Treatment of Veterans With PTSD at a VA Medical Center: Primary Care Versus Mental Health Specialty Care

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Objective: Recent military conflicts have generated significantly more demand for treatment of posttraumatic stress disorder (PTSD) as well as concerns about the adverse effects of stigma associated with specialty mental health care. This study examined the extent to which veterans diagnosed as having PTSD received treatment exclusively in primary care settings. Methods: Administrative data from the U.S. Department of Veterans Affairs (VA) Connecticut Healthcare System for fiscal year 2010 were used to compare the proportions and characteristics of veterans with PTSD (N=4,144) who were treated exclusively in a primary care setting or a mental health specialty clinic. Results: Most (87%) veterans were treated in specialty mental health clinics, and 13% were treated exclusively in primary care. In contrast, 24% of veterans with any mental health diagnosis received treatment exclusively in primary care. Comorbid psychiatric diagnoses were much more prevalent among those treated in mental health specialty clinics than in primary care (86% versus 14%), and psychotropic medications were far more likely to be filled in mental health specialty clinics than in primary care (80% versus 36%). The percentage of veterans with service-connected disabilities did not differ between the two treatment settings. Conclusions: Despite the VA's successful expansion of mental health services in primary care, the vast majority of patients with PTSD received treatment in mental health specialty clinics. Stigma does not seem to keep veterans with PTSD from receiving care in specialty mental health settings in spite of the availability of services in primary care. (Psychiatric Services 65:1238-1243, 2014; doi: 10.1176/appi.ps.201300204)

The recent involvements of U.S. military personnel in conflicts in Iraq and Afghanistan have expanded the number of veterans who need mental health services and who seek help from the Veterans Health Administration (VHA) (1). The increase in demand for posttraumatic stress disorder (PTSD) services has been particularly dramatic, especially among Vietnam veterans, even though that conflict ended more than three decades ago. In response to this demand, the VHA significantly enhanced funding for specialized mental health programs (2) and has promoted the use of evidence-based psychotherapies for PTSD (3). Despite these efforts, there has been a concern that many veterans with PTSD and other mental disorders are reluctant to seek care from specialty mental health clinics because of worry about stigma and inconvenience. A recent study of activeduty service personnel (4) found that only 23% to 40% of veterans with evidence of combat-related mental health conditions sought mental health care.

Veterans typically enter the U.S. Department of Veterans Affairs (VA) system through primary care, and, in most cases, referrals for mental health treatment are made by primary care providers. Veterans of all eras are entitled to treatment, with no health insurance requirement.

Since the mid-1990s, a growing body of empirical research has demonstrated that mental illnesses can be effectively treated through interventions in primary care settings (5-8). In 1996, the VHA implemented one of the earliest trials demonstrating the effectiveness of this approach (9). The VA Connecticut Healthcare System was one of the sites for the trial and for other related trials (10) and has continued to put a strong emphasis on placing mental health professionals in primary care clinics. A recent national VA study showed that most initial mental health diagnoses among veterans who served in Iraq or Afghanistan were made in primary care settings (11), reflecting a systemwide emphasis on treating mental health problems in primary care (12) and active efforts to disseminate this approach (13).

However, little is known about the extent to which VHA patients with

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PTSD, particularly those from Operation Enduring Freedom/Operation Iraqi Freedom (OEF/OIF), the newest generation of war zone veterans, receive care exclusively in a primary care setting rather than a specialized mental health clinic. In this study, we examined the characteristics of all veterans diagnosed as having PTSD at the VA Connecticut Healthcare system during fiscal year (FY) 2010 and compared the characteristics of those treated in a specialty mental health clinic and those treated exclusively in a primary care setting. We sought first to assess the proportions of veterans diagnosed as having PTSD who were treated exclusively in a primary care setting and then to compare them with veterans treated in specialty mental health clinics on the basis of sociodemographic characteristics, comorbid diagnoses, and psychotropic prescription fills.

Methods

Sample and sources of data Administrative data from the VA Connecticut Healthcare System for FY 2010 (October 1, 2009–September 30, 2010) included all outpatients who had at least one clinical encounter with a diagnosis of PTSD (*ICD-9* code 309.81). Data on sociodemographic characteristics, diagnoses, and service use came from the same source.

Data on prescriptions filled for psychotropic medications during FY 2010 were derived from the Pharmacy Benefits Management database.

Measures

Local administrative records were used to derive information about sociodemographic characteristics, including age, gender, annual income, service era, disability compensation, and pension status. Place of residence was designated as rural or urban by matching zip codes in the VA files with the Rural-Urban Commuting Area codes developed at the University of Washington (depts.washington.edu/uwruca). A dichotomous variable was used to differentiate veterans who had at least one outpatient visit in a mental health specialty clinic and those who were treated exclusively in primary care.

Data on age were subcategorized into five groups: $<40, 40-49, 50-64, 65-74, and \geq 75.$

Annual income was classified into three groups: <\$15,000, \$15,000-\$25,000, and >\$25,000.

Data on psychiatric diagnoses included all ICD-9 codes from 290 through 319 as well as 331.00 (Alzheimer's dementia) coded into 11 classes: dementia/ Alzheimer's (290.00-290.99, 294.10, and 331.00), alcohol abuse/dependence (303. xx and 305.00), drug abuse/dependence (292.01-292.99, 304.xx, and 305.20-305.99), schizophrenia (295.xx), other psychosis (297.xx-299.xx), bipolar disorder (296.0x, 296.1x, and 296.40-296.89), major depressive disorder (296.20-296.39), dysthymia and other depression (300.4, 296.9x, 311.xx, and 301.10-301.19), PTSD (309.81), anxiety disorders (300.xx, excluding 300.4), adjustment disorder (309.xx, excluding 309.81), personality disorders (301.0x and 301.2x-301.99).

The Charlson Index (14), a weighted measure for predicting mortality that reflects the severity of general medical conditions, was completed for each patient on the basis of outpatient diagnoses and age. Because age was central to our analyses, we used only the component of the index that is based on outpatient diagnoses.

Pharmacy prescription data were used to construct variables representing any prescriptions filled from each class of psychotropic medication and the number of prescriptions filled from each class during FY 2010. Documented psychotropic medications were classified into the following categories: antidepressants (amitriptyline, amoxapine, clomipramine, desipramine, doxepin, imipramine, nortriptyline, protriptyline, trimipramine, isocarboxazid, phenelzine, selegiline, tranylcypromine, bupropion, citalopram, desvenlafaxine, duloxetine, escitalopram, fluoxetine, fluvoxamine, maprotiline, mirtazapine, nefazodone, paroxetine, sertraline, trazodone, and venlafaxine); antipsychotics (chlorpromazine, fluphenazine, perphenazine, thioridazine, thiothixene, trifluoperazine, aripiprazole, clozapine, haloperidol, loxapine, molindone, olanzapine, paliperidone, quetiapine, risperidone, and ziprasidone); anxiolytics/sedatives/ hypnotics (alprazolam, chlordiazepoxide, clorazepate, clonazepam, diazepam, estazolam, flurazepam, lorazepam, oxazepam, temazepam, triazolam, buspirone, chloral hydrate, eszopiclone, meprobamate, zaleplon, and zolpidem); stimulants (amphetamine, dextroamphetamine, lisdexamfetamine, methamphetamine, dexmethylphenidate, and methylphenidate); anticonvulsants (carbamazepine, gabapentin, lamotrigine, oxcarbazepine, topiramate, valproate sodium, valproic acid, and divalproex sodium); and lithium.

Analyses

Because all the sociodemographic and diagnostic variables were dichotomous or categorical, chi square tests were used to compare the characteristics of veterans with PTSD who were treated in specialty mental health clinics and those who were treated exclusively in primary care, including specialized medical or surgical clinics. Bivariate statistics were used to compare the use of any psychotropic medication and the number of psychotropic medications used in each class among patients treated in specialty mental health clinics and in primary care settings. Analysis of variance (ANOVA) was used to assess the significance of differences between users of primary care and of mental health specialized care in the number of psychotropic prescriptions filled altogether and in each drug class. A significance level of .05 was used.

Data management and statistical analysis were performed by using SAS, version 9.2. This study involved analysis of deidentified administrative data and was approved with a waiver of written informed consent by the institutional review boards at West Haven VA Medical Center and Yale University School of Medicine.

Results

In the course of FY 2010, a total of 4,247 veterans were diagnosed at the VA Connecticut Healthcare System as having PTSD, of whom 4,144 (98%) received PTSD treatment. A majority of the sample were treated in specialty mental health clinics (87%, N=3,620), with only 13% (N=524) treated exclusively in primary care. A vast majority were males (93%, N=3,849), with females accounting for only 7% of the total (N=295). Race was excluded from our analysis because of extensive missing data.

Chi square analysis showed that comorbid psychiatric diagnoses were significantly more likely to be present Characteristics of veterans who received treatment for PTSD in primary care or mental health specialty care

	Primary care (N=524)		Mental health specialty care (N=3,620)				
Characteristic	Ν	%	N	%	χ^2	р	df
Gender					5	.02	1
Male	449	95	3,350	93			
Female	25	5	270	7			
Age (years)					27.9	<.001	4
<40	120	23	849	23			
40-49	35	7	370	10			
50-64	267	51	1,923	53			
65-74	52	10	309	9			
≥75	50	9	169	5			
Income	00	0	100	0	1.34	ns	2
<\$15,000	239	46	1,719	48	1.01	115	-
\$15,000-\$25,000	59	10	435	12			
>\$25,000	226	43	1,466	40			
Pension	6	10	1,400	2	2.66	ns	1
Theater of war	0	1	01	4	32.00	<.001	4
OEF/OIF	126	24	801	22	02.00	<.001	т
WWII	34	6	89	22			
Vietnam	288	55	1,976	55			
Post-Vietnam	200 27	5	298	8			
Gulf War era	146^{27}	28	1,093	30			
Place of residence	140	20	1,095	30	4.24	.04	1
Urban	464	91	2 200	94	4.24	.04	T
Rural	404 44	91	$3,289 \\ 219$	94 6			
	44	9	219	0			
Diagnoses	11	0	05	1	10 5	001	1
Dementia/Alzheimer's	11	2	25	1	10.5	.001	1 1
Schizophrenia	4	1	191	5	20.8	<.001	-
Bipolar disorder	3	6	324	9	44.2	<.001	1
Alcohol abuse or dependence	42	8	787	22	53.9	<.001	1
Drug abuse or dependence	20	3	589	16	56.6	<.001	1
Major depressive disorder	22	4	993	27	134	<.001	1
Dysthymia and other depression	73	14	1,291	33	79.6	<.001	1
Anxiety disorder	5	1	57	1	1.2	ns	1
Other psychiatric disorder	34	6	589	16	34.3	< .001	1

among users of specialty mental health clinics (86%, N=3,654) than among users of primary care clinics (14%, N=580). The only exception was dementia, which occurred more frequently among veterans treated in primary care (Table 1).

In both the mental health specialty care and the primary care groups, the leading comorbidity was dysthymia and other depression (33% and 14%), followed by substance use disorder (28% and 11%).

Users of specialty mental health services were somewhat more likely than users of primary care to be in younger age groups. The largest age group of users of both types of care was 50–64 years old (primary care, 51%; mental health specialty care, 53%). Compared with users of primary care, users of mental health specialty services were significantly more likely to be 40–49 years old and were significantly less likely to be 65–74 years old or 75 or older (Table 1).

For both types of care, a majority of veterans served in the Vietnam era (55% for each type). Gulf War era veterans constituted the next largest group (30% in specialized care and 28% in primary care), followed by OEF/OIF veterans (22% and 24%, respectively). Veterans who served during World War II were significantly less likely than veterans of other eras to receive specialty mental health care.

Table 2 presents data on prescribing frequencies by location of provider. Psychotropic medications were far more likely to be filled among patients treated in specialty mental health clinics (80%) than in primary care clinics (36%). This pattern was observed for all classes of medication.

ANOVAs revealed that veterans treated in specialized mental health clinics had significantly higher numbers of psychotropic prescriptions filled than veterans treated in primary care clinics (Table 3). This robust pattern was observed for each class of medications.

Discussion

This study examined the extent to which patients with PTSD-and younger, OEF/OIF veterans in particularat the VA Connecticut Healthcare System in FY 2010 received care exclusively in a primary care setting. Because the facility has long maintained an emphasis on treating veterans with psychiatric diagnoses in primary care, we expected to find that a significant proportion of veterans with PTSD were receiving treatment in a primary care setting. Contrary to expectations, a great majority of veterans with PTSD (87%) received treatment in specialized mental health clinics, whether by their own preference or by the recommendation of treating clinicians, while only 13% were treated exclusively in primary care centers.

These findings stand in contrast to the proportion of all patients with mental health diagnoses who were treated exclusively in primary care at the VA Connecticut Healthcare System (24%) and in the same year at VA facilities nationwide (21%) (15). Thus, especially among veterans with PTSD, there seems to be little evidence of stigma-driven hesitancy to be treated in specialty mental health care and some evidence that veterans with PTSD make significantly greater use of specialty care than veterans with other mental health diagnoses.

Veterans with PTSD who were treated in specialized mental health clinics were more likely than those who were treated exclusively in primary care to have comorbid psychiatric illnesses and to be prescribed psychotropic medications, similar to findings reported by Abrams and colleagues (16) on the basis of national VA data from FY 2009. The differences in prescribing frequencies for three major groups of medications antidepressants, antipsychotics, and

Table 2

Class of medication	Total (N=4,144)		Primary care (N=524)		Mental health specialty care (N=3,620)			
	Ν	%	Ν	%	N	%	χ^{2a}	р
Any psychotropic medication	3,098	75	190	36	2,908	80	471	<.001
Antidepressant	2,650	64	136	26	2,514	69	305	<.001
Antipsychotic	1,001	24	8	1	993	27	168	<.001
Anxiolytic/sedative/hypnotic	1,719	41	78	15	1,641	45	175	<.001
Stimulant	68	2	0		68	2	10	.002
Mood stabilizer	777	19	39	7	738	20	50.3	<.001
Lithium	82	2	0	—	82	2	12.1	.001

Prescriptions for psychotropic medication filled by veterans with PTSD in primary care or mental health specialty care in fiscal year 2010, by class of agent

^a df=1

anxiolytics—across the two treatment settings were also comparable to the findings of Abrams and colleagues (16). Although veterans treated exclusively in primary care were more likely to be older and to have served in World War II, there was only a minimal difference across the two treatment settings in the proportion of veterans who had served in recent Iraq and Afghanistan conflicts, despite concerns that this younger group is especially vulnerable to stigma.

National VA data also indicated that in FY 2010, only 7% of veterans with a diagnosis of PTSD received care exclusively in primary care (15). At the VA Connecticut Healthcare System, therefore, the proportion of patients with PTSD who were treated exclusively in such settings was somewhat larger than expected. The proportion of patients with a mental health diagnosis at the VA Connecticut Healthcare System who were seen exclusively in primary care (24%) was also larger than expected, given that nationwide, 21% of VA patients with a mental health diagnosis were seen exclusively in primary care. This pattern, we expect, reflects the fact that the VA was one of the first VA facilities in the country to pilot and implement treatment of mental health problems in the primary care setting. By gradually increasing to 11 the number of mental health professionals in primary care clinics by FY 2010, the VA Connecticut Healthcare System has ensured access to mental health services to a larger proportion of patients treated exclusively in primary care.

This commitment of resources seems especially timely, given the rising number of veterans, and especially young veterans of the recent Iraq and Afghanistan wars, seeking mental health services for PTSD (1). As findings by Seal and others (11) indicate, the availability of mental health professionals in primary care is especially relevant now that a majority of mental health diagnoses among OEF/OIF veterans are made in primary care clinics. It is widely believed that veterans with PTSD, particularly combatants in the recent conflicts in Iraq and Afghanistan, are highly sensitive to the stigma associated with being seen in a specialty mental health clinic. For example, a study by Stecker and colleagues (17) found that only 25% of veterans of the recent Iraq and Afghanistan conflicts who screened positive for mental health problems had received treatment, and another study found that veterans of the recent Iraq and Afghanistan conflicts who believed that treatment would help their symptoms were more likely to seek mental health care (18). Our findings suggest that veterans diagnosed as having PTSD, in particular, are more likely than veterans with other psychiatric diagnoses to be seen in specialty mental health clinics. Whether this reflects veteran preference or provider judgments that specialty care is necessary cannot be determined from the available data.

Stigma and negative attitudes toward mental health care have been found to be potential barriers to mental health care utilization, especially among younger people, and are often cited as reasons to offer mental health services in primary care settings

Table 3

Number of prescriptions for psychotropic medication filled by veterans with PTSD in primary care or mental health specialty care in fiscal year 2010, by class of agent

	Total (N=4,144)	Primary care (N=524)		Mental health specialty care (N=3,620)			
Class of medication	М	М	SD	М	SD	F^{a}	Pr>F
Any psychotropic medication	14.8	3.20	8.22	16.48	23.17	169.04	<.001
Antidepressant	6.77	1.67	5.26	7.50	10.80	147.88	< .001
Antipsychotic	2.81	.10	.96	3.21	9.39	57.51	< .001
Anxiolytic/sedative/hypnotic	3.43	.94	2.97	3.79	5.49	98.29	< .001
Stimulant	.13	0		.14	1.41	5.66	.017
Mood stabilizer	1.39	.48	2.62	1.52	5.07	21.29	< .001
Lithium	.24	0	—	.28	2.67	5.95	.015

^a df=1 and 4,142

(19). On the other hand, recent evidence suggests that among veterans with PTSD, stigma does not create a significant barrier to staying in mental health treatment. That appears to be true for both Vietnam (20) and OEF/ OIF (21) veterans.

It is also important to note the suggestion that primary care providers may be reluctant to address PTSD. Like other inexperienced clinicians, they may be uncomfortable asking about disturbing traumatic experiences and may be unfamiliar with the recommended first-line treatments for trauma-related disorders. At this time, there is limited training for primary care clinicians at the VA Connecticut Healthcare System in the treatment of PTSD patients, even though local staff are working to develop training to address these issues. The assignment of experienced mental health professionals to work within primary care at places like the VA Connecticut Healthcare System no doubt ameliorates these processes.

Additionally, primary care providers may have specific reasons to refer patients for treatment in specialty care rather than address patient preference in the selection of PTSD treatment setting. For example, there are no evidencebased brief PTSD psychotherapies for use in primary care. The first-line recommended PTSD psychotherapy treatments generally consist of nine to 14 weekly sessions, a regimen that is not practical for most primary care clinicians, even for mental health clinicians who provide primarily short-term services in primary care.

Somewhat surprisingly, the presence of a service-connected disability did not seem to play a major role in the determination of treatment site (specialized mental health versus primary care). The percentage of veterans with a service-connected disability was not significantly greater in mental health specialty clinics, where veterans might believe that they have a better chance of having their claims approved.

On the basis of analysis of the characteristics of the patients in two treatment settings, it appears that patients seen exclusively in primary care had fewer comorbidities and made less extensive use of medications, an indication that they appeared to be "less complicated" than patients treated in specialized mental health care. VA facilities that offer large specialized PTSD programs may be more likely to attract veterans seeking specialized treatment. Patients may also believe that mental health specialists are more knowledgeable about the management of their special conditions, PTSD in particular, and are more aware of guidelines for improving management of special conditions and more likely to incorporate new practices. More severely ill, complex PTSD patients, optimally, should be treated in a specialized mental health setting, where they are most likely to receive comprehensive, evidence-based PTSD treatment.

The national dissemination of evidence-based treatments for PTSD has had its greatest impact at specialized mental health clinics, which provide more effective therapies for PTSD compared with other locations. Veterans may be aware of this effort and may be eager to seek these treatments (3). An analysis of national VA data showed that patients diagnosed as having PTSD were more likely than those with other mental health diagnoses to receive psychotherapy (22) and, notably, were slightly more likely to receive psychotherapy than patients diagnosed as having PTSD who were treated in privately insured settings (23).

Several limitations deserve comment. First, this study was based on administrative data that reflect the thinking of providers in real-world practice, but the validity of the data is not well established. Second, because the data represent treatment received during one year, some veterans who were seen exclusively in primary care may have been seen in specialty mental health clinics in previous years. This possibility would result in an overestimate of the proportion of veterans diagnosed as having PTSD who were seen exclusively in primary care. Third, we had no information about decision making during the referral process and whether it reflected patient preference or the judgment of primary care providers. Nevertheless, the data presented here clearly suggest that even in a facility that has long emphasized the integration of mental health service delivery in primary care, few veterans diagnosed as having PTSD did not receive treatment from a specialty mental health clinic in a given year.

Conclusions

This study evaluated the exclusive utilization of health care in primary care settings by veterans diagnosed as having PTSD at one VA facility during FY 2010. A vast majority of PTSD patients received treatment in specialized mental health clinics, in proportions greater than among patients with other mental health diagnoses, a phenomenon also observed nationally. Service era, as well as service connection, did not play a significant role in the determination of the location of care. Therefore, our data do not support the concern that the stigma of receiving specialty mental health care is a barrier for veterans with PTSD and especially those with recent service in Iraq and Afghanistan conflicts.

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The authors report no competing interests.

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