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SERVICE UTILIZATION AMONG COMPENSATION-SEEKING VETERANS

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To examine the relationship between compensation-seeking status, symptom reporting, and health care utilization among combat veterans presenting for a Posttraumatic Stress disorder (PTSD) evaluation. Archival data for 68 veterans was drawn from electronic medical records for which compensation-seeking status was available. Consistent with previous findings, self-reports of distress and validity scale indices on the Minnesota Multiphasic Personality Inventory-2 (MMPI-2) were higher among compensation-seeking (CS) veterans than noncompensation-seeking (NCS) veterans despite a lack of difference in actual PTSD diagnoses. However, no significant differences emerged between these two groups on healthcare utilization indices. Although exploratory analyses did not yield significant group differences on various healthcare indices,

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there was a trend for CS veterans to use PTSD services more, suggesting the need to further explore utilization patterns among these groups.

KEY WORDS: PTSD; combat; MMPI; service utilization.

Combat veterans with PTSD typically endorse significant levels of psychopathology across various self-report symptom measures, as well as measures of general functioning (1–5). Elevated symptom measures also appear to be accompanied by inflated validity indices on the Minnesota Multiphasic Personality Inventory (MMPI/MMPI-2). Specifically, validity scores tend to reflect a tendency by the veteran to "fake-bad" or exaggerate symptoms (2,6,7). The severity of combat veterans' reports of their functioning, coupled with inflated scores on the validity indices of the MMPI/MMPI-2, have raised questions regarding the accuracy of veterans' accounts of their psychological functioning.

It is difficult to make conclusions regarding the accuracy of veterans' reports of distress. It is possible that, although inflated, reports of trauma-related symptomatology reflect accurate levels of distress on the part of the veteran. However, there is some evidence that veterans' reports of their distress are not comparable to more objective indicators of functioning, such as clinician ratings, daily symptom counts, and physiological indices (6,8). Furthermore, symptom reporting among veterans may be exacerbated by compensation policies within the Veterans Affairs Medical Center (VA) healthcare system. Veterans diagnosed with PTSD are eligible to receive "service connected" disability compensation (e.g., monthly disability payments, comprehensive medical coverage, college education for dependents) for a range of psychiatric conditions such as PTSD, that are considered to be related to their military service and impair their functioning. Studies have revealed that the majority of veterans seeking PTSD related services also apply for disability benefits and those who do seek benefits tend to have elevated symptom scores and exaggerated validity indices on the MMPI/MMPI-2 (4,9,10).

Inconsistencies in veterans' reports of their functioning coupled with incentives provided by the VA system to remain symptomatic, complicate the provision of services within the VA healthcare system. Consistent with this, a recent study found that clinicians' perceptions of compensation-seeking veterans tend to be negative (11). Specifically, clinicians reported a more negative view of the treatment engagement of veterans who were seeking benefits, and believed that the pursuit of service connected benefits had a negative effect on the therapeutic

relationship. These findings raise legitimate concerns regarding the adequate provision of services for veterans presenting with trauma-related concerns.

The previous issues reflect some of the difficulties that are inherent in providing veterans with needed psychiatric care. Despite apparent symptom overreporting among veterans presenting for PTSD services, it is clear that many veterans are experiencing serious psychiatric difficulties that hinder their social and occupational functioning and require services. Within the VA system, studies have demonstrated that PTSD is often accompanied by high rates of medical impairment and the utilization of medical and mental health services (12–14). Although studies have explored the effect of having VA disability benefits on service use (13,15), none have examined the effect of applying for these benefits on service use. General service utilization among veterans with PTSD has been explored, but little is known regarding how compensation-seeking status influences utilization patterns. Understanding the interrelationship between these variables may shed light on the appropriate treatment needs of veterans presenting with PTSD-related concerns.

The purpose of this paper is therefore to expand our knowledge regarding the relationship between disability seeking status and service utilization among veterans using various healthcare indices. Specifically, this exploratory study will examine utilization services such as PTSD visits, primary care visits, specialty care visits, and medication prescribed among compensation-seeking and noncompensation-seeking veteran groups. Given the higher degree of symptom reporting among compensation-seeking veterans, we also aimed to examine whether there were differences in how these two groups utilized healthcare opportunities.

METHOD

Participants

Archival data were drawn retrospectively from 172 male combat veterans who were assessed at a VA outpatient PTSD clinic from 1997 to 1999. Approval was obtained from an Institutional Review Board, which included a waiver for obtaining informed consent. Compensation seeking status was determined by an interview, chart review, and self-report items gathered from a psychosocial history. Compensation-seeking (CS) status was assigned to participants who had previously applied or were planning to apply for any kind of VA disability

compensation. Participants who were not intending to apply for any kind of disability were classified as noncompensation-seekers (NCS).

Of the 172 veterans from a distinct sample, compensation seeking-status was available for 30% of the participants ($N = 52$). Specifically, the sample included 17 (33%) NCS and 35 (67%) CS participants. The unavailability of compensation-seeking data for the total sample was a result of changes in procedures used to assess veterans between 1995 and 1999, and was not believed to reflect any systematic biases in the data.

Procedure and Instruments

Psychiatric Diagnoses were derived from the Diagnostic and Statistical Manual of Mental Disorders—Fourth Edition (16). All diagnoses were determined by a team consensus, which included a psychiatrist, clinical psychologist, social worker, and psychology intern. Determinations were based on an evaluation that included a chart review, psychosocial and military history interviews, and the Clinician Administered PTSD Scale (17), which is a structured PTSD clinical interview.

Clinical information was also gathered from a battery of self-report instruments: 1) Minnesota Multiphasic Personality Inventory-2 (MMPI-2) (18), a widely used 567-item true-false measure that is used to detect a wide range of psychopathology and provides validity scales for detecting exaggerated response styles (19); 2) MMPI-2 Keane PTSD Scale (PK), a measure of combat-related PTSD symptoms and general distress with good psychometric qualities (20).

Information regarding medical and psychiatric disability percentage ratings were gathered from computerized records approximately three to five years after the initial evaluation. Medications prescribed and total number of primary care, specialty care, and PTSD clinic visits were based on those services used in the 365 days after their PTSD evaluations.

Statistical Analyses

Analyses were first conducted on the demographic variables in order to detect differences between the CS and NCS groups on these variables. For continuous variables (e.g., age, annual income, and years of education), t-tests for independent samples were used, and robust t-tests for unequal group variances were used when indicated (i.e., when Levene's test of equal variances was significant at $p < .05$). Chi square analyses were used to examine CS and NCS group differences across

categorical demographic variables (e.g., ethnicity, relationship status, branch of military service, and era of war served).

Separate ANOVAS were used to examine differences between the CS and NCS groups on PTSD symptoms and percentage of medical and PTSD disability received. Three separate ANOVAS were used to explore differences between the CS and NCS groups on total PTSD visits, total primary and specialty care visits, and total medications prescribed in the past year.

RESULTS

First, comparisons were made across the continuous demographic variables for the CS and NCS groups. The CS group had a mean age of 50 years ($SD = 6.68$) and the NCS group's mean age was 52 years ($SD = 8.90$), with no significant group differences. The CS group had an average of 12.09 years of education ($SD = 1.96$) and the NCS group had an average of 12.20 years (2.80), with no significant group differences. Finally, the CS group had an average income of \$15, 689 ($SD = 13,500.81$), while the NCS group averaged \$27,844.80 ($SD = 20,083.58$), revealing a significant group difference $t(55) = 2.72$, $p < .05$. Although income revealed statistically significant group differences, it was not covaried out of subsequent analyses as in previous studies in order to conserve power. Furthermore, it was assumed that income would overlap significantly with the independent variable of interest. That is, income would intuitively influence one's motivation for seeking monetary compensation.

Chi square analyses were used to examine CS and NCS veterans across the categorical demographic variables (e.g., ethnicity, relationship status, branch of military service, and era of war served). Ethnic status revealed that 53% of the CS group was Caucasian and 47% was African American; 60% of the NCS group was Caucasian and 40% was African American. Relationship status revealed that 61% of the CS group was married and 28% was divorced or separated; 80% of the NCS group was married and 20% was divorced or separated. Five participants endorsed being single or never married, and they were all in the CS group. With regard to employment status, 57% of the CS group was unemployed, and 37% was employed full-time. Three participants endorsed being employed part-time, and they were all in the CS group; 60% of the NCS group was unemployed and 40% was employed full-time. In terms of rural versus urban dwelling status, 40% of the CS group was urban and 60% was rural; 33% of the NCS group was urban and 67% was rural. The majority of veterans in both groups served in

Vietnam; 76% of the NCS group and 77% of the CS group. Chi square analyses revealed that there were no significant differences between the CS and NCS groups on dichotomous demographic variables. These demographic patterns are similar to prior work (Frueh et al, 2003).

Validity scales on the MMPI-2 were used to exclude participants who responded in an invalid manner by responding with a mostly true or mostly false manner (TRIN $\geq$ 100, responding randomly (VRIN $\geq$ 80), or missing responses ("cannot say" $\geq$ 15). Based on these criteria, 5 NCS and 17 CS participants were excluded. Comparisons between the CS and NCS groups on the FPTSD validity scale (21) the MMPI-2 revealed that the CS group had significantly higher scores, $F(1, 50) = 5.50$, $p < .05$.

An ANOVA examining differences between the CS and NCS groups on the MMPI-2 Keane PTSD Scale (PK) also yielded a statistically significant group difference, $F(1, 50) = 6.81$, $p < .05$. Mean group comparisons revealed that the CS group had higher scores on these scales then the NCS group, suggesting a higher level of symptom reporting (see Table 1). PTSD scores based on the CAPS, however, failed to yield group differences in severity scores between the CS and NCS groups.

Separate ANOVAS comparing the CS and NCS groups on % medical disability and % PTSD disability did not reveal significant group differences. Further ANOVAS comparing the CS and NCS veterans on total PTSD related service utilization did not yield statistically significant group differences, despite a higher mean average for the CS group. Furthermore, separate ANOVAS comparing the CS and NCS veterans in total primary care and specialty care visits did not yield significant group differences. In terms of medications prescribed within the past year, total medication prescribed in the past year was nonsignificant. However, the use of antidepressants was higher in the NCS group than the CS group.

DISCUSSION

This small exploratory study replicated previous findings (4) that CS veterans typically report more psychological distress compared to NCS veterans despite a lack of difference in actual PTSD diagnoses. Furthermore, validity indices of the MMPI-2 revealed that symptom reporting among CS veterans were exaggerated in a "fake-bad" manner. However, despite higher symptom reporting among CS veterans, no statistically significant group differences were found across various healthcare utilization indices, including PTSD services.

TABLE 1
PTSD Symptoms, Disability Status, and Service Utilization by Compensation-Seeking Status (Noncompensation Seeking = NCS, Compensation-Seeking = CS)

		n	*M*	*SD*	*F*
Validity measures					
FPTSD	NCS	17	2.47	1.28	5.50*
	CS	35	4.31	3.10	
Symptom measure					
PK	NCS	17	29.47	8.28	6.81*
	CS	35	35.49	7.56	
CAPS total	NCS	16	80.38	17.26	1.53
	CS	32	86.22	14.50	
Disability					
% Medical	NCS	7	40.00	27.69	.06
	CS	14	36.43	34.11	
% PTSD	NCS	9	53.33	23.45	3.30
	CS	13	36.92	18.88	
Service use					
Total PTSD visits	NCS	15	7.67	7.40	2.82
	CS	24	13.08	11.02	
Total primary visits	NCS	15	1.93	2.50	.61
	CS	24	2.46	3.43	
Total specialty visits	NCS	15	4.00	3.93	.32
	CS	24	2.79	3.43	
Psychiatric meds	NCS	15	3.13	1.41	1.42
	CS	22	2.45	1.8	

Note. FPTSD = Validity Scale of the MMPI-2; PK = MMPI-2 Keane PTSD Scale Score; CAPS Total = Severity × Intensity of PTSD Symptoms.
$^{*}p < .05$.

Although not statistically significant, there was a strong trend for CS veterans to use PTSD related services at a higher rate. Furthermore, statistical power for these analyses was low, limiting our ability to detect group differences. Comparison of group means for the use of primary care services, specialty care services, and medication prescribed were relatively similar across both groups. These findings suggest that differential rates of PTSD service use compared to other healthcare indices may exist between CS and NCS veterans despite similar PTSD diagnostic rates. Although the present study is the first to examine the effects of applying for disability benefits on service use, these findings should be put in context with those from studies of combat (22) and

Vietnam (13) veterans. These findings suggest that veterans who receive disability benefits are more likely to use VA mental health and medical services compared to veterans without such benefits. However, whether utilization rates and patterns change as a direct result of receiving disability payments is unclear.

Regardless of compensation-seeking status, veterans are reporting high levels of distress on symptoms measures and are seeking medical and psychiatric services. The conclusions from this study are tentative but suggest that CS veterans may be seeking PTSD related services at a higher rate. More research is needed to better understand how compensation seeking status affects the use of healthcare opportunities within the VA system, as well as the provision of services to this population.

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