Barriers and Facilitators Related to Mental Health Care Use Among Older Veterans in the United States

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Objective: Psychiatric disorders are more prevalent among older veterans compared with their civilian counterparts, but many veterans with symptoms of psychiatric disorders do not utilize mental health services. This study examined barriers and facilitators related to current mental health care utilization in a nationally representative sample of veterans ages 60 and older (N=2,025).

Methods: Using data from the National Health and Resilience in Veterans Study, the authors evaluated how predisposing, enabling, and need characteristics as well as perceived barriers to care were related to utilization of mental health care among older veterans.

Results: A minority of veterans (N=130; weighted prevalence, 6%) reported current mental health care utilization. Among veterans (N=144) who screened positive for a current psychiatric disorder, 42 (weighted prevalence, 25%) were currently utilizing services. In the full sample, current utilization was associated with lifetime posttraumatic stress disorder or depression (odds ratio [OR]=5.88, 95% confidence interval [CI]=3.51–9.84), lifetime drug use disorder (OR=2.87, CI=1.59–5.17), severity of current psychiatric symptoms (OR=1.40, CI=1.19–1.65), general medical difficulties (OR=1.28, CI=1.10–1.50), and lower perceptions of stigma (OR=.80, CI=.68–.93). Non-Hispanic veterans were less likely to utilize care (OR=.42, CI=.25–.69). Among psychiatrically distressed veterans, current utilization was associated with younger age (OR=.89, CI=.81–.97), current suicidal ideation (OR=5.60, CI=1.98–15.84), and fewer negative beliefs about mental health care (OR=.23, CI=.09–.56).

Conclusions: Efforts to identify psychiatrically distressed veterans and to reduce stigma and negative beliefs about mental health care may help increase mental health service utilization among older U.S. veterans.

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Between 41% and 79% of older persons with psychiatric disorders do not receive mental health care (1,2). Nonuse of mental health care is associated with being married or belonging to a racial-ethnic minority group, middle-to-high income, and milder general medical and mental distress (1). In the United States, older veterans have higher rates of psychiatric disorders and unique mental health needs compared with older adult civilians, and it is unclear whether the same factors that impede and facilitate mental health care utilization among older civilians are also associated with use of services among older veterans (2–4).

The behavioral model of health services use suggests that predisposing, enabling, and need characteristics are related to mental health service utilization (5). Prior research on veterans indicates that predisposing factors of female sex (6,7), white race (4), and combat exposure (4,8) and both younger and older age have been associated with increased utilization (4,7,8). The enabling characteristic of being unmarried (8) and the need characteristics of greater psychiatric distress (6–9) and general medical difficulties (8) were also associated with increased utilization. Further, need characteristics—particularly posttraumatic stress disorder (PTSD)—were more robust predictors of utilization than were predisposing or enabling characteristics (9). Although results of the aforementioned studies are informative, they were drawn from samples of younger veterans already engaged in care (6,7) or from the National Vietnam Veterans Readjustment Study (9). Thus it is unclear whether these findings apply to the contemporary population of older veterans.

Perceived barriers to care, including stigma, negative beliefs about mental health care, and logistical barriers to care, may also affect utilization of mental health services among older veterans. The association between perceived stigma and utilization among veterans is mixed. Some studies showed that perceived stigma was higher among veterans with lower treatment-seeking intentions (10), but others found that perceived stigma was unrelated to care utilization among veterans enrolled in U.S. Department of Veterans Affairs (VA) health care (6) or was higher among veterans who attended more VA mental health visits (11). Negative beliefs about mental health care were associated with lower utilization

of mental health services among Iraq and Afghanistan veterans (12), and these beliefs may be heightened among older veterans given their lower use of mental health services (13). Indeed, nonutilization of mental health services and negative beliefs about mental health care may be associated with stoicism, which is heightened among older individuals (14) and promoted by military culture (15). Logistical barriers to mental health care have also been linked to delays in use among veterans (16). Older veterans may experience unique logistical barriers to care, given possible reduced mobility (16) and decline in functional independence associated with older age.

This study examined correlates of current mental health care utilization—including predisposing, enabling, and need characteristics as well as perceived barriers to care—in a nationally representative sample of older U.S. veterans. Because the participants in the sample were likely to have comorbid general medical illnesses associated with aging, general medical difficulties were also examined as a potential need factor (1). These correlates were examined in the full sample of veterans as well as in a subsample of veterans who met screening criteria for current PTSD, depression, or generalized anxiety ("distressed" veterans). It was hypothesized that need factors (6–9) would be associated with increased likelihood of current utilization of mental health care, whereas increased stigma and negative beliefs about mental health care (10,12) would be negatively associated with utilization.

METHODS

Participants

Participants were drawn from the 2011 National Health and Resilience in Veterans Study (NHRVS), a nationally representative survey of U.S. veterans. Participants were surveyed by GfK Knowledge Networks, Inc., a survey research company that uses probability-based sampling of addresses from the U.S. Postal Service's Delivery Sequence File to maintain a nationally representative survey panel of U.S. adults. A total of 3,188 individuals in the panel reported having served in the military, and 3,157 (99%) completed the survey. A majority of veterans who completed the survey (N=2,025, 64%) were age 60 or older, and they are the focus of the current study. Poststratification weights were computed by using age, sex, race-ethnicity, education, metropolitan area, and census region variables derived from the 2010 Current Population Survey (17) to allow for comparisons with the general population of older U.S. veterans. The survey took about 60 minutes to complete, and individuals were paid $15. The Human Subjects Subcommittee of the VA Connecticut Healthcare System and the VA Office of Research and Development approved the study procedures.

Assessments

Predisposing and enabling characteristics. Age, sex, race-ethnicity (non-Hispanic white or Hispanic), education (at least some college education or no college education), marital status (married, living with a partner or single, divorced, or widowed), annual income (≥$60,000 or <$60,000), and combat exposure were assessed.

Need characteristics. Lifetime and current PTSD symptoms were measured by using the 17-item PTSD Checklist–Specific Stressor Version (PCL-S [18]). The PCL-S was administered twice, once for lifetime symptoms and once for current symptoms, and the results were summed for a total score; a score of ≥44 was used to indicate a positive screen for lifetime or current PTSD (19). Cronbach's alphas were .93 for both the lifetime and current PCL-S in this sample of participants.

Current symptoms of depression and generalized anxiety were assessed by using the Patient Health Questionnaire–4 (PHQ-4 [20]), which includes two items assessing symptoms of depression and two items assessing symptoms of generalized anxiety that were experienced over the past two weeks. Scores of ≥3 on the depression (α=.86) and generalized anxiety (α=.86) items are indicative of a positive screen for major depression and generalized anxiety, respectively. To reduce problems with multicollinearity in analyses examining the association of current distress with use of mental health services, an exploratory factor analysis (EFA) using continuous scores on the PCL-S and PHQ-4 was conducted to create a composite variable of current psychiatric symptom severity (21). Lifetime major depression and drug abuse or dependence were assessed by using the Mini International Neuropsychiatric Interview (22). Current (past-year) hazardous drinking was assessed by using the Alcohol Use Disorders Identification Test–Consumption (AUDIT-C [23]); scores of 3 and 4 indicate problematic alcohol use among women and men, respectively. Current suicidal ideation was assessed by using the questions, "Over the last two weeks, how often have you been bothered by the following problems? Thoughts that you might be better off dead? Thoughts of hurting yourself in some way?" Responses were coded into dichotomous (yes or no) responses, and an affirmative response on at least one item was indicative of suicidal ideation.

General medical health was assessed by using four measures. The Activities of Daily Living (ADL) Checklist (24) assesses current functional difficulties across four domains: bathing, transferring, dressing, and walking. The Instrumental Activities of Daily Living (IADL) Checklist assesses current functional activities across eight instrumental ADLs, such as paying bills. Any reported difficulty in performing an ADL or IADL was coded as indicative of ADL or IADL disability, and items were summed to create an ADL or IADL severity score. Higher scores indicated greater disability. The Brief Symptom Inventory somatization subscale contains six items assessing current somatic symptoms (α=.80) (25). Finally, participants were presented with a list of 20 medical conditions and asked to indicate any disorders for which they had received a diagnosis from a medical

TABLE 1. Demographic characteristics of the full sample of veterans and a subsample of distressed veterans[a]

	Full (N=2,025)		Distressed (N=144)	
Characteristic	N	%	N	%
Age (M±SD)	71.0±7.1		67.6±7.1	
Years of service (M±SD)	6.7±7.7		6.5±7.3	
Non-Hispanic white	1,808	85	118	71
Married or living with partner	1,625	78	104	66
At least some college education	1,735	67	119	63
Military branch				
Army	865	41	65	40
Navy	464	25	25	28
Air Force	505	24	35	18
Marines	124	6	15	10
Combat exposure	795	38	81	65
Vietnam era	605	69	67	75

[a] Distressed veterans were veterans who met screening criteria for current PTSD, depression, or generalized anxiety.

professional. The number of disorders endorsed was summed for a general medical disorder severity measure. An EFA was conducted to yield a composite variable of general medical difficulties (4,26) assessed by these four measures.

Perceived barriers to care. Perceptions of stigma and logistical barriers to care were assessed by using the Perceived Stigma and Barriers to Care Scale (27). Two additional items assessed negative beliefs about mental health care ("Mental health care does not work," and "I do not trust mental health professionals"). Response options to these items were dichotomously scored (1 for yes and 0 for no), and affirmative responses were summed to create scores for perceptions of stigma (possible range 0–6), logistical barriers (range 0–5), and negative beliefs about mental health care (range 0–2) (28).

Current utilization. Current utilization of mental health care was assessed with two items, "Are you currently receiving psychotherapy or counseling for a psychiatric or emotional problem?" and "Are you currently taking prescription medication for a psychiatric or emotional problem?" A positive response on either item was interpreted to indicate current utilization.

Data Analysis

Binary logistic regressions were used to calculate bivariate odds ratios for associations between predisposing, enabling, and need characteristics as well as perceptions of stigma, logistical barriers to care, and negative beliefs about mental health care and current utilization of mental health care. Predisposing, need, and enabling characteristics associated with current utilization at the $p<.05$ level were subsequently entered into a multivariable binary logistic regression analysis by using the forward Wald method. Perceptions of stigma, logistical barriers to care, and negative beliefs about mental health care were also added to the model, regardless of whether they were associated with use at the bivariate level. All independent variables were entered simultaneously in the same step. The forward Wald method was selected because it allowed us to extract key predictors of current utilization of mental health care from a larger set of potential predictors and because there is limited a priori guidance regarding predisposing, enabling, and need variables associated with utilization in a nationally representative sample of older U.S. veterans. To identify the unique effects of individual variables that comprised the composite scored variables (for example, PTSD [individual] and need characteristics [composite]), post hoc analyses were conducted on composite variables with a significant multivariable association with utilization; alpha was set at .01 to reduce the likelihood of type I error, and all covariates were included in these analyses. Each composite variable with a significant bivariate association with utilization was examined separately. Separate analyses were conducted in the full sample (N=2,025) and in the subsample of distressed veterans (N=144). Poststratification weights were applied for computing all means, standard deviations, percentages, and regression analyses in order to reflect the older U.S. population.

RESULTS

Table 1 shows demographic characteristics of the full sample of veterans and of the distressed veterans. Table 2 shows demographic characteristics of both samples grouped by current use of mental health care. All percentages are rounded and are weighted to reflect the population of older U.S. veterans. Of the full sample, 332 (16%) reported having ever utilized mental health treatment, and 130 (6%) reported current utilization. Of those reporting current utilization, 68 (47%) were receiving medication alone, 13 (17%) were receiving psychotherapy alone, and 49 (36%) were receiving both. A majority (N=88, 72%) of veterans who were currently engaged in treatment did not screen positive for PTSD, depression, or generalized anxiety.

A total of 144 (7%) veterans in the full sample screened positive for PTSD, depression, or generalized anxiety, and of those, 42 (25%) reported current utilization of mental health care. Of these, eight (19%) were receiving psychotherapy alone, eight (19%) were receiving medication alone, and 26 (62%) were receiving both.

Correlates of Utilization in the Full Sample

Predisposing variables of older age, male sex, and non-Hispanic white race-ethnicity were negatively associated at the bivariate level with current utilization of mental health care (Table 2). In a multivariable model, non-Hispanic white veterans were less likely to use care compared with veterans from racial-ethnic minority groups (Table 3). The enabling characteristic of being married or partnered was negatively associated with utilization in bivariate analyses (Table 2), but the association was not significant in multivariable analyses. Need characteristics of lifetime history of PTSD or

TABLE 2. Bivariate associations between characteristics of the full sample of veterans and a subsample of distressed veterans and current use of mental health care[a]

	Full (N=2,025)							Distressed (N=144)						
	No mental health care (N=1,895)		Mental health care (N=130)					No mental health care (N=102)		Mental health care (N=42)				
Characteristic	N	%	N	%	OR[b]	95% CI	p	N	%	N	%	OR[b]	95% CI	p
Predisposing														
Age (M±SD)	71.1±7.1		68.8±7.0		.95	.92–.98	.001	67.7±8.5		64.8±4.5		.89	.81–.97	.01
Male	1,842	97	120	92	.39	.19–.81	.01	98	97	40	98	1.25	.09–17.09	.87
Non-Hispanic white	1,703	86	105	70	.40	.26–.61	<.001	86	72	32	68	.87	.36–2.11	.76
Some college education	1,618	67	117	76	1.53	.98–2.38	.061	81	57	38	81	3.14	1.16–8.44	.024
Enabling														
Married or living with partner	1,536	78	89	69	.59	.39–.90	.014	76	65	28	71	1.32	.55–3.21	.53
Annual income ≥$60,000	961	40	56	37	.90	.60–1.34	.60	34	18	16	33	2.21	.88–5.52	.090
Need														
Lifetime PTSD or depression	198	9	80	55	12.87	8.54–19.40	<.001	53	41	33	83	6.72	2.43–18.59	<.001
Severity of current psychiatric distress (M±SD score)[c]	−.1±.9		1.3±1.9		1.97	1.74–2.22	<.001	2.6±1.4		3.9±1.4		1.75	1.30–2.37	<.001
Lifetime drug use disorder	126	6.	30	24	4.99	3.09–8.06	<.001	17	11	16	36	4.72	1.76–12.66	.002
Current hazardous drinking	28	22	491	24	.93	.85–1.03	.18	6	13	25	17	.74	.23–2.39	.61
Current suicidal ideation	69	5	30	23	5.98	3.64–9.81	<.001	36	39	22	70	3.55	1.48–8.52	.02
General medical difficulties[d]	−.04±.9		.97±1.8		1.71	1.52–1.93	<.001	.8±1.6		1.7±1.9		1.33	1.06–1.66	.015
Perceived barrier to care														
Perceptions of stigma (M±SD score)[e]	.6±1.5		.6 ± 1.5		1.01	.89–1.15	.81	1.8±2.5		1.0±2.0		.85	.70–1.04	.11
Negative beliefs about care (M±SD score)[f]	.2±.6		.2 ±.6		1.11	.79–1.55	.56	.6±.8		.2±.5		.44	.21–.93	.03
Logistical barriers to care (M±SD score)[g]	.3±.7		.3 ±.7		1.00	.72–1.39	.99	.7±1.0		.4±.7		.66	.39–1.11	.12

[a] Distressed veterans were veterans who met screening criteria for current PTSD, depression, or generalized anxiety. All veterans were ages 60 and older. All means, standard deviations, percentages, and odds ratios are weighted to reflect the U.S. older veteran population.
[b] Odds ratios (ORs) compare use versus nonuse of mental health care by veterans with that characteristic.
[c] Composite variable comprising current scores on the PTSD Checklist–Specific Stressor Version and the Patient Health Questionnaire–4. Possible scores range from 17 to 85 and 0 to 12, respectively. Higher scores indicate greater distress.
[d] Possible scores range from 0 to 20, with higher scores indicating greater general medical difficulties.
[e] Possible scores range from 0 to 6, with higher scores indicating greater number of perceived barriers to care.
[f] Possible scores range from 0 to 2, with higher scores indicating greater number of perceived barriers to care.
[g] Possible scores range from 0 to 5, with higher scores indicating greater number of perceived barriers to care.

depression, lifetime drug use disorder, greater severity of current psychiatric symptoms, greater general medical difficulties, and current suicidal ideation were associated with current utilization in bivariate analyses (Table 2). In a multivariable model, those variables, except current suicidal ideation, remained associated with utilization (Table 3). Post hoc analyses revealed that a positive screen for depression (odds ratio [OR]=1.42, 95% confidence interval [CI]=1.16–1.75) and an IADL disability (OR=2.50, CI=1.38–4.51) were independently associated with utilization.

Perceptions of stigma, logistical barriers to care, and negative beliefs about mental health care were not associated at

TABLE 3. Characteristics of the full sample of veterans and a subsample of distressed veterans that were associated with use of mental health care[a]

	Full (N=2,025)			Distressed (N=144)		
Characteristic	OR	95% CI	p	OR	95% CI	p
Predisposing						
Age	—	—	—	.89	.81–.97	.011
Non-Hispanic white	.42	.25–.69	.001	—	—	—
Need						
Lifetime PTSD or depression	5.88	3.51–9.84	<.001	—	—	—
Lifetime drug use disorder	2.87	1.59–5.17	<.001	—	—	—
Current suicidal ideation	—	—	—	5.60	1.98–15.84	.001
Severity of current psychiatric symptoms	1.40	1.19–1.65	<.001	—	—	—
General medical difficulties	1.28	1.10–1.50	.002	—	—	—
Perceived barrier to care						
Perceptions of stigma	.80	.68–.93	.005	—	—	—
Negative beliefs about mental health care	—	—	—	.23	.09–.56	.001

[a] Results are from multivariable logistic regression. Distressed veterans were veterans who met screening criteria for current PTSD, depression, or generalized anxiety. All veterans were ages 60 and older.

the bivariate level with utilization of mental health care (Table 2). In a multivariable model, perceptions of stigma were negatively associated with current utilization (Table 3), and post hoc analysis revealed that this association was independently driven by endorsement of the item "I would be seen as weak" (OR=.25, CI=.11–.58).

Correlates of Utilization Among Distressed Veterans

Bivariate analyses revealed that the predisposing characteristic of increased age was negatively associated with current utilization of mental health care among distressed veterans (Table 2). Having at least some college education was positively associated with current utilization of mental health care. In a multivariable model, increased age remained independently negatively associated with utilization (Table 3). Enabling characteristics were unrelated to utilization of mental health care among distressed veterans in both bivariate (Table 2) and multivariable analyses. Need characteristics of lifetime PTSD or depression, lifetime drug use disorder, current suicidal ideation, greater severity of current psychiatric symptoms, and general medical difficulties were associated with utilization of mental health care according to bivariate analyses (Table 2). In a multivariable model, only current suicidal ideation remained independently associated with utilization (Table 3).

Negative beliefs about mental health care were negatively associated with utilization of services among distressed veterans in both bivariate and multivariable analyses (Tables 2 and 3). Post hoc analysis revealed that endorsement of the belief "I do not trust mental health professionals" independently drove this association (OR=.31, CI=.11–.91). Perceptions of stigma and logistical barriers to care were unrelated to utilization of mental health care among distressed veterans in both analyses.

DISCUSSION

A minority of distressed older U.S. veterans were currently engaged in treatment, a finding that is similar to reports of underutilization of mental health services by older adults in the U.S. civilian population (1,2). Most veterans who were currently in care were not psychiatrically distressed, suggesting that many remained in care after their distress had subsided or were drawn to care for difficulties other than psychiatric distress. Predisposing and need characteristics were associated with utilization of mental health care in the full sample of older veterans and among distressed older veterans, with stigma linked to utilization in the full sample and negative beliefs about mental health care linked to utilization among distressed veterans. Unlike research linking enabling variables of marital status and income and utilization of mental health care among older civilians (1), this study found no association between these variables and utilization among older veterans after the analyses controlled for need and predisposing characteristics.

The positive association between need characteristics and utilization of mental health care is consistent with prior research in samples composed of veterans and service members (6–9). Despite speculation that drug use may inhibit care (29), lifetime drug use disorder was positively linked with current utilization. This association is encouraging, given that mental health care may reduce the negative sequelae associated with such disorders (30–35). Suicidal ideation and younger age were associated with greater utilization of mental health care among distressed veterans but not in the full sample of veterans. Given that the barriers and facilitators to mental health care utilization changed when such factors were examined in the distressed sample only, tailored interventions may be useful in promoting help seeking among distressed populations of older veterans.

Perceptions of stigma and negative beliefs about mental health care were related to decreased utilization of mental health care in the full sample of veterans and distressed sample of veterans, respectively. These findings align with prior research on stigma and treatment seeking among Iraq and Afghanistan veterans (10,12). They are also are consistent with recent results from the World Health Organization World Mental Health Survey, which found that negative attitudes about mental health care were negatively related to mental health treatment utilization among distressed individuals (36). Psychoeducation about mental health care can

reduce stigma and negative beliefs about mental health care and promote utilization among distressed older veterans. Indeed, research suggests that psychoeducation with younger veterans reduced stigma and negative attitudes about mental health care (37,38), although studies of older veterans are needed.

General medical difficulties—namely, difficulties with IADLs—were associated with increased utilization of mental health care in the full sample of veterans. This finding is consistent with prior research on mental health care utilization among veterans (8) and civilians (1,2). Indeed, the number of mental health care visits by younger veterans was more highly associated with greater general medical impairment than with mental health symptoms (39). Given that disability in IADLs often co-occurs with general medical or mental conditions associated with aging (39–42), difficulties with IADLs may motivate veterans to use or facilitate mental health services through visits to primary care. Increased awareness of the mental health and functional needs of older veterans in primary care settings may help identify veterans in need of mental health services.

Non-Hispanic white race-ethnicity was associated with decreased utilization of mental health care in the full sample. This finding accords with results from a study showing a positive association between utilization and ethnicity among male veterans (43) and is consistent with data from the National Comorbidity Survey, which showed a similar trend among black depressed males (44). However, this finding contrasts with results from a nationally representative sample of U.S. older adults (1), indicating that it may be related to the less diverse racial-ethnic composition of the NHRVS sample and of the population at large of older U.S. veterans. Our results underscore the importance of developing interventions to promote utilization of mental health care among older, non-Hispanic white veterans with symptoms of psychiatric illness.

Limitations of the study included the use of cross-sectional self-report data. Because of the low number of veterans using care, separate analyses examining differences between facilitators and barriers with medication versus psychotherapy were not possible. Limited information was gathered about minority status; as such, we were able to measure differences and similarities only between Hispanic and non-Hispanic veterans. Although this sample was representative of older veterans, a majority of the sample was white, male, and married, which limits generalizability.

CONCLUSIONS

Predisposing and need characteristics were associated with utilization of mental health care among older U.S. veterans. Perceptions of stigma were negatively associated with utilization in the full sample, and negative beliefs about mental health care were negatively associated with utilization among distressed veterans. Results highlighted the importance of efforts to identify veterans who may benefit from care because of predisposing and need characteristics as well as to evaluate the effectiveness of interventions to promote utilization of mental care among older veterans by reducing perceptions of stigma and negative beliefs about mental health care.

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