Racial Differences in Veterans' Satisfaction With Examination of Disability From Posttraumatic Stress Disorder

Marc I. Rosen, M.D.
David R. Afshartous, Ph.D.
Samuel Nwosu, M.S.
Melanie C. Scott, Psy.D.
James C. Jackson, Psy.D.
Brian P. Marx, Ph.D.
Maureen Murdoch, M.D., M.P.H.
Patricia L. Sinnott, P.T., Ph.D.
Theodore Speroff, Ph.D.

Objective: **The examination that determines if a veteran has service-connected posttraumatic stress disorder (PTSD) affects veterans' lives for years. This study examined factors potentially associated with veterans' perception of their examination's quality.** ***Methods:*** **Veterans (N=384) being evaluated for an initial PTSD service-connection claim were randomly assigned to receive either a semistructured interview or the examiner's usual interview. Immediately after the interview, veterans completed confidential ratings of the examinations' quality and of their examiners' interpersonal qualities and competence. Extensive data characterizing the veterans, the 33 participating examiners, and the examinations themselves were collected.** ***Results:*** **Forty-seven percent of Caucasian veterans and 34% of African-American veterans rated their examination quality as excellent. African Americans were less likely than Caucasians to assign a higher quality rating (odds ratio=.61, 95% confidence interval=.38–.99, p=.047). Compared with Caucasians, African Americans rated their examiners as having significantly worse interpersonal qualities but not lower competence. Ratings were not significantly related to the veterans' age, gender, marital status, eventual diagnosis of PTSD, Global Assessment of Functioning score, the examiner's perception of the prevalence of malingering, or the presence of a third party during the examination.** ***Conclusions:*** **Ratings of disability examinations were generally high, although ratings were less favorable among African-American veterans than among Caucasian veterans. (*Psychiatric Services* 64:354–359, 2013; doi: 10.1176/appi.ps.201100526)**

Dr. Rosen is affiliated with the Department of Psychiatry and Dr. Scott is with the Department of Psychology, Veterans Affairs (VA) Connecticut Healthcare System, 116A, West Haven, CT 06516 (e-mail: marc.rosen@yale.edu). They are also with the Department of Psychiatry, Yale School of Medicine, New Haven, Connecticut. Dr. Afshartous is with the Department of Biostatistics, Vanderbilt University School of Medicine, Nashville, Tennessee. Mr. Nwosu, Dr. Jackson, and Dr. Speroff are with the Geriatric Research, Education and Clinical Center, VA Tennessee Valley Healthcare System, Nashville, and with the Vanderbilt University School of Medicine, where Mr. Nwosu and Dr. Speroff are with the Department of Biostatistics and Dr. Jackson is with the Department of Medicine. Dr. Marx is with the National Center for Posttraumatic Stress Disorder, VA Boston Healthcare System, and the Department of Psychiatry, Boston University School of Medicine, both in Boston. Dr. Murdoch is with the Section of General Internal Medicine, Center for Chronic Disease Outcomes Research, Minneapolis VA Health Care System, and the Department of Internal Medicine, University of Minnesota School of Medicine, both in Minneapolis. Dr. Sinnott is with the Health Economics Resource Center, VA Palo Alto Health Care System, Palo Alto, California, and the Center for Health Policy/Center for Primary Care and Outcomes Research, Stanford University, Stanford, California.

Veterans who claim that a mental health condition was caused or exacerbated by their military service can apply for disability payments from the U.S. Department of Veterans Affairs (VA). Once an application is filed, the veteran has a compensation and pension examination by a mental health professional that is central to assessing the claim. The approval of a claim has far-reaching implications (1) because it can result in lifelong priority access to VA care, financial remuneration, and an official acknowledgment that the veteran was harmed by military service. As of 2009, a total of 345,520 veterans were receiving service-connected payments for posttraumatic stress disorder (PTSD) (2), a number reflecting that disability awards often are continued for decades after the initial award (3).

Many veterans find the PTSD compensation interview to be stressful and indicate that the examiners who conduct these interviews do not understand veterans, question them skeptically, and display unfamiliarity with the military (4). These views are shared by many representatives of organizations that support veterans with their applications (5).

Veterans' perceptions that their examinations were of lower quality are damaging. Compensation examinations are a potential portal of entry to engagement in VA treatment, and an off-putting interview may predispose veterans to be less engaged in VA treatment (6). Veterans' perceptions

that examinations are unfair can also become self-fulfilling prophecies, given that distrustful veterans may be more difficult to interview. Perceptions that disability determinations are capricious might also undermine public support for this indemnification program (7). For all these reasons, it is important to understand veterans' satisfaction with the compensation examination and factors that may be associated with veterans' perceptions that their compensation examination was of lower quality.

In this study, we examined characteristics of veterans, examiners, and examinations that are potentially associated with satisfaction among veterans evaluated for service connection for PTSD. A wide range of potential predictors were considered because there are few data concerning claimants' satisfaction with evaluative, forensic examinations of any type (8). Of particular interest was veterans' race. Abundant literature has shown that compared with Caucasian patients, African-American patients have less trust in medical professionals (9). Prior analyses that accounted for potentially confounding differences in PTSD disability awards, such as PTSD symptom severity and degree of disability, showed that African-American veterans were 13% less likely than Caucasians to receive such awards (10). Furthermore, this racial difference in PTSD disability award was found to directly mediate a higher subsequent burden of poverty among African-American veterans relative to other veterans (11).

Methods

Parent study

This study was embedded within a multisite, cluster-randomized clinical trial of veterans being evaluated for an initial PTSD service-connection claim between March 17, 2009, and September 29, 2010. As described in detail elsewhere (12), 999 veterans were identified for a study involving random assignment either to examiners who conducted their usual examination or to examiners who incorporated semistructured assessments of PTSD and associated functional impairment into the interview. Altogether, 406 (41%) of the 999 veterans consented to participate. Demographic and other data were collected for 384 veterans, all of whom completed an evaluation of the examiners. The 384 veterans were examined by 33 examiners at six geographically scattered sites. The average number of veterans examined per examiner was 12 (range 1–42).

The semistructured interviews incorporated the Clinician-Administered PTSD Scale (13) to assess PTSD and the World Health Organization Disability Assessment Schedule II (14) to assess functional impairment. The study design was hierarchical, with veterans clustered within clinicians who were nested within medical centers. Examiners remained in their study arm throughout the study and did not cross over. Both veterans and examiners provided written, voluntary informed consent for participation, and the study was approved by the institutional review boards at all participating study sites. As part of study participation, veterans and examiners agreed to audio recording of the compensation examination.

Veterans' ratings of their examinations

Each veteran's subjective experiences of the PTSD compensation examination were assessed by a brief paper-and-pencil questionnaire completed by research staff immediately after the veteran had undergone the examination. The questionnaire items were adapted from measures used for similar purposes by the Veterans Benefits Administration to assess satisfaction with compensation examinations and from other consumer satisfaction surveys (15,16).

On the questionnaire, veterans are asked the summary question, "Overall, how would you rate the quality of today's compensation and pension examination?" Response options are excellent, very good, good, fair, and poor. Given there were zero ratings of poor and very few ratings of fair (N=17, 5%), the fair and good response categories were combined to yield a three-level ordinal scale for analysis (fair or good, very good, and excellent). Ratings are coded so that higher scores correspond to higher quality. This summary measure was predefined as the primary outcome because it allows veterans to consider the quality of all facets of the examination (15).

Veterans also rated their agreement with four statements about the examiner's interpersonal qualities. Each statement begins with "My examiner" and was completed by one of the following phrases: "was courteous," "paid attention to what I had to say," "took a personal interest in me," and "was reassuring." Agreement is rated on a Likert scale anchored by 1, strongly disagree; 2, somewhat disagree; 3, neither agree nor disagree; 4, somewhat agree; and 5, strongly agree. These items have acceptable internal consistency (Cronbach's α=.71)

Using the same Likert scale, veterans rated the examiner's competence by separate items rating whether the examiner "was very thorough," "seemed to know what she or he was doing," "seemed very experienced," "had a lot of skill when working with me," and "was fair." These items have high internal consistency (Cronbach's α=.85). The distinction between professional competence and personal qualities has been a key feature of surveys of satisfaction with health care providers (17).

Covariate measurements

We hypothesized that veterans' satisfaction with their examinations would be affected by characteristics of the veteran, the examiner, and the examination. Demographic data (age, gender, marital status, race, and education) about veterans were collected and included as predictors. The presence of a diagnosis of PTSD and a substance use disorder and the Global Assessment of Functioning (GAF) score were extracted from the disability examination report. The GAF is a global rating scale that rates combined psychiatric and social functioning on a scale of 0 to 100 (18). Demographic information about examiners was also collected.

In addition, examiners completed a paper questionnaire asking about training they had received for conducting PTSD compensation examinations, the number of years they had conducted PTSD compensation examinations, and attitudes toward claimants (19). Examiners were asked

separate questions about whether they had received formal training in each of seven topics related to PTSD examination.

To elucidate examiners' general attitudes concerning whether veterans are prone to either exaggerate or avoid discussing and thus minimize symptoms (20), each examiner was asked, "What percentage of the veterans you interview exaggerate symptoms?" The same question was asked regarding veterans who minimize symptoms.

Data about the examinations

After each examination, the examiner recorded how much time had been spent conducting the interview. Examiners also indicated whether someone other than the veteran—such as a spouse or a veterans service organization representative—had been present during the examination.

Data analysis

The veteran's rating of the overall quality of the PTSD examination was the primary dependent variable. A proportional-odds logistic regression was used to assess the relationship between rating of overall quality and the covariates listed above. To account for the data structure of veterans' ratings clustered within PTSD examiners, we obtained standard errors by using bootstrap covariance matrix estimates. For continuous covariates, odds ratios comparing the 75th and 25th percentiles of the respective distribution are presented. An alternative analysis treating quality as a dichotomous variable (excellent versus not excellent) was conducted. Scores on the interpersonal quality and competence scales were analyzed by using linear regression for the same set of prespecified covariates. A variance-stabilizing log transformation to assess robustness to nonnormality was also employed.

All statistical analysis was performed by using R, version 2.13.1, and R packages rms and Hmisc (21). Statistical significance was assessed at the level of alpha=.05.

Table 1

Predictors of ratings of quality of examinations to determine PTSD disability among 377 veterans[a]

Predictor	OR	95% CI
Veterans' factors		
Age	1.37	.92–2.00
Female (reference: male)	1.25	.49–3.21
Married or living with partner (reference: no)	1.24	.70–2.21
Race (reference: Caucasian)		
African American	.61	.38–.99
Other[b]	.76	.35–1.70
Some education post high school (reference: no)	1.04	.66–1.62
Diagnosis by examiner		
PTSD (reference: no)	1.72	.61–4.89
Substance use disorder (reference: no)	1.51	.95–2.41
Global Assessment of Functioning score	1.07	.86–1.34
Examiners' factors		
Estimated prevalence of malingering	1.13	.40–3.17
Estimated prevalence of minimizing symptoms	1.21	.76–1.93
Compensation exam training sessions attended (out of 7)	1.41	.62–3.19
Female (reference: male)	1.29	.24–6.83
Veteran (reference: no)	1.70	.25–11.39
Years conducting compensation exams	1.10	.40–3.06
Minutes spent preparing for compensation exam	1.20	.87–1.66
Examination factors		
Semistructured examination group (reference: no)	.81	.16–4.26
Length of face-to-face exam (minutes)	.57	.24–1.39
Third party at exam (reference: no)	.85	.44–1.65

[a] For continuous covariates, the odds ratios (ORs) represent a comparison of the 75th and 25th percentiles of the distribution. PTSD, posttraumatic stress disorder

[b] Neither African American nor Caucasian

Results

Veterans' characteristics

Most veterans in the study were male (N=366, 95%) and were married (N=239, 62%). Forty percent (N=154) had had some education after high school. With regard to race, 60% (N=228) were Caucasian, 26% (N=100) were African American, and 14% (N=54) indicated "other" race. Of those indicating "other" race, 31 of the 52 veterans with available data (60%) were Hispanic. Study veterans had served mainly in the Army (N=262, 67%), in combat (N=349, 91%), and in the Vietnam (N=214, 56%) or the Iraq and Afghanistan (N=93, 24%) conflicts. The veterans' ages reflected the war era in which they served—12% (N=45) were aged 27 or younger, and 64% (N=246) were aged 51 or older.

The compensation examination reports indicated that 65% (N=250) of veterans were diagnosed as having PTSD and 49% (N=188) of veterans were found to have a substance use disorder (two reports lacked information about substance use disorders). The mean±SD GAF score was 55.0±10.5, reflecting moderate disability.

Examiners' characteristics

One examiner was Hispanic, and 32 were non-Hispanic Caucasians; 61% (N=20) were female, and 97% (N=32) were psychologists. On average, the examiners reported 6.5±6.2 years of PTSD diagnostic experience and had received 5.2±1.4 of the seven training sessions about PTSD compensation examinations. On average, the examiners estimated that 10.6%±9.3% of veterans exaggerate symptoms and 13.6%±15.9% of veterans minimize them. Examiners reported having spent 184.6±81.7 minutes on the examination itself.

Relationship between outcome measures

Ratings of overall examination quality were available for 377 veterans; 41% (N=156) rated the examination as excellent, 38% (N=142) rated it as very good, and 21% (N=77) rated it as fair or good. The mean rating (N=380 veterans) was 4.72±.46 for examiner

competence and 4.71±.43 for examiner interpersonal qualities. Ratings of examiner competence and interpersonal qualities were correlated with Pearson's r=.72 (p≤.001). The correlations between the rating of overall examination quality and the competence and interpersonal qualities scales were .62 (p<.001) and .54 (p<.001), respectively.

Factors associated with overall quality

As indicated in Table 1, although many predictor variables yielded relatively large coefficient estimates, only race was significantly associated with overall rating of quality. The odds of a rating in a higher quality category were estimated to be 39% less among African-American veterans than among Caucasian veterans (odds ratio [OR]=.61, 95% confidence interval [CI]=.38–.99, p=.047). Although the CI was relatively wide, this result was consistent with the unadjusted raw data shown in Table 2—a lower proportion of African Americans (34%) than Caucasians (47%) indicated that their examination had been excellent.

Because this difference appeared concentrated at the highest end of the rating scale, an alternative analysis was conducted in which the overall rating of quality was treated as dichotomous (excellent versus not excellent). In this multivariable logistic regression, the effect size for comparison of African-Americans' and Caucasians' ratings was heightened even more (OR=.54, CI=.33–.89, p=.016). Thus, as indicated by both the unadjusted and the adjusted analysis, African Americans were less satisfied than Caucasians with the quality of their exam.

Factors associated with examiners' qualities

Table 3 presents the results of the linear regression model of factors associated with examiner competence. None of the coefficient estimates approached statistical significance, and the magnitude of the effects was not very large.

Table 4 presents the results of the linear regression model of factors associated with interpersonal qualities. Compared with Caucasian veterans, African-American veterans rated their examiners' interpersonal qualities lower (CI=–.18 to –.02, p=.01). A similar coefficient was found for the race category "other," indicating lower interpersonal quality ratings compared with Caucasians; however, it was not estimated with the same amount of certainty as the coefficient for African Americans and did not reach statistical significance.

Follow-up analyses

Several follow-up analyses were conducted to further elucidate the relationship between race and compensation examinations. Because a structured examination might be more consistently delivered and less prone to differentially upset African-American veterans, we reviewed the rates of examinations with low quality ratings within the structured and unstructured examination groups. Quality ratings of excellent were assigned by 32% (N=14) of African Americans in the structured examination group and 36% (N=19) of African Americans in the unstructured group (p=.91). Thus there was no evidence that the race effect was ameliorated by use of the semistructured examination.

Table 2

Ratings of quality of examinations to determine disability from posttraumatic stress disorder among 372 veterans, by race[a]

	African American (N=97)		Non-Hispanic Caucasian (N=225)		Other (N=50)	
Rating	N	%	N	%	N	%
Fair or good	24	25	44	20	10	20
Very good	40	41	75	33	24	48
Excellent	33	34	106	47	16	32

[a] Race data missing for five of the 377 veterans who rated exam quality

Table 3

Factors associated with veterans' ratings of examiners' competence[a]

Predictor	Estimate	SE	p
Veterans' factors			
Age	.001	.002	.54
Gender	−.034	.149	.82
Married or living with partner	.006	.054	.90
African American	−.046	.043	.28
Neither African American nor Caucasian	−.019	.093	.84
Some education post high school	−.021	.047	.65
Diagnosis of examiner			
Posttraumatic stress disorder (PTSD)	.032	.098	.74
Substance use disorder	.004	.058	.94
Global Assessment of Functioning score	−.001	.003	.78
Examiners' factors			
Estimated prevalence of malingering	.000	.005	.92
Estimated prevalence of minimizing symptoms	.000	.004	.98
Compensation examination training sessions attended (out of 7)	−.013	.037	.73
Gender	−.168	.139	.23
Veteran	−.091	.181	.62
Years conducting compensation examinations	−.008	.007	.22
Minutes spent preparing for examination	.000	.002	.93
Examination factors			
Semistructured interview	−.102	.151	.50
Interaction of semistructured interview × diagnosis of PTSD	−.005	.121	.97
Length of face-to-face examination (minutes)	−.001	.027	.98
Third party at examination	−.004	.073	.96

[a] Standard errors (SEs) were calculated via bootstrap procedure. Fixed effects included medical center.

Table 4

Factors associated with veterans' ratings of examiners' interpersonal qualities[a]

Predictor	Estimate	SE	p
Veterans' factors			
Age	.002	.002	.36
Gender	−.210	.131	.11
Married or living with partner	.026	.052	.62
African American	−.099	.039	.01
Neither African American nor Caucasian	−.110	.105	.29
Some education post high school	.057	.049	.25
Diagnosis of examiner			
Posttraumatic stress disorder (PTSD)	.088	.094	.35
Substance use disorder	.053	.034	.12
Global Assessment of Functioning score	.000	.003	.93
Examiners' factors			
Estimated prevalence of malingering	−.001	.005	.80
Estimated prevalence of minimizing symptoms	.002	.005	.73
Compensation examination training sessions attended (out of 7)	.005	.049	.91
Gender	−.210	.131	.11
Veteran	−.051	.203	.80
Years conducting compensation examinations	−.005	.010	.63
Minutes spent preparing for compensation examination	.001	.002	.72
Examination factors			
Semistructured interview	−.055	.199	.78
Interaction of semistructured interview × diagnosis of PTSD	−.032	.107	.76
Length of face-to-face examination (minutes)	−.001	.019	.95
Third party at examination	.051	.103	.62

[a] Standard errors (SEs) were calculated via bootstrap procedure. Fixed effects included medical center.

Discussion

The overall ratings of compensation and pension examinations by both African-American and Caucasian veterans were predominantly excellent or very good. However, compared with Caucasian veterans, African-American veterans rated the quality of their examinations and the interpersonal qualities of their examiners lower. This finding persisted even after control of other potential predictors of dissatisfaction. Remarkably, despite the limited range of satisfaction ratings in this study, only veterans' race and race alone predicted lower ratings by veterans. There was no support in the data that other measured covariates accounted for veteran satisfaction.

African-American veterans' lower quality ratings may have been related to characteristics of the veterans or of their examiners. Compared with patients of other races, African Americans have been shown to provide less information and to be less assertive when interacting with medical providers (22,23); lack of assertiveness may be related to less trust in medical providers (22–25). It is also possible that African-American veterans are treated differently than other veterans during the disability examination because they tend to have received less previous PTSD treatment (26). Consequently, they may be less experienced and less comfortable than Caucasian veterans discussing their PTSD symptoms with a medical professional.

Alternatively, it is possible that examiners are less empathic with African-American veterans than with Caucasian veterans, a phenomenon observed in medical settings (27). Reliance by examiners on preexisting stereotypes may also be exacerbated in stressful situations (28,29), such as a compensation examination. Only Caucasian examiners evaluated African-American veterans in this study, and such racial discordance has been associated with worse outcomes in clinical settings (30,31).

A better qualitative understanding of the mechanisms behind the disproportionately lower ratings by African-American veterans would have clinical implications. If the differences are attributable to African-American veterans' reticence, for example, teaching veterans before their examination the advantages of volunteering information might reduce racial differences in the future (32). On the other hand, differences arising from examiner-based characteristics suggest the need for examiner-based solutions, such as further training and monitoring of examiners. Although standardizing the compensation examination with use of semistructured interviews did not reduce the racial difference in satisfaction in this study, perhaps more targeted examiner training, for example, training about cultural awareness, would help close the gap.

It is important to note that the veteran's perspective is only one component of high-quality examinations. Judgments of quality among veterans may differ from those of other important stakeholders, such as the Veterans Health Administration, which conducts the examinations; the Veterans Benefits Administration, which must decide service connection on the basis of examination reports; and government and taxpayers, who fund the awarded benefits (16).

The strength and generalizability of the study findings are open to more than one interpretation. The findings of racial differences did not reflect substantial dissatisfaction with the examinations. Although African Americans assigned relatively more ratings that were not excellent, their ratings were still mostly quite satisfactory (ratings of very good). Two main interpretations of this finding are possible, one being that the range and extent of racial differences would be even greater in a nonresearch setting. However, it is also possible that the racial difference in ratings of compensation examinations is, in fact, a modest effect.

The generalizability of the study is a concern because the study data did not include descriptions of the standard examinations conducted. Therefore, we cannot form conclusions about the components of examinations, such as the range of examiner styles and methods, that might account for racial differences.

Conclusions

Overall, the findings suggested that veterans' race is important to how veterans perceive their examinations' quality. In future studies of digitally recorded examinations, we hope to elucidate the provider-veteran interactions that might be changed to improve veterans' satisfaction with their examinations.

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