Women's Health Issues 26-2 (2016) 225–231

ELSEVIER

WOMEN'S HEALTH ISSUES

www.whijournal.com

Gender-Based Violence

Sexual Assault, Sexual Harassment, and Physical Victimization during Military Service across Age Cohorts of Women Veterans

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Article history: Received 11 June 2015; Received in revised form 22 September 2015; Accepted 23 September 2015

A B S T R A C T

Objectives: Exposure to sexual and physical trauma during military service is associated with adverse mental and physical health outcomes. Little is known about their prevalence and impact in women veterans across age cohorts.
Methods: Data from a 2013 national online survey of women veterans was used to examine associations between age and trauma during military service, including sexual assault, sexual harassment, and physical victimization. Analyses were conducted using logistic regression, adjusting for service duration and demographic factors. In secondary analyses, the moderating role of age in the relationship between trauma and self-reported health was examined.
Results: The sample included 781 women veterans. Compared with the oldest age group (≥65), all except the youngest age group had consistently higher odds of reporting trauma during military service. These differences were most pronounced in women aged 45 to 54 years (sexual assault odds ratio [OR], 3.81 [95% CI, 2.77–6.71]; sexual harassment, OR, 3.99 [95% CI, 2.25–7.08]; and physical victimization, OR, 5.72 [95% CI, 3.32–9.85]). The association between trauma during military service and self-reported health status also varied by age group, with the strongest negative impact observed among women aged 45 to 54 and 55 to 64.
Conclusions: Compared with other age groups, women in midlife were the most likely to report trauma during military service, and these experiences were associated with greater negative impact on their self-reported health. Providers should be aware that trauma during military service may be particularly problematic for the cohort of women currently in midlife, who represent the largest proportion of women who use Department of Veterans Affairs health care.
Published by Elsevier Inc. on behalf of the Jacobs Institute of Women's Health.

Trauma during military service is a prevalent and problematic issue, with disproportionate risks of exposure among the rapidly growing numbers of women in the armed forces relative to men. Recent estimates suggest that approximately 32% of female and 5% of male Veteran VA users screen positive for military sexual trauma (MST), defined by the Veteran Health Administration (VA) as sexual assault and/or sexual harassment during military service (Klingensmith, Tsai, Mota, Southwick, & Pietrzak, 2014). Although attention has largely focused on sexual harassment and sexual assault, exposure to physical assault or victimization during military service may also be common for women (Sadler, Booth, Cook, Torner, & Doebbeling, 2001).

Sexual assault, sexual harassment, and physical victimization during military service are associated with a number of adverse physical and mental health outcomes. Sexual assault during military service has been associated with subsequent post-traumatic stress disorder (Suris & Lind, 2008; Walsh et al., 2014; Yaeger, Himmelfarb, Cammack, & Mintz, 2006), impaired physical function (Sadler et al., 2001), poor self-rated health (Smith et al., 2011), increased prevalence of chronic health conditions (Sadler, Booth, Mengeling, & Doebbeling, 2004; Street, Stafford,

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1049-3867/$ - see front matter Published by Elsevier Inc. on behalf of the Jacobs Institute of Women's Health.
http://dx.doi.org/10.1016/j.whi.2015.09.013

Mahan, & Hendricks, 2008), increased prevalence of cardiovascular risk factors (Frayne, Skinner, Sullivan, & Freund, 2003), and problems with alcohol (Frayne et al., 2003), as well as reproductive health concerns, including pelvic pain, menstrual problems, and problematic menopausal symptoms (Frayne et al., 1999). Although typically coupled with sexual assault in research using the VA MST definition, sexual harassment when examined independently has also been associated with later mental (Street et al., 2008) and physical health concerns (Rosen & Martin, 1998; Street et al., 2008; Vogt, Pless, King, & King, 2005). Much less attention has been paid to the prevalence and potential health impact of physical victimization, which includes physical assault, stalking, and being threatened with weapons. Extant research indicates that repeated physical assault during military service is associated with both poor health and impaired physical functioning (Sadler et al., 2001) as well as increased use of health care (Sadler et al., 2004). Therefore, MST and physical victimization, including physical assault, during military service may have long-term implications for women veterans' health and health care needs.

Recently, there has been a significant focus on the prevalence and potential sequelae of MST among younger women veterans deployed in service to Operation Enduring Freedom/Operation Iraqi Freedom (OEF/OIF; Kimerling et al., 2010; Mattocks et al., 2013; Street, Gradus, Giasson, Vogt, & Resick, 2013), or in representative samples of VA users without attention to age (Himmelfarb, Yaeger, & Mintz, 2006; Kimerling, Gima, Smith, Street, & Frayne, 2007; Pavao et al., 2013; Street et al., 2008; Valdez et al., 2011; Yaeger et al., 2006). Little is known about the differences in these experiences in women across the lifespan or the impact of these experiences for women veterans who are currently middle aged or older. Two recent studies using data collected in 2003 and 2013 had conflicting results regarding variation in prevalence of MST by age, with one study finding the highest prevalence in women veterans aged 35 to 54 (Kimerling et al., 2007), and another finding the highest prevalence among men and women (combined) aged 18 to 29 (Klingensmith et al., 2014). To our knowledge, no study has closely examined age-related differences in traumatic experiences, including sexual assault, sexual harassment, and physical victimization, sustained during military service, or the associations between these experiences and health by age in women veterans.

As the growing number of women in the military transition to veteran status, the demographics of women veterans are rapidly shifting. The majority of women veterans are younger and middle aged; the largest age cohort of women Veteran VA users is now those aged 50 to 55 years (Frayne et al., 2014). The experiences and needs of women veterans differ across age and military service eras (Washington, Bean-Mayberry, Hamilton, Cordasco, & Yano, 2013), reflecting age-related changes in health as well as exposure to different military recruitment policies and changes in military culture across time. Given the potential impact of traumatic experiences during military service on the health and well-being of women veterans, attention to this issue in women across the lifespan and in the context of aging is necessary for the provision of quality care.

In this study, we examined reported experiences of sexual assault, sexual harassment, and physical victimization during military service among women of different age cohorts using a national online survey of women veterans. We also evaluated whether the relationships between these experiences and subjective ratings of current health differed by age cohort. Given the lack of descriptive research on traumatic experiences during military service and sequelae among women veterans currently in midlife and older, specific hypotheses about the effects of age cohorts were not formed.

Method

Study Population

Data were collected via a web-based survey about women veterans' health from February to May 2013. Details of recruitment procedures have been previously reported (Lehavot, Browne, & Simpson, 2014). Briefly, advertisements were disseminated to online listservs serving women veterans and via Facebook, a social networking website. Because the original main aim of the survey was to describe differences between sexual minority and heterosexual women veterans, sexual minority women were oversampled using targeted advertising. Those who were interested in the study clicked the survey link and were taken to an information statement describing the nature of the survey (anonymous), its purpose (to understand women veterans' life experiences), risks and benefits, and eligibility criteria. At enrollment, eligible participants were aged 18 years or older, were biologically born female and identified as women, lived in the United States, and were veterans of the U.S. armed forces. The survey took approximately 40 minutes to complete. Participation was voluntary and no compensation was provided. The research was approved by the VA Puget Sound Health Care System Institutional Review Board.

Of the 918 women who assented to the study and completed the survey, 901 were deemed eligible. Seventeen individuals were deemed ineligible because they were transgender ($n = 10$), underage ($n = 1$), or did not identify their birth sex, current gender, or both ($n = 6$). A further 140 participants were excluded from this analysis owing to missing data on main study variables, leaving a primary analytic sample of 761. In secondary analyses with self-reported health as the outcome, an additional 92 women were excluded (missing data on outcome, $n = 66$; age cohort 18–25 excluded owing to small cell sizes, $n = 26$), leaving a secondary analytic sample of 669.

Study Variables

Age cohort

Age cohort was determined based on participants' self-reported age (in years), categorized as 18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, and 65 or older. These categories were modeled after the Behavioral Risk Factor Surveillance Survey conducted by the Centers for Disease Control and Prevention (Pierannunzi, Hu, & Balluz, 2013), and chosen to be consistent with past studies that reported prevalence of MST among women veterans by age cohort (Kimerling et al., 2007).

Covariates

Demographic items included respondents' self-reported sexual orientation (lesbian/gay, bisexual, or heterosexual), race/ethnicity (Caucasian or other), and education (high school or less, some college, and college degree or more). Service duration was determined from self-reported years of military service, summed across noncontinuous periods.

Sexual assault, sexual harassment, and physical victimization

An adapted version of the Sexual Experiences Survey was used to assess sexual assault during military service (Koss et al.,