National Guard families are far more likely than their active-duty counterparts to receive care from civilian service providers (10). Because National Guard significant others are most likely to receive help from physicians and mental health professionals at a civilian facility, efforts should be made to raise awareness of military family experiences with these providers.

The reduction of stigma related to utilization of mental health services remains a challenge across the military and civilian communities. Educational and outreach strategies are needed on all system levels to raise awareness and open pathways for early intervention and treatment. Community engagement and awareness of deployment experiences are needed to provide greater accessibility to high-quality services for National Guard families receiving care in the private sector (28). Furthermore, because significant others of National Guard members are more likely than those of U.S. Army members to perceive cost as a barrier to care (10), policy should address reimbursement issues for these families, given their limited access to military treatment facilities. Policy should ensure that no veteran or veteran's family member is penalized for psychological injuries sustained as a result of a combat-related deployment. This is especially true for National Guard members, who return to civilian communities and, in most cases, to nonmilitary employment. Furthermore, if a psychiatric diagnosis associated with combat duty has occupational effects, it will further complicate the multiple stressors that these families face (29).

Methodological limitations of this study include that the sample was limited to National Guard members and significant others living in the Midwest who were attending a reintegration workshop. Attendance at the workshop itself could have affected survey responses. Although the reintegration program was mandatory for service members, some of their significant others were not in attendance because of family or work obligations. Furthermore, we did not have information about the individuals who attended the reintegration event but chose not to participate in the study. Although every effort was made during the study assessment to maintain anonymity, some participants may have been inhibited in their responses if they chose to remain in proximity to their significant others or military colleagues. Finally, the cross-sectional design allowed for only a one-

time assessment of these participants shortly after service members returned home.

Conclusions

The results of this study provide a cross-sectional view of the mental health and related experiences of the National Guard family after OEF-OIF deployments. The mental health effects of deployment on the soldier and his or her family remain a challenge for National Guard families living in communities with limited understanding of the psychological cost of war on military families. Continued efforts are needed to educate communities and civilian providers about the experiences associated with combat deployments, especially because our findings indicate that these were the providers delivering services to National Guard families. Although many National Guard families are extremely resilient and go on to live a satisfying life, others endure complicated deployments and find reintegration into civilian life difficult. Since early intervention is a protective factor (30), continued support is needed for National Guard family programs and interventions that extend beyond deployment and early integration efforts.

Acknowledgments and disclosures

This study was supported by the Families and Communities Together Coalition of Michigan State University.

The authors report no competing interests.

References

1. Booth B, Segal MW, Bell DB, et al: What We Know About Army Families. Alexandria, Va, US Army Family and Morale, Welfare, and Recreation Command, 2007. Available at www.army.mil/fmwrc/documents/research/whatweknow2007.pdf
2. Hoge CW, Castro CA, Messer SC, et al: Combat duty in Iraq and Afghanistan, mental health problems and barriers to care. *New England Journal of Medicine* 351:13–22, 2004
3. Tanielian T, Jaycox LH: *Invisible Wounds of War: Psychological and Cognitive Injuries, Their Consequences, and Services to Assist Recovery*. Santa Monica, Calif, RAND, 2008
4. Mental Health Advisory Team (MHAT-V) Operation Iraqi Freedom 06-08: Iraq; Operation Enduring Freedom 8: Afghanistan. Washington, DC, Office of the US Army Surgeon General, 2008

5. Hoge CW, Auchterlonie JL, Milliken CS: Mental health problems, use of mental health services, and attrition from military service after returning from deployment to Iraq or Afghanistan. *JAMA* 296:1023–1032, 2006
6. Jacobson IG, Ryan MA, Hooper TI, et al: Alcohol use and alcohol-related problems before and after military combat deployment. *JAMA* 300:663–675, 2008
7. Kang HK, Bullman TA: Risk of suicide among US veterans after returning from the Iraq or Afghanistan war zones. *JAMA* 300:652–653, 2008
8. Zivin K, Kim HM, McCarthy JF, et al: Suicide mortality among individuals receiving treatment for depression in the Veterans Affairs health system: associations with patient and treatment setting characteristics. *American Journal of Public Health* 97: 2193–2198, 2007
9. Oquendo M, Brent DA, Birmaher B, et al: Posttraumatic stress disorder comorbid with major depression: factors mediating the association with suicidal behavior. *American Journal of Psychiatry* 162:560–566, 2005
10. Eaton KM, Hoge CW, Messer SC, et al: Prevalence of mental health problems, treatment need, and barriers to care among primary care-seeking spouses of military service members involved in Iraq and Afghanistan deployments. *Military Medicine* 173:1051–1056, 2008
11. Mansfield A, Kaufman J, Marshall S, et al: Deployment and the use of mental health services among US Army wives. *New England Journal of Medicine* 362:101–109, 2010
12. Milliken CS, Auchterlonie JL, Hoge CW: Longitudinal assessment of mental health problems among active and reserve component soldiers returning from the Iraq War. *JAMA* 298:2141–2148, 2007
13. Profile of the Military Community: DoD Demographics. Washington, DC, Department of Defense, 2005. Available at cs.mhf.dod.mil/content/dav/mhf/QOL-Library/PDF/MHF/QOL%20Resources/Reports/2006%20Demographics%20Report.pdf
14. Koenen KC, Stellman SD, Sommer JF, et al: Persisting posttraumatic stress disorder symptoms and their relationship to functioning in Vietnam veterans: a 14-year follow-up. *Journal of Traumatic Stress* 21:49–57, 2008
15. Pietrzak R, Johnson D, Goldstein M, et al: Perceived stigma and barriers to mental health care utilization among OEF-OIF veterans. *Psychiatric Services* 60:1118–1122, 2009
16. Greene-Shortridge TM, Britt TW, Castro CA: The stigma of mental health problems in the military. *Military Medicine* 172:157–161, 2007
17. Weathers FW, Litz BT, Herman JA, et al: The PTSD Checklist (PCL): reliability, validity and diagnostic utility. Presented at the Annual Conference of the International Society for Traumatic Stress Studies, San Antonio, Tex, Oct 24–27, 1993
18. Orsillo S: Measures for acute stress disorder and posttraumatic stress disorder; in *Practitioner's Guide to Empirically Based Measures of Anxiety*. Edited by Antony M, Orsillo S. New York, Kluwer Academic, 2001
19. Goodman L, Corcoran C, Turner K, et al: Assessing traumatic event exposure: general issues and preliminary findings for the Stressful Life Events Screening Questionnaire. *Journal of Traumatic Stress* 11:521–542, 1998
20. Breslau N, Peterson EL, Kessler RC, et al: Short Screening Scale for DSM-IV Posttraumatic Stress Disorder. *American Journal of Psychiatry* 156:908–911, 1999
21. Beck A, Steer R, Brown G: Beck Depression Inventory, 2nd ed. San Antonio, Tex, Psychological Corp, 1996
22. Frasere-Smith N, Lespérance F: Depression and anxiety as predictors of 2-year cardiac events in patients with stable coronary artery disease. *Archives of General Psychiatry* 65:62–71, 2008
23. Bryant R, Mastrodomenico J, Felmingham K, et al: Treatment of Acute Stress Disorder. *Archives of General Psychiatry* 65: 659–667, 2008
24. Segal Z, Kennedy S, Gemar M, et al: Cognitive Reactivity to Sad Mood Provocation and the Prediction of Depressive Relapse. *Archives of General Psychiatry* 63:749–755, 2006
25. Mohr D, Hart S, Julian L, et al: Telephone-administered psychotherapy for depression. *Archives of General Psychiatry* 62: 1007–1014, 2005
26. Saunders J, Aasland O, Babor T, et al: Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO Collaborative Project on Early Detection of Persons With Harmful Alcohol Consumption—II. *Addiction* 88:791–804, 1993
27. Babor TF, Higgins-Biddle JC, Saunders JB, et al: The Alcohol Use Disorders Identification Test, 2nd ed. Geneva, World Health Organization, Department of Mental Health and Substance Dependence, 2001
28. Rona RJ, Hyams KC, Wessely S: Screening for psychological illness in military personnel. *New England Journal of Medicine* 293:1257–1260, 2005
29. Savoca E, Rosenheck R: The civilian labor market experiences of Vietnam-era veterans: the influence of psychiatric disorders. *Journal of Mental Health Policy and Economics* 3:199–207, 2000
30. Litz BT, Gray MJ, Bryant RA, et al: Early intervention for trauma: current status and future directions. *Clinical Psychology: Science and Practice* 9:112–134, 2002