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Behavioral Health and Service Use Among Civilian Wives of Service Members and Veterans

Evidence from the National Survey of Drug Use and Health

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Key findings

- The military wives and the comparison group were fairly similar in past-year behavioral health status. However, there is evidence that military wives are more likely to have had major depression in their lifetimes.
- Military wives were more likely to have received behavioral health service in the past year, but this difference was not consistent across the types of services; it was due to higher use of prescription psychiatric medications.
- Military wives in more rural areas are less likely to use any type of behavioral health services, significantly so for substance use disorder treatment.
- The likelihood of receiving specialty behavioral health treatment is similar in metropolitan noncore and metropolitan core areas, but lower among residents of micropolitan and small towns and rural areas.
- Military wives living close to an MTF showed lower use of behavioral health services than those living farther away. For the comparison group, proximity to an MTF is associated with higher likelihood of using services.
- Military wives who live near an MTF are less likely to use prescription medication than those who live farther away.

SUMMARY ■ In recent years, policymakers and members of the media have raised concerns regarding access to behavioral health care for service members and veterans of the U.S. military and their families. Particular concern has been raised regarding the availability and accessibility of care to individuals covered by the DoD's Military Health System (MHS) and the Veterans Health Administration (VHA). To date, research on access to behavioral health care among eligible family of service members and veterans has been limited. In this report, we examine utilization of behavioral health care among one important segment of this population: current or former wives of service members and veterans (whom we refer to as military wives) who are covered by either TRICARE or CHAMP-VA (corresponding to eligibility for care in the MHS or VHA, respectively).

Data for this study are drawn from the National Survey of Drug Use and Health (NSDUH), a large annual cross-sectional survey of behavioral health status and service use in the general U.S. population. By pooling across four consecutive years of the NSDUH, from 2008 to 2011, we are able to compile a large enough sample of current and former wives of service members and veterans to allow meaningful statistical analysis. The sample of military wives was identified in the sample by three criteria:

1. They had never been in the U.S. armed services.

2. They had been married at some point in their lives (presumably to a service member who established their eligibility for either DoD or VA health benefits).
3. They currently receive health care coverage from either TRICARE or the CHAMP-VA.

The comparison group was also drawn from the four-year pooled NSDUH sample according to the following criteria:

1. They had never been in the U.S. armed services.
2. They had been married at some point in their lives.
3. They were covered by a nonmilitary form of health insurance.

Comparisons were made with respect to use of any behavioral health service and of three specific types of service: specialty behavioral health treatment, use of prescription psychiatric medications, and substance use treatment.

Three findings of interest emerged from the analysis. First, relative to the comparison group, military wives who were covered for either TRICARE or CHAMP-VA were more likely to receive behavioral health services, but this pattern was exclusively due to use of prescription psychiatric medications. No difference was found for specialty behavioral health treatment. Second, residing in rural areas was negatively associated with behavioral health care service use for both groups. That is, women who lived small towns or rural areas were less likely to use care, regardless of whether they were military spouses or not. Third, contrary to expectations, we found that military wives who live more than 30 minutes from a military treatment facility (MTF) were more likely than military wives living close to an MTF to receive prescription psychiatric mediations but not other types of behavioral health services.

This study, the first to directly examine behavioral health service use among a representative sample of TRICARE- or CHAMP-VA-covered military wives, did not find evidence that the group experiences disparities in care compared with the general population. The study does have some limitations, which could be addressed in future studies, notably the indirect method of identifying the population of interest. The unexpected finding that military spouses who are more than a 30-minute drive from an MTF are more likely to use prescription psychiatric medications, might indicate a problem in the quality of behavioral health care they are receiving and should be followed up in future studies.

Abbreviations

APA	American Psychiatric Association
CHAMP-VA	Civilian Health and Medical Program of the Department of Veterans Affairs
CI	confidence interval
K6	Kessler 6 (psychometric scale)
MHS	Military Health System
MTF	military treatment facility
NSDUH	National Survey of Drug Use and Health
OR	odds ratio
RUCA	Rural Urban Community Area
SAMHSA	Substance Abuse and Mental Health Services Administration
TRICARE	the health care program for the Department of Defense
VA	Department of Veterans Affairs
VHA	Veterans Health Administration

INTRODUCTION

Access to quality behavioral health treatment for eligible family of service members and veterans is an important and growing concern (Brown et al., 2015; Lazare, 2013; U.S. Department of Defense [DoD], 2014; U.S. Government Accountability Office [GAO], 2011), alongside concerns for the quality of behavioral health treatment offered to the service members and veterans themselves. However, the use of behavioral health treatment in this population has not been compared with the general population, partly because of the difficulty of obtaining epidemiologic data that contain not only large enough sample sizes, but also assessments of behavioral health status and assessments of behavioral health service use. This study addresses that gap with respect to one segment of this population: women who receive medical coverage through a military source by virtue of the military service of their current or former spouse.

Many family members of U.S. military service members and veterans receive medical coverage from a military-related source—either through TRICARE, a health benefits plan administered by DoD's Military Health System (MHS), or through CHAMP-VA, an insurance program for some eligible veteran spouses administered by the Veteran's Health Administration (VHA) run by the Department of Veterans Affairs. Both the MHS and the VHA employ specific criteria to determine eligibility for coverage. TRICARE coverage is made available to immediate family members of active component service members, retirees, some categories of National Guard and Reserves, and service members who died while serving. Ex-spouses remain eligible until they remarry. Eligibility for CHAMP-VA is extended to spouses who are not eligible for TRICARE and whose sponsor died or was disabled due to a service-connected condition or while on active duty.

In this report, we examine patterns of behavioral health service use in a nationally representative sample of adult (age 18 or older) women who are or have been married, are covered by TRICARE or CHAMP-VA, and have never themselves served in the U.S. military. We restrict the sample to women because the small sample of men who meet these criteria makes generalization to men in this position unreliable. In addition, we restrict the sample to women who have never been in the military as a way to focus on individuals who have access to TRICARE or CHAMP-VA exclusively through the service history of their spouse. Our goal is to examine whether disparities in behavioral health care exist between this group of women and a comparable group of women from the general population who receive medical coverage from other sources. Disparities in behavioral health care related to coverage from a military-related source might indicate a need for targeted policy efforts to improve access within TRICARE or CHAMP-VA for covered spouses of service members and veterans.

Because of concerns regarding the geographic distribution of care, we also examined whether differences in use of care between the sample of women covered through TRICARE or CHAMP-VA and the comparison group are related to rural versus urban residence and proximity to military treatment facilities (MTFs) and VHA medical facilities. If they are covered by TRICARE, spouses of current or former service members may attempt to obtain care at MTFs if there are no easily accessible alternative facilities. However, the primary mission of MTFs is to treat active duty service members—dependents are seen on a space-available basis only. Thus, MTFs may have difficulty accommodating the needs of spouses of former service members (Jansen, 2014).

METHODS

Data come from the National Survey of Drug Use and Health (NSDUH), an annual survey of the general U.S. population carried out by the Substance Abuse and Mental Health Services Administration (SAMHSA). The NSDUH, which serves as the nation's primary drug use and behavioral health survey, is the best available source of data on the target population of this study because of its large sample size, which includes more than 30,000 adults age 18 and over, and its sample design, which is composed of representative samples of each of the 50 states and the District of Columbia. For the purposes of this study, four years of data (2008 through 2011) were pooled.

For purposes of this study, spouses of service members and veterans covered by TRICARE or CHAMP-VA were identified as women meeting the following three criteria:

1. The respondent self-reported a military source of health coverage (the NSDUH instrument does not ask about the specific military source).
2. The respondent was never a member of the U.S. military.
3. The respondent was married at least once.

Formerly married women were included because many in this population continue to receive military-related health cov-

erage after divorce or the death of their spouse.[1] As a comparison group, we selected women who met similar criteria:

1. They had health insurance that is not from a military-related source.
2. They had never been a member of the U.S. military.
3. They had been married at least once in their lifetime.[2]

We compared these two groups with respect to their behavioral health status and their use of behavioral health services. Three behavioral health measures were used. The K6 is a six-item screening measure for *serious psychological distress* designed to identify clinically significant behavioral health problems (Kessler et al., 2003). A *history of major depression* was assessed using a modified version of the depression module from the World Mental Health Composite International Diagnostic Instrument (Kessler and Ustün, 2004). *Alcohol and drug use disorders* were determined using a structured diagnostic instrument (Jordan, Karg, Batts, et al., 2008) to assess standard criteria specified in the American Psychiatric Association's (APA's) *Diagnostic and Statistical Manual of Mental Disorders, Version IV* (APA, 2000).

The following four behavioral health service use outcomes were examined:

- **Substance Use Disorder Treatment.** Respondents were asked: "During the past 12 months, have you received treatment or counseling for your use of alcohol or any drug, not counting cigarettes?" Treatment may have been received in the specialty behavioral health sector or in the general medical sector (e.g., primary care clinic).
- **Specialty Behavioral Health Treatment.** Any non–substance-related specialty behavioral health treatment received from a specialty mental health provider in the past year. Respondents were asked: "During the past 12 months, did you receive any outpatient treatment or counseling for any problem you were having with your emotions, nerves, or mental health at any of the places listed below? Please do not include treatment for alcohol or drug use.
  - An outpatient mental health clinic or center;
  - The office of a private therapist, psychologist, psychiatrist, social worker, or counselor that was not part of a clinic;
  - A doctor's office that was not part of a clinic;
  - An outpatient medical clinic;
  - A partial day hospital or day treatment program;
  - Some other place."
- **Prescription Medication for a Mental Health Problem.** Respondents were asked: "During the past 12 months, did you take any prescription medication that was prescribed for you to treat a mental or emotional condition?" Prescriptions for these medications may have come from any prescriber.
- **Any Behavioral Health Care Service.** Respondents replying "yes" to one or more of questions 1–3 above.

Census tract information was used to define two geographic variables, one based on the Rural Urban Community Area (RUCA) codes, developed by the U.S. Department of Agriculture's Economic Research Service (2013), and the other based on proximity to an MTF,[3] which was developed at RAND (Brown et al., 2015). Four levels of RUCA codes were used:

- core area of a large metropolitan area
- noncore area of a large metropolitan area
- micropolitan area (urbanized area with between 10,000 and 50,000 inhabitants)
- rural area.

Proximity to an MTF was coded as either within or outside a 30-minute driving radius of an MTF. Further details on this definition of proximity are available in Brown et al. (2015).

Associations of medical coverage from a military-related source with behavioral health status and use of behavioral health care were examined in cross-tabulations with design-adjusted chi-square tests using the SUDAAN (Survey Data Analysis) software package (SUDAAN, 2004). Disparities in use of behavioral health services were operationalized as differences between groups that remain after statistical adjustment for demographic factors and need for behavioral health services as indicated by past-year serious psychological distress or substance use disorder. Differences were estimated in logistic regression models. Coefficients from those models are presented as odds ratios with design-adjusted confidence intervals.

FINDINGS

Who Are the Wives Covered by TRICARE or CHAMP-VA?

Table 1 shows the characteristics of military wives (*n=3100*) and the comparison group (*n=133,600*).[4] Relative to the comparison group, the spouses covered by TRICARE or CHAMP-VA are more likely to be at the younger and older extremes of the age range, more likely to be in the middle categories of edu-

cational attainment, less likely to be employed and more likely to be retired or out of the labor market, less likely to be in the highest level of income, and more likely to live in the South. In addition, military wives are more likely to live in small to mid-sized metropolitan areas and more likely to live near MTFs than the comparison group.

Do Military Wives Differ from the Comparison Group with Respect to Behavioral Health Status?

As shown in Table 2, the military wives in our sample are generally similar to the comparison group in their past-year behavioral health status. None of the comparisons on past-year behavioral health assessments show statistically significant differences. However, there is evidence that the military wives in our sample are more likely than the comparison group to have had major depression in their lifetimes, and this difference is sustained after statistical adjustment for age, ethnicity, educational attainment, employment status, income, marital status, and urbanicity (odds ratio [OR]=1.3; 95 percent confidence interval [CI]=1.1–1.6).

Do Military Wives Differ from the Comparison Group with Respect to Use of Behavioral Health Services?

Table 3 shows differences in the use of behavioral health services. The military wives in our sample are more likely than the comparison group to have received behavioral health service in the past year (19.5 percent versus 15.1 percent), and this difference is sustained after statistical adjustment for demographic and behavioral health factors (OR=1.43; 95 percent CI=1.11–1.84). However, this difference is not consistent across the types of behavioral health services. In fact, the difference in use of services is entirely due to their higher likelihood of using prescription psychiatric medications (OR=1.61; 95 percent CI-1.23–2.09). In contrast, there is no statistically significant difference between the military wives in our sample and their comparison group with respect to specialty behavioral health treatment (OR=1.15; 95 percent CI=0.81–1.62) or substance use disorder treatment (OR=0.45; 95 percent CI-0.20–1.01).

DOES THE USE OF BEHAVIORAL HEALTH SERVICES DIFFER BY URBANICITY?

Based on literature on behavioral health service use among the general population (Hauenstein, Petterson, Rovnyak et al., 2007), we expected that women in both groups who live in more rural areas would be less likely to receive behavioral health care, and, in particular, less likely to receive specialty behavioral health treatment than those living in more urban areas.

Table 4 shows the relationships between urbanicity, defined using RUCA codes, and use of the various types of behavioral health services in the combined sample of military wives and the comparison group. Compared with those living in urban cores of metropolitan areas, people in noncore areas, small towns, or rural areas are less likely to use any type of behavioral health services, after adjusting statistically for demographic characteristics and behavioral health status. The urban-rural pattern differs by the type of behavioral health service being considered. For substance use disorder treatment, the relationship is considerably stronger than for other categories of service, with persons residing in metropolitan noncore areas, small towns, or rural areas significantly less likely to receive treatment than those in metropolitan core areas, with ORs equal to 0.6 in both cases. In contrast, the likelihood of receiving specialty behavioral health treatment is similar in metropolitan core and noncore areas, but lower among residents of micropolitan and small towns and rural areas. There is no statistically significant relationship between RUCA and use of prescription medications.

To test whether disparities in behavioral health service use related to rural versus urban residence differ between the military wives in our sample and the comparison group, we tested for statistical interactions between military sample status and several alternative geographic categorizations. If these interactions are significant, they indicate that the relationship between geographic location and use of services differs between the military wives in our sample and the comparison group. None of the interactions between military sample status and urban versus rural categorizations were statistically significant, suggesting that the urban-rural pattern of service use observed in the military wives in our sample is similar to that in the general population.

The urban-rural pattern differs by the type of behavioral health service being considered.

Table 1. Characteristics of the Military Wives and Comparison Group

Characteristic	Comparison Group (%)	Military Wives (%)
Age		
18-25	2.24	6.75
26-34	12.65	11.25
35-49	32.74	18.16
50-64	31.11	26.05
65 or older	21.26	37.79
	p<.001	
Education		
Less than high school	12.64	12.22
High school graduate	29.23	30.85
Some College	23.97	33.41
College graduate	34.16	23.52
	p<.001	
Ethnicity		
Non-Hispanic white	74.19	77.48
Non-Hispanic black	9.1	9.73
Hispanic	10.78	6.62
Other	5.93	6.17
	p<.001	
Employment Status		
Employed full-time	52.13	22.41
Employed part-time	13.53	13.36
Unemployed	2.99	4.93
Student	0.63	1.92
Not in labor market	7.01	16.23
Retired	18.34	37.05
Disabled	5.37	4.11
	p<.001	
Nativity		
Born in United States	84.51	88.21
Not born in United States	15.49	11.79
	p=.01	
Marital Status		
Married	74.38	75.37
Widowed	8.8	18.78
Divorced or separated	16.81	5.85
	p<.001	

Table 1—Continued

Characteristic	Comparison Group (%)	Military Wives (%)
Income		
Less than $20,000	11.94	9.06
$20,000–49,999	28.7	36.6
$50,000–74,999	19.16	23.72
$75,000–99,999	14.91	15.03
$100,000 or more	25.29	15.59
	p<.001	
Region		
Northeast	19.55	7.1
Midwest	23.22	13.79
South	34.97	55.46
West	22.26	23.65
	p<.001	
Rural Urban Commuting Area		
Metro core	69.96	66.93
Metro noncore	10.14	9.53
Micropolitan	10.02	13.37
Small town/rural	9.88	10.17
	p=.091	

SOURCE: Data come from the National Survey of Drug Use and Health (2008–2011).
NOTE: P-values are reported for design-adjusted chi-square tests.

Table 2. Prevalence of Behavioral Health Outcomes Among Military Wives and the Comparison Group

	Prevalence		Adjusted Odds Ratio*			
Disorder Category	Comparison Group (%)	Military Wives (%)	OR	95% CI	Wald Chi-Sq	P-value
Past-year major depression	5.93	6.81	1.2	(0.9, 1.7)	2.17	0.141
Lifetime major depression	12.33	14.69†	1.3	(1.1, 1.6)	5.65	0.018
Past-month serious psychological distress	3.57	3.55	1.1	(0.7, 1.5)	0.05	0.825
Past-year serious psychological distress	8.23	9.42	1.2	(0.9, 1.6)	1.70	0.193
Past-year serious mental illness (SMIYR=1)	3.94	4.26	1.1	(0.8, 1.5)	0.29	0.591
Past-year substance use disorder	5.15	2.89†	0.7	(.4, 1.1)	2.30	0.130

SOURCE: Data come from the National Survey of Drug Use and Health (2008–2011).
* Estimated in logistic regression model with statistical controls for age, ethnicity, educational attainment, employment status, income, current marital status, moves in the past year, and rural urban community area.
† Difference in prevalence between military wives and comparison group is statistically significant at p=.05.

Table 3. Behavioral Health Service Use Among Military Spouses and the Comparison Group

	Prevalence of Service Use		Adjusted Odds Ratio*			
Type of Service	Comparison Group (%)	Military Wives (%)	OR	95% CI	Wald Chi-Sq	P-value
Specialty treatment	6.8	7.4	1.15	(0.81, 1.62)	0.61	0.4368
Prescription drugs	12.6	18.1†	1.61	(1.23, 2.09)	12.29	0.0005
Substance use treatment	1.0	0.3†	0.45	(0.20, 1.01)	3.75	0.053
Any treatment	15.1	19.5†	1.43	(1.11, 1.84)	7.6	0.006

NOTE: Adjusted models include statistical controls for age, educational attainment, employment status, income, U.S. nativity, marital status, recent residential moves, ethnicity, region, survey year, severity of psychological distress, lifetime major depression, past-year major depression, K6 severity, and past-year substance disorder.
† Difference between military wives and comparison group is statistically significant at p=.05.
Data come from the National Survey of Drug Use and Health (2008–2011).

Table 4. Relationship Between Remoteness and Behavioral Health Service Use in Military Wives and Comparison Group

	Type of Behavioral Health Service							
Rural/Urban Commuting Area	Specialty		Prescription Medication		SUD		Any Treatment	
	OR	CI	OR	CI	OR	CI	OR	CI
Metro core	Ref.		NS		Ref.		ref	
Metro noncore	0.9	(0.77, 1.08)			**0.6**	**(0.43, 0.96)**	**0.9**	**(0.78, 1.00)**
Micropolitan	**0.7**	**(0.62, 0.87)**			0.9	(0.61, 1.25)	0.9	(0.82, 1.04)
Small town/rural	**0.7**	**(0.58, 0.83)**			**0.6**	**(0.44, 0.83)**	**0.8**	**(0.74, 0.94)**

NOTE: Statistical controls for age, educational attainment, employment status, income, U.S. nativity, marital status, recent residential moves, ethnicity, region, survey year, severity of psychological distress, lifetime major depression, past-year major depression, K6 severity, past-year substance disorder, and military health insurance coverage.
NS=Not statistically significant.
Odds ratios in bold are significantly different from 1 at p=0.05.
Data come from the National Survey of Drug Use and Health (2008–2011).

Table 5. Associations of MTF Proximity with Use of Behavioral Health Services in Military Wives and the Comparison Group

	Full Sample			Military Wives			Comparison Group		
Service	OR	95% CI		OR	95% CI		OR	95% CI	
Substance use treatment	1.0	0.7	1.4	1.6	0.5	5.2	1.0	0.7	1.4
Specialty treatment	**1.3**	**1.1**	**1.5**	0.9	0.5	1.7	**1.3**	**1.1**	**1.5**
Prescription medication	1.0	1.0	1.2	**0.6**	**0.3**	**0.9**	**1.1**	**1.0**	**1.3**
Any service	**1.1**	**1.0**	**1.2**	**0.6**	**0.4**	**0.9**	**1.2**	**1.0**	**1.3**

NOTES: All odds ratios estimated with statistical adjustment for age, education, employment status, income, U.S. nativity, marital status, recent residential moves, ethnicity, region, survey year, behavioral health status, and urbanicity.
Odds ratios in bold are significantly different from 1 at p=.05.
Data come from the National Survey of Drug Use and Health (2008–2011).

Is Proximity to an MTF Associated with Use of Behavioral Health Services Among Military Wives?

In contrast with the findings regarding urban versus rural categorizations, we did find a statistically significant interaction between being a military wife and proximity to an MTF. This interaction indicates that the relationship between proximity to an MTF and use of behavioral health services differs significantly between the military wives in our sample and the comparison group. Although we would not expect that proximity to an MTF would have an impact on access to care among the comparison group, proximity to an MTF might be associ-

ated with other factors that would improve access to care close to MTFs even for people without TRICARE coverage. For example, some MTFs are routinely overwhelmed by demand, and this "overflow" is pushed to community providers. It is possible that such intermittent demand helps build networks of community providers around MTFs (Brown et al., 2015). Differences between the military wives in our sample and the comparison group provide stronger evidence of distinctive patterns of care attributable to the source of health coverage.

The associations of MTF proximity and use of behavioral health services for the entire sample and for each subgroup are shown in Table 5. If we look at the entire sample as a single group, we find a small association of being close to an MTF and higher likelihood of using any behavioral health service (OR=1.1; 95 percent CI=1.0–1.2), and this difference appears to be attributable to use of specialty behavioral health treatment. However, the associations are different in the military wives' group than in the comparison group. In fact, among the military wives, the association is statistically significant in the opposite direction; in this group, living close to an MTF is associated with lower use of behavioral health services (OR=0.6; 95 percent CI=0.4–0.9). With respect to the specific types of service, only prescription medication use follows this pattern, while there is no significant relationship between MTF proximity and either specialty behavioral health treatment or substance use treatment. In contrast, when the comparison group is examined separately, proximity to an MTF is associated with higher likelihood of using any behavioral health service, prescription medication, and specialty treatment.

The differences in use of behavioral health services related to MTF proximity are shown for both the military wives and the comparison group in Figure 1. Among the comparison group, on the left side of the figure, there are very small differences between those who live near an MTF (shown in blue bars) and those who do not (shown in red bars). Only one of these three comparisons reaches statistical significance, specialty behavioral health treatment, and the magnitude of the difference is small, 0.9 percent (7.7 percent among those close to an MTF and 6.7 percent among others). In contrast, among the military wives in our sample, on the right side of the figure, there is a statistically significant difference of more than 7 percentage points in receipt of any behavioral health service (14.8 percent among those close to an MTF and 22.4 percent among others), which is almost entirely accounted for by the difference in the likelihood of receiving prescription medication. The military spouses in our sample who live near an MTF are less likely to use prescription medication than those who are not near an MTF. Comparing the military wives to the comparison group suggests that the latter group, the military wives who are not near an MTF, are the true exceptions, with higher use of prescription medication treatment for mental health conditions than all other groups.

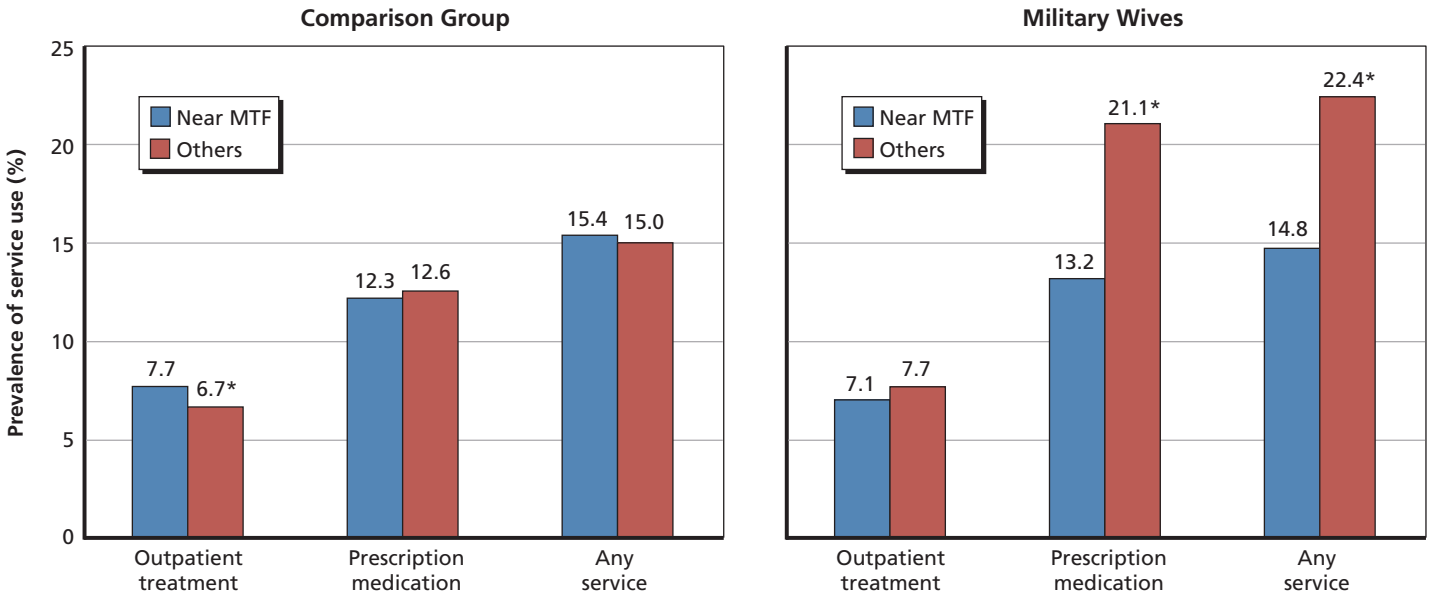
DISCUSSION AND CONCLUSION

By pooling data from the largest survey of behavioral health status and behavioral health service use that is conducted in the United States, we were able to shed light on a sector of the population about which little is known. The sample of women who have never themselves been in the U.S. military but are covered by TRICARE or CHAMP-VA by virtue of current or former marriage to a U.S. service member represent an important population for study. The survey also provided a comparison group of women from the general U.S. population who, like the sample of military wives, have also been married and have health insurance coverage, though it is from a nonmilitary source.

After adjusting statistically for remaining demographic differences between the military wives' sample and the comparison group, some differences in behavioral health status remain statistically significant, but the results do not indicate large differences in need for behavioral health care. Although the military wives in our sample were more likely to have had major depression at some prior point in their lives, they were not more likely than the comparison group to be depressed at the time of the interview. However, there is evidence that use of behavioral health care among the military wives in our sample differed from use among the comparison group. The military wives in our sample are more, rather than less, likely to receive some kind of behavioral health service, after adjusting for their behavioral health status. The difference is entirely accounted for by higher use of prescription medications for behavioral health reasons.

When we look at the use of medication more closely, we find that proximity to an MTF has a different impact on military wives than on the comparison group. For the comparison group, proximity to an MTF is unrelated to behavioral health care use. However, contrary to our expectation, proximity to an MTF was associated with lower likelihood of behavioral health care use for the military wives in our sample—particularly in use of prescription medications. The difference is quite large; military wives are nearly 1.5 times more likely to use prescription psychiatric medications if they live at a distance from an MTF than if they live near an MTF. This unexpected finding warrants investigation in future studies. One potential explanation is that women living close to MTFs have difficulty

Figure 1. Proximity to an MTF and Use of Behavioral Health Services Among Sampled Military Wives and the Comparison Group



*Indicates statistically significant difference between groups at p=0.5.
SOURCE: Data from the NSDUH 2008–2011.

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accessing care because their insurance limits them to care at the MTF but those facilities do not have the capacity to treat them. Dependents who are covered via TRICARE at MTFs are seen only on a space-available basis (Jansen, 2014), so it is possible that dependents near MTFs are significantly less likely to get care due to long wait times and other barriers to care (compared with those who have TRICARE remote coverage and are able to see community providers for their behavioral health needs). However, it is notable that, relative to the comparison group, the high level of utilization of prescription medications among military wives who are not proximal to an MTF is truly distinctive. The high level of prescription psychiatric medication in this group, which is not matched by similarly high levels of use of outpatient specialty mental health care, may suggest problems in the quality of mental health care to which their military-related health insurance coverage provides them access.

This represents the first use of the NSDUH to investigate patterns of behavioral health disparities and behavioral health care utilization among a sample of current and former military wives who have access to health care through TRICARE or CHAMP-VA. The NSDUH is a powerful tool because of its population-based sampling and the resulting ability to compare military family members with the general U.S. population. The Defense Health Agency, VHA, and other agencies and organizations could benefit from further analysis of the NSDUH for emerging policy-related research questions.

These findings should be understood in light of three important limitations. First, the sample of military wives is identified indirectly and probably undercounts members of this group relative to their actual population percentage. The reason for this is that there may be some women who are properly in this category—i.e., they are eligible for military-related health coverage by virtue of their current or former spouse—who are not covered by either TRICARE or CHAMP-VA because they are covered by some other source of health insurance. Furthermore, this sample excludes military wives who are not eligible for TRICARE or CHAMP-VA because of their spouse's number of years of military service or discharge status. The group studied here represents the subgroup of eligible women who actually utilize TRICARE or CHAMP-VA benefits. Second, there are limitations to the data in the NSDUH regarding the specific source of health care, including prescription medications. Additional studies with more-detailed data on the source of care will be required to identify the specific pathways to care responsible for the patterns identified here for the first time. Third, the NSDUH asks about all forms of military-related health insurance coverage in a single question, making it impossible to separate individuals covered by TRICARE from those covered by CHAMP-VA. Future research is needed to identify patterns of unmet need specific to each of these programs.

Notes

[1] This definition may include a small number of married women who qualify for coverage through a parent rather than a spouse. However, due to age restrictions on eligibility through a parent, the number of women misclassified for this reason is likely to be very small.

[2] This comparison group could include a small number of women who meet eligibility criteria for MHS or VHA coverage but who have not enrolled in one of those plans.

[3] Proximity to a VHA facility (medical center or community-based outpatient clinic) was also tested. No associations with behavioral health outcomes were observed for the military wives or comparison group, and there was no mediation or moderation of the effects by MTF proximity. For the sake of simplicity, we report patterns by MTF proximity only in this report.

[4] Presentation of sample sizes are rounded to the nearest 100 as required by the Data Use Agreement.

REFERENCES

American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders,* revised 4th ed., Washington, D.C., 2000.

APA—*See* American Psychiatric Association.

Brown, Ryan Andrew, Grant N. Marshall, Joshua Breslau, Coreen Farris, Karen Chan Osilla, Harold Alan Pincus, Teague Ruder, Phoenix Voorhies, Dionne Barnes-Proby, Katherine Pfrommer, Lisa Miyashiro, Yashodhara Rana, and David M. Adamson, *Access to Behavioral Health Care for Geographically Remote Service Members and Dependents in the U.S.*, Santa Monica, Calif.: RAND Corporation, RR-578-OSD, 2015. As of May 28, 2015:
http://www.rand.org/pubs/research_reports/RR578.html

DoD—*See* U.S. Department of Defense.

GAO—*See* U.S. Government Accountability Office.

Hauenstein E. J., S. Petterson, V. Rovnyak, E. Merwin, B. Heise, and D. Wagner, "Rurality and Mental Health Treatment," *Administration and Policy in Mental Health*, Vol. 34, No. 3, 2007, pp. 255–267.

Jansen, Don J., *Military Medical Care: Questions and Answers*, Washington, D.C.: Congressional Research Service, 2014. As of May 28, 2015:
http://fas.org/sgp/crs/misc/RL33537.pdf

Jordan, B. K., R. S. Karg, K. R. Batts, J. F. Epstein, and C. Wiesen, "A Clinical Validation of the National Survey on Drug Use and Health Assessment of Substance Use Disorders," *Addictive Behaviors*, Vol. 33, No. 5, 2008, pp. 782–798.

Kessler R., and T. Ustün, "The World Mental Health (WMH) Survey Initiative Version of the World Health Organization (WHO) Composite International Diagnostic Interview (CIDI)," *International Journal of Methods in Psychiatric Research*, Vol. 13, No. 2, 2004, pp. 93–121.

Kessler R. C., Barker, P. R., Colpe L. J., et al., "Screening for Serious Mental Illness in the General Population," *Archives of General Psychiatry*, Vol. 60, No. 2, 2003, pp. 184–189.

Lazare, Sarah, "The Military's Hidden Mental Health Crisis: Spousal Trauma," *Al Jazeera America*, November 15, 2013. As of March 30, 2014:
http://america.aljazeera.com/articles/2013/11/13/the-military-s-hiddenhealthcrisis.html

SUDAAN, Release 9.0 [computer program], Research Triangle Park, N.C.: Research Triangle Institute, 2004.

U.S. Department of Defense, *Final Report to the Secretary of Defense: Military Health System Review*, Washington D.C.: Office of the Secretary of Defense, 2014. As of June 20, 2015:
http://www.defense.gov/pubs/140930_MHS_Review_Final_Report_Main_Body.pdf

U.S. Government Accountability Office, *Number of Veterans Receiving Care, Barriers Faced, and Efforts to Increase Access*, Washington, D.C.: Report to the Ranking Member, Committee on Veterans' Affairs, House of Representatives, 2011.

U.S. Department of Agriculture's Economic Research Service, *Rural Urban Continuum Codes*, 2013. As of July 15, 2013:
http://www.ers.usda.gov/data-products/rural-urban-continuum-codes.aspx

About This Report

Recently, concern has grown regarding access to behavioral health care for service members, veterans, and their families. The health systems that primarily serve U.S. military service members and veterans—the Department of Defense Military Health System (MHS) and the Department of Veterans Affairs' Veterans Health Administration (VHA), respectively—also provide health care coverage to eligible family of service members and veterans. In this study, we conduct an exploratory analysis of behavioral health status and utilization of behavioral health care among one group of these family members: currently or formerly married women who have never served in the military themselves but receive medical coverage from either the DoD or the VHA (hereafter referred to as "military wives"). Using population-based epidemiological data from a national survey, we compare a sample of military wives with a sample of women who have other forms of medical coverage. The goal of this comparison is to identify differences in the use of behavioral health care that may indicate unmet needs among military wives.

This report will be of interest to military and veteran health policymakers and to command and line leadership, as well as planners, managers, and providers of behavioral health care across the United States.

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