

Risk of Incarceration and Other Characteristics of Iraq and Afghanistan Era Veterans in State and Federal Prisons

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Objective: The Health Care for Reentry Veterans (HCRV) program provides Veterans Health Administration outreach services to veterans incarcerated in state and federal prisons. This study used HCRV data to compare risk of incarceration of veterans of Operations Enduring Freedom (OEF), Iraqi Freedom (OIF), and New Dawn (OND) and other veterans and to identify sociodemographic and clinical characteristics of incarcerated veterans of OEF/OIF/OND. **Methods:** Administrative national data were analyzed for 30,968 incarcerated veterans, including 1,201 OEF/OIF/OND veterans, contacted from October 2007 to April 2011. Odds ratios were calculated comparing the risk of incarceration among OEF/OIF/OND and other veterans in the HCRV sample and in a weighted sample of nonincarcerated veterans from the 2010 National Survey of Veterans. Stepwise logistic regressions of HCRV data examined characteristics of incarcerated veterans independently associated with OEF/OIF/OND service. **Results:** Regardless of ethnicity or age, OEF/OIF/OND veterans were less than half as likely as other veterans to be incarcerated and constituted only 3.9% of the incarcerated veterans. Compared with other incarcerated veterans, OEF/OIF/OND veterans were younger, were more likely to be married, were more likely to report combat exposure, expected a shorter incarceration, were 26% less likely to have a diagnosis of drug abuse or dependence, and were three times more likely to have combat-related posttraumatic stress disorder (PTSD). **Conclusions:** OEF/OIF/OND veterans appeared to be at lower risk of incarceration than veterans of other service eras, but those who were incarcerated had higher rates of PTSD. Efforts to link these veterans to mental health services upon their release are warranted. (*Psychiatric Services* 64:36–43, 2013; doi: 10.1176/appi.ps.001882012)

Criminal justice involvement and incarceration among American military veterans, especially those who have served in

combat, have long been of national concern. There was much expectation that Vietnam veterans would be at high risk of incarceration because of

combat trauma, but recent research suggests that premilitary factors are more important than combat exposure in predicting antisocial behavior and incarceration (1,2).

More recently, stories have appeared in the press about criminal behavior and incarceration of veterans who have served in the Middle East in Operations Enduring Freedom (OEF), Iraqi Freedom (OIF), and New Dawn (OND) (3,4). However, the risk of incarceration among this new generation of veterans compared with the general population of veterans has yet to be studied, and so far there is no empirical research on the general characteristics, potential risk factors, and crimes of incarcerated OEF/OIF/OND veterans.

According to a recent report by the U.S. Department of Justice (5), about 10% of prison inmates are veterans. The incarceration rate of veterans (630 per 100,000) is less than half that of nonveterans (1,390 per 100,000), a circumstance that may be explained largely by age, given that in the general population, veterans are considerably older than nonveterans. The report also indicated that like the veteran population as a whole, a majority of incarcerated veterans served during a wartime period; however, only 20%–26% reported seeing combat duty. Yet data about the characteristics of incarcerated OEF/OIF/OND veterans, who are likely to be younger and more likely to have been exposed to war trauma, are not available. Examining these characteristics

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is important because they may have implications for prevention of incarceration, for treatment, and for delivery of prisoner reentry services among OEF/OIF/OND veterans.

Studies of earlier generations of veterans found that veterans with histories of incarceration have an increased risk of psychiatric problems, substance abuse and dependence, and homelessness compared with veterans with no incarceration history (6,7). Examination of the association of incarceration and homelessness among both veterans (6) and non-veterans (8) suggested that a cluster of nonmilitary-related factors, including sociodemographic characteristics, substance abuse and dependence, and mental illness, may be key risk factors for both conditions (5).

In 2007, the Veterans Health Administration (VHA) created a system-wide outreach program called Health Care for Reentry Veterans (HCRV) to facilitate connection with VHA services among incarcerated veterans upon their release from state and federal prisons. The HCRV program was launched under the umbrella of the Veterans Affairs (VA) homeless services with the intention of preventing both reincarceration and future homelessness.

This study represents the first examination of veterans served by the HCRV program. It compared the risk of incarceration of OEF/OIF/OND veterans and other veterans in the general population stratified by age, gender, and race. It also compared the characteristics of incarcerated OEF/OIF/OND veterans and other incarcerated veterans to identify factors that may have put the OEF/OIF/OND veterans at risk for incarceration.

Methods

Program description

The HCRV program was established to assist incarcerated veterans in accessing VHA services upon their release into the community with the ultimate goal of preventing both reincarceration and future homelessness. Each HCRV program consists of specialists who provide outreach to veterans in state and federal prisons. The specialists partner with state and

federal correctional staff to meet with incarcerated veterans who are close to their release date to conduct prerelease assessments. They also facilitate postrelease linkages and provide short-term clinical management after release.

HCRV specialists, mostly social workers, help incarcerated veterans develop plans to connect to pension and compensation benefits as well as to medical and mental health services and to vocational and residential services. Contacts with veterans while they are incarcerated are limited to assessment and planning for postrelease treatment, and no formal VHA medical services are delivered in the incarceration setting. Thus HCRV specialists focus on initiating contact with incarcerated veterans to help them access VHA services after their release.

Because HCRV does not identify or target veterans with particular health problems or who served in a particular military service area or era, the data available from the program may be representative of the incarcerated veteran population, having no obvious tendency to under- or overrepresent certain groups. However, the data are from only one national, albeit geographically representative, program, so the extent to which they are completely representative of incarcerated veterans on all variables is unknown.

Data source

Administrative national data summarizing outreach assessments by the HCRV program of 30,968 veterans contacted from October 2007 to April 2011 were obtained for analysis.

Population data for a weighted sample of nonincarcerated veterans from the 2010 National Survey of Veterans (9) were used to compare the odds of being an OEF/OIF/OND veteran in age-race cohorts of the incarcerated sample with those of being an OEF/OIF/OND veteran among domiciled veterans nationally. Odds ratios comparing these samples were used to estimate and compare the risk of incarceration among various strata of the population of OEF/OIF/OND veterans and other veterans.

The 2010 National Survey of Veterans was a comprehensive nationwide

mail survey that collected information about veteran characteristics and health service use. A total of 8,710 veterans participated, and the data were weighted to incorporate the probability of selection and survey nonresponse and were poststratified to known population totals to be representative of the entire noninstitutionalized veteran population.

Measures

Administrative data were based on information obtained by HCRV specialists in face-to-face interviews of incarcerated veterans. The specialists used a structured assessment form to collect information about sociodemographic characteristics, criminal history, clinical status, homelessness history, and service needs.

Sociodemographic characteristics. Information was collected about sociodemographic characteristics including age, gender, ethnicity, marital status, military history, and combat exposure. Service in OEF/OIF/OND was defined as serving in theaters of operations in Iraq or Afghanistan. Combat exposure was defined as receiving hostile or friendly fire in a combat zone.

Criminal history. The offense related to the current incarceration was classified into six categories: violent offenses (for example, murder, manslaughter, assault, or robbery), property offenses (for example, burglary, motor vehicle theft, stolen property, arson, or vandalism), drug offenses (for example, possession or trafficking), public order offenses (for example, weapons offense, prostitution, public intoxication, or driving under the influence), a probation or parole violation, or other or unspecified offenses. Clients were also asked whether they had been drinking alcohol or using drugs at the time of the offense.

The expected length of the client's current incarceration, which included any time in prison, was calculated from information provided by the clients about their release date.

Clients were asked the age at which they were first arrested and how many times they had been arrested in their lifetime before their most current incarceration.

Clinical status. Clients were asked whether they had any serious medical problems. Psychiatric diagnoses were made by the HCRV specialist on the basis of observations and assessment and client's self-reported history.

Clients were asked whether they had used any VA services in the past six months and if they were interested and were willing to participate in each of five different VA services: psychiatric or substance abuse treatment, medical services, residential treatment services (including the grant and per diem program), social-vocational assistance (including the compensated work therapy program and the incentive therapy program), and case management services.

Homelessness history. Length of current homelessness was defined as the time between last being housed for 30 days or more, according to the client's report, and the current incarceration. Homelessness history was assessed by asking clients how many separate episodes of homelessness they had experienced in the previous three years.

Data analysis

To examine the risk of incarceration among OEF/OIF/OND veterans compared with other veterans in the general population, the odds of being an OEF/OIF/OND veteran in the incarcerated sample were compared with the odds of being an OEF/OIF/OND veteran in the weighted population of nonincarcerated veterans according to the 2010 National Survey of Veterans. Odds ratios stratified by age groups were calculated. Supplementary analyses examining these odds ratios by gender and race were conducted.

Descriptive statistics were used to summarize the histories of homelessness of all veterans assessed by the HCRV program. Bivariate analyses, including t tests and chi square tests, were conducted to compare these characteristics among the incarcerated OEF/OIF/OND and non-OEF/OIF/OND veterans. Appropriate corrections were made for continuous variables that violated Levene's test for equality of variances.

Multivariate analyses using backward stepwise logistic regressions

were conducted to examine the independent associations of these characteristics to predict OEF/OIF/OND status. Only variables identified as significant in bivariate analyses were included in the multivariate analyses. To adjust for multiple comparisons and inflated type I error, all statistical tests described above were conducted at the .01 level with the statistical software SPSS, version 17.0 (10).

Results

Of the total sample of 30,968 veterans assessed by the HCRV program, 1,201 (3.9%) were veterans of OEF/OIF/OND. Among the 29,767 (96.1%) other veterans, 3.0% (N=893) served before the Vietnam War, 27.9% (N=8,305) during the Vietnam War era, 47.8% (N=14,229) during the post-Vietnam era, and 18.7% (N=5,566) during the Persian Gulf War. A total of 2.6% (N=774) served after September 11, 2001, but were not deployed for OEF/OIF/OND.

National representative data from the 2010 National Survey of Veterans were used to compare the risk of incarceration among nonincarcerated veterans and OEF/OIF/OND veterans in HCRV. As Table 1 shows, across age groups, even the youngest, OEF/OIF/OND veterans were less than half as likely as other veterans to be incarcerated. This remained true for analyses of only males, only whites, only blacks, and only Hispanics (who may also have identified themselves as white or black).

Table 2 shows the sociodemographic characteristics, criminal history, clinical status, and homelessness history of all veterans in the HCRV program. A majority of veterans were unmarried white men in their late forties who did not report combat exposure, were not working, and had little income in the past month. At the time of interview, veterans had been incarcerated for an average of over four years, and the most common current incarceration offense was a violent offense, property offense, or drug offense. Veterans reported an average age at their first arrest of 26 and an average of eight lifetime arrests. Nearly half reported using substances at the time of offense, but

the response rate for that question was only 55.6%.

Most veterans reported serious medical problems and had an alcohol or drug abuse or dependence diagnosis, but most were not currently homeless and reported no recent homelessness history. Most veterans had not used the VA in the past six months but reported being willing to use VA mental health and medical services.

Bivariate analyses revealed that compared with other veterans, OEF/OIF/OND veterans were significantly younger and were more likely to be white, be married, and have some income in the past month. OEF/OIF/OND veterans were expected to be incarcerated for a shorter duration of time, were more likely to have been using only alcohol (as opposed to alcohol and drugs) at the time of the offense, and were less likely to be homeless or have a history of recent homelessness. OEF/OIF veterans were less likely to have serious medical problems and to report drug abuse or dependence but were more likely to have a mood disorder, an adjustment disorder, and other mental health problems. Most notably, OEF/OIF/OND veterans were dramatically more likely to report combat exposure and combat-related post-traumatic stress disorder (PTSD). Compared with other veterans, OEF/OIF/OND veterans were also more likely to have used the VA in the past six months and were more willing to use VA mental health services but were less willing to use VA residential treatment.

Multivariate logistic regression analyses (Table 3) showed that among HCRV clients, younger age, being married, reporting combat exposure, having a shorter duration of incarceration, being first arrested at an older age, having combat-related PTSD, and not having a drug abuse or dependence diagnosis were all independently associated with OEF/OIF/OND service, with the largest effect sizes for combat exposure and combat-related PTSD.

Discussion

National administrative data from the HCRV program revealed that OEF/OIF/OND veterans represented a small

Table 1

Characteristics of veterans, by incarceration status, service era, and likelihood of incarceration among OEF/OIF/OND veterans^a

Group	OEF/OIF/OND veterans		Other veterans		OR ^b	95% CI ^c
	Nonincarcerated (N=1,789,171)	Incarcerated (N=1,199)	Nonincarcerated (N=18,967,169)	Incarcerated (N=29,751)		
All veterans						
20–29 years	501,974	638	329,942	1,395	.30	.24–.38
30–39 years	470,083	375	806,872	3,661	.18	.14–.22
40–49 years	477,246	149	2,497,942	10,368	.08	.06–.09
50–59 years	204,319	33	3,598,472	10,569	.06	.04–.08
≥60 years	135,549	4	11,733,941	3,754	.09	.03–.26
Males only	1,283,114	1,174	15,770,128	29,270		
20–29 years	377,495	625	236,262	1,332	.29	.22–.39
30–39 years	304,255	367	514,936	3,530	.18	.14–.22
40–49 years	336,309	143	1,737,108	10,166	.07	.06–.09
50–59 years	146,305	33	2,733,655	10,482	.06	.04–.09
≥60 years	118,749	4	10,548,167	3,741	.10	.03–.21
Whites only	1,306,136	718	15,882,586	15,384		
20–29 years	339,476	390	225,880	862	.30	.22–.41
30–39 years	368,927	224	627,977	1,947	.20	.15–.25
40–49 years	335,687	89	1,820,921	4,954	.12	.07–.13
50–59 years	156,555	14	2,687,107	5,100	.05	.03–.09
≥60 years	105,491	0	10,520,700	2,507	.00	.00–.00
Blacks only	296,800	308	1,938,478	11,634		
20–29 years	74,698	152	75,073	375	.42	.23–.70
30–39 years	66,096	93	121,422	1,291	.13	.08–.22
40–49 years	104,069	43	461,586	4,463	.04	.03–.07
50–59 years	34,247	15	613,676	4,570	.06	.03–.13
≥60 years	17,690	4	666,721	935	.16	.05–.55
Hispanics only	1,514,173	127	16,976,705	1,897		
20–29 years	416,447	71	293,084	106	.47	.33–4.15
30–39 years	389,145	43	735,454	293	.28	.09–2.25
40–49 years	419,643	9	2,262,004	680	.07	.02–.15
50–59 years	185,006	4	3,190,619	608	.11	.04–3.24
≥60 years	103,932	0	10,395,543	209	.00	.00–.00

^a OEF, Operation Enduring Freedom. OIF, Operation Iraqi Freedom. OND, Operation New Dawn. Data about incarcerated veterans were collected between October 2007 and April 2011 by the Health Care for Reentry Veterans (HCRV) program, and data about nonincarcerated veterans were from the 2010 National Survey of Veterans. HCRV data about veterans younger than 19 years were excluded from the analyses of the total group and blacks only (2 OEF/OIF/OND veterans and 16 other veterans), males only (2 OEF/OIF/OND veterans and 15 other veterans), whites only (1 OEF/OIF/OND veteran and 14 other veterans), and Hispanics only (1 other veteran).

^b Odds of being incarcerated among OEF/OIF/OND versus other veterans

^c Calculated on the basis of the original sample size of the 2010 National Survey of Veterans rather than the weighted population estimate

minority (3.9%) of the veteran population incarcerated in state and federal prisons. Moreover, even among the youngest age group (aged 20–29 years) and within different ethnic groups, OEF/OIF/OND veterans were less than half as likely to be incarcerated as other veterans, suggesting this finding is not simply an artifact of age or race. This finding may reflect the increased attention and service supports provided to OEF/OIF/OND veterans by the VA (11,12) and other organizations (13,14) and is consistent with reports that the proportion of prisoners who are veterans has declined steadily over the past three decades (5). It is also in

accord with studies showing less risk of homelessness (15) and substance abuse (16) among OEF/OIF/OND veterans than among veterans of earlier service eras.

Of incarcerated OEF/OIF/OND veterans, a majority were unmarried white men in their early thirties who were not homeless, were not working, and had no income. Multivariate analyses showed that compared with other veterans, OEF/OIF/OND veterans were younger, were more likely to be married, and expected to have shorter incarceration periods. The most common current incarceration offense was a violent offense, reported by 38% of OEF/OIF/OND veterans

and 35% of other veterans; these proportions are consistent with, although slightly lower than, the proportions contained in a previous report (5). After the data were controlled for age, OEF/OIF/OND veterans still had a shorter incarceration period and reported being arrested fewer times in their lifetime than other veterans.

Alcohol abuse or dependence was most common diagnosis for both OEF/OIF/OND veterans (43%) and other veterans (45%). Psychotic disorder was the least common diagnosis among OEF/OIF/OND veterans (7%), and combat-related PTSD was the least common diagnosis among

Table 2

Characteristics of 30,968 incarcerated veterans, by service in Operations Enduring Freedom (OEF), Iraqi Freedom (OIF), or New Dawn (OND)^a

Characteristic	All veterans (N=30,968)			OEF/OIF/OND veterans (N=1,201)			Other veterans (N=29,767)			Test of difference		
	N	%	N	%	N	%	N	%	t	χ^2	df	
Age	30,964	48.43 ± 10.57	1,201	32.04 ± 7.64	29,763	49.09 ± 10.13	74.76**	1,376				
Male gender	30,968	98.3	1,201	97.8	29,767	30,019	98.3	2.32	1			
Ethnicity	30,834		1,197		29,637							
White	16,103	52.2		718	60.0	15,385	51.9	107.03**	3			
Black	11,944	38.7		308	25.7	11,636	39.3					
Hispanic	2,025	6.7		127	10.6	1,898	6.4					
Other	762	2.5		44	3.7	718	2.4					
Marital status	30,950		1,201		29,749							
Married	4,639	15.0		251	20.9	4,388	14.8					
Widowed, separated, or divorced	17,694	57.2		479	39.9	17,215	57.9	152.51**	2			
Never married	8,617	27.8		471	39.2	8,146	27.4					
Combat exposure	30,863	14.8	1,195	832	69.6	29,668	12.6	2976.21**	1			
Days worked in past month	30,946	4.69	1,201	4.46	29,745	4.70	9.1	.88	1,301			
Total income in past month	30,811		1,186		29,625							
No income	20,091	65.2		733	61.8	19,358	65.3					
\$1–\$99	7,572	24.6		265	22.3	7,307	24.7	47.28**	4			
\$100–\$499	1,878	6.1		104	8.8	1,774	6.0					
\$500–\$999	585	1.9		34	2.9	551	1.9					
≥\$1,000	685	2.2		50	4.2	635	2.1					
Current offense												
Violent offense	28,472	35.1	1,124	422	37.5	27,348	35.0	3.06	1			
Property offense	28,237	25.2	1,116	281	25.2	27,121	25.2	.00	1			
Drug offense	28,222	24.3	1,115	242	21.7	27,107	24.4	4.18	1			
Public order offense	27,919	15.5	1,106	189	17.1	26,813	15.4	2.23	1			
Probation/parole violation	28,109	23.1	1,106	226	20.4	27,715	23.2	4.50	1			
Other	27,771	7.6	1,103	122	11.1	26,668	7.5	19.23**	1			
Length of current incarceration (M ± SE months)	29,322	49.45 ± 67.61	1,164	24.27 ± 25.32	28,158	50.49 ± 68.60	30.95**	1,968				
Use of substances at time of offense	17,204		742		16,462							
None	8,601	50.0		368	49.6	8,233	50.0	15.76*	3			
Alcohol	3,626	21.1		192	25.9	3,434	20.9					
Drugs	2,535	14.7		103	13.9	2,432	14.8					
Alcohol and drugs	2,442	14.2		79	10.7	2,363	14.4					
Age at first arrest (M ± SD)	30,949	26.52 ± 11.63	1,201	23.70 ± 7.41	29,748	26.63 ± 11.76	13.06**	1,456				
Lifetime arrests	30,951	8.17 ± 11.76	1,201	4.16 ± 6.76	29,750	8.33 ± 11.89	20.19**	1,518				
Length of current homelessness	30,746		1,195		29,551							
Not homeless	24,896	81.0		1,028	86.0	23,868	80.8	29.35*	3			
<6 months	2,226	7.2		79	6.6	2,147	7.3					
<2 years	1,779	5.8		55	4.6	1,724	5.8					
≥2 years	1,845	6.0		33	2.8	1,812	6.1					

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Table 2

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Characteristic	All veterans (N=30,968)		OEF/OIF/OND veterans (N=1,201)		Other veterans (N=29,767)		Test of difference		
	N respondents	%	N respondents	%	N respondents	%	t	χ ²	df
Episodes of homelessness	30,945								
0	22,279	72.0	1,201	78.1	29,744	71.8		26.70**	3
1 or 2	6,584	21.3	213	17.7	6,371	21.4			
3 or 4	1,229	4.0	33	2.8	1,196	4.0			
≥5	853	2.8	17	1.4	836	2.8			
Currently homeless or any homeless history	30,948	30.0	1,201	23.3	29,767	29.7		24.63**	1
Any serious medical problem	30,226	59.7	1,181	53.6	29,045	60.0		19.12**	1
Psychiatric diagnosis									
Alcohol abuse or dependence	30,840	44.9	1,196	43.1	29,644	45.0		1.56	1
Drug abuse or dependence	30,867	44.7	1,193	36.7	29,674	45.0		31.85**	1
Psychotic disorder	30,968	2.093	6.8	7.1	29,767	6.8		.20	1
Mood disorder	30,818	27.8	1,194	32.9	29,624	27.6		16.37**	1
Personality disorder	30,796	11.2	1,190	12.1	29,606	11.2		.94	1
Combat-related posttraumatic stress disorder	30,804	1,895	1,195	37.8	29,609	4.9		2160.17**	1
Adjustment disorder	30,804	6,263	1,195	23.9	29,649	20.2		9.65*	1
Other psychiatric disorder	30,757	3,324	1,190	16.0	29,567	10.6		34.18**	1
Use of any Veterans Affairs (VA) services in the past 6 months	30,686	1,791	1,189	10.5	29,497	5.7		49.22**	1
Willingness to use VA services									
Mental health	28,606	16,845	1,132	65.2	27,474	58.6		19.37**	1
Medical care	28,733	23,476	1,134	82.5	27,599	81.7		.44	1
Residential treatment	28,244	10,390	1,108	31.1	27,136	37.0		15.83**	1
Social-vocational assistance	28,284	10,627	1,111	38.3	27,173	37.5		.29	1
Case management	28,391	11,855	1,116	41.7	27,275	41.8		.00	1

^a Data were collected between October 2007 and April 2011 by the Health Care for Reentry Veterans (HCRV) program.

*p<.01 **p<.001

Table 3

Characteristics of veterans assessed by HCRV and their association with service in Operations Enduring Freedom, Iraqi Freedom, and New Dawn^a

Characteristic	β	SE	OR	95% CI
Age	-.20**	.01	.82	.81-.83
Race-ethnicity (reference: white)				
Black	-.16	.10	.85	.70-1.05
Hispanic	.20	.16	1.22	.90-1.65
Other	.43	.24	1.53	.96-2.44
Marital status (reference: married)				
Widowed, separated, or divorced	-.30	.12	.74	.58-.94
Never married	-.50**	.13	.61	.47-.78
Combat exposure	2.89**	.10	18.07	14.78-22.10
Current offense ^b	.34	.15	1.41	1.05-1.88
Duration of current incarceration	-.00*	.00	1.00	.99-1.00
Age at first arrest	.03**	.01	1.03	1.02-1.05
Lifetime arrests	-.02	.01	.98	.97-1.00
Drug abuse or dependence (reference: no drug abuse or dependence)	-.31*	.10	.74	.61-.89
Combat-related PTSD ^c (reference: no PTSD)	1.14**	.12	3.12	2.46-3.95
Use of any Veterans Affairs services in the past 6 months (reference: no use)	.46	.18	1.58	1.12-2.25

^a Results are from backward stepwise logistic regression. HCRV, Health Care for Reentry Veterans

^b Offense other than violent offense, property offense, drug offense, public order offense, and probation or parole violation

^c PTSD, posttraumatic stress disorder

* $p < .01$ ** $p < .001$

other veterans (5%). Most incarcerated veterans had some mental health or substance abuse problems, which is consistent with previous studies (14,17). The high rates of substance use disorders among all incarcerated veterans suggest that the HCRV program should aggressively seek to address substance abuse problems. It is likely that many offenses leading to incarceration were either directly or indirectly related to substance abuse, as evidenced by the sizable proportion of veterans who endorsed using substances at the time of their offense and the number of veterans who were currently incarcerated for drug offenses.

Incarcerated OEF/OIF/OND veterans were less likely than other veterans to have a drug abuse or dependence diagnosis, which may be due to notable decreases over the past 28 years in the use of illegal drugs and cigarettes among military personnel, likely reflecting the military's implementation in the 1980s of a zero tolerance policy for drug abuse (18).

Perhaps the most salient clinical finding was that incarcerated OEF/

OIF/OND veterans were three times more likely than other incarcerated veterans to have combat-related PTSD, probably reflecting their greater likelihood of combat exposure. This finding may have important clinical implications, given that PTSD has been associated with a host of negative health, psychosocial, and functional problems among OEF/OIF/OND veterans (19-21). Incarcerated adults often do not receive needed mental health treatment (22,23), and provision of these services after their release may be particularly important to prevent recidivism, homelessness, and other negative outcomes (24,25). Thus, programs like HCRV can hope to be instrumental in helping incarcerated veterans connect to needed mental health services upon their release and successfully integrate into the community.

Previous efforts to link incarcerated veterans to VA health care services have been challenging, but specialized outreach services have shown promise (26). Further research is needed to evaluate the success of

prerelease outreach efforts in linking veterans to needed health and mental health services after discharge and to both preventing criminal justice system recidivism and homelessness and improving health.

Several limitations of this study deserve mention. Although the HCRV program did not formally target particular groups of veterans for outreach, the representativeness of the national sample in this study of the population of incarcerated veterans is undetermined. The HCRV program was directed at veterans soon to be discharged, so the sample may underrepresent younger veterans with longer sentences, although this possibility could not be empirically evaluated. However, one might expect that the VA's focus on OEF/OIF/OND veterans and the extensive media attention paid to this group of veterans may lead to an oversampling of this group. Yet, this expectation only strengthens the credibility of the finding that incarcerated OEF/OIF/OND veterans are less likely to be incarcerated than other veterans.

Causal directionality of the associations between OEF/OIF/OND status and other characteristics is unknown, and causal risk factors cannot be conclusively determined from these data. The diagnoses of mental disorders, including PTSD, were not assessed with structured, standardized measures and relied on veteran self-report and the clinical skills and judgment of HCRV specialists. Moreover, PTSD from noncombat-related events was not assessed, which may be an area worthy of future study.

Data about whether veterans in the sample had filed VA disability claims were not available. However, given that combat-related PTSD is the most common VA psychiatric disability claim filed among veterans (27,28), it would have been useful to examine how pending disability claims or intent to apply for disability influenced the clinical presentation of incarcerated veterans (29) and the study results, especially because older veterans may be more likely than younger veterans to have had their disability claims settled.

Conclusions

HCRV data suggested that OEF/OIF/OND veterans are at lower risk of incarceration than veterans of other service eras. However, incarcerated OEF/OIF/OND veterans reported higher rates of combat exposure and PTSD than other incarcerated veterans, suggesting that some incarcerated OEF/OIF/OND veterans may especially benefit from PTSD treatment and VA services upon their release.

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