



RESEARCH BRIEF

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Homelessness and Risk Factors for Homelessness Among Veterans from the Era of the Afghanistan (OEF) and Iraq (OIF/OND) Conflicts

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BACKGROUND

The attention given to homelessness among recent Veterans, and especially those with deployments in Afghanistan and Iraq has highlighted the difficulties Veterans have experienced upon returning to civilian life. Media and advocacy accounts typically highlight the hardships endured by individual Veterans, and link homelessness to service-connected factors, particularly post-traumatic stress disorder and traumatic brain injuries. In contrast to these accounts, little systematic research has been gathered on how deployment in Iraq and Afghanistan, and these attending characteristics, impact the risk for homelessness. Even the extent of homelessness among this group is in question, as there have been no definitive estimates of the number of OEF/OIF/OND Veterans who have experienced homelessness.

The most extensive study to date on homelessness among this most recent cohort of Veterans comes from a report from the U.S. Department of Veterans Affairs (VA) Office of Inspector General (OIG)¹. The study uses administrative records to follow 310,685 Veterans who separated from the military between July 1, 2005 and September 30, 2006 who were followed from point of military separation through September 30, 2010 for any occurrence of homelessness. Researchers at the National Center for Homelessness Among Veterans, in collaboration with the OIG report's authors, extended the OIG's descriptive study. In doing so, we simultaneously assessed multiple risk factors for the Veterans that were followed in the OIG study to see whether they were associated with greater or lesser risks for subsequently becoming homeless. Particular foci were on the roles of OEF/OIF deployment and gender, as well as broader socioeconomic, behavioral health and military factors, and their impact on homelessness.

DATA AND METHODS

Data for this study comes from the LC database, established and maintained by the VA Office of Inspector General (OIG) to quantitatively characterize the care transition process for all 494,147 service members who separated from active military duty during July 1, 2005 to September 30, 2006. The LC database is derived from more than 100 files acquired from VA and the Department of Defense (DoD) and offers an integrated, population-based database for these Veterans. In addition, Social Security Administration (SSA) death files were used to track Veterans' vital status information. This study included the 310,685 Veterans (63% of LC database) aged 17-64 at their separation from military service who had no record of a homeless episode prior to their separation from the military and who used VA or DoD services following separation. All data used in the analyses pertained to information at or prior to separation, except for dates of homelessness.

Elements of interest in this dataset included military service characteristics, demographic characteristics, behavioral health diagnosis categories, and diagnosis of traumatic brain injury (TBI). Data elements related to military service included an indicator for OEF/OIF deployment, branch of service, character of discharge from service, military pay grade (at separation), and whether or not service was in the context of active duty or reserve/National Guard duty. Demographic characteristics are limited to sex and age. Time to homelessness and the baseline factors were the bases for the survival analysis techniques that were applied to the data. This included Kaplan-Meier estimation methods to calculate unadjusted and adjusted incidence rates, and Cox regression to assess baseline factors on risk of homeless incidence.

¹ - US Department of Veterans Affairs Office of the Inspector General. *Incidence of Homelessness among Veterans and Risk Factors for Becoming Homeless in Veterans*. Washington DC: author; 2012. www.va.gov/oig/pubs/VAOIG-11-03428-173.pdf

FINDINGS

TABLE 1 – FREQUENCIES AND REGRESSION RESULTS FOR HOMELESSNESS RISK FACTORS AMONG OEF/OIF VETERANS

	Total	Homeless	Hazard Ratio
N	310,685	5,574	
Female	15.2%	15.4%	non-sig.
OEF/OIF Deployment	55.1%	65.0%	1.34***
Military Pay Grade			
E1-E4	44.1%	72.4%	Reference
E5-E9	43.4%	25.5%	0.37***
O1-O3	5.2%	1.1%	0.18***
O4-O10	6.0%	0.7%	0.10***
Character of Discharge			
Honorable	90.6%	90.1%	Reference
BC/Dishonorable	0.5%	3.3%	4.52***
Other than Honorable	0.0%	0.2%	2.95***
Traumatic Brain Injury	1.0%	3.0%	1.30**
Any Behavioral Health Disorder	17.8%	43.8%	
PTSD	2.4%	9.3%	1.13*
Adjustment disorders (not PTSD)	5.2%	17.2%	1.52***
Anxiety disorders	3.6%	11.1%	1.12*
Mood disorders	5.9%	20.0%	1.61***
Major depression	2.3%	8.5%	non-sig.
Personality disorders	1.6%	7.5%	1.37***
Psychotic disorders	0.3%	2.9%	2.13***
Substance-related disorders	3.3%	17.7%	1.94***

* - $p < .05$; ** - $p < .01$; *** - $p < .001$

Among the cohort, 5,574 (1.8%) experienced a homeless episode, yielding an overall (unadjusted Kaplan-Meier) 5-year incidence rate of 3.8%.

Table 1 shows frequencies and adjusted hazard ratios from the Cox regression analyses. Key findings shown on this table include:

- The 55% of the study group that was deployed had a 34% higher hazard (adjusted hazard ratio or AHR of 1.34) of subsequently becoming homeless.
- Persons who subsequently became homeless were disproportionately among those with the lowest pay (72% of the homeless came from the 44% that had the lowest pay grades). This corresponds to substantially reduced adjusted hazard ratios (AHR) associated with the higher pay grades.
- No statistical difference was found between genders in the hazard for becoming homeless.
- Among those diagnosed with behavioral health disorders prior to separation from the military, 44% of the homeless came from the 18% who were so diagnosed.
- At the point of separation from the military, 2.4% of all Veterans and 9.3% of subsequently homeless Veterans were diagnosed with PTSD. This corresponds to an AHR of 1.13, where Veterans with a pre-separation diagnosis of PTSD were 13% more likely to become homeless.
- While TBI had a significant, positive relationship with subsequently becoming homeless, closer examination showed that this association was only significant among the male non-OEF/OIF subpopulation in the study group. No significant association between TBI (diagnosed pre-separation) among OEF/OIF Veterans and homelessness was found here.
- Among behavioral health disorders, those with the strongest associations – psychotic disorders (AHR=2.13) and substance abuse (AHR=1.94) – were those that are most often associated with homelessness in civilian populations.

- Problematic discharges, compared to honorable discharges, had a much higher hazard for homelessness, but the proportion of Veterans in the study group was very small, because Veterans with such discharges are generally ineligible for VA services.

DISCUSSION

These results come from the first cohort study to simultaneously examine baseline factors on the risk of becoming homeless among OEF/OIF era Veterans. Assessing incidence of homelessness in a cohort study, as was done in this study, sets the temporal order between baseline conditions and subsequent homelessness. This approach thereby informs a focus on preventing new cases of homelessness, and minimizes confounding this with risk factors for remaining or relapsing into homelessness.

The study provides support for assertions by the popular media and by Veterans advocates that OEF/OIF service is associated with higher risk for homelessness and that, among the Veterans deployed in Iraq and Afghanistan, PTSD was a significant risk factor for homelessness. However, both of these associations were modest. Highlighting these risk factors only tells part of this story, however. Given that one-third of those identified as homeless had not been deployed as part of OEF/OIF, interventions aimed at preventing and ending Veteran homelessness should target all Veterans in this cohort. Pay grade, as a proxy for socioeconomic status, was a strong and consistent risk factor for becoming homeless, regardless of OEF/OIF status. Similarly, substance use and psychotic disorders were consistently found to significantly increase the risk of becoming homeless.

Limiting data to what were available at the point of military separation also had limitations. Most prominent is the likely under-diagnosis of behavioral health disorders, including PTSD. Another limitation of this study was potentially under-identifying the extent of homelessness experienced by this OEF/OIF era cohort. Veterans who had episodes of homelessness but did not use any homeless services, or only used non-VA (i.e., community-based) homeless services, would not have been identified as homeless in this study unless they received services, post-military separation, through the VA or DoD healthcare systems.

This study provides insight into the relationship between military service and homelessness, and represents a prototype for using administrative data to identify Veterans who are at elevated risk for becoming homeless upon their return to civilian life. Here, broad indicators such as pay grade and diagnosis of a behavioral health disorder substantially pared down the pool of Veterans among which the large majority of homelessness occurred. If prevention efforts build on this approach by employing additional administrative data sources, along with targeted screening instruments, they should become increasingly precise in their ability to assess individual Veterans' risks of becoming homeless.

Such refined targeting would not exclude any Veteran from receiving homeless services when needed, but it should help narrow those receiving prevention assistance to only those who are the most likely to become homeless. This would make more efficient use of the VA's homelessness prevention services, which included \$100 million under the Supportive Services for Veterans and Families (SSVF) program in Fiscal Year 2012, and help make good on the VA's overall commitment to end Veteran homelessness by 2015.

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