Service Use and Satisfaction among Elderly Former Prisoners of War in South Carolina

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Objective: This project was developed to evaluate the use of and satisfaction with Veteran's Affairs (VA) medical services and disability benefits among surviving elderly prisoners of war (POWs) in South Carolina. Method: A single-assessment quantitative survey strategy was implemented to learn more about the service use patterns and satisfaction with care of two groups of male former POWs (N = 87): those who were members of a national POW service organization and those who were not. Results: Data show that the majority of these POWs had used the VA for medical care in the previous year, received disability compensation through the VA, and were satisfied with VA primary care medical services. Furthermore, differences between these two POW groups were minimal. Conclusions: Results provide preliminary evidence that many former POWs rely heavily upon the VA for provision of primary medical and specialty care and disability compensation and that POWs are generally satisfied with the VA services and benefits they receive.

Introduction

Former prisoners of war (POWs), whose level of trauma exposure severity is generally acknowledged to be quite extreme, are particularly vulnerable to medical[1] and psychological sequelae related to their wartime captivity experiences.[2-4] Studies have found that such wartime captivity is highly correlated with a range of anxiety and depressive disorders.[5-7] In particular, epidemiological studies have shown that whereas the lifetime occurrence of post-traumatic stress disorder (PTSD) among combat veterans is high at approximately 30%,[8,9] PTSD rates are approximately twice that (up to 67%) in former POWs.[10] There have been large numbers of surviving American former POWs from 20th century wars, primarily World War II (approximately 109,000) and the Korean War (approximately 4,400) with a smaller number from the Vietnam and Persian Gulf Wars (fewer than 800 for both of these wars combined). Thus, current surviving former POWs are now mostly elderly, and the traumatic impact of wartime captivity among them, both medically and psychologically, continues to be significant.

It has been documented recently that the costs associated with traumatic experiences, both to individuals and society, are extremely high. In fact, evidence indicates that among psychiatric disorders in the general population, PTSD is associated with nearly the highest rate of medical service use and, therefore, may be one of the costliest mental disorders.[11,12] PTSD has been associated with more frequent outpatient visits to medical clinics and greater medical care costs among female survivors of sexual and physical assault[13] and among female survivors of childhood abuse or neglect.[14] In studies within the Veterans Affairs (VA) system, PTSD has been associated with greater medical impairment and use of medical services.[15-18] Service use and associated costs are even greater for those with additional comorbid diagnoses than for singly diagnosed persons.[19] Thus, it is clear that trauma has a prominent impact on the public health and should be of great interest to those concerned with public health policy.

Although persons with trauma histories and PTSD may be more frequent users of medical care services, they may often be reluctant to use mental health services.[20] It has been suggested that many trauma victims are reluctant to seek services from traditional organized medicine and may be using informal or alternative services (peer support groups, advocacy groups, etc.) instead.[21] On the other hand, it has also been found that veterans with PTSD are more likely to use VA mental health services than are other veterans,[22] and combat veterans are more likely to use mental health treatment from the VA than any other source.[23] Thus, whereas POWs as a subgroup of PTSD patients have not been studied carefully, it appears that in general, combat veterans with PTSD are likely to use at least some of the VA services available to them.

There are relatively few data available regarding treatment outcome, cost-effectiveness, and appropriateness of care for veterans or civilians with traumatic experiences,[24] let alone former POWs. Research on what types of services combat veterans and former POWs use and their perceptions of these services is also lacking. Set against this backdrop, an important step in improving service delivery systems is to better understand the needs and preferences of the veterans to be served, including former POWs. This information should be helpful in improving service delivery systems and treatment programs, including outreach efforts and "alternative" services. The purpose of this study was to collect survey data from former POWs on their medical and mental health services use, as well as their perceptions of these services. In addition to describing general POW demographics, patterns of service use, and levels of satisfaction, we were also interested in comparing POWs who participated actively in a community-based POW organization to those who did not participate in such a service organization.

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Methods

Study Overview

We implemented a quantitative survey strategy to learn more about the service use patterns and ratings of satisfaction with care of male former POWs ($N = 87$) who were in two groups: (1) those who were members of a national POW service organization and (2) those who were not members of this organization. Subjects in the first group were recruited in person at their monthly meetings; subjects in the second group were recruited via a mail-out procedure. All subjects completed the same short battery of instruments designed to assess some of the medical, mental health, and social services they use both within and outside the VA system and their satisfaction with services provided within the clinics they attend. Participation was voluntary and responses to questionnaires were confidential and anonymous. The questionnaires were designed to take approximately 10 to 15 minutes to complete. This project had Institutional Review Board approval from both the Medical University of South Carolina and the Naval Aerospace Medical Research Laboratories.

Subjects

For POW group 1, we surveyed male former POWs recruited through the South Carolina membership of the Ex-POWs of America, Inc., a community-based organization invested in furthering the cause of ex-POWs throughout the country. Potential volunteers were contacted during their monthly meetings in Charleston, South Carolina and asked to participate in the study on a voluntary basis. Over the course of four monthly meetings, 24 of 32 (75.0%) POWs agreed to participate and completed study measures. Prior to recruitment, all potential former POW subjects were given a brief explanation of the research project, were allowed to ask questions, and were asked to sign a research informed consent form.

For POW group 2, we surveyed all identified former POWs in the Charleston, South Carolina area who were not members of the Ex-POWs of America, Inc. This list of local POWs was obtained from records in the VA's POW registry. Surveys were mailed to 152 area POWs with a brief cover letter and a self-addressed, stamped envelope for return. Over the course of 3 months, 63 of 152 (41.4%) POWs completed and returned the study measures. Written informed consent was not obtained in this sample, although informed consent was implied by completion and return of research materials. Data from group 1 were collected first, and data from group 2 were then collected separately to address concerns about the generalizability of information gathered from POWs so actively involved in a national POW service organization.

Groups were compared on demographic variables using independent samples t test (for continuous variables) and χ^2 analyses (for categorical variables) with no significant differences found in these analyses. The average participant's age was 77.9 ± 2.0 years (mean ± SD) in group 1 and 78.7 ± 4.3 years in group 2 (t (85) = −0.9; $p > 0.05$). Number of years of education averaged 14.0 ± 2.7 years for group 1 and 13.3 ± 3.3 years for group 2 (t (83) = −1.0; $p > 0.05$). For group 1, all subjects were Caucasian; we did not have information on ethnicity for group 2. Groups were compared in terms of marital status, branch of military service, and war era with no significant differences found (Table I). In addition, in group 1, 8 (33.3%) POWs

TABLE I

SELF-REPORT DEMOGRAPHIC VARIABLES FOR FORMER POWS

Parameters	Group 1, *n* (%)	Group 2, *n* (%)	χ^2 (*df*, *N*)
Marital status			
Single	1 (4.2%)	0 (0%)	
Married	18 (75%)	45 (71.4%)	
Widowed/divorced	5 (20.8%)	18 (28.6%)	3.1 (2, $N = 87$)
Military branch			
Air Force	14 (58.3%)	33 (52.4%)	
Army	9 (37.5%)	25 (39.7%)	
Navy	1 (4.2%)	3 (4.8%)	0.9 (2, $N = 87$)
War era			
World War II	24 (100%)	58 (92.1%)	
Korean War (only)	0 (0%)	3 (4.8%)	
Vietnam	0 (0%)	2 (3.2%)	2.0 (2, $N = 87$)
Both World War II and Korean War	8 (33.3%)	16 (25.4%)	1.2 (2, $N = 87$)
Receiving VA disability			
All types	24 (100%)	44 (71.0%)	8.8 (1, $N = 86$)[a]
Medical	20 (83.3%)	39 (63.9%)	3.1 (1, $N = 85$)
PTSD	11 (45.8%)	13 (21.7%)	4.9 (1, $N = 84$)[b]
Other psychiatric	3 (12.5%)	7 (11.9%)	0.0 (1, $N = 83$)
Receiving non-VA disability	1 (4.2%)	10 (15.9%)	2.2 (1, $N = 87$)
Receiving retirement pensions	19 (82.6%)	50 (80.6%)	0.0 (1, $N = 85$)
Received medical or mental health care from VA in past year	22 (91.7%)	40 (67.8%)	5.1 (1, $N = 83$)[b]

Note: Because of missing data, not all numbers add up to represent the entire sample.

[a] $p < 0.01$.

[b] $p < 0.05$.

who served in World War II also served in the Korean War, and in group 2, this number was 16 (25.4%) (χ^2 (2, N = 87) = 1.2; $p > 0.05$).

Information on wartime captivity was compared between groups with no significant differences found. In group 1, participants remained in wartime captivity for an average of 13.3 ± 8.4 months compared with 16.3 ± 16.1 months in group 2 (t (85) = −0.9; $p > 0.05$). Country/area of captivity was primarily Germany or Austria for group 1 (95.0%) and group 2 (83.9%). Groups were compared in terms of whether they reported experiencing any traumatic experiences during captivity, including torture, starvation, beatings, forced labor, and severe disease. Twenty-three (100%) of group 1 and 56 (88.9%) of group 2 participants reported experiencing at least one of these traumatic events during captivity (χ^2 (1, N = 86) = 2.8; $p > 0.05$). Combining groups 1 and 2, 19 (22.1%) were tortured, 73 (84.9%) were starved, 26 (30.2%) were beaten, 25 (29.1%) were forced to labor, and 28 (32.6%) experienced severe disease; 57 (66.3%) experienced two or more and 23 (26.7%) experienced three or more of these specific traumatic experiences.

Disability benefits and past-year VA service use were also examined. The mean disability rating (on the VA 0%–100% scale) for those receiving VA disability was 68.3% ± 36.2% for group 1 and 56.3 ± 39.2% for group 2, which was not statistically different (t (65) = 1.2; $p > 0.05$). In group 1, 10 (41.7%) were rated at 100% disability, compared with 15 (34.9%) in group 2. The percentage of POWs receiving various forms of VA disability, non-VA disability, and retirement pensions were generally not different between groups (Table I). Finally, data indicate that high percentages of POWs from both groups had received some form of medical or mental health care from a VA medical center within the previous year (Table I).

Instruments

1. The study-specific Demographics and Service Utilization Patterns measure was used to obtain information about relevant demographics and service use patterns within and outside of the VA system.
2. The Veteran Ratings of Outpatient Services-VA Medical Center is a 16-item measure with a 5-point Likert scale response format designed to evaluate veteran satisfaction with general medical services (if used) provided by the VA Medical Center. Recent results in a sample of veterans with PTSD[25] showed that the internal reliability of this instrument was high (α = 0.96). Furthermore, preliminary convergent validity of this instrument was supported by the finding that all but one item was significantly correlated with the anchor items (range of rs for item 8 "Overall quality of care," 0.32–0.91; range of rs for item 16 "Would you recommend this program to a friend or family member," 0.12–0.67). The original version of this satisfaction survey has been used with other (nonveteran) psychiatric outpatient samples and has been found to have robust psychometric properties.[26]
3. The Veteran Ratings of Outpatient Services-Primary Care is a virtually identical 16-item measure to evaluate veteran satisfaction with their primary care services outside the VA system. POWs were asked to complete this measure if they had received medical care outside the VA within the past 5 years. Recent results in a sample of veterans with PTSD[25] showed that the internal reliability of this instrument was high (α = 0.95) with good preliminary convergent validity.

Results

First, we examined the POWs' perceptions of VA services, concerns about future needs, and satisfaction with outpatient care provided within the VA with no significant differences found between groups (Table II). For example, 19 participants (82.6%) from group 1 and 51 (89.5%) participants from group 2 reported that the VA medical center provided adequate medical treatment to POWs (χ^2 (1, N = 80) = 0.7; $p > 0.05$). Next, we examined data from the patient satisfaction measures. Analyses revealed between-group differences for both measures. With regard to the Veteran Ratings of Outpatient Services-VA Medical Center, the mean score from group 1 on this measure was 36.0 ± 10.4, whereas the mean score from group 2 was 49.2 ± 16.9 (t (57) = −3.3; $p < 0.01$). Thus, group 1 reported significantly lower satisfaction with VA outpatient services than group 2. Regarding the Veteran Ratings of Outpatient Services-Primary Care, the mean score from group 1 was 32.8 ± 10.7, whereas the mean score from group 2 was 51.6 ± 14.5 (t (54) = −4.9, $p < 0.001$). Therefore, group 1 also reported significantly lower satisfaction with the primary care outpatient services they received outside the VA than the POWs in group 2. We also collapsed both groups of POWs and compared responses on the two satisfaction measures. Results revealed that satisfaction with primary care provided by the VA Medical Center in the past year (mean ± SD, 45.5 ± 14.7) was somewhat higher than for non-VA primary care received in the previous 5 years (41.0 ± 14.8; t (40) = 2.05; $p < 0.05$). Overall, these mean satisfaction scores indicate that POWs are satisfied with their medical care.

To further our understanding of the assessment of patient satisfaction with POWs, we examined the internal reliability (α) of the measures related to satisfaction with VA services and primary care services in the present sample. This analysis revealed excellent internal reliability for the VA satisfaction measure (α = 0.96). Excellent internal reliability was also present for the primary care satisfaction measure (α = 0.97) similar to the original normative group of veterans.

Descriptive data on service utilization were computed. These data are combined for groups 1 and 2 (between-group analyses were not conducted due to the small number of cases in a number of cells and given the similarities between groups on previously examined variables). First, we present information on use of medical care services reported by POWs in the previous year (Table III). Second, we present information on use of formal and informal services outside of VA mental health care that POWs used in the previous year to help deal with memories or upsetting reminders of wartime captivity experiences (Table IV).

Discussion

Results from our examination of service use and satisfaction among former POWs in South Carolina produced several findings of interest. Former POWs, whether members of a POW service organization or not, proved to be remarkably homogenous both within and between groups. They were primarily Caucasian, World War II era POWs (mainly European theater of

TABLE II

FORMER POWS' PERCEPTIONS OF VA SERVICES, FUTURE NEEDS, AND OVERALL SATISFACTION WITH VA CARE

	Group 1, *n* (%)	Group 2, *n* (%)	χ^2 (*df*, *N*)
POWs who believe the VA provides adequate medical treatment to POWs	19 (82.6%)	51 (89.5%)	0.7 (1, *N* = 80)
POWs who believe the VA provides adequate services and benefits to POWs	18 (78.3%)	49 (84.5%)	0.4 (1, *N* = 81)
POWs who have concerns about their financial future	10 (41.7%)	24 (38.1%)	0.1 (1, *N* = 87)
POWs who worry about having current/future medical needs go unmet	8 (34.8%)	26 (41.9%)	0.4 (1, *N* = 85)
POWs who are satisfied overall with how the U.S. Government takes care of POWs	13 (54.2%)	38 (65.5%)	0.9 (1, *N* = 82)
POWs who are satisfied overall with how the VA system takes care of POWs	16 (66.7%)	42 (67.7%)	0.0 (1, *N* = 86)

Note: Because of missing data, not all numbers add up to represent the entire sample.

operations), and currently receiving disability compensation payments from the VA for service-connected medical and/or psychiatric disabilities. There were no significant between-group differences on demographic, military, or wartime captivity variables. Regarding the latter, the mean number of months in wartime captivity ranged from 13.3 to 16.3. When asked about specific traumatic experiences during their period of captivity, virtually all of these POWs reported at least one type of specific traumatic experience during captivity. Combined, the two groups endorsed high rates of starvation (85%), severe disease (33%), beatings (30%), forced labor (29%), and torture (22%). Furthermore, 66% of the entire sample reported experiencing two or more of these specific traumatic experiences, whereas 27% reported three or more. Thus, on average, both length of time in captivity and trauma exposure severity were considerable for both groups and were consistent with trauma exposure severity described in previous studies of POWs.[5]

Information related to broad service use revealed several interesting findings. First, in terms of VA medical service use, both groups showed high rates of using medical and/or mental health care services through the VA within the previous year (68%–92%; Table III). Second, when asked about formal and informal services obtained outside of VA mental health care in the past year to help deal with memories or upsetting reminders of wartime captivity experiences, POWs reported relying on a variety of sources, many of them informal. Combined, approximately 40% of the POWs in this study reported talking to primary care physicians, friends, and family members, and a substantial number reported turning to veterans service organizations or church leaders. Virtually none reported seeking help from psychiatrists, social workers, or psychologists outside the VA.

A closer examination of service use patterns for the two groups combined revealed that these POWs rely heavily upon the VA for provision of medical and mental health care as well as disability compensation support. This is consistent with a previous finding that veterans with PTSD are more likely to use mental health services offered through the VA than similar services offered outside the VA.[23] More specifically, 76% of the entire sample received VA primary care services, 45% received VA specialty care services, and 29% had received non-VA primary care services within the past year. The majority of this combined sample of POWs received no primary care (71%) or specialty care (74%) outside of the VA during the previous year. Although both groups were reliant on VA disability payments, those POWs who were members of specialty POW organization were more likely to receive VA disability for any reason (100% vs. 71%) and for PTSD specifically (46% vs. 22%) than were those POWs who were not members of the organization. The mean level of disability severity rating (on a 0%–100% scale) for those who were rated was high and did not differ significantly between groups was 56% to 68%.

The findings related to perceptions of services and future needs indicate that POWs not only rely on the VA but are generally satisfied with the services they receive through the VA. There were no significant between-group differences in general perceptions of the VA, concerns about future medical or financial needs, or general satisfaction with their overall care. A

TABLE III

POWS REPORTING PREVIOUS YEAR MEDICAL CARE USE

Type of Care	No. Reporting (%)	Mean No. of Visits	SD
Primary care			
VA primary care	61 (76.2%)	2.10	2.41
Non-VA primary care	23 (28.8%)	0.85	2.08
No primary care outside of VA	57 (71.3%)	NA	NA
Specialty care			
VA specialty care	36 (45.0%)	1.94	3.46
No specialty care outside of VA	59 (73.8%)	NA	NA
Hospitalization			
Medical hospitalization	25 (28.6%)	0.60	1.52
Psychiatric hospitalization	1 (1.2%)	NA	NA

Note: Number reporting represents the number of POWs reporting they had used that type of care in the previous year; mean number of visits is computed for only those POWs reporting that they had used any type of that care in the previous year.
NA, Not applicable.

TABLE IV

PERCENTAGE OF POWS REPORTING THEY USED FORMAL OR INFORMAL SERVICES OUTSIDE OF VA MENTAL HEALTH CARE IN THE PREVIOUS YEAR TO HELP DEAL WITH MEMORIES OR UPSETTING REMINDERS OF WARTIME CAPTIVITY EXPERIENCES

POWs who spoke to	Percentage
Primary care physicians	43.8
Friends	41.7
Family members	39.6
Service organizations (e.g., VFW, DAV)	35.4
Church leaders	22.9
Other physicians	10.4
Non-VA psychiatrists	2.1
Non-VA psychologists	0
Non-VA social workers	0
Hotlines	0

VFW, Veterans of Foreign Wars; DAV, Disabled American Veterans.

majority of the sample thought that the VA "probably" or "definitely" generally provides adequate medical treatment (83%–90%) and services and benefits (78%–85%) to POWs. A smaller majority agreed that they were satisfied with the way the U.S. government (54%–66%) and VA system (68%) takes care of POWs. Nevertheless, many former POWs reported that they have worries about their financial future (38%–42%) and that they may have current or future medical needs that may go unmet (35%–42%).

Examination of data from two patient satisfaction measures provided more fine-grained analyses of satisfaction with outpatient care services provided by VA and non-VA clinics. These data showed that satisfaction could be reliably measured in both groups (i.e., internal consistencies were >0.95). Group 1 was significantly less satisfied with outpatient medical services received, from both VA and non-VA clinics, than group 2. However, both groups reported relatively high levels of satisfaction with services. Data also showed that, when combined, the two groups of POWs were actually slightly more satisfied with general medical services received at the VA in the past year than with primary medical care received from non-VA sources over the past 5 years. Thus, it appears that satisfaction with VA primary care is strong, even in comparison to services received from other sources.

Several limitations of the present study merit comment. First, although identical survey measures were used for both groups 1 and 2, the method of subject recruitment and informed consent was different and there were different participation rates by group (75% and 41%, respectively). As noted, data from group 1 were collected first, and data from group 2 were then collected separately to address concerns about the generalizability of information gathered from POWs so actively involved in a national POW service organization. There are potential unknown sources of error variance represented by the different data collection procedures. Nevertheless, our concerns regarding this issue are lessened somewhat by the fact that the two groups did not differ from each other on basic demographic, military, and wartime captivity variables. Second, evaluation of information regarding service use and perception may have been limited in a variety of ways by the structured nature of the surveys used. To address this concern, qualitative research methodology may prove useful for capturing rich detail regarding a broader range of POW perception of available services and benefits as well as obstacles and barriers to care. Third, this study is based on data from a relatively small sample of POWs living in South Carolina. Additional research is needed to make conclusions regarding the national POW population.

In summary, these data provide evidence that many former POWs in South Carolina rely heavily upon the VA for provision of medical care, mental health care, and disability compensation for service-related difficulties, and furthermore, that they are generally satisfied with the care and services received through the VA. In particular, POWs appear to rely upon and value services provided by VA primary care physicians. However, many POWs also have worries about future finances and medical problems, and satisfaction with the VA was not complete or universal. These results also indicate that satisfaction with medical services may be reliably evaluated among POWs, although further psychometric research (with a focus on criterion validity) is necessary. These preliminary data have implications for VA service delivery to POWs and for the development of outreach efforts to POWs who may avoid or underuse the VA in the belief that it will not be responsive to their needs or provide adequate services. These data also suggest that the VA needs to work to assure POWs that the United States will continue to meet our great and well-earned debt to them.

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