

HOMELESS VETERANS IN THE CARIBBEAN: PROFILE AND HOUSING FAILURE*

VETERANOS SIN HOGAR EN EL CARIBE: PERFIL Y LA PÉRDIDA DE VIVIENDA

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ABSTRACT

This research assesses sociodemographic, psychosocial, and military characteristics and their role in homelessness programs readmission to provide a profile of the Caribbean Homeless Veteran of the U.S. military. We evaluated 620 healthcare records of veterans who requested services at the Homeless Program of the VA Caribbean Healthcare System from 2005 to 2014. Statistical analyses consisted of Chi square, Fisher's exact test, Wilcoxon-Rank Sum tests, and generalized linear models of regression with Poisson distribution. Homeless veterans were characterized by being male, serving in the Army, having low social support, poor house affordability, extreme poverty, unemployment, and psychiatric disorders. Veterans from Operation Iraqi Freedom, Operation Enduring Freedom, and Operation New Dawn conflicts exhibited more readmission prevalence risk ratio overall and when adjusted for all factors than veterans of previous conflicts. Psychosocial factors such as substance use, social isolation, legal problems, and psychiatric disorders were identified in the readmission process. Results suggest assistance beyond housing is needed to end veteran homelessness.

KEYWORDS: Homelessness, homelessness services readmission, psychosocial care.

RESUMEN

Esta investigación evalúa características sociodemográficas, psicosociales y militares y su rol en la readmisión a programas para personas veteranas del ejército de los Estados Unidos sin hogar en el Caribe. Evaluamos 620 registros de salud de personas veteranas que solicitaron servicios en el Programa para personas sin hogar del Sistema de Salud de Veteranos del Caribe del 2005 al 2014. Los análisis estadísticos consistieron de chi cuadrado, la prueba exacta de Fisher, pruebas de suma de rangos de Wilcoxon y modelos lineales generalizados de regresión con distribución de Poisson. Las personas veteranas sin hogar se caracterizaron por ser hombres, sirviendo en el Army, con bajo apoyo social, baja asequibilidad de vivienda, pobreza extrema, desempleo y trastornos psiquiátricos. Las personas veteranas de los conflictos Operación Libertad Iraquí, Operación Libertad Duradera y Operación Nuevo Amanecer mostraron una mayor tasa de riesgo de prevalencia de readmisión en general en comparación con personas veteranas de conflictos anteriores. Factores psicosociales como el uso de sustancias, el aislamiento social, los problemas legales y los trastornos psiquiátricos se identificaron como importantes en el proceso de readmisión al programa. Los resultados sugieren que se necesita asistencia más allá de la vivienda para lograr que veteranos/as mantengan un hogar.

PALABRAS CLAVE: Personas sin hogar, readmisión a servicios para personas sin hogar, cuidado psicosocial.

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Four decades of research have indicated that veterans are at greater risk of becoming homeless, when compared to the general population (Kline et al., 2009). They are also three times more likely to become homeless if they live in poverty or are a minority (Thompson & Bridier, 2013). Factors associated with homelessness among veterans, while known, have not been as studied with Caribbean samples living on the islands (Rivera-Rivera & Villarreal, 2020). According to the latest Annual Homeless Assessment Report (AHAR) to Congress, there are 37,252 homeless veterans on a single night; a 50% reduction since 2009 (Henry et al., 2021). However, this report does not include Puerto Rico and U. S. Virgin Islands, which are the only places in the Caribbean for homeless veterans to seek help through the Department of Veterans Affairs (VA).

In 2009, the VA launched the goal of ending Veteran Homelessness and formalized the Homeless Program, which serves to connect veterans at risk of or already homeless to housing, employment, health, justice, and reintegration services they may need to acquire and maintain housing. Among housing related services, there are the Housing and Urban Development – Veterans Affairs Supportive Housing (HUD-VASH), the Supportive Services for Veteran Families (SSVF), the Homeless Providers Grant and Per Diem (GPD), and the Domiciliary Care for Homeless Veterans (DCHV). Studies related to these housing initiatives reveal a decrease on housing time placement and emergency room use and an increase in housing retention and health care treatment engagement (Byrne et al., 2016; Montgomery et al., 2013). Among employment opportunities, there are the Homeless Veteran Community Employment Services (HVCES) and the Compensating Work Therapy (CWT). The CWT has been found to help veterans deal with substance use problems and physical difficulties due to substances and have less incarceration and homelessness experiences (Kashner et al., 2002). Health-related aid initiatives include the Health Care for Homeless Veterans (HCHV), the Homeless Patient Aligned Care

Teams (H-PACTs), and the Homeless Veterans Dental Program. H-PACTS have provided good results on acute care use, hospitalization, emergency department use, and costs reduction (Gundlapalli et al., 2017; O'Toole et al., 2018). The Veterans Justice Outreach (VJO) and the Health Care for Reentry Veterans (HCRV) helps during judicial procedures and social reintegration difficulties after imprisonment.

O'Connel and colleagues (2008) introduced the term housing failure to describe the moment in which a veteran after receiving housing from one of the Homeless Program initiatives is once again homeless. In a longitudinal study, 25% of veterans had housing failure after one year, 36% after two years and 50% after five years (Lipton et al., 2000). Factors associated with housing failure were older age, substance use history and being referred to a psychiatric center (Lipton et al., 2000; Gabrielian et al., 2015). Another study found housing failure among 34% of veterans within six months of being housed, 28% after one year, 40% after two years, 48% after three years, 53% after four years and 64% after five years (O'Connel et al., 2008). Among specific homeless program initiatives, HUD-VASH was deemed to have only a 2% of housing failure (Montgomery et al., 2013). However, participants in this program think of their housing as temporary or as a potential transition to a best housing option in a safer location because due to limited housing availability and time constraints, HUD-VASH housing sometimes is located in undesired areas (Chinchilla et al., 2020). As a result, house stability, community integration and overall wellness is affected (Chinchilla et al., 2020). As for SSVF it has a housing failure percentage of 16% at one year and 26% after two years for single veterans and 9.4% at one year and 15.5% after two years for veterans in families (Byrne et al., 2016).

While homelessness pathways are continuously investigated, factors related to housing failure are not as studied (Gabrielian et al., 2015). Results on VHA Homeless Program effectiveness toward preventing housing

failure found an increase of 125% in the homeless veterans who have been served and a 75-fold in HUD vouchers offered since 2009 (Rosenheck et al., 2021). Another study focused on the results from the Community Homelessness Assessment, Local Education and Networking Group (CHALENG) survey (2012-2016). This annual survey assess homeless veterans' challenges and unmet needs. The study found the highest unmet needs among this population to be emergency shelter, case management, permanent housing, credit counseling, legal assistance, utility assistance, furniture and housewares, dental care, and Supplementary Security Income and/or Social Security Disability Insurance assistance (Tsai et al., 2019). Among the preliminary factors identified to prevent housing failure beyond housing and employability are clinical engagement and interventions with peer specialists (Ellison et al., 2020; Johnson et al., 2017).

In the current study, we used data from patient records of homeless veterans enrolled at the VA Caribbean Healthcare System (VACHS) Homeless Program to evaluate the presence and interaction of sociodemographic, psychosocial, and military characteristics. The specific aims were to: (1) provide a profile including sociodemographic, psychosocial, and military characteristics of homeless veterans in the Caribbean, and (2) identify sociodemographic, psychosocial, and military characteristics involved in readmission (housing failure) to the Homeless Program.

METHODS

Participants

A total of 620 medical records, were obtained for this retrospective record review. The mean age of this sample was 53.5 (SD: 13.4) years. Most of the veterans were male (92.5%), served in the US Army (73.8%) during the Vietnam War (55%). Only 19.6% were found to have combat experience. Seventy percent of the sample experienced extreme poverty. Overall, 52.3% of the veterans had service-connected disabilities. Overall, 55.9% of the

veterans within this group had substance use problems (e.g., alcohol [41.4%], and drugs such as cocaine [35.1%], and cannabis [21.6%]) and 79.3% had psychiatric disorders. The most prevalent psychiatric disorders were major depression disorder (50.4%), drug-induced disorders (14.5%), generalized anxiety disorder (15.3%), and post-traumatic stress disorder (PTSD) (12.5%). A 34.7% of the veterans experienced social isolation, legal issues, or difficulty affording a house. Less than 10% of the sample had experienced foster care or military sexual trauma.

Procedure

Medical records of Caribbean Veterans enrolled at the VACHS Homeless Program between 2005 to 2014 were assessed. After both Institutional Review Board and the Research & Development Committee of VACHS approvals, a retrospective record review utilizing the VA Computerized Patient Record System (CPRS) was performed for 620 medical records. Within CPRS, the Social Work Psychosocial Outpatient Assessment, Social Work Behavioral Health Psychosocial Assessment, Social Worker Notes and Homeless Services Assessment forms were reviewed. They are standard forms used for homeless and non-homeless veterans in the VA. The Homeless Services Assessment Form was used to gather information about history of legal problems (e.g., incarceration), employability status, military service history, and poverty status because it contains specific questions about these topics at the time services are requested. For legal problems, questions such as: "Does the veteran want assistance with any of the following areas: legal?", "Did you had any outstanding fines or other legal obligations?", among others helped us determine if the veteran had legal problems. For employability status, questions such as: "Did you receive any money in the last 30 days: Employment?" helped us determine if the veteran was employed at the moment services were requested. For military service history, questions such as "In which component of the military did you serve the longest?", Did you

serve in the theatre of operations for any of the following military conflicts?”, What year did you enter the military service? and What year did you separate from military service?”, among others were reviewed. The examination of poverty status was a little more complex because we gathered the veteran’s household size and income and compared it with the 2013 U.S. poverty measures to determine poverty levels.

History of military sexual trauma (MST) was gathered using the CPRS flag system and the Social Work Psychosocial Outpatient Assessment where a specific question about MST is asked. A term that was not answered dichotomously (yes/no) was social support. This term was operationalized as having at least one person identified as “support” by the veteran in the Homeless Program case managers’ notes, present recovery environment and the psychosocial status/functioning and family circumstances/living situation sections of the Social Work Behavioral Health Psychosocial Assessment. Post post-military psychiatric disorders based on DSM-5 (American Psychiatric Association, 2013). Substance use disorders were assessed using the Problems section of CPRS and then confirmed using the Homeless Services Assessment Form and the Social Work Behavioral Health Psychosocial Assessment where there are specific questions on current mental health disorders and their need for treatment at the time homeless services were requested. Childhood foster care experiences were assessed using the narrative from the childhood history/significant events section of the Social Work Behavioral Health Psychosocial Assessment. Finally, the variable of social isolation was measured using the relationships section of the significant psychosocial problem areas of the Social Work Behavioral Health Psychosocial Assessment where isolation/withdrawal can be listed.

Statistical Analyses

All statistical analyses were performed using STATA SE 14 (Stata Corp. Texas, USA). Sociodemographic data of Veterans regarding

gender, conflicts served, military branch, combat experience, poverty and employability status, social isolation, military service, childhood foster care experiences, social support, legal problems, military sexual trauma, house affordability, substance use, and psychiatric disorders among others were described as absolute and relative frequencies. Group comparison by age was conducted with mean, median, and standard deviations. To determine the association between sociodemographic, psychosocial, and military characteristics and readmission to the Homeless Program, Wilcoxon Rank Sum and Chi Square Tests were performed.

All statistically significant sociodemographic, psychosocial, and military characteristics ($p < 0.05$) along with those who were found to be important in the literature were included in the generalized linear model regression (GLM) using a Poisson distribution. GLM regression was performed to estimate the prevalence risk ratio (PRR), and 95% Confidence Intervals (CIs) to test for significant associations between gender and the prevalence of readmission to the Homeless Program stratified by groups of combat experience, after adjusting (one variable at a time) for the characteristics that were selected a priori or found to be significant on the univariate analysis.

RESULTS

Sociodemographic, psychosocial, and military characteristics and readmission to the Homeless Program are shown in Table 1. The average time interval between being discharged from active service to being accepted into the Homeless Program was 24.4 years ($SD: 15.4$). Approximately 25.6% of the veterans experienced readmission into the program. There were statistically significant differences for readmission among legal problems ($p < .001$), substance use ($p < .001$), post-military psychiatric disorders ($p < .05$), social isolation ($p < .05$), conflicts served ($p < .05$), and military branch ($p < .05$). However, when we evaluated the magnitude of the association, in some cases the significance

was lost. Significance remained for legal problems, social isolation, substance use, and psychiatric disorders. Veterans with legal problems were 1.94 (95%CI: 1.47-2.56) more likely to be readmitted to the Homeless Program when compared to those without legal issues. Those presenting social isolation had 1.36 (95%CI: 1.04 – 1.78) increase prevalence for readmission when compared to those who did not experience social isolation. In the case of substance, those who have indicated to use substances had 2.41 (95%CI: 1.74 – 3.33) increase prevalence for readmission to the Homeless Program when compared to those who do not use substances. Finally, those diagnosed with any psychiatric disorder (e.g. depression, schizoaffective personality disorder, schizophrenia, obsessive compulsive disorder, bipolar disorder, panic disorder, self-injurious behaviors, borderline personality disorder, anxiety, PTSD, psychosis, dementia, psychosis, attention deficit disorder/attention deficit hyperactivity disorder, adjustment disorder, gambling disorder, substance use disorders, and anti-

social personality disorder), had 1.54 (95%CI: 1.03 – 2.29) increase prevalence of readmission to the Homeless Program when compared with veterans who did not had a psychiatric diagnosis. Even when low social support was not statistically significant ($p < 0.05$), 71.6% of those who re-entered the Homeless Program displayed a lack of social support.

Among those who readmitted to the Homeless Program there were important differences. Men had a greater prevalence of being readmitted than women 1.74 (95%CI: 0.87 – 3.49). Veterans who served in the Army had more prevalence of readmission than those from other branches 1.40 (1.00 – 1.98) as well as those who served in OIF/OEF/OND 1.61 (95% CI: 0.99 – 2.61) and those who had combat experience 1.28 (95% CI: 0.94 – 1.74). Extreme poverty 0.81 (95% CI: 0.62 – 1.08) and service-connected disability 0.89 (95% CI: 0.68 – 1.16) seem not to be factors affecting the readmission of Veterans to the Program.

TABLE 1. Sociodemographic, Military, and Psychosocial Characteristics of Homeless Veterans overall and by their status of Readmission to the Homeless Program ($n = 620$).

Sociodemographic Characteristics	Overall (%)	Readmission		Crude PR (95% CI)
		No n=461 (%)	Yes n=159 (%)	
Age				
Mean ± SD	53.55 ± 13.41	53.02 ± 13.70	55.10 ± 12.46	
Median (P25 – P75)	56 (44 – 62)	56 (41 – 63)	57 (48 – 62)	1.01 (1.00 – 1.02)
Gender				
Female	7.42	47.72	53.46	Reference
Male	92.58	52.28	46.54	1.74 (0.87 – 3.49)
Conflict Served*				
OIF/OEF/OND	14.35	16.05	9.43	Reference
Other Conflicts	85.65	83.95	90.57	1.61 (0.99 – 2.61)
Military Branch**				
Other	26.13	28.20	20.13	Reference
Army	73.87	71.80	79.87	1.40 (1.00 – 1.98)
Combat Experience				
No	80.32	81.78	76.10	Reference
Yes	19.68	18.22	23.90	1.28 (0.94 – 1.74)
Extreme Poverty				
No	29.52	27.98	33.96	Reference
Yes	70.48	72.02	66.04	0.81 (0.62 – 1.08)
Service-Connected Disabilities				
No	47.66	46.64	50.63	Reference
Yes	52.34	53.36	49.37	0.89 (0.68 – 1.16)

Sociodemographic Characteristics	Overall (%)	Readmission		Crude PR (95% CI)
		No n=461 (%)	Yes n=159 (%)	
Foster Care				
No	69.26	68.63	71.07	Reference
Yes	7.77	7.19	9.43	1.18 (0.76 – 1.85)
Unspecified	22.98	24.18	19.50	0.83 (0.58 – 1.17)
Legal Problems***				
No	56.13	59.65	45.91	Reference
Yes	26.13	20.82	41.51	1.94 (1.47 – 2.56)
Unspecified	17.74	19.52	12.58	0.87 (0.55 – 1.35)
Social Isolation†				
No	65.21	67.76	57.86	Reference
Yes	34.79	32.24	42.14	1.36 (1.04 – 1.78)
Low Social Support				
No	28.36	29.41	25.32	Reference
Yes	71.64	70.59	74.68	1.17 (0.85 – 1.60)
Unemployment				
No	10.02	10.00	10.06	Reference
Yes	89.98	90.00	89.94	1.00 (0.64 – 1.55)
House Affordability				
No	72.42	72.67	71.70	Reference
Yes	27.58	27.33	28.30	1.04 (0.77 – 1.39)
Military Sexual Trauma				
No	94.68	94.14	96.23	Reference
Yes	5.32	5.86	3.77	0.70 (0.33 – 1.46)
Substance use***				
No	44.10	50.76	24.68	Reference
Yes	55.90	49.24	75.32	2.41 (1.74 – 3.33)
Psychiatric Disorders*				
No	20.65	22.78	14.47	Reference
Yes	79.35	77.22	85.53	1.54 (1.03 – 2.29)

‡ Other conflicts include: Vietnam War, Korea War, Persian Gulf War, World War II, and Multiple Wars.

† Other Military Branch includes: Navy/Coast Guard, Marines, Air Force, National Guard/Reserve

Statistically Significant values on the bivariate analysis: *0.001 < p < 0.05; **0.001 < p < 0.01; *** p < 0.001

Results from the regression analysis (Table 2) shows the prevalence of readmission to the Homeless Program for males stratified by conflict served adjusted for different sociodemographic, psychosocial, and military characteristics. After adjusting for age, combat experience, extreme poverty, legal problems and social isolation, men who served in the OIF/OEF/OND combat and who perceived low social support were 2.85 (95% CI: 0.30 – 27.00) more likely to be readmitted to the Homeless Program when compared to women serving on the same conflict. However, after adjusting for all remaining characteristics: substance use and psychiatric

disorders, the prevalence of readmission decreases (PR 1.22; 95% CI: 0.12-12.39) compared to the prevalence observed for men who showed low social support; but, at the same time, remained higher compared to women that served in the same combat era and experienced the same conditions. When we compare the prevalence of readmission between type of conflict served, meaning those who served in other conflicts vs. those who served in OIF/OEF/OND, the prevalence risk of readmission to the Homeless Program seems to be higher for men who served in the OIF/OEF/OND era even after adjusting for all associated characteristics.

TABLE 2.

Prevalence of Readmission to the Homeless Program for males stratified by conflict served and adjusting for homelessness psychosocial and military characteristics (*n* = 574).

Psychosocial and Military Characteristics	Readmission to the Program	
	Other Conflicts [‡] PR (95%CI)	OIF/OEF/OND PR (95%CI)
Gender		
Female	Reference	Reference
Male	1.52 (0.73 – 3.19)	2.39 (0.34 – 16.88)
+ Age	1.44 (0.68 – 3.08)	2.63 (0.34 – 20.19)
+ Combat Experience	1.40 (0.67 – 2.95)	2.63 (0.34 – 20.07)
+ Extreme Poverty	1.43 (0.67 – 3.05)	2.59 (0.32 – 20.41)
+ Legal Problems	1.35 (0.64 – 2.81)	2.50 (0.32 – 19.84)
+ Social Isolation	1.29 (0.61 – 2.72)	2.54 (0.29 – 22.44)
+ Low Social Support	1.28 (0.61 – 2.71)	2.85 (0.30 – 27.00)
+ Substance use	1.02 (0.46 – 2.22)	1.16 (0.11 – 12.29)
+ Psychiatric Disorders	1.02 (0.47 – 2.25)	1.22 (0.12 – 12.39)

[‡] Other conflicts include Vietnam War, Korea War, Persian Gulf War, World War II, and Multiple Wars.

[‡] Unadjusted prevalence risk ratio (PRR) showing the crude association of Type of Conflict Served and Readmission to the Homeless Program.

[‡] Prevalence risk ratio (PRR) adjusted for all covariates (Age, Gender, Combat Experience, Extreme Poverty, Legal Problems, Social Isolation, Low Social Support, Substance Use, Psychiatric Disorders).

DISCUSSION

This study examines homelessness characteristics among 620 U.S. military veterans who lived in the Caribbean and requested the services of the Homeless Program at VACHS from 2005 to 2014. This is the first known study of Caribbean homeless veterans that concurrently examined over 15 psychosocial and military characteristics to determine their role in homelessness and housing failure among veterans in the Caribbean region. Our results identified the most prevalent characteristics of homeless veterans to be low social support, unemployment, extreme poverty, substance use, and psychiatric disorders. Prevalent characteristics associated with readmission to the Homeless Program were legal problems, social isolation, substance use, and psychiatric disorders. Men who served in the OIF/OEF/OND conflicts had more readmission prevalence even after adjusting for all associated factors (e.g. sociodemographic, psychosocial, and military).

Results suggest an improvement in readmission when all factors are controlled in the group of veterans from other conflicts. However, this was not observed with

OIF/OEF/OND veterans. Psychosocial and demographic factors such as age, social isolation, low social support, and psychiatric disorders seem to be important variables to consider for readmission. For example, for psychiatric disorders, homeless veterans from the OIF/OEF/OND conflicts were found to be more prone to trauma/stress-related disorders as well as anxiety disorders. These disorders, especially PTSD, have been associated with social isolation (Galovski & Lyons, 2004). The higher numbers of trauma/stress-related and anxiety disorders in the OIF/OEF/OND veteran population reflect a change in type of disorders seen in homeless veterans as those from previous conflicts/wars were more likely to have schizophrenia and depressive disorders (Kline et al., 2009). For substance use, these results may indicate a family estrangement that results in social isolation and low social support (DeViva et al., 2016; Hamilton et al., 2011).

Based on the results of this study, the authors recommend that VACHS address specific factors that would help prevent homelessness and diminish readmissions to the Homeless Program (which were found to be 25%). To prevent homelessness, efforts should be made to align multidisciplinary

interventional services at the primary care level (e.g., including mental health, nutrition, pharmacy, and Veterans Benefits Administration (VBA) services). Specific orientation services should be available as part of the interventions. In addition, due to the higher homeless readmission rates found in veterans from OIF/OEF/OND, efforts should be allocated in the Transition and Care Management (OEF/OIF/OND) Program in which veterans from these conflicts are offered case management assistance. To prevent housing failure, the Homeless Program should not be perceived as an independent or isolated initiative. It should collaborate closely with primary care, pharmacy, laboratory, mental health, nutrition, and any other programs/services that are proven vital to the social reintegration of the veterans in need. More importantly, it should look at specific factors such as legal problems, social isolation, substance use and psychiatric disorders. These factors could be screened and addressed by the Homeless Program upon admission, during services or at the end of the provided services.

Despite the significant findings, we experienced several limitations during the study. For the record review, there was a lack of consistency in the CPRS notes. Some notes were not completed or uploaded to the electronic system, making it difficult to trace the pattern of services offered to the veterans. This problem was evident in the earlier years (2006-2008) when the Homeless Program was starting. For future studies, we highly suggest that researchers explore at a deeper level psychosocial factors involved in the readmission of OIF/OEF/OND homeless veterans.

Ending veteran homelessness is a social justice issue that is not resolved with housing alone. Efforts towards community integration, mental health services, legal assistance, employment, medical assistance, recreation and leisure, employability, and quality of life are important as important to prevent housing failure. Eradicating homelessness is

the goal, but to accomplish this, wholesome initiatives must guarantee that the person will not become homeless again. Research aids this process providing a comprehensive interdisciplinary evaluation and updated knowledge of the required care needed to assist eradicating this social justice and human rights issue.

Research Ethical Standards

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Informed Consent/Assent: This was a record review; does not apply.

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