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Utilization of Mental Health Services by Minority Veterans of the Vietnam Era[1]

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This study sought to identify differences in utilization of mental health services among members of five minority groups who served in the military during the Vietnam era. Data on utilization of mental health services from five different types of provider (Veterans Affairs [VA] and non-VA mental health providers, nonpsychiatrist physicians, clergy, and self-help groups) were obtained from a national survey of Vietnam era veterans (the National Vietnam Veterans Readjustment Study) along with information on sociodemographic characteristics, health status, income, and health insurance coverage. Chi-square tests and multivariate logistic regression analyses were used to compare use of various services among whites, blacks, Puerto Rican Hispanics, Mexican Hispanics, and others. Black veterans and Mexican Hispanic veterans were significantly less likely than white veterans to have used non-VA mental health services or self-help groups, after adjusting for health status and other factors. There were no differences between ethnocultural groups in use of VA mental health services, or services provided by nonpsychiatrist physicians or clergy, even after adjustment was made for health and economic factors. Although military service during the Vietnam conflict may have alienated many minority veterans from the federal government, the reluctance of minorities to use non-VA mental health services does not extend to the VA system. Further studies are needed to clarify the reasons for less non-VA service use among some minority groups.
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An important objective of the community mental health movement of the 1960s and 1970s was to increase the access of members of underserved minority groups to needed mental health services (Sue, 1977). Empirical studies of both the general demand for mental health services (Acosta, 1980; Lefley, 1990; Watts et al., 1986) and of specific influences on the use of mental health services (Horgan, 1986; Leaf et al., 1988; Sue, 1988) have suggested that ethnocultural minorities make less use of most types of formal health and mental health services than other Americans. Underutilization has been most apparent among blacks (Mollica et al., 1980; Solomon, 1988) and Mexican Hispanics (Hough et al., 1987; Wells et al., 1987), although sometimes such underutilization is not apparent until the greater needs of minorities for mental health services are taken into consideration (Meinhardt and Vega, 1987).

Specific concern has been expressed about underuse of mental health services by minority group veterans of the Vietnam conflict, and, more specifically, of services provided by the Department of Veterans Affairs (VA) (Scott, 1993). This concern has been heightened by a major study that showed that blacks and Hispanics are more likely to suffer negative effects of military service than whites (Kulka et al., 1990a). By many accounts, the exceptionally painful and alienating experiences of members of ethnic minority groups who served in the armed forces (Parson, 1985; Terry, 1984) have resulted in considerable distrust of the government, its leaders, and its institutions (Allen, 1986). In a 1980 survey of Vietnam veterans, for example, 29% of black veterans and 27% of Hispanic veterans agreed with the statement, "My country took unfair advantage of me," as compared with only 20% of whites ("Myths and Realities," 1980).

Leading scholars have expressed concern at the lack of attention to ethnocultural and minority issues in the treatment of war-related posttraumatic stress disorder (PTSD; Marsella et al., 1993; Westermeyer, 1989) and in psychiatric research more generally (Lawson, 1986). In this study, we present secondary analyses of data from a national survey of veterans who served during the Vietnam era (Kulka et al., 1990a, 1990b) to compare rates of mental health service utilization, and especially VA mental health service utilization among members of different ethnocultural groups. We examine two hypotheses: that veterans belonging to major ethnic

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minority groups are less likely than white veterans to use formal mental health services, and that this relative underutilization is greater for VA than for non-VA mental health services.

Methods

The National Vietnam Veterans Readjustment Study (NVVRS) was conducted on a stratified national community sample of veterans who served in the U.S. Armed Forces during the Vietnam era. The sampling frame was a national screening sample of military personnel records (Kulka et al., 1990a, 1990b). Face-to-face interviews were completed by extensively trained lay interviewers with 80% of the sample. The primary objective of the NVVRS was to estimate the prevalence of PTSD among Vietnam veterans and the relationship of PTSD to combat exposure. Blacks and Hispanics were systematically oversampled. The subsample used for this study included all male veterans surveyed in the NVVRS (N = 1698).

Measures

Ethnocultural Status

Ethnocultural status was assessed through a series of questions concerning first racial identity, then Hispanic origin or descent, and, finally, among those claiming Hispanic descent, the specific national background or ancestry with which the veteran felt most closely identified. These responses were coded as Puerto Rican, Mexican, or other Hispanic. Veterans who were both black and Hispanic were excluded from the analyses.

Service Use and Attitudes Toward Mental Health Services

Lifetime receipt of assistance for mental health problems was evaluated through an extensive series of questions. Veterans were asked, first, if they had ever sought help or advice for a psychological or emotional problem from 18 different types of outpatient providers, including services from VA medical centers and Vet centers. They were then asked specifically about use of VA and non-VA inpatient psychiatric services. Although measures of VA use might be inflated by psychiatric examinations conducted purely for the adjudication of VA benefits claims, we think the risk of such a confound is small since the interview specifically addresses whether the veteran sought "advice or help with any personal problems?"

Providers were classified into five groups: a) formal non-VA mental health providers (private psychiatrist, psychologist or social worker, community mental health center, psychiatric clinic, drug or alcohol clinic; hospital emergency room, non-VA inpatient unit, family service agency, non-VA hospital); b) VA providers (VA medical center inpatient unit, outpatient clinic, or Vet center); c) physicians other than psychiatrists (VA or non-VA); d) clergy (ministers, priests, or rabbis), and e) self-help groups (Alcoholics Anonymous, Narcotics Anonymous, veterans' rap groups).

An additional "mental health utilization" category was constructed to assess negative attitudes toward the use of mental health services, rather than the actual use of services. It has been suggested that the masculine role, among Hispanics (Becerra, 1982) as well as other minorities, "encourages endurance and silence in the face of distress rather than complaining about problems" (Marsella et al., 1990). Veterans who had never sought help for an emotional or psychological problem were asked a series of questions concerning their attitudes toward formal mental health services. Among those who had not received services, 49% indicated that it was their belief that they would *never* need services because they would *always* be able handle their problems by themselves. The proportion of veterans who reported this "never need" attitude was assessed for each ethnocultural group.

Other Factors Influencing Mental Health Service Use

Because factors other than ethnocultural status have been shown to influence service utilization, special attention was directed toward adjusting our estimates of relative service use among ethnocultural groups for such factors. Following the framework developed by Anderson and colleagues (Anderson and Newman, 1973), these factors were grouped into: predisposing, illness, and enabling factors. Predisposing factors are personal characteristics, existing before the onset of illness, that influence the use of health care services (*e.g.*, age or minority group membership). Illness factors are the perceived health problems that provide the immediate impetus toward the use of health services. Enabling factors are the financial, eligibility, and/or insurance resources needed to obtain health care services. All measures used in this study are summarized in Table 1.

Predisposing factors used as covariates in this study include age, religious affiliation, education, military experience, criminal justice history, recent violent behavior, marital status, and work status. Data on family background were included because of reports in the literature of their independent influence on service utilization even after other factors are considered (Williams et al., 1994). Measures of family background included questions concerning parental mental illness; whether the veteran was physically or sexually abused as a child; and a family instability index composed of 11 dichotomous items covering experiences before the age of 18, such as parental separation, divorce or death,

TABLE 1
Variables, Means, Standard Deviations, and Ranges for the Total Sample (N = 1698)

	Mean ± SD	Range[a]
Predisposing Factors		
Age	41.90 ± 6.60	29–60
Black	.27 ± .45	0–1
Puerto Rican	.05 ± .22	0–1
Mexican	.15 ± .35	0–1
Protestant	.54 ± .50	0–1
Catholic	.30 ± .46	0–1
Parental mental illness	.21 ± .41	0–1
Family instability	2.81 ± 1.88	0–11
Childhood physical abuse[b]	.42 ± .94	0–4
Father in combat	.23 ± .43	0–1
Education	13.36 ± 2.46	1–20
Combat exposure	5.49 ± 5.03	0–1
Abusive violence in Vietnam	.24 ± .43	0–1
Criminal behavior	1.59 ± .92	1–4
Violence	7.48 ± 4.20	0–7
Married	.73 ± .44	0–1
Working	.85 ± .36	0–1
Illness Factors		
PTSD	.22 ± .41	0–1
Psychiatric diagnoses	.29 ± .76	0–6
Substance abuse	.45 ± .61	0–2
Physical disability	1.10 ± 2.20	0–14
Enabling Factors		
Personal income ($000's)	25.79 ± 13.48	0–50
VA benefits	.19 ± .39	0–1
Insurance	.86 ± .35	0–1
Medicaid	.02 ± .14	0–1
City size[c]	1.93 ± .90	1–3
Services		
Mental health professional	.27 ± .44	0–1
Lifetime VA mental health	.10 ± .30	0–1
Lifetime non-VA mental health care	.21 ± .38	0–1
Clergyperson	.12 ± .32	0–1
Physician	.09 ± .28	0–1
Self-help group	.07 ± .26	0–1
Would never need help[d]	.49 ± .47	0–1

[a] Where range is 0–1, mean is equivalent to percent.
[b] Four-level scale based on severity.
[c] 1 = < 250,000; 2 = > 250,000 < 1,500,000; 3 = > 1,500,000.
[d] Among those who have not used mental health services.

or family income less than $5000 per year (Kadushin et al., 1981). A final area of family background concerned whether the veteran's father had ever served in combat. Exposure of the veteran himself to war zone stressors was assessed by two variables: exposure to combat, measured by the Revised Combat Scale (Laufer et al., 1981), and participation in abusive violence.

Criminal justice history was assessed with a criminal behavior index (1 = never in jail, 2 = jailed once, 3 = jailed more than once, and 4 = imprisoned for a felony), and violent behavior by a seven-item 5-point scale that addressed issues such as the frequency with which a veteran destroyed property, threatened someone with physical violence, or was verbally abusive (Cronbach's alpha = .80). Marital and work status were reflected by dichotomous variables that showed whether the veteran was currently married and currently working for pay.

Illness factors that were measured covered both psychopathology and physical functional impairment. Lifetime psychopathology was represented by three measures: a dichotomous index of current PTSD; a lifetime psychiatric illness index that comprised the total number of lifetime psychiatric diagnoses (excluding PTSD) using standard criteria from the American Psychiatric Association's (1987) *Diagnostic and Statistical Manual* (DSM-III-R); and a lifetime substance abuse index based on the number of lifetime DSM-III-R substance abuse diagnoses (alcohol or drug abuse) for which the veteran met criteria.

PTSD was assessed using a cutoff score of 89 on the Mississippi Scale for Combat-Related PTSD (Keane et al., 1988; Kulka et al., 1990a). All diagnoses other than PTSD were based on DSM-III-R criteria as assessed with the Diagnostic Interview Schedule, a standardized, structured diagnostic interview (Robins et al., 1981).

Physical functional impairments were assessed through responses to 14 questions concerning inability to perform tasks such as driving a car, getting around the community, doing vigorous exercise, etc., that had lasted for more than 3 months. These responses were summed to create a physical impairment index (Cronbach's alpha = .88).

Enabling factors measured in the NVVRS include personal income and receipt of VA benefits (both of which affect eligibility for VA services), as well as health insurance other than Medicaid, and Medicaid. The size of the city of residence was also included among the enabling characteristics because of the greater availability of medical services, and especially VA services, in large metropolitan areas. An additional enabling factor was the available supply of general health care services or mental health services, which has been shown to vary significantly across regions of the country (Rosenheck and Astrachan, 1990). Current residence was coded using the Census Bureau's definitions of the major U.S. regions (Northeast, Midwest, South, and West). Because of its special importance to the study of ethnocultural issues, Puerto Rico was singled out from the four regions.

Analyses

Chi-square tests were used to test whether there were significant differences in the proportion of veterans in each ethnocultural group who had used each type of service. A series of logistic regression analyses were then used to test the relationship of ethnocultural group membership and lifetime use of 11 different types of mental health service, after controlling for predisposing, illness, and enabling factors, including eligibility for VA services.

In these analyses, therefore, we compare whites and three different ethnic minority groups (blacks, Puerto Rican Hispanics, and Mexican Hispanics) on their use of 11 different types of mental health services, for a

total of 33 comparisons. Since we would expect one to two of these comparisons to be significant at the .05 level on the basis of chance alone, we only considered findings statistically significant if the total number of significant results exceeded this number. In the results present below, in fact, seven comparisons were significant at this level.

Results

Sample Characteristics and Service Utilization

The average age of veterans in the sample was 42 years. Altogether 47% were white, 27% were black, 5% were Puerto Rican Hispanic, 15% were Mexican Hispanic, and 7% were of other ethnicity. A total of 27% had received formal mental health services: 21% had received services from non-VA providers and 10% from VA providers (4% had received services from both VA and non-VA providers). In addition, 12% had received help from clergy for an emotional problem, 9% from a nonpsychiatrist physician, and 7% from a self-help group.

Unadjusted Rates of Service Utilization

Table 2 shows the unadjusted rates of service utilization by each ethnocultural group. There were no significant differences among the groups in the overall use of any formal mental health services (VA and non-VA), or of services from any other provider of help for mental health problems. Significant differences were evident, however, in the use of non-VA mental health services specifically ($\chi^2 = 12.3$, $df = 4$, $p < .02$), but not of VA mental health services. Blacks, Mexican Hispanics, and "others" were less likely than whites to have used non-VA mental health services.

Turning to VA mental health service use, Puerto Rican Hispanics and blacks were more likely than whites to have used VA mental health services, although the differences did not reach statistical significance. Among veterans who had never used formal mental health services, there were no significant differences among ethnocultural groups in the proportion who reported they would "never need help for an emotional problem."

Logistic Regression Analysis of Mental Health Service Use

After controlling for other predisposing, illness, and enabling factors, blacks and Mexican Hispanics, but not Puerto Rican Hispanics, were significantly *less* likely to have sought any formal mental health services (either VA or non-VA) than white veterans (Table 3). There were no significant relationships between minority group membership and use of VA mental health services (Table 3). In contrast, blacks and Mexican Hispanics were less likely than whites to have used non-VA mental health services. Blacks and Mexican Hispanics were also less likely than other veterans to have used self-help groups (Table 3). There were no significant relationships between ethnocultural group membership and receiving help for mental health problems from nonpsychiatrist physicians or clergy. The only significant relationships between ethnocultural status and the assertion that "I would never need help" for a mental health problem was a negative relationship with being Puerto Rican Hispanic.

Table 4 presents logistic regression coefficients for ethnocultural minority use of both VA and non-VA mental health services, broken down by inpatient and outpatient service use. The reduced likelihood of non-VA service use among blacks and Mexican Hispanics appears to be primarily attributable to low rates of outpatient service use. It is notable that the proportion of variance explained by these analyses is generally modest, reflecting the difficulty of predicting lifetime service utilization.

TABLE 2
Veteran Use of Services, by Ethnocultural Status

	White (N = 800)	Black (N = 458)	Hispanic Puerto Rican (N = 90)	Hispanic Mexican (N = 247)	Other (N = 103)	χ^2	p[a]
Total Sample of Veterans (N = 1698)							
Use of general sources of help for emotional problems							
Any mental health professional	28.3%	23.1%	27.8%	23.9%	33.0%	7.1	
Lifetime non-VA mental health	23.8%	17.3%	22.2%	17.0%	7.8%	12.3	.015
Lifetime VA mental health	8.4%	11.6%	13.6%	8.2%	11.7%	6.0	
Physician	8.5%	8.5%	12.2%	6.1%	13.6%	6.8	
Clergy	12.4%	12.7%	10.0%	8.5%	11.7%	3.5	
Self-help group	7.5%	6.1%	4.5%	5.7%	12.6%	7.4	
Veterans who had never used mental health services (N = 1228)							
Would never need MH services	48.1%	47.4%	46.4%	54.3%	56.3%	.48	

[a] $df = 4$.

TABLE 3
Logistic Regression Analysis of Mental Health Service Use by Ethnocultural Group, By Source[a]

	Formal mental health	VA mental health	Non-VA mental health	Physician	Clergy	Self-help group	Never need help
Percent positive	25.3%	9.5%	21.2%	8.5%	11.9%	7.1%	7.3%
Model N^f	1576	1575	1575	1576	1576	1576	1134
R^2	.23[e]	.33[e]	.11[e]	.07[e]	.08[e]	.18[e]	.08[e]
Ethnocultural group							
Black	−.11[b]	.00	−.06[c]	−.05	−.03	−.17[b]	−.01
Puerto Rican	−.08	.05	−.04	.01	.00	−.10	−.11[a]
Mexican	−.07[a]	.01	−.13[b]	−.06	−.08	−.16[b]	.00

Note: Standardized regression coefficients are adjusted for predisposing, illness, and enabling characteristics described in the text. Key to significance of adjusted regression coefficients: [a] = $p < .10$, [b] = $p < .05$, [c] = $p < .01$, [d] = $p < .001$, [e] = $p < .0001$.
[f] Data are missing on 122 to 123 veterans; the model of the "never need help" belief includes nonservice users.

Discussion

Data presented in this study generally confirm our first hypothesis, that veterans belonging to ethnocultural minority groups are less likely than others to use formal mental health services when adjustment is made for different levels of need. It is important to note, however, that this pattern did not pertain to all minorities (*i.e.*, it was limited to blacks and Mexican Hispanics), and that the relationship was not *specific* to use of formal mental health services, but also appeared in the use of a very different service modality, self-help groups. These findings are similar to those found in studies of nonveterans, in that they reveal reduced use of formal mental health services by minorities (Horgan, 1986; Leaf et al., 1988; Sue, 1988; Watts et al., 1986), and especially by blacks (Mollica et al., 1980; Solomon, 1988) and Mexican Hispanics (Hough et al., 1987; Wells et al., 1987). Puerto Rican Hispanics, in contrast, have also been found in studies of nonveterans to use services at a frequency lying in between that of Mexican Hispanics and whites (Schur et al., 1987). Studies of nonveterans, like this study of veterans, have also found that the relatively low utilization of mental health services among minorities is sometimes not apparent until adjustment is made for differing levels of need (Meinhardt and Vega, 1987).

TABLE 4
Logistic Regression Analysis of Use of VA and Non-VA Mental Health Services, By Inpatient and Outpatient Categories

	VA Services		Non-VA Services	
	Inpatient	Outpatient	Inpatient	Outpatient
Percent positive	4.4%	8.9%	5.8%	21.1%
Model N^f	1576	1576	1576	1576
R^2	.27[e]	.32[e]	.26[e]	.16[e]
Ethnocultural group				
Black	.14[a]	−.01	.03	−.13[c]
Puerto Rican	−.01	−.04	−.01	−.08
Mexican	−.01	−.03	−.02	−.11[c]

Note: Standardized regression coefficients are adjusted for predisposing, illness, and enabling characteristics described in the text. Key to significance of adjusted regression coefficients: [a] = $p < .10$, [b] = $p < .05$, [c] = $p < .01$, [d] = $p < .001$, [e] = $p < .0001$.
[f] Data are missing on 122 veterans.

The reasons for underutilization of mental health services, and especially non-VA outpatient services, among minorities are unclear. Since our analyses control for income, health insurance, VA eligibility and benefits, and regional supply factors, neither the greater rate of poverty among minorities, nor differences in their geographical distribution would seem to explain the observed differences in service utilization. While it is possible that minority group cultures discourage help seeking in some way, our data indicate that among those who have never used mental health services, members of minority groups are no more likely than whites to feel that they would never need mental health services.

Since the reluctance of minorities to use mental health services extends to self-help groups (the virtual antithesis of formal mental health services), it would also seem that we must be dealing with something more than a discomfort with the formality of professional services. Even if minority group members are no more likely than whites to feel they would "never" need help with an emotional problem, a more subtle discomfort in obtaining help for emotional problems from people outside of the family or beyond informal social support networks might still be important. The lower utilization of both formal mental health services and self-help groups among Mexican Hispanics as compared with Puerto Rican Hispanics is a case in point. In an analysis of cultural value orientations, Papajohn and Spiegal (1975) suggested that, in the Mexican Hispanic culture, the most important social ties are with kin networks, and that humankind is viewed as largely powerless before the forces of nature. In Puerto Rican culture, in contrast, collateral relationships with a larger nonkin network are highly valued and people are not viewed

as powerless. Mexican Hispanic values, in this analysis, can be seen to be less compatible with seeking help from "change" experts outside of the family than those of Puerto Rican Hispanics.

It is also possible that, since the majority of health professionals in this country are white, minorities are inhibited from using services by some degree of cross-cultural distrust. Although some clinicians and some simulation experiments have suggested that minorities do poorly when treated by clinicians from other ethnocultural groups, most empirical studies have shown few differences in clinical outcome between ethnocultural minorities (Sue, 1988). Careful studies of medical care have found similarly unexplained underutilization of services by minorities (Bergner, 1993; Cowies et al., 1993; Escarce et al., 1993). Such differences represent dislocations in our health care system, are poorly understood, and need to be studied further and remedied.

The data presented strongly disconfirmed our hypothesis that minorities would also be less likely to use VA mental health services. Blacks and Mexican Hispanics were less likely than whites to use *non*-VA services, especially outpatient services, but were no less likely than whites to use VA services, even after controlling for VA eligibility factors. Blacks, in fact, appear to be more likely than whites to use VA inpatient mental health treatment. A previous study, which included World War II and Korean War era veterans, has reported that black veterans are more likely than others to use general VA health care services (Rosenheck and Massari, 1993), even after the influences of income, receipt of VA benefits, and health status have been taken into consideration. Published utilization data also show that in 1980, psychiatric admission rates per 100,000 Vietnam era veterans were highest for VA medical centers (828.6), as compared with state and county hospitals (229.7), private psychiatric hospitals (70.6), and nonfederal general hospitals (348.1) (Rosenstein et al., 1987).

Although it is commonly assumed that bitter feelings about racial tensions in the military have discouraged minority veterans from seeking help from the VA health care system (Allen, 1986; Scott, 1993), this assumption was not borne out by our data. Rather, it appears that, on the whole, the forces of affiliation with VA are at least as strong among minority veterans as the forces of alienation. During the past century, the federal government has played a visible, central, and often leading role in the expansion of civil rights, and it is possible that minorities feel that they can get fairer treatment from an institution operated by the federal government than elsewhere. It is also possible that the integration of psychiatric services with general medical services in VA, and the positive identity of those who seek help from VA as veterans rather than as psychiatric patients, adds to the appeal of VA mental health services because they create a less stigmatized setting in which to receive services.

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