Treating Behavioral Health Conditions of OEF/OIF Veterans and Their Families: A State Needs Assessment of Civilian Providers

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With the return of troops from Afghanistan and Iraq, increasing numbers of civilian behavioral health providers are treating veterans and their families for service-related conditions. However, little is known about civilian providers’ capacity to meet the needs of this population. A statewide needs assessment of 1,665 clinicians examined their screening/referral practices, knowledge and confidence in treating 14 veteran conditions, and training interests. Overall, providers had limited knowledge and confidence to treat veteran conditions but reported high interest in training to enhance their clinical skills. Findings informed the training of more than 700 state clinicians to provide culturally competent behavioral health care for veterans and their families.

Keywords: Veterans, veteran families, veteran health care, behavioral health professionals, mental health, needs assessment, veteran health conditions, best practices, training/education programs

More than 2.6 million American service members have deployed to Afghanistan and Iraq in support of Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and Operation New Dawn (OND) (National Research Council, 2012). Approximately 1.6 million of these troops have already separated from the military and become veterans (Adams, 2013). Recent veterans have faced unique challenges, including multiple deployments, combat exposure, and concussive events stemming from improvised explosive device blasts (National Research Council, 2013). Although the majority of these veterans transition successfully to civilian life, others have developed a wide array of behavioral health problems. An estimated 13% to 20% of veterans who fought in Afghanistan or Iraq have experienced post-traumatic stress disorder (PTSD), and others have exhibited depression, anxiety, and substance use disorders (National Research Council, 2012; Tanielian & Jaycox, 2008). The prevalence of military sexual trauma (MST) is estimated to be as high as 33% among recent women veterans (Department of Defense [DOD], 2013a). Veterans with physical health problems, including traumatic brain injury (TBI) and chronic pain, have also reported co-occurring behavioral health problems as their injuries are often linked to traumatic events (Tanielian & Jaycox, 2008). Notably, more than half of OEF/OIF veterans are married, and approximately 2 million children have a parent who served in these conflicts (DOD, 2012). Some family members have experienced psychological distress, domestic abuse, and/or caregiver burden in their relationships with veterans who are suffering from war-related conditions (Family Caregiver Alliance, 2010; McFarlane, 2009; Sayers, Farrow, Ross, & Oslin, 2009).

In response to these challenges, President Obama directed the DOD, Department of Veterans Affairs (DVA), and the Department of Health and Human Services (DHHS) to make treatment of veterans’ mental health needs a national priority (DOD, DVA, & DHHS, 2013). Early intervention with appropriate screening, diagnosis, and culturally competent care may help veterans with behavioral health conditions recover and reintegrate successfully into civilian life. Although most recent veterans can obtain mental health treatment through the Veterans Administration (VA), many do not take advantage of this health care system. About half of those eligible to
receive VA health services access this care, and only half of those referred for VA mental health services keep their first appointment (Substance Abuse and Mental Health Services Administration, 2013; VA, 2013). In one study of veterans who were traumatically injured and discharged from military service between 2003 and 2006, only 24% had enrolled in VA health care within three years of their discharge (Copeland et al., 2011).

Researchers have identified numerous factors that impede veterans from obtaining behavioral health treatment, including the stigma of mental illness, perceived discrimination by employers, impact on future security clearances, and side effects of medications (Tanielian & Jaycox, 2008). Geography is another challenge: more than 40% of veterans reside in rural areas, often at great distances from VA health facilities (Veterans Health Administration Office of Rural Health, 2012). Veterans may also choose to continue care with long-term TRICARE providers or trusted civilian providers in their communities. One recent RAND study of New York OEF/OIF veterans found a large percentage of veterans had private health insurance, and much of their care was delivered by private or non-VA public sector providers (Schell et al., 2011). The National Council for Behavioral Health (2012) recently reported that 27% of OEF/OIF veterans were using community-based behavioral health services, with this percentage expected to reach 40% by 2014. Family members have also sought behavioral health treatment thought to be related to their own exposure to military life challenges. A DOD Military Health System study revealed a 15% increase in behavioral health treatment for military family members between 2001 and 2009 (Brewin, 2011). Researchers have found that 88% of caregivers of veterans suffering from physical wounds, PTSD, TBI, and other injuries have reported increased stress and anxiety as a result of their caregiving experiences (Family Caregiver Alliance, 2010).

With growing numbers of OEF/OIF-era veterans and family members who need behavioral health care, there is an urgent need for more professionals outside the VA/DOD system to treat war-related health conditions (Chretien & Chretien, 2013). The Affordable Care Act will also provide thousands of uninsured veterans with access to health insurance that covers mental health treatment, beginning in 2014 (DOD, DVA, & DHHS, 2013). Addressing this issue, the 2013 Interim Report of the Interagency Task Force on Military and Veterans Mental Health recommended enhancing partnerships between the VA and community providers to improve veteran and family member care (DOD, DVA, & DHHS, 2013). However, little is known about the preparation of civilian providers to address the behavioral health needs of veterans and family members, or their interest in improving their skills to treat this population (Kilpatrick, Best, Smith, Kudler, & Cornelison-Grant, 2011; Tanielian & Jaycox, 2008). Lack of such data impedes states and communities in their efforts to establish a health care system and a workforce capable of providing accessible, high-quality veteran care.

Responding to this gap in knowledge about civilian providers’ capacity to treat recent veterans, the Veterans Integrated Service Network (VISN) 6 Mental Illness Research, Education, and Clinical Center and the Office of Rural Health conducted a web survey of the educational needs of mental health and primary care providers working largely in the private sector (Kilpatrick et al., 2011). Participants included approximately 300 psychiatrists, psychologists, social workers, and primary care professionals from rural and urban communities in four states. One in six participants reported having served in the armed forces, one in three had received VA training, and one in eight had ever been employed as a VA health professional. Notably, only 44% of participants screened their clients/patients for military service, and only 29% reported knowledge of how to refer veterans to the VA. Community providers reported more knowledge and confidence in treating family stress, depression, and suicide ideation than in treating PTSD, TBI, and substance abuse/dependence. Findings emphasized the need for improving civilian providers’ knowledge of behavioral health issues affecting veterans, as well as for increasing collaboration between VA/DOD treatment services and civilian health professionals.

The state of Maryland has made a major effort to provide behavioral health services for Maryland veterans and their families through Maryland’s Commitment to Veterans, a resource and referral program involving collaboration of state agencies and the VA (Maryland Department of Health and Mental Hygiene, 2013). Hosting 10 military installations, Maryland is home to approximately 450,000 veterans, 46,000 of whom served in the post-9/11 era (DOD, 2013b; DVA, 2012b). The latter cohort is projected to grow to more than 76,000 by 2020 (DVA, 2012b). In 2012, the state’s Department of Health and Mental Hygiene partnered with the University of Maryland School of Public Health to create the Maryland Veterans Resilience Initiative (MaVRI). One component of MaVRI was to conduct an online needs assessment of Maryland behavioral health and primary care professionals who could address the needs of veterans and their family members.

To our knowledge, this needs assessment is one of the first statewide investigations of the knowledge and practices of health care providers who treat or have the potential to treat veterans and their families. Unlike the previous study, which combined data from mental health and primary care professionals in multiple states in the same analyses (Kilpatrick et al., 2011), the current study focused exclusively on civilian behavioral health professionals in Maryland. Adopting a public health approach, efforts were made to engage a wide segment of health professionals in research that focused on their capacity to identify, treat, and refer veterans and family members for behavioral health services. This approach defined the system of veteran health care
as including civilian providers in the myriad communities where veterans live and work, as well as VA and DOD health professionals. The current investigation examined civilian providers’ personal military background, screening and referral practices, knowledge and confidence in treating issues affecting veterans and family members, and clinical training interests. The role of demographic and military experience factors in predicting providers’ knowledge of best practices for treating veterans’ behavioral health conditions was also explored.

METHOD

Sample and Data Collection

The purpose of the needs assessment research was to collect data from Maryland health professionals relating to their treatment of veterans and veteran family members. In fall 2012, the university institutional review board approved the exploratory study and needs assessment survey. Maryland’s professional boards of licensed behavioral health and primary care providers agreed to send their members one e-mail announcing the survey. The e-mail included a message from the secretary of the Maryland Department of Health and Mental Hygiene explaining the purpose of the study and encouraging completion of a voluntary, anonymous, 15-minute survey. No monetary incentives were offered for responding. After consenting to participate, providers were linked to an online survey, which was formatted using PsychData software. The survey was closed after two months.

The current study focused exclusively on licensed behavioral health providers, including social workers, psychologists, professional counselors, marriage and family therapists, and psychiatrists. E-mail invitations were sent to a total of approximately 22,000 licensed clinicians through their professional boards, and 1,725 completed surveys were received. Providers who worked at military installations/facilities (n = 41), were serving on active duty (n = 17), or were serving in the National Guard or Reserves (n = 2) were excluded from consideration because of the study’s focus on civilian professionals working in community settings. Thus, the final sample was composed of 1,665 civilian behavioral health providers.

Calculation of an exact response rate for behavioral health providers was not possible because the researchers did not have access to professional board databases and the numbers of undelivered e-mail invitations; however, based on board membership numbers and an estimation of undelivered surveys, the response rate was estimated to be approximately 9% of Maryland’s licensed behavioral health professionals. More specifically, the sample of 1,665 civilian providers represented approximately 8% of social workers, 11% of psychologists, 9% of professional counselors and marriage and family therapists, and 6% of psychiatrists in the state. Notably, among those individuals who opened the survey, 94% completed and submitted it. Given the anonymous nature of the survey, data were not available to compare respondents to nonrespondents.

Measure

The needs assessment survey was adapted from a web survey designed by the VISN 6 Mental Illness Research, Education, and Clinical Center and the Office of Rural Health, which had been successfully disseminated by professional organizations and state agencies (Kilpatrick et al., 2011). The current study’s survey collected demographic information about the sample and questioned respondents about treatment of veterans and family members, including (1) screening and referral practices, (2) knowledge of best practices for treating this population, (3) confidence in treating veteran/family member conditions, and (4) training interests. The knowledge measure asked respondents to rate their knowledge of best practices for treating 14 conditions that may affect veterans and family members on a 3-point scale that included minimal, some, and extensive knowledge; sample items included PTSD, TBI, sleep disorders, and caregiver stress. Another measure addressed respondents’ confidence in treating the same 14 conditions on a 3-point scale with alternatives of minimally, somewhat, and very confident. Finally, respondents were asked about their level of interest in receiving training on each of the 14 conditions with response categories of not, somewhat, and very interested. One additional item queried respondents about desired training formats/resources, such as face-to-face conferences, webinars, CDs/DVDs, and pocket cards. The survey had excellent face validity, as assessed by the MaVRI Advisory Council, which included 25 representatives of key federal, state, and community veteran-serving agencies and organizations (University of Maryland School of Public Health, 2013).

Data Analyses

Descriptive statistics (percentages) were calculated to provide a demographic profile of the sample and to summarize respondents’ screening and referral practices, knowledge and confidence in treating 14 veteran/family member conditions, and training interests. Multivariate logistic regression was then used to assess whether providers’ self-rated knowledge for treating each veteran/family member condition could be predicted by demographic characteristics or military-related experience. Specifically, knowledge of each of the 14 conditions was regressed on providers’ age, sex, veteran status, membership in a military family, training in a VA/DOD facility, VA/DOD employment, recent treatment of veterans/military clients, and geographic location of practice (rural/urban). Each of the knowledge outcomes was dichotomous (1 = Extensive knowledge, 0 = Some/minimal knowledge) and simultaneously adjusted for all eight
covariate variables. All statistical analyses were conducted using SAS software, Version 9.2.

RESULTS

Demographics of Sample

Demographic characteristics of the study’s sample of civilian behavioral health providers are presented in Table 1. With respect to professional discipline, social workers were the largest group (60%) in the sample, followed by professional counselors (21%), psychologists (24%), marriage and family therapists (9%), and psychiatrists (4%). Examination of practice settings revealed that 34% of respondents worked in private practice, with significant numbers also employed in public mental health and family service agencies (32%), hospitals (13%), educational settings (9%), other social service agencies (8%), and the criminal justice system (3%). Approximately four out of five (82%) study participants described their practice setting as urban and one out of six (16%) reported it as rural. Practice settings were generally representative of the rural–urban population in the state of Maryland, which is 13% rural (Maryland Department of Planning, 2010). Both rural and urban areas had practicing clinicians from each professional discipline, with some overrepresentation of social workers (19%) and underrepresentation of psychologists (10%) and marriage and family therapists (8%) in rural areas.

Among respondents who provided data about their age, sex, and race/ethnicity, almost half (48%) were age 55 or older and four out of five (81%) were women. Almost four out of five (79%) reported their race/ethnicity as White, followed by African American (16%), Latino (2%), and Asian American and Native American professionals (1% each).

Providers were also asked about their personal and professional connections to the military. Only 6% had personally served in the armed forces, and one out of five (21%) identified as an immediate family member of a veteran or service member. One out of six (16%) had completed some training in a VA or DOD health care facility, but only one out of eight (13%) reported any employment in the VA or DOD system.

Prior Treatment of Veterans and Family Members

Table 2 presents data on civilian behavioral health providers’ treatment of veterans and family members in their practices. Slightly more than half (53%) of the respondents had treated veterans, and 39% had treated family members of veterans within the past year. In addition, approximately one out of five providers (21%) had treated active-duty service members and one out of six (16%) had treated members of the National Guard and/or Reserves during the same time period. In all, 29% reported no veteran or military clients within the past year, and a small percentage (6%) was unsure about their clients’ military status.

| Survey Item | % |
|-------------|---|
| Professional discipline | |
| Social workers | 60 |
| Professional counselors | 21 |
| Psychologists | 24 |
| Marriage and family therapists | 9 |
| Psychiatrists | 4 |
| Professional setting | |
| Private practice | 34 |
| Family services/mental health/health clinic | 32 |
| Hospital | 13 |
| College/university | 4 |
| School (primary, middle, high) | 5 |
| Criminal justice | 3 |
| Social services (housing, employment) | 8 |
| Other | 1 |
| Professional location | |
| Rural | 16 |
| Urban | 82 |
| Unsure | 3 |
| Sex | |
| Male | 19 |
| Female | 81 |
| Age | |
| 22–40 | 24 |
| 41–54 | 28 |
| 55+ | 48 |
| Race/ethnicity | |
| White | 79 |
| African American | 16 |
| Latino | 2 |
| Asian American | 1 |
| Native American | 1 |
| Other | 2 |
| Military status | |
| Veteran | 6 |
| Immediate family member | 21 |
| Military training/experience | |
| Any training in a VA/DOD facility | 16 |
| Any VA/DOD Employment | 13 |

*Participants could check all responses that applied.

Providers were also asked about their participation in TRICARE, a health program managed by the Defense Health Agency for Uniformed Service members, military retirees, and their dependents or survivors, including activated members of the Reserve Component (Defense Health Agency, 2013). Among respondents, 31% participated in TRICARE; about half (49%) did not participate; and 20% were unsure about whether their agency participated in the health program.

Table 2 further summarizes civilian providers’ screening of clients for their military status. Almost half of the respondents (49%) reported regularly screening clients for their military background, with an additional 16% occasionally engaging in screening. Notably, one-third of respondents (34%) never screened for military status. Additional
TABLE 2
Treatment of Veterans and Family Members
(N = 1,665)

| Survey Item                                                                 | %    |
|-----------------------------------------------------------------------------|------|
| Client population in past yeara                                           |      |
| Veterans                                                                    | 53   |
| Active duty                                                                 | 21   |
| National Guard/Reserves                                                     | 16   |
| Family members of veterans                                                 | 39   |
| None of the above groups                                                    | 29   |
| Unsure of client military status                                           | 6    |
| Accept TRICARE                                                              |      |
| Yes, accept                                                                | 31   |
| No, does not accept                                                        | 49   |
| Unsure                                                                     | 20   |
| Screen for military/veteran/family member status                           |      |
| Yes, regularly                                                             | 49   |
| Yes, occasionally                                                          | 16   |
| No                                                                          | 34   |
| Ask veterans about stressors of military service                           |      |
| Yes, regularly                                                             | 50   |
| Yes, occasionally                                                          | 24   |
| No                                                                          | 26   |
| Ask family members about stressors of veterans’ service                    |      |
| Yes, regularly                                                             | 43   |
| Yes, occasionally                                                          | 27   |
| No                                                                          | 30   |
| Frequency of referral to VA                                                |      |
| Often                                                                      | 13   |
| Sometimes                                                                  | 38   |
| Never                                                                      | 44   |
| Unsure about frequency                                                     | 5    |
| Factors that prevent referral to VAa                                       |      |
| Lack of knowledge about eligibility requirements                           | 17   |
| Lack of knowledge about how to refer                                       | 15   |
| Concerns about wait time for appointments                                  | 13   |
| Concerns about quality of care                                            | 10   |
| Clients not eligible for VA services                                       | 4    |
| Concerns about distance to nearest VA                                      | 2    |
| Client concerns about career impacts of seeking VA care                    | 1    |

aParticipants could check all responses that applied.

Knowledge About Treating Veterans and Family Members

A major goal of this study was to assess behavioral health providers’ knowledge of best practices for treating conditions that may be related to veterans’ deployment and combat exposure. Table 3 summarizes civilian providers’ responses to the knowledge measure. Percentages of respondents reporting extensive knowledge of best practices for treating veteran conditions were highest for family stress and relationship problems (34%), depression (35%), anxiety (33%), PTSD (32%), suicide/suicide ideation (31%), and substance abuse and dependence (30%). Thus, only about one in three respondents rated themselves as having a high level of knowledge about how to treat these conditions with clients who were veterans or family members. Even smaller percentages of providers reported extensive knowledge about how to treat chronic pain (10%), TBI (10%), MST (11%), and sleep disorders (14%).

Confidence in Treating Conditions

Civilian providers were also surveyed about their level of confidence in treating conditions that may affect veterans and their families. Table 3 reveals that providers were generally most confident about treating conditions for which they had the most knowledge. Between three and four out of 10 respondents reported feeling very confident in their ability to treat veterans who were experiencing depression (37%), anxiety (35%), and suicide/suicide ideation (30%). One-third of providers felt very confident in treating family stress and relationship problems (34%) and caregiver stress (33%) in veteran families. Notably, only 28% of providers felt very confident in treating PTSD in veteran clients. Consistent with knowledge ratings, one in eight or fewer providers reported feeling very confident in treating chronic pain (10%), TBI (9%), sleep disorders (12%), and MST (13%).

Interest in Training

Behavioral health providers’ interest in obtaining training to treat conditions that may affect veterans or their family members is also summarized in Table 3. Between four and six out of ten respondents were very interested in securing training about each of the targeted conditions. More than half reported the highest level of interest in learning best practices for treating PTSD (61%), family stress and relationship problems (56%), family violence (53%), suicide/suicide ideation (53%), TBI (52%), depression (52%), anxiety (52%), grief and bereavement (52%), caregiver stress (51%), and anger (51%) in the veteran population. After combining categories of very and somewhat interested in training, more than four out of five respondents expressed interest in securing training on every topic under investigation. When asked about optimal ways to receive training, 89% of providers were interested in face-to-face trainings in their geographic area,
TABLE 3

Providers’ Knowledge, Confidence, and Training Interest About Best Practices for Treating Veterans \((N = 1,665)\)

| Training Topic/Issue Facing Veterans | Knowledge |  |  | Confidence |  |  | Training Interest |  |  |
|-------------------------------------|-----------|---|---|------------|---|---|------------------|---|---|
|                                     | High (%)  | Some (%) | Minimal (%) | High (%)  | Some (%) | Minimal (%) | High (%)  | Some (%) | None (%) |
| Anger                               | 26        | 52       | 22          | 26        | 45        | 29          | 51        | 41       | 8        |
| Anxiety                             | 33        | 49       | 18          | 35        | 42        | 23          | 52        | 40       | 8        |
| Caregiver stress                    | 26        | 51       | 23          | 33        | 46        | 21          | 51        | 41       | 8        |
| Depression                          | 35        | 48       | 17          | 37        | 41        | 22          | 52        | 40       | 8        |
| Family stress and relationship problems | 34        | 49       | 17          | 34        | 42        | 24          | 56        | 38       | 6        |
| Family violence                     | 27        | 48       | 26          | 27        | 41        | 32          | 53        | 37       | 10       |
| Grief and bereavement               | 29        | 49       | 22          | 30        | 42        | 28          | 52        | 39       | 9        |
| Military sexual trauma              | 11        | 32       | 57          | 13        | 29        | 58          | 48        | 36       | 16       |
| Pain management                     | 10        | 41       | 50          | 10        | 32        | 59          | 40        | 40       | 20       |
| Post-traumatic stress disorder      | 32        | 51       | 18          | 28        | 40        | 32          | 51        | 33       | 7        |
| Sleep disorders                     | 14        | 49       | 38          | 12        | 35        | 52          | 46        | 40       | 15       |
| Substance abuse and dependence      | 30        | 47       | 24          | 26        | 36        | 38          | 44        | 37       | 18       |
| Suicide and suicide ideation        | 31        | 48       | 21          | 30        | 41        | 29          | 53        | 37       | 10       |
| Traumatic brain injury               | 10        | 43       | 47          | 9         | 28        | 63          | 52        | 33       | 15       |

Note. Response categories for knowledge included extensive, some, and minimal knowledge; for confidence included very, somewhat, and minimally confident; and for interest included very, somewhat, and not interested.

and 52% also expressed interest in webinars. Rural and urban clinicians reported similar interest in face-to-face trainings (88% rural, 90% urban) and webinars (51% rural, 53% urban); providers from the different disciplines also preferred face-to-face trainings to webinars, with 80% or more of respondents from each profession reporting interest in the face-to-face training modality.

Provider Characteristics and Knowledge of How to Treat Conditions

Finally, survey data were analyzed to determine whether providers’ self-rated knowledge for treating the 14 veteran/family member conditions could be predicted by their demographic characteristics or military-related experience. Table 4 summarizes these analyses. Results reveal that age of behavioral health providers was a significant predictor of knowledge about nine of the 14 veteran conditions; providers 55 years or older were between 1.3 and 1.9 times more likely to have extensive knowledge of best practices for treating anger, anxiety, depression, PTSD, suicide/suicide ideation, grief, family stress, caregiver stress, and family violence. Male providers reported significantly greater treatment knowledge than female providers for half of the targeted conditions; males were 1.4 to 2.1 times more likely to report a high level of knowledge for treating anger, anxiety, depression, substance abuse, PTSD, suicide/suicide ideation, and family violence. Having an immediate family member in the military was also a significant predictor of greater knowledge of eight conditions; clinicians with a spouse, child, sibling, or parent in the military were 1.3 to 1.9 times more likely to report extensive knowledge of best practices for treating anger, caregiver stress, family stress, family violence, MST, sleep disorders, substance abuse disorders, and suicide/suicide ideation. DOD/VA training significantly predicted six conditions, with those who had such preparation 1.5 to 2.2 times more likely than peers without DOD/VA training to have extensive knowledge for treating MST, PTSD, sleep disorders, substance abuse disorders, suicide/suicide ideation, and TBI. Prior employment in a DOD/VA facility was the strongest predictor of providers’ knowledge of best treatment practices; those who had worked in a DOD or VA facility were 1.8 to 4.8 times more likely than those without this employment history to report extensive knowledge for treating all 14 veteran conditions. Treatment of military clients within the past year also significantly predicted knowledge of best practices; those who had seen military clients were 1.6 to 2.3 times more likely than peers without such clients to have extensive knowledge for treating all study conditions except TBI. Notably, neither veteran status nor geographic location (rural/urban practice) was a significant predictor of knowledge for treating any of the 14 conditions.

DISCUSSION

To our knowledge, this study is one of the first statewide needs assessments of civilian behavioral health providers’ capacity to treat conditions that may affect OEF/OIF/OND veterans and their families. Consistent with a public health approach, findings revealed knowledge gaps and training needs of civilian providers, laying the foundation for targeted, cost-effective statewide interventions to improve veteran and family member well-being. Civilian providers are projected to play a growing role in veteran behavioral health care with the drawdown of troops in Afghanistan and planned reduction in the size of the U.S. military (National Council for
Behavioral Health, 2012). Previous research indicates that many recent veterans and family members are using community-based, civilian health services rather than federal government services because they are perceived to be more flexible, accessible, and confidential (Davis et al., 2011; Greedlinger & Clervil, 2011; Schell et al., 2011).

In the current study, almost four out of five of the civilian behavioral health providers were women, reflecting the female majority of behavioral health professionals in the state. According to the Maryland professional boards, female professionals comprise 87% of social workers, 81% of counselors, 79% of marriage and family therapists, 67% of psychologists, and 43% of psychiatrists in the state. Percentages of female respondents within each professional discipline were similar (within 1% and 6%) to their representation within the state, with the exception of psychiatry, where 82% of respondents were female.

Findings further revealed that almost half of the participating providers were age 55 or older, suggesting that they may have acquired experience in treating veterans of other war eras. Only 8% of civilian providers who completed surveys had personally served in the military—a percentage half that of an earlier study of behavioral health and primary care providers (Kilpatrick et al., 2011). This disparity in findings is likely influenced by the preponderance of female respondents, as well as the exclusion of respondents employed in military facilities.

The vast majority of clinicians in this study had little training or supervised experience in veteran-specific care; fewer than one in six had received graduate training in a VA/DOD facility, and even fewer had been employed by the VA or DOD. Given this dearth of military/veteran experience, many providers likely had inadequate knowledge of military culture and its associated values, traditions, and lifestyles. Lack of military "cultural competence" may impair the therapeutic process for both the provider and the client (Monroe, 2012). Providers need to gain an understanding of how military contextual factors, such as rank structure, formal communication, treatment stigma, commitment to mission, and buddy support/responsibility can affect the etiology of

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**TABLE 4**

Predictors of Knowledge of Veteran and Family Member Behavioral Health Conditions (*N* = 1,665)

| Variable | Anger | Anxiety | Caregiver Stress | Depression | Family Stress |
|----------|-------|---------|-----------------|------------|--------------|
| Male (female) | 1.29 | 1.08 | 1.03 | 1.04 | 1.05 |
| Veteran (no) | 1.27 | 0.95 | 1.27 | 1.49 | 1.48 |
| VA/DOD training (no training) | 1.16 | 0.79 | 1.35 | 1.37 | 1.23 |
| VA/DOD employment (no employment) | 3.91 | 2.64 | 3.66 | 2.48 | 2.20 |
| Treated military clients (no) | 1.84 | 1.37 | 1.83 | 1.41 | 1.93 |
| Urban (rural) | 1.29 | 0.89 | 1.18 | 0.85 | 0.84 |

| Variable | Family Violence | Grief | MST | Pain Management | PTSD |
|----------|-----------------|------|-----|-----------------|------|
| Male (female) | 1.30 | 1.01 | 1.92 | 1.29 | 1.13 |
| Veteran (no) | 1.43 | 0.88 | 1.28 | 1.55 | 0.51 |
| VA/DOD training (no training) | 1.21 | 0.84 | 1.01 | 1.61 | 1.19 |
| VA/DOD employment (no employment) | 1.80 | 1.22 | 3.42 | 4.47 | 4.83 |
| Treated military clients (no) | 1.71 | 1.29 | 1.83 | 1.55 | 2.27 |
| Urban (rural) | 1.67 | 0.83 | 1.18 | 0.84 | 0.87 |

| Variable | Sleep Disorders | Substance Abuse Disorders | Suicide/Suicide Ideation | Traumatic Brain Injury |
|----------|-----------------|---------------------------|-------------------------|-----------------------|
| Male (female) | 1.28 | 0.91 | 1.22 | 0.95 | 1.33 |
| Veteran (no) | 0.80 | 0.43 | 1.45 | 0.89 | 1.20 |
| VA/DOD training (no training) | 1.54 | 1.05 | 1.47 | 1.10 | 1.39 |
| VA/DOD employment (no employment) | 3.66 | 2.37 | 1.95 | 1.33 | 2.95 |
| Treated military clients (no) | 1.95 | 1.29 | 2.00 | 1.51 | 2.16 |
| Urban (rural) | 1.46 | 0.89 | 1.01 | 0.73 | 1.06 |

**Note:** *p < .001; **p < .01; *p < .05; referent categories for categorical predictors are in parentheses.*
behavioral health conditions and client disclosure (Adler & Castro, 2013). Clinicians should also consider how occupational strengths during military service, such as risk taking and emotional control, may pose challenges in veterans’ reintegration to family and civilian life (Adler & Castro, 2013). Civilian providers’ knowledge of military culture and prior experience with veteran care are likely to influence veterans’ decision making about seeking and continuing behavioral health care, as well as their perceptions of the usefulness of treatment.

Although state providers reported limited military experience, their clients often included veterans, service members, and/or family members. Findings support results of prior studies indicating increasing use of the civilian health sector by veterans, service members, and their families (e.g., Davis et al., 2011; Schell et al., 2011). However, less than one-third of Maryland’s civilian behavioral health providers participated in TRICARE, about half the percentage in a previous needs assessment study (Kilpatrick et al., 2011). Such findings suggest that the state’s civilian providers would benefit from more information about this health care program and its potential to expand their client base with veterans and family members. Providers should also be aware of the new Defense Health Agency, which will absorb many functions of TRICARE within a larger initiative to offer a more integrated approach to military health services delivery (Philpott, 2013).

Given the significant percentages of civilian providers who reported treating the veteran and military population, it is notable that only about half regularly screened for clients’ military status or regularly questioned veterans about the stressors of military service. Even fewer clinicians regularly asked family members about stressors related to the veteran’s war experience. Consistent with previous research, findings illustrate a clear need for health providers to routinely screen for military background, including the client’s status as a military family member (Boscarino, Larson, Ladd, Hill, & Paolucci, 2010; Kilpatrick et al., 2011). Clinicians should seek information about the client’s military history or membership in a veteran/military family, determine health concerns that may be war related, and identify service-connected stressors that may affect family well-being. Providers may also utilize short, psychometrically validated screening measures that assess combat exposure, depression, PTSD, suicide ideation, and other conditions (DVA, 2013). Such screening will help providers to identify behavioral health conditions and select evidence-based therapies and best practices for treatment, as well as determine additional services for which their clients may be eligible. Discussion about clients’ military experience will also reveal strengths of veterans and their families, which may inform treatment planning, enhance the quality of the therapeutic relationship, and improve adherence to therapy.

Behavioral health providers in this study also reported on the frequency with which they referred veterans to the VA health care system. Approximately one in eight made frequent referrals, but more than four in 10 never referred clients to the VA for any health care need. In some cases, the absence or low level of referral may stem from providers’ failure to treat veterans or to detect their veteran status. However, about one in six providers failed to refer because they lacked knowledge about VA eligibility or the VA referral process. Smaller percentages reported concerns about VA quality of care, wait time for appointments, and distance to VA facilities—the latter finding likely due to the predominantly urban status of study participants. Given the relatively low level of concern about the quality or accessibility of VA care, many of the state’s civilian providers may be receptive to referring clients for VA services (e.g., substance abuse treatment, chronic pain management) if they had knowledge of eligibility and referral procedures. Current findings support the need for greater collaboration and coordination between the VA and civilian providers across the state. For example, summits that connect VA practitioners and community professionals may increase the resources available to veterans and family members, as well as improve their access to culturally competent behavioral health care (DOD, DVA, & DHHS, 2013).

A major purpose of this study was to examine behavioral health professionals’ knowledge and confidence in treating service-related conditions. Civilian providers who completed the survey were most knowledgeable about treatments for veterans’ depression, anxiety, PTSD, suicide ideation, and substance abuse/dependence in comparison to other service-related conditions. However, the majority of study participants did not feel well prepared to treat any of the 14 targeted conditions. Civilian providers had least knowledge about best practices for treating veterans’ TBI, sleep disorders, chronic pain, and MST. These conditions are among the most frequently reported war-related behavioral health problems and may be largely “invisible” to others, despite their impact on the mood, thoughts, and behaviors of affected veterans (Tanielian & Jaycox, 2008). In addition, only one-third of providers had extensive knowledge of best practices for treating problems of veteran family members, including caregiver stress, family stress and relationship problems, and family violence. Thus, training aimed at improving veteran care should also increase providers’ proficiency in working with family members who also seek treatment from community providers and play a critical role in veterans’ recovery from war wounds (Cozza, Holmes, & Van Ost, 2013; Johnson, 2000).

Consistent with civilian providers’ appraisal of knowledge, the majority of providers in this study did not demonstrate a high level of confidence in their ability to treat any of the conditions affecting veterans and their families. Not surprisingly, providers reported greatest confidence in treating conditions for which they had the most knowledge, such as depression, anxiety, and family stress and relationship problems. Less than one in six clinicians felt very confident treating two conditions associated with the recent conflicts,
TBI and MST. Most providers are unlikely to have completed graduate training about these conditions, and many new therapies for treating these traumatic experiences are only now under study (Greedlinger & Clervil, 2011). The majority of providers also felt minimally confident in treating chronic pain, which may reflect their practice of referring clients to primary care providers or specialists for assessment and treatment of physical pain.

The needs assessment also identified provider characteristics that predicted greater knowledge of treatments for service-related conditions. Not surprisingly, having prior connections with veterans and the military was significantly associated with greater knowledge of treating veteran conditions. Specifically, prior DOD/VA employment, recent treatment of military clients, and having an immediate family member in the armed forces significantly predicted knowledge of the majority of conditions. DOD/VA training likewise predicted higher knowledge of six conditions, including PTSD, TBI, and MST. These results suggest that interacting with veterans, whether in a work or family setting, may prompt providers to seek knowledge about veteran care.

Findings also revealed that older and male providers reported greater knowledge of how to treat many veteran conditions than their younger and female peers did. Another study of primary care providers treating OEF/OIF veterans also found that older and male providers reported greater mental health treatment knowledge than younger and female providers (Boscarino et al., 2010). Clinicians over age 55 may be more likely than their younger colleagues to have treated veterans from former war eras, and to have developed skills for treating service-related conditions and reducing the stigma associated with mental health treatment. Female clinicians may be less likely to have had contact with the male-dominated military than their male peers. National data on behavioral health professions, such as social work, indicate a much higher proportion of male clinicians working in military and government agencies and female clinicians working in child welfare and residential facilities for children (Whitaker & Arrington, 2008). Women veterans are the fastest-growing segment of the veteran community, and they are more likely than their male peers to be diagnosed with mental health problems (DVA, 2012a). Given women veterans’ preference for receiving health services in women-only settings (Washington, Yano, Simon, & Sun, 2006; Washington, Kleimann, Michelini, Kleimann, & Canning, 2007), efforts to train female clinicians in veteran care appear likely to enhance women veterans’ health care utilization and satisfaction.

Interestingly, veteran status was not a significant predictor of any of the 14 targeted behavioral health conditions. Although one might expect that veterans would be more knowledgeable about these conditions by virtue of their military experience, the current study focused on providers’ knowledge of best practices for treating these conditions. Veterans, like other providers, need formal education, training, and clinical supervision to provide evidence-based care for veterans’ behavioral health conditions and to engage clients who are often reluctant to seek mental health care.

Although most civilian providers in this study did not report high levels of knowledge and confidence in treating war-related conditions, they were highly motivated to learn best practices for working with veterans and their families. Providers expressed greatest interest in securing training about numerous conditions linked to the recent OEF/OIF conflicts, including PTSD, TBI, suicide/suicide ideation, and family stress and relationship problems. Notably, the most popular training modality in both rural and urban areas was face-to-face trainings, a method which enables clinicians to build regional and state peer networks and to share optimal strategies for veteran and family member care.

Application to Practice

Overall, this study revealed substantial gaps in civilian behavioral health providers’ knowledge of best practices for treating veteran and family member conditions, as well as their confidence in providing veteran-centric care. However, findings also revealed substantial provider interest in securing training to serve the veteran population. The current study extends previous research with a large sample size of providers, broad representation of behavioral health professionals, comprehensive examination of veteran behavioral health conditions (including family issues), and assessment of three levels of provider knowledge, confidence, and interest. It further provides a model for other states interested in assessing civilian providers’ capacity to deliver culturally competent veteran care.

Consistent with a public health approach, data from this needs assessment were subsequently used to plan trainings for the state’s civilian behavioral health providers. Providers reported that the needs assessment enhanced their awareness of veterans’ issues, while also fostering a sense of “shared responsibility” for improving veteran care at the community level. Within a year of the survey, MaVRI trained more than 700 behavioral health providers in four geographic sites across the state, including two sites in rural counties. Trainings focused on enhancing familiarity with military culture and sharing best practices to treat conditions for which providers had limited knowledge but desired training (e.g., PTSD, TBI, suicide ideation, family stress). Programs also shared screening measures and treatment resources within the VA, DOD, and civilian health care system. In partnership with the Center for Deployment Psychology, MaVRI provided an advanced, two-day prolonged exposure therapy training for 150 Maryland civilian clinicians who had completed a previous MaVRI training. Evaluations from these MaVRI trainings revealed that all learning outcomes were met, and speaker presentations were highly rated with respect to content, delivery, and usefulness to practice.

On
average, participants reported moving from feeling “a little prepared” to “moderately prepared” in their readiness to treat veterans and their families as a result of participation in the training programs. In addition, a county mental health association offered a training program for 150 clinicians addressing veterans’ reintegration to civilian life that was informed by disaggregated county data from the MaVRI needs assessment.

Limitations

Although this study provides useful information about the capacity of civilian behavioral health providers in one state to deliver veteran/family member care, it has several limitations. Given that the response rate was estimated at less than 10%, results may not be representative of the larger group of licensed clinicians in Maryland. Notably, the high survey completion rate of clinicians who actually opened our survey (94%) was similar to that of a previous needs assessment study (98%; Kilpatrick et al., 2011). Individuals who responded to the survey may have had a special interest in veterans’ issues not shared by their peers. It is also possible that those already trained to treat this population chose not to respond. Future studies should aim for a higher response rate, employing such strategies as gaining endorsement from professional associations, tailoring survey invitations to clinicians in specific work environments (e.g., health clinics, colleges, hospitals, justice system), and sending multiple follow-up reminders. Surveys should be developed with direct input from clinicians to ensure that they address the issues and settings in which providers treat and interact with veterans and family members.

Given that current findings were based on self-reported knowledge and practices, results may have been biased by providers’ faulty recall or their desire to present themselves in a favorable light. However, the survey was anonymous and findings were generally consistent with those obtained in previous studies of health care providers (Boscarino et al., 2010; Kilpatrick et al., 2011). Future research should explore the training needs of civilian behavioral health providers in other states/regions, including those with a larger and smaller military presence. There is a particular need to examine civilian provider expertise and alternative methods of service delivery in rural states given the distance barriers to VA facilities and the higher prevalence of untreated mental health conditions among veterans in some rural states (Davis et al., 2011; Wallace, Weeks, Wang, Lee, & Kazis, 2006).

Conclusion

Behavioral health providers outside the VA/DOD health care system will increasingly encounter veterans and family members seeking treatment for service-related conditions. Although the majority of these providers lack graduate training in veteran-specific care, efforts are now being made to enhance their capacity to serve this population. Careful assessment of the current knowledge, practices, and training needs of providers is an important component of the public health approach and essential in preparing providers to address behavioral health conditions within a military context. State needs assessments can inform the development of professional curricula and continuing education programs that focus on behavioral health needs of veterans and family members, as well as identify opportunities for civilian providers to partner with VA/DOD health services. Such efforts will help reduce behavioral health problems before they become chronic, costly, and severe. U.S. veterans and their families have sacrificed for our nation and deserve the highest quality of behavioral health care.

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