



Original article

Access to Care and Health Outcomes Among Women Veterans Using Veteran's Administration Health Care: Association With Food Insufficiency

Kimberly Narain, MD, PhD, MPH^{a,b,*}, Bevanne Bean-Mayberry, MD, MHS^{a,b},
 Donna L. Washington, MD, MPH^{a,b}, Ismelda A. Canelo, MPA^b,
 Jill E. Darling, PhD, MSHS^b, Elizabeth M. Yano, PhD, MSPH^{b,c}

^a Division of General Internal Medicine and Health Services Research, Department of Medicine, David Geffen School of Medicine, University of California, Los Angeles, Los Angeles, California

^b VA HSR&D Center for the Study of Healthcare Innovation, Implementation, and Policy, VA Greater Los Angeles Healthcare System, Los Angeles, California

^c Department of Health Policy and Management, Fielding School of Public Health, University of California, Los Angeles, Los Angeles, California

Article history: Received 26 July 2017; Received in revised form 5 January 2018; Accepted 10 January 2018

A B S T R A C T

Background: Food insecurity has been associated with worse health outcomes in the civilian population. Male veterans of the Gulf Wars have been shown to have a higher prevalence of food insecurity than similarly situated civilians. Women veterans have more risk factors for food insecurity, relative to male veterans, yet little is known about the prevalence of food insecurity in this cohort.

Methods: We used the Women Veterans' Health Utilization and Experience Survey for this analysis. Our study population consisted of women veterans who had at least three primary care or women's health visits to 1 of 12 Veteran's Health Administration health care facilities from December 2013 to November 2014. Multiple logistic regression was used to examine the relationship between food insufficiency (an inadequate amount of food intake owing to a lack of money or resources), delayed/missed care, anxiety, depression and self-reported fair to poor health, controlling for race/ethnicity, marital status, and employment status.

Results: The prevalence of food insufficiency among women veterans was 27.6%. Being food insufficient was associated with 16.4, 15.4, 14.9, and 12.1 percentage point increases in the probability of delayed/missed care, screening positive for anxiety, screening positive for depression and reporting fair to poor health, respectively ($p < .05$).

Conclusions: The prevalence of food insufficiency in this cohort was associated with delayed access to health care and worse health outcomes. Interventions addressing Veteran's Administration access and health outcomes will need to examine the potential role of food insufficiency.

© 2018 Jacobs Institute of Women's Health. Published by Elsevier Inc.

Funding Statement: This project was funded by the VA HSR&D Service Women Veterans Healthcare CREATE project on Implementation of Women's Health Patient Aligned Care Teams (Project #CRE 12-026), a cluster randomized trial registered in [ClinicalTrials.gov](https://clinicaltrials.gov) #NCT02039856. Funding for the 12-month patient survey wave was augmented by VA Women's Health Services, Veteran's Health Administration, Washington, DC, to increase content for formative feedback to evidence-based quality improvement (EBQI) sites, as well as funding from Dr. Yano's Under Secretary for Health Award (Project # USH 12-216). Dr. Narain's effort was supported by the Advanced Health Services Research Fellowship, Center for Healthcare Innovation, Implementation & Policy, VA

Greater Los Angeles Healthcare System. Dr. Yano's effort was supported by a VA HSR&D Senior Research Career Scientist Award (Project #RCS 05-195).

Disclosures: The views expressed in this article are those of the authors and do not necessarily reflect the position or policy of the Department of Veteran's Affairs or the United States government.

* Correspondence to: Kimberly Narain, MD, PhD, MPH, Division of General Internal Medicine and Health Services Research, Department of Medicine, David Geffen School of Medicine, University of California, Los Angeles, 911 Broxton Ave, Los Angeles, CA, 90024. Phone: 213-536-9897.

E-mail address: Knarain@mednet.ucla.edu (K. Narain).

Food security is defined as physical and economic access to sufficient, safe, and nutritious food to meet dietary needs and food preferences for an active and healthy lifestyle (Jones, Ngure, Pelto, & Young, 2013). Food insecurity implies the absence of one or more of these conditions. For the newest cohorts of veterans (serving since 1975) the prevalence of food insecurity has been found to be higher than that of the general population (Miller, Larson, Byrne, & DeVoe, 2016; Widome, Jensen, Bangerter, & Fu, 2015).

Women veterans, who are the fastest growing segment of new users of the Veteran's Health Administration (VA) health care system, have more risk factors for food insecurity than their male counterparts. Specifically, compared with male veterans, women veterans are more likely to have a service-connected disability, are more likely to live in poverty, more likely to be homeless, have higher rates of depression, and are more likely to have experienced sexual trauma (Cohen et al., 2012; Kimerling et al., 2010; Peterson et al., 2015; RTI Center for International Health and Environmental Modeling, 2014; VA Office of Inspector General, 2012), all risk factors linked to food insecurity in the literature (Bocquier et al., 2015; Miller et al., 2016; RTI Center for International Health and Environmental Modeling, 2014; Siefert, Heflin, Corcoran, & Williams, 2001; Vozoris & Tarasuk, 2002; Widome et al., 2015). Despite a higher prevalence of risk factors for food insecurity among women veterans relative to male veterans, little is known about the prevalence of food insecurity in this cohort.

Investigating the prevalence of food insecurity among female veterans is important because food insecurity has been shown to be both a risk factor for poor health outcomes as well as a consequence of poor health outcomes (Kushel, Gupta, Gee, & Haas, 2006; Siefert et al., 2001; Vozoris & Tarasuk, 2002). Food-insecure individuals may adopt various coping strategies that increase the risk of adverse health outcomes, such as lower consumption of fruits and vegetables, increased consumption of calorie dense foods, meal skipping, and binge eating (Bocquier et al., 2015). Food-insecure individuals may also have to make tradeoffs between eating and obtaining needed health care (Kushel et al., 2006; RTI Center for International Health and Environmental Modeling, 2014). Last, individuals who suffer from serious illnesses or have a disability may be unable to work and, as a consequence, have lower incomes that increase their risk of being food insecure (RTI Center for International Health and Environmental Modeling, 2014). Widome et al. (2015), the first study to document the prevalence of food insecurity among veterans serving in the Iraq and Afghanistan wars after 2001, found that the prevalence of food insecurity among veterans in 2012 was nearly 25%, roughly 40% higher than the national prevalence among U.S. households (14.5%). Food insecurity was found to be associated with younger age, single marital status, lower final military pay grade, having more children in the household, lower income, tobacco use, binge drinking, and decreased sleep in this cohort (Widome et al., 2015). Miller et al. (2016) extended this work by exploring the prevalence of food insecurity in a broader swath of veterans. In analyses of Current Population Survey data (2005–2013) stratified by military service period, Miller et al. (2016) found that the predicted probability of food insufficiency among veterans serving between 1990–2001 and 1975–1990 was 14.8% and 14.1% higher than that of the civilian population, respectively, controlling for housing tenure, education, employment, means-tested benefit program participation, sex, marital status, race/ethnicity, household poverty, age, family structure and the presence of immigrants in the household as well as state and year fixed effects.

Although strong studies documenting the prevalence of food insecurity among the general veteran population exist, little is known about the prevalence of food insecurity among women veterans, a high-risk group for this condition. Additionally, little is known about the relationship between food insecurity, access to care, and health outcomes among veterans in general. The aims of this study are to document the prevalence of food insufficiency (an inadequate amount of food intake owing to a lack of money or resources; Jones et al., 2013) and to examine the link between food insufficiency and both access to health care and health outcomes in a cohort of women veterans who use VA health care. Based on studies in the civilian population, we hypothesize that food insufficiency will be associated with worse access to health care and worse health outcomes among women veterans.

Methods

Data Source

Data were drawn from the Women Veterans Health Utilization and Experience Survey (WV-HUES). The WV-HUES was one part of the *Implementation of VA Women Veterans' Patient Aligned Care Teams* research project, a mixed-methods evaluation of a 5-year cluster-randomized controlled trial that randomized participating VA medical centers to different approaches for implementing Patient Aligned Care Teams for women veterans, an alternative model of primary care, based on the patient-centered medical home concept (Yano, Haskell, & Hayes, 2014). The study took place at 12 VA medical centers in nine states across the country. The sampling frame included women veterans who had three or more primary care and/or Women's Health visits to one of the participating VA medical centers, 12 months before the baseline survey. Individuals were randomly sampled from this frame ($N = 4,307$). Data were collected by interview. The baseline survey was conducted between January and March of 2014 and had a response rate was 47% ($n = 1,395$). The 12-month survey was conducted between January and March of 2015 ($n = 821$ [59%]). This study adhered to ethical standards and was conducted in accordance with institutional review board approval.

Participants and Procedures

Our analyses explored the prevalence and implications of food insufficiency, so we limited our study population to individuals from the baseline sample who responded to the 12-month WV-HUES survey, because food insufficiency was only addressed during the 12-month interview. We then further limited our sample to individuals who responded to the food insufficiency question ($n = 818$ [99%]).

Measures

We obtained measures of age, race/ethnicity (Hispanic, American Indian/Alaskan Native, Native Hawaiian/Pacific Islander, Asian/Asian-American, Black/African American, White) marital status, presence of minor children (children <18 in the home vs. no children <18 in the home), military rank (enlisted vs. officer), education, employment status, post-traumatic stress disorder (PTSD) screening status (VA 2-Item PTSD Screener; Orcutt, Erickson, & Wolfe, 2004), Seattle Comorbidity Index (SCI; Fan et al., 2002), gender-tailored alcohol abuse (Audit-C score,

Download English Version:

<https://daneshyari.com/en/article/7528655>

Download Persian Version:

<https://daneshyari.com/article/7528655>

[Daneshyari.com](https://daneshyari.com)