Predictors of Burnout Among Military Mental Health Providers

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ABSTRACT Mental health treatment of military service members places unique demands on providers as their patients experience combat stress. This study assessed levels and predictors of burnout among mental health providers ($N = 97$) at military facilities, using a self-administered survey of demographic and work-related measures and the Maslach Burnout Inventory. Burnout levels were comparable to studies of civilian mental health providers but were less severe than those of the Maslach Burnout Inventory normative sample. Working more hours, having more patients with personality disorders, increased patient caseloads, female gender, and being a psychiatrist were predictive of higher burnout scores. Having more confidants at work, a greater percentage of patients with traumatic brain injury, more clinical experience, and being a psychologist predicted lower burnout scores. These findings suggest that burnout levels among military providers are similar to those among civilian providers and may be alleviated by interventions targeting general institutional risk factors.

INTRODUCTION

Operation Enduring Freedom/Operation Iraqi Freedom have resulted in increasing numbers of military service members developing mental health disorders. In light of the increased burden on mental health providers serving this military population, such conditions as burnout and compassion fatigue have received more attention recently.[1–3] As burnout is a common result of occupational stress and is prevalent among many service-oriented professions, such as law enforcement, management, teaching, and healthcare,[4] it is an especially relevant concern for the mental health providers treating a vital military population. Defined by three primary factors, burnout is a syndrome consisting of (1) physical and mental exhaustion, (2) negative attitude or dissatisfaction about oneself, and (3) cynicism toward clients.[5,6]

Although the topic of burnout has been studied in a variety of health settings, little is known about the burden of treating mental health disorders in the military. We hypothesize that providers who treat military personnel are more likely to be burned out than mental health providers treating civilians due primarily to the higher prevalence of traumatic stress disorders among the military patient population. Compared to the general U.S. population in which the estimated 12-month prevalence of posttraumatic stress disorder (PTSD) was 3.6%,[7] 12% to 19% of war fighters returning from Operation Enduring Freedom/Operation Iraqi Freedom deployments met criteria for PTSD.[8] This increase in PTSD among war fighters is likely due to the greater exposure to life-threatening traumatic events compared to the general population. Data from the National Comorbidity Survey indicate that 51% to 61% of people in the U.S. have experienced at least one extremely stressful event in their lifetime.[9] In contrast, 97% of Marines stationed in Iraq report having been shot at, 95% report having been attacked, and 94% report having seen human remains.[8] Moreover, military providers themselves may also have been exposed to combat trauma, which could potentially lead to increased burnout. Recent combat operations in the Middle East have expedited advancements in the assessment and treatment of combat stress reactions[10]; however, the impact of increased caseloads consisting of survivors of complex battlefield trauma on military mental health providers has yet to be described.

A variety of workplace stressors have been shown to negatively impact healthcare workers and could potentially lead to burnout. Nurses report that inadequate staffing, relationships with co-workers, the emotional needs of the patient, shift working, and a lack of reward and social support are common sources of stress.[4,11] Such demographic variables as gender, age and marital status,[12] years of experience,[13] and job-related factors (staff-to-patient ratio,[14] type of psychological pathology, and treatment method,[6] i.e., pharmacological or psychological) have also been shown to be predictors of burnout among mental healthcare providers. Whether these same factors affect burnout among military mental health providers has not yet been determined.

Some studies show that perceived inefficacy of treating mental disorders has been linked to job stress and could potentially lead to burnout. In a study on burnout among psychotherapists, a lack of therapeutic success was found to be the most

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stressful aspect of their occupation.[13] Researchers also have concluded that providers' personal beliefs about psychotherapy and pharmacotherapy can influence whether patients are adherent to treatment protocols,[15] thereby affecting whether the provider experiences therapeutic success. Providers who have negative beliefs about treatment may therefore experience increased job stress if these beliefs affect the successful treatment of their patients. It remains to be seen whether these beliefs about treatment affect burnout levels among mental health providers.

A number of studies of healthcare workers have demonstrated that burnout can lead to numerous adverse outcomes. Severe distress is correlated with staff absenteeism, poor staff retention, ill health, and reduced job performance.[11] Burned out medical practitioners experienced high rates of suicide, early retirement, increased substance use, and marital problems.[16] The more years that mental health staff worked in the field, the less they reported enjoying working with patients and the more ambivalent their attitudes toward mental illness became.[6] Given the many adverse effects of burnout on the job performance and overall well-being of healthcare providers, it is of great importance to understand the unique stressors faced by active duty and civilian mental health staff at military hospitals.

The purpose of this investigation was to explore the extent of burnout experienced by mental health providers at two U.S. military treatment facilities and to identify the personal and occupational factors that can affect burnout levels in this population. The results of this study may be useful in designing programs to prevent burnout in both military and non-military settings.

METHODS

Participants

Ninety-seven civilian and active duty providers from the mental health departments at two U.S. military treatment facilities were assessed. The two facilities are located in California: Naval Medical Center San Diego (NMCSD) and Marine Corps Base Camp Pendleton (CP). Because the composition of providers' occupations differs greatly between clinics, multiple clinics from both treatment facilities were invited to participate to reflect the diversity of military mental health providers. At NMCSD, providers worked at adult inpatient and outpatient clinics, a deployment health clinic, and a multidisciplinary casualty care clinic. At CP, providers worked at an adult outpatient clinic, a substance abuse treatment clinic, a residential wounded warrior program, and a deployment health clinic. All active duty providers were service members in the U.S. Navy. Providers were considered to be anyone who delivered mental health services to patients and who indicated a profession other than clerical on the demographic portion of the survey (i.e., case managers, social workers, psychological technicians, psychologists, psychiatrists, and psychiatry residents). Psychological technicians were underrepresented in this sample, but this may be due to the range of duties assigned to these positions. In some instances, psychological technicians provide patient care, whereas the positions are more administrative in nature other times. The low participation by psychological technicians could therefore be due to their not attending the meeting or completing the survey because they may not be considered primarily as providers. This study was reviewed and approved by the NMCSD Institutional Review Board.

Survey Administration

A convenience sample of providers attending mandatory staff meetings aimed at improving patient care was asked to complete anonymous surveys during the meeting. Data from NMCSD were collected in January 2009, and data from CP were collected in February and March 2009. The voluntary nature of the questionnaire was openly stated by leadership and on the first page of the document. To preserve anonymity, no detailed accounting of the providers' combat exposure or mental health status was elicited, and names, social security numbers, and ranks were withheld. In addition, assurances were given that refusal to participate would not affect performance evaluations. The surveys took approximately 10 to 15 minutes to complete and were self-administered.

Measures

Maslach Burnout Inventory—Human Services Survey

The Maslach Burnout Inventory (MBI) is the most commonly used validated measure of burnout.[17] The 22-item questionnaire was designed to assess the three aspects of burnout syndrome: emotional exhaustion, depersonalization, and personal accomplishment. Emotional exhaustion was defined as providers feeling emotionally overextended, whereas depersonalization referred to an impersonal response or a lack of empathy toward patients. Personal accomplishment involved feelings of achievement and job satisfaction. Higher scores on the emotional exhaustion and depersonalization subscales indicate increased burnout levels, while lower mean scores on the personal accomplishment subscale correspond to higher levels of burnout. Participants used a Likert scale to indicate the frequency ("never," "a few times a year," "monthly," "a few times a month," "every week," "a few times a week," or "everyday") with which they experienced a particular feeling related to their job. This scale has been shown to have sufficient reliability, internal consistency, and validity.[5,6]

Treatment Beliefs

A modified version of the 14-item scale created by Bystritsky and colleagues[15] was used to assess how strongly individuals agreed with statements regarding the efficacy of psychotherapy and medication for the treatment of anxiety and depressive disorders. Although the original Treatment Beliefs survey has been previously validated and tested for internal consistency in patients with anxiety disorders,[15] it has never been used to measure providers' beliefs.

Additional variables included in the assessment were providers' demographics (age, gender, marital status, number of children living at home, active duty/civilian status, number of combat deployments, years of clinical experience, and occupation), social support (number of confidants at work), and institutional variables (medical facility location, number of hours worked per week, average number of patients per week, diagnostic composition of providers' caseload, and percent of patients with combat-related diagnoses).

Analysis

Totals were calculated for each of the three subscales of the MBI and for Treatment Beliefs by adding together the scores of all questions for each subscale. Missing data were replaced with the mean score for each individual's subscale total, contingent on having a minimum of 75% of questions answered. Means and standard deviations for each MBI subscale were compared to a normative sample of 730 mental health workers for which data have been previously published[17]; statistical significance was determined using independent sample *t*-tests. Analyses of burnout predictive factors were conducted using stepwise multiple linear regression procedures. All statistical analyses were conducted using SPSS 17.0 (SPSS Inc., Chicago, Illinois), and alpha levels for statistical significance were set at 0.05.

TABLE I. Provider Characteristics ($N = 97$)

Characteristics	*N* (%)
Treatment Facility	
NMCSD	68 (70.1)
CP	29 (29.9)
Age, years (mean)	43.8
Gender	
Male	40 (43.0)
Female	53 (57.0)
Marital Status	
Single or Divorced	31 (33.4)
Married or Domestic Partner	62 (66.7)
Number of Children	
None	49 (55.7)
One	14 (15.9)
Two or More	25 (28.4)
Employment Status	
Civilian	47 (56.6)
Active Duty	36 (43.4)
Job Title	
Psych tech/Corpsman	3 (3.3)
Case Manager	10 (10.9)
Social Worker	15 (16.3)
Psychologist	29 (31.5)
Psychiatrist	13 (14.1)
Psychiatry Resident	13 (14.1)
Other	9 (9.7)
Number of Deployments	
None	63 (78.8)
One or more	17 (21.3)

RESULTS

Sample Characteristics

Of the 97 mental health providers surveyed, the average age was 43.8 years and over half were female (57.0%; Table I). Roughly half of the providers had no children (55.7%), and approximately two-thirds were married (66.7%). There were slightly more civilian than active duty providers (56.6% vs. 43.4%, respectively), and the majority of respondents (78.8%) had never been deployed to a combat zone. The most commonly reported occupation was psychologist (31.5%), followed by social worker (16.3%) and psychiatrist or psychiatry resident (both at 14.1%). NMCSD had twice the proportion of psychiatrists as CP ($p = 0.04$) and reported working more hours per week ($p < 0.01$). No other significant differences with regard to demographic characteristics were found between the two facilities.

Patient Diagnoses

Respondents reported that, on average, patients with PTSD comprised 28.4% of their caseload, patients with traumatic brain injury (TBI) accounted for 7.0%, and psychotic patients made up only 3.7%. Mood disorders were the most common patient diagnosis (31.9%), and roughly 39% of patients were seen for combat-related issues. Comorbid conditions, such as co-occurring of PTSD and TBI, were not accounted for. The prevalence of certain conditions was slightly different at each hospital. Providers at NMCSD reported having significantly more patients with psychotic disorders ($p < 0.01$), whereas providers at CP reported larger percentages of patients with PTSD ($p < 0.01$) and combat-related conditions ($p < 0.01$).

Prevalence of Burnout

The MBI mean scores for the sample as a whole were 16.6 (SD = 9.9) for emotional exhaustion, 4.3 (SD = 4.0) for depersonalization, and 39.7 (SD = 5.5) for personal accomplishment (Table II). When categorized into the range of experienced burnout defined by the MBI, 27 (27.8%) providers scored in the high level of emotional exhaustion, 18 (18.6%) had high depersonalization scores, and 4 (4.1%) reported a low level of personal accomplishment. Our provider sample displayed significantly lower depersonalization and higher personal accomplishment subscale scores ($p < 0.05$) compared to the MBI normative sample of 730 civilian mental health workers (including psychologists, psychotherapists, counselors, mental health hospital staff, and psychiatrists).[17] There were no significant differences among burnout subscale scores between NMCSD and CP.

Stepwise multiple regression analyses were conducted to determine whether risk factors previously described in the literature were predictors of burnout in our sample. Potential predictors included provider demographics, social support, institutional factors, and beliefs about psychotherapy and medication. Regression results indicated that being female, employed as a psychiatrist, and working a greater number of hours significantly predicted emotional exhaustion (model

TABLE II. MBI Subscale Scores

Provider Sample	*N*	Mean MBI Subscale Scores (SD)		
		Emotional Exhaustion	Depersonalization	Personal Accomplishment
NMCSD	68	17.3 (10.0)	4.7 (4.2)	39.5 (5.2)**
CP	29	15.0 (10.2)	3.2 (3.5)*	40.2 (6.1)**
Combined NMCSD/CP	97	16.6 (9.9)	4.3 (4.0)*	39.7 (5.5)**
Normative Sample[a] (reference)	730	16.9 (8.9)	5.7 (4.6)	30.9 (6.4)

[a]Normative Sample scores taken from MBI validation sample.[17] *Significantly lower than normative sample ($p < 0.01$). **Significantly higher than normative sample ($p < 0.001$).

TABLE III. Burnout Regression Model Summaries

Burnout Predictors	R^2_{adj}	*F* (df)	*p*	β	*t*
Emotional Exhaustion Model	0.19	5.34 (3,53)	0.003		
Occupation: Psychiatrist				0.26	2.11*
Number of Fours Worked Per Week				0.30	2.44*
Female Gender				0.25	2.01*
Depersonalization Model	0.17	6.66 (2,54)	0.003		
Percent of Patient Caseload With Personality Disorder Diagnosis				0.49	3.60***
Percent of Patient Caseload With TBI Diagnosis				−0.29	−2.11*
Personal Accomplishment Model	0.26	5.86 (4,52)	0.001		
Occupation: Psychologist				0.29	2.42*
Number of Friends/Confidants at Work				0.32	2.76**
Years of Clinical Experience				0.32	2.57*
Average Number of Patients Per Week				−0.26	−2.17*

*$p < 0.05$. **$p < 0.01$. ***$p = 0.001$.

$p < 0.01$; Table III). Depersonalization was predicted by the patients seen by the provider: a greater percentage of personality disorder diagnoses in a provider's caseload were linked to higher depersonalization, whereas a greater proportion of patients with TBI diagnoses predicted lower depersonalization (model $p < 0.01$). Finally, an overall model of four variables significantly predicted personal accomplishment: being employed as a psychologist, having a greater number of years of clinical experience and more confidants at work were linked to greater personal accomplishment, whereas treating a greater number of patients per week decreased feelings of personal accomplishment (model $p = 0.001$).

DISCUSSION

Both active duty and civilian providers working for the military had significantly better scores than a normative sample of mental health providers serving primarily a civilian population on 2 of the 3 burnout subscales, indicating lower levels of burnout. Our analyses revealed that female gender, employment as a psychiatrist, greater work hours, treating more patients with personality disorders, and treating more patients in general per week were predictive of higher burnout scores. By contrast, employment as a psychologist, having a greater percentage of patients with TBI, having more confidants at work, and more clinical experience were predictive of lower burnout scores. Notably, a greater caseload of traumatic stress disorder diagnoses and providers' beliefs about the efficacy of psychotherapy and pharmacotherapy were not found to be related to any dimension of burnout in this study. Overall, our regression models of burnout predictors accounted for a relatively small percentage of the variance in emotional exhaustion, depersonalization, and personal accomplishment (18.9%, 16.8%, and 25.8%, respectively), which suggests that the 3 dimensions of burnout could be influenced by a variety of factors not investigated in this study.

The burnout subscale scores from our sample were fairly similar to other studies of burnout in mental health professionals. A review of the literature of burnout found the median emotional exhaustion, depersonalization, and personal accomplishment subscales for 26 studies of civilian mental health professionals (Table IV) to be 19.8 (range, 15.4–32.9), 5.9 (range, 3.7–12.4), and 36.5 (range, 30.9–43.2), respectively. Our sample's emotional exhaustion and depersonalization scores fell in the lowest quarter of the studies in this review, whereas personal accomplishment ranked in the upper half. Although our sample's level of personal accomplishment was not remarkably different from the studies mentioned earlier, it was significantly higher than Maslach's normative sample.[17] Maslach's population had the lowest personal accomplishment score of all the published literature. The discrepancy between personal accomplishment scores among Maslach's sample and the scores reported in the literature is not fully understood and should be further investigated.

Analysis of potential burnout predictors in our sample determined that increased emotional exhaustion was linked

TABLE IV. Comparison of MBI Scores From Previously Published Literature

Author/Year	Sample	EE		DP		PA	
		Mean	SD	Mean	SD	Mean	SD
Current study	97 Mental health providers	16.6	9.9	4.3	4.0	39.7	5.5
Sherring and Knight[18] (2009)	166 Mental health nurses	19.7	12.14	4.41	4.5	33.78	7.55
Evans et al[19](2006)	237 Mental health social workers	26.3	10.1	7.3	5.2	33.9	6.8
Rupert and Morgan[20] (2005)	1,200 Psychologists	19.99	9.83	5.21	4.26	41.64	4.78
Lloyd and King[21] (2004)	304 Occupational therapists and social workers	22.7	9.9	6.1	4.9	36.4	5.9
Hannigan et al[22] (2000)	283 Community mental health nurses	21.2	10.3	5.2	4.5	34.8	6.5
Coffey and Coleman[23] (1999)	80 Forensic mental health nurses	19.3	10.1	5.7	4.3	33.0	6.22
Prosser et al[24] (1999)[a]	121 Clinical mental health staff	22.9	11.1	7.5	5.7	33.5	6.6
Harper and Minghella[25] (1997)	55 Community mental health staff	18.8	9.7	4.2	3.98	36.5	6.2
Wykes et al[26] (1997)	61 Community care staff	22.5	9.95	7.8	5.38	35.2	5.48
Carney et al[27] (1993)	66 Case managers	15.81	11.0	3.7	4.38	36.36	9.99
Skorupa and Agresti[28] (1993)	112 Psychologists	16.0	—	5.58	—	43.2	—
Garzotto et al[29] (1992)	210 Mental health staff	21.31	10.96	9.67	5.55	34.63	7.1
Pranger and Brown[30] (1992)	91 Occupational therapists	18.74	8.67	5.83	4.67	37.9	6.65
Tracy et al[31] (1992)	36 Family perseveration workers	20.58	9.01	6.69	5.16	35.66	7.01
Finch and Krantz[32] (1991)	48 Mental health staff	15.38	—	3.86	—	41.14	—
Raquepaw and Miller[14] (1989)	68 Psychotherapists	18.5	8.9	5.5	4.5	42.9	3.7
Ross et al[33] (1989)	169 Counselors	19.11	8.27	5.65	3.77	40.3	5.1
Snibbe et al[34] (1989)	51 Mental health staff	32.9	11.2	12.4	6.8	39.2	4.8
Wilcoxon[35] (1989)	177 Psychotherapists	24.7	10.3	9.4	3.9	41.2	8.8
Ackerley et al[36] (1988)	562 Psychologists	19.44	9.31	6.31	4.48	42.27	4.52
Maslach and Florian[37] (1988)	38 Counselors	19.24	7.65	7.37	3.6	38.97	5.68
O'Driscoll and Schubert[38] (1988)	64 Counselors	20.3	9.8	4.8	3.5	36.5	6.5
Brollier et al[39] (1987)	33 Mental health occupational therapists	21.52	—	10.82	—	39.48	—
Firth et al[40] (1987)	200 Nurses	18.3	9.5	5.9	5.1	35.9	7.3
Maslach and Jackson[17] (1986)[b]	730 Mental health workers	16.89	8.9	5.72	4.62	30.87	6.37
Maslach and Jackson[5] (1981)	1,400 Social service workers	24.08	11.88	9.4	6.9	36.01	6.93

[a]Longitudinal study, only baseline data was used for this comparison. [b]MBI normative sample.

with long working hours, whereas personal accomplishment was diminished by having more patients per week. This finding is consistent with previous burnout research.[6,41,42,20] As burnout often stems from prolonged and intense emotional contact with patients, it is not surprising that overworked mental health providers feel emotionally drained and have increasingly more negative feelings toward their achievements. Despite the negative impact, this can be easily remedied by hiring additional personnel to reduce the burden on providers.

Our results also demonstrated that being female was linked with higher emotional exhaustion. Most studies in a review article of burnout in mental health workers found no significant relationship between the gender and the three burnout subscales.[12] However, another study of psychologists found that women were more likely than men to be emotionally exhausted in hospital settings.[20] Overall, no clear distinction can be made from the literature about the effect of gender on burnout. Further investigation into this topic is warranted.

Although it has long been understood that depersonalization can be predicted by a caseload with more personality disorder diagnoses,[13] an unforeseen finding was that depersonalization was attenuated by having a caseload with more patients with TBI. We suspect that providers may be more empathetic to conditions sustained by physical injury. Furthermore, providers may have greater compassion for patients with TBI as TBI in military populations is commonly seen when troops are injured from blast exposure while in combat. Another explanation is that a more positive attitude toward patients may result if providers believe that many TBI symptoms are reversible because the patient was without the constellation of symptoms before the injury. As a result, providers could maintain more positive attitudes toward treating patients with TBI compared to patients with chronic conditions, such as personality disorders. TBI treatment is also multi-disciplinary, which may take some of the workload off the mental health provider and allow for collaboration between departments.

Our results support the findings of previous burnout research that suggest that years of experience[13,24] and social support[23,43] ameliorate work stress and burnout. The link between years of experience and lower burnout could be explained in part by the suggestion that inexperienced therapists may be less prepared to deal with job stress and lack the confidence to adequately treat their patients.[13] Given that the mean number of years of clinical experience in our sample is 15.3 years (range, 1–44 years), providers may feel like they have honed their skills and have worked in the field long enough to see the positive effects of treatment in their patients. Social support from co-workers also serves as a buffer from the negative effects of burnout. However, having more confidants at work was more frequently associated in the literature with

job satisfaction and lower emotional exhaustion[23,43,44] rather than with increased personal accomplishment, as was found in this study. Pines and Maslach explain that when relationships among staff members are good, they are more likely to have positive attitudes about their work and feel greater success.[6] Although greater personal accomplishment was predicted by having more confidants at work, it is interesting to note that none of the burnout dimensions were impacted by the quantity of non-occupational relationships, such as having a spouse or children at home. Several previous studies have found being married is associated with lower burnout,[45–47] whereas some have found it to be associated with higher burnout[33] or have found no association.[48] Still other studies have found mixed or no associations of number of children with burnout.[48–50]

In our sample, psychiatrists were at greater risk of becoming burned out by their work compared to all other job categories. There are several possible hypotheses to explain this finding. At NMCSD and CP, leadership positions in mental health are typically held by active duty psychiatrists, and so it is likely that many of the psychiatrists in our sample have more administrative and supervisory duties than other mental health workers in the cohort. As noted in the burnout literature, less time spent having direct patient contact often results in negative attitudes toward patients over time,[6] as does having too much paperwork.[25] Additionally, psychiatrists reported having treated a significantly higher percentage of psychotic patients than did psychologists ($p = 0.03$), a factor which has been previously associated with burnout.[6] Although it was expected that psychiatry residents would report greater burnout symptoms because of inexperience and the stress of training and exams, they did not have significantly different results from other providers. In contrast, psychologists in our sample reported greater personal accomplishment, which may be due to having more direct contact with patients. Other researchers have found that more time spent conducting clinical therapy yields higher personal accomplishment scores.[20,21]

There are a variety of factors that could potentially impact burnout that were not included in this analysis. For instance, adequacy and quality of management-level supervision and quality of interpersonal relationships have been shown to influence burnout rates among individuals working in the health service industry.[51] Previous literature has found that a perceived lack of support from supervisors increased emotional exhaustion among a variety of mental health professions.[33,38] Sherring and Knight found that rates of emotional exhaustion were significantly higher among mental health nurses with no or less frequent clinical supervision as compared to nurses with more frequent supervisory interaction.[18] Although the quality of supervisory relationships was not specifically measured in this study, it is hypothesized that positive interactions with leadership would further reduce the negative aspects of burnout. In addition, although having more confidants has been associated with lower burnout, this may not necessarily translate to increased quality of co-worker relationships. Furthermore, the quality of a marital relationship may be a better indicator of social support than marital status alone. Future studies should attempt to gather information on the quality of both occupational and non-occupational social support, as well as clinical supervision.

Interpretations of current study findings are limited by a number of factors. First, the small sample may have led this study to be underpowered and was likely not sufficient to detect significance among all variables in the regression models. For this reason, it cannot be assumed that a correlation would not have been found with a greater sample size because no association was found between burnout subscales and potential factors. A second limitation is the cross-sectional nature of the data. Burnout is associated with chronic stress rather than with acute stress, and our single time-point self-report data may be reflective of transient feelings of exhaustion and irritability rather than of sustained burnout. In addition, some information was not assessed given the convenience sample of providers who were attending mandatory staff meetings. Although information regarding the provider's mental health status and previous combat exposure would have been a valuable contribution to this study, it was not feasible given the sensitive nature of this information and the anonymous structure of the survey.

Notwithstanding these limitations, our results indicate that active duty and civilian providers at military facilities are less burned out than a normative sample of mental health providers serving a civilian population (similar emotional exhaustion, less depersonalization, and greater personal accomplishment); however, burnout levels were similar to that reported in other studies of mental health workers. Overall, the results of this study indicate that burnout among mental health providers in a military setting is predicted by patient caseload (both size and type), long working hours, amount of clinical experience, gender, occupation, and social support at work. Burnout in providers was not predicted by seeing more patients with PTSD or combat-related conditions as suspected. Nor were burnout scores higher in active duty providers, regardless of the number of deployments, or among individuals who were skeptical of treatment efficacy. Recommendations for future research include investigating additional potential burnout risk factors in military provider populations, including such institutional factors as time spent on administrative tasks, quality of supervision, duration of job assignment, patient characteristics, military rank, and personal factors, including job satisfaction, coping mechanisms, quality of interpersonal relationships, non–work related social support, and general quality of life. Additionally, a long-term investigation into productivity and turnover is needed to characterize the effects of burnout on military mental health providers. In the interim, prevention programs aimed at reducing burnout should be implemented and may include pairing less experienced providers with a more experienced provider mentor. This may improve social support in the work environment and improve the morale of

newcomers to the field. In addition, assurance that providers are not overburdened by both time spent at work or caseload is essential to reducing burnout levels and retaining valuable military mental health staff.

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