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## Experiences of Perceived Gender-based Discrimination among Women Veterans: Data from the ECUUN Study

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### Abstract

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**Conflict of Interest:** No potential conflicts exist.

**Background:** Experiences of discrimination are associated with poor health behaviors and outcomes. Understanding discrimination in health care informs interventions to improve health care experiences.

**Objective:** Describe the prevalence of, and variables associated with, perceived gender-based discrimination in the Veterans Affairs (VA) Healthcare System among women Veterans.

**Design:** A cross-sectional, telephone-based survey of a random national sample of young female Veterans.

**Participants:** Female VA primary care patients aged 18–45 years.

**Main Measures:** The primary outcome was perceived gender-based discrimination in VA health care. Logistic and linear regression models were used to determine associations between any perceived discrimination and cumulative perceived discrimination with patient and health service characteristics.

**Key Results:** Among 2294 women Veterans, 33.7% perceived gender-based discrimination in VA. Perceiving gender-based discrimination was associated with medical illness [adjusted odds ratio (aOR)=1.67, 95% confidence interval (CI)=1.34, 2.08], mental illness (aOR=2.06, 95% CI=1.57, 2.69), and military sexual trauma (aOR=2.65, 95% CI= 2.11, 3.32). Receiving most health care from the same VA provider (aOR=0.73, 95% CI=0.57, 0.94) and receiving care at a VA site with a women's health clinic (aOR=0.76, 95% CI=0.61, 0.95) were associated with reduced odds of any perceived gender-based discrimination. Among those who perceived gender-based discrimination (n=733), perceived discrimination scores were higher among women with increased age, medical illness, or history of military sexual trauma and lower among those who saw the same VA provider for most medical care.

**Conclusions:** One third of women Veterans perceived gender-based discrimination in VA. Obtaining most medical care from the same VA provider and having a women's health clinic at one's VA were associated with less perceived discrimination.

## Keywords

Social discrimination; Veterans health; Women's health services

## Introduction

The Veterans Affairs (VA) Healthcare System has undergone a remarkable demographic shift in recent years. Once serving an almost entirely male population, VA now serves over 450,000 women, representing 5% of the total VA patient population.<sup>1,2</sup> Women Veterans are a young population, 42% are of reproductive age (ages 18–44) compared to only 13% of male Veterans in this age category. Women Veterans are also more diverse, as 39% belong to racial/ethnic minority groups compared to only 23% of male Veterans.<sup>1,3</sup> In addition to demographic differences, women Veterans have gender-specific healthcare needs, such as contraceptive counseling and provision. Additionally, women Veterans often have complex psychosocial histories, including higher rates of military sexual trauma (MST) and harassment than male Veterans.<sup>4–8</sup>

There is evidence that some women Veterans delay or avoid care within the VA system because they have had negative gender-based experiences when seeking VA healthcare in the past. For example, a recent study found that nearly one in four women seeking care in VA have been subjected to gender-based harassment by male Veterans on VA grounds.<sup>9</sup> Such harassment was associated with feeling unsafe in VA and delaying or missing medical care.<sup>9,10</sup> Gender-based harassment has also been associated with increased risk of sexual violence.<sup>11</sup> In addition to gender-based harassment from male Veterans, women Veterans may perceive gender-based discrimination by members of the healthcare system. The extent to which women Veterans perceive gender-based discrimination in the VA healthcare system has not been well-explored.

Perceived discrimination in the healthcare setting based on a number of social identities (e.g., race/ethnicity, socioeconomic status, age) has been documented.<sup>12–15</sup> Perceived discrimination is associated with poorer health outcomes, reduced patient engagement in protective health behaviors, and reduced patient perceptions of healthcare quality.<sup>16–23</sup> Perceived gender-based discrimination in healthcare, specifically, has been the focus of few studies<sup>24–26</sup>. Studies examining perceived gender-based discrimination in healthcare have found that 10–39% percent of women perceive gender-based discrimination while seeking healthcare.<sup>24–26</sup> Such discrimination was associated with increased disease burden and use of less effective methods of contraception.<sup>24–26</sup> Studies on perceived gender-based discrimination in other settings have associated perceived gender-based discrimination with reduced access to healthcare, higher burden of medical and mental illnesses, and lower self-esteem.<sup>27–29</sup> These studies have not examined whether aspects of healthcare providers (e.g., gender concordance) or healthcare systems (e.g., presence of women’s health specialty clinics) are associated with perceived gender-based discrimination.

In this study, we determine the prevalence of perceived gender-based discrimination in a national sample of women Veterans of reproductive age who receive primary care in the VA healthcare system. We also aim to identify variables associated with perceived gender-based discrimination. In addition to examining demographic variables for which differences in perceived discrimination in healthcare based on other social identities have been found (e.g., age, race/ethnicity, income, and education<sup>12,19</sup>), we explore demographic, clinical, and health service variables that may uniquely affect women Veterans’ experiences with the VA healthcare system (e.g., deployment experiences, history of MST, having a women’s health clinic at one’s VA). Examining the prevalence of perceived gender-based discrimination, and factors with which it associated, among women Veterans seeking care in VA is especially important given that women represent a minority of VA patients and the system has traditionally served a predominantly male population.

## Methodology

### Study Design and Participants

This is an analysis of data from the “Examining Contraceptive Use and Unmet Need among Women Veterans” (ECUUN) study, a telephone-based survey with a nationally representative sample of 2,302 women Veterans of reproductive age.<sup>13</sup> Surveys were completed between April of 2014 through January of 2016. Study participants were

randomly selected from a sampling frame of Veterans aged 18–44 who had at least one primary care visit in the VA healthcare system within the 12 months prior to sampling. Potential participants were contacted by mail with information pamphlets, including response cards and a telephone number used to indicate interest or opt out of the study. Those who did not opt out were then called and invited to participate. Those who expressed interest were screened and enrolled, providing verbal consent via telephone.

Participants completed a 45–60 minute, computer-assisted telephone interview about their experiences with VA care, military service, and medical, contraceptive and pregnancy histories. Participants were compensated \$30. This study was approved by the institutional review boards of VA Pittsburgh Healthcare System and the University of Pittsburgh.

In total, 8,198 invitations were sent. From among these, 2,769 women were enrolled and 2,302 women Veterans fully completed the survey for an overall response rate of 28%. The survey completion rate among those enrolled was 83%. Participants and non-participants were similar in age, race/ethnicity, marital status, income, presence of medical and mental illness, and geographic region (standardized differences of 0.07–0.13), suggesting that the ECUUN study sample is representative of the larger population of women getting care through the VA.<sup>30</sup>

Among the 2,302 women who completed interviews, 8 who did not complete the full perceived gender-based discrimination questionnaire were excluded from this analysis, yielding a sample of 2,294.

## Main Measures

The study outcome was perceived gender-based discrimination while receiving VA healthcare. This was assessed using an adaptation of William’s Everyday Discrimination measure modified for studying discrimination in healthcare settings.<sup>31,32</sup> We further modified the measure to assess perceived gender-based discrimination in the VA healthcare setting by adding “when getting healthcare at the VA” and “because you are a woman” to the questions.<sup>13</sup> We omitted one item for conceptual reasons (“How often have you had a doctor/nurse act as if they are afraid of you?”). Response options were on a 5-point scale (*1=never; 2=rarely; 3=sometimes; 4=most of the time; 5=always*). Women who responded to one or more of the survey items with “rarely” or more were classified as perceiving gender-based discrimination.

We examined the following patient characteristics as independent variables: age, race/ethnicity, marital status, religion, education, income, insurance, history of medical illness, history of mental illness, history of MST, and military service history. Medical and mental illnesses were assessed by asking respondents if they had ever been diagnosed or treated for a series of medical (hypertension, thromboembolic disease, coronary artery disease, breast cancer, stroke, liver disease, HIV or AIDS, liver disease, migraines, lupus, or seizure disorder) or mental (major depressive disorder, bipolar disorder, post-traumatic stress disorder, anxiety or panic disorder, or schizophrenia) illnesses. History of MST was assessed using standard screening questions by asking patients if they had experienced uninvited or unwanted sexual attention, or experienced the use of force or threat of force to engage in

sexual contact against their will.<sup>33</sup> Military service history was assessed as most recent service branch (Army, Navy, Marine Corps, Air Force or Coast Guard) and history of deployment (yes/no).

We also examined provider gender, whether the Veteran received most of their healthcare from the same VA primary care provider (yes/no), the census region of one's VA site, whether the site was hospital-based or community-based, and whether the site had a women's health clinic (yes/no).

All variables were assessed via self-report, with the exception of census region, which we ascertained using VA administrative data.

## Data Analysis

Descriptive statistics were used to describe patient demographic and health service characteristics. We calculated the proportion of women who perceived gender-based discrimination (i.e., rarely, sometimes, most of the time, or always) on each of the six individual questions, and on at least one of the items, overall. We calculated the proportion of women reporting any perceived gender-based discrimination by potential independent variables, using Chi-square to test differences. We used logistic regression to examine unadjusted and adjusted associations between patient characteristics and any perceived gender-based discrimination. Adjusted models included age plus all variables significantly associated with the outcome in bivariate analyses at the  $p < 0.15$  level.

Among women who perceived any gender-based discrimination, we calculated a summative score of perceived gender-based discrimination, using a score of 1–4 (1=rarely, 2=sometimes, 3=most of the time, 4=always) for each of the 6 survey items, for a total score of 1–24. We used this score as a continuous variable to examine unadjusted and adjusted associations between patient characteristics and the strength of perceived gender-based discrimination using linear regression models. Adjusted models included age plus all variables significantly associated with the outcome in bivariate analyses at the  $p < 0.15$  level.

In creating our women's health clinic variable, we ran additional analyses testing a 3-level variable that distinguished between women who were seen at a women's health clinic and those who had a women's health clinic at their site but did not use it. Because the two groups did not differ with respect to perceived discrimination, we collapsed them into a single category for analyses.

All analyses were conducted using Stata 14.<sup>34</sup>

## Results

### Sample Characteristics

The sample included 2294 women Veterans with a median age of 35 (range 21–45); 51.6% were non-Hispanic White, 29.0% non-Hispanic African American, 12.3% Hispanic; and 7.1% other racial/ethnic minority group. Over half reported at least one medical illness

(56.1%), and 68.7% reported at least one mental illness. Just over half (55.5%) were deployed during their service, and 55.0% reported a history of MST.

### **Perceived Gender-based Discrimination**

Overall, 773 women (33.7%) perceived gender-based discrimination when receiving care in VA. Rates across the six individual items ranged from 17.7%–27.4% (Table 2). Of those who perceived discrimination, the mean summative score was 7.8 (sd=5.7).

### **Variables Associated with Any Perceived Gender-based Discrimination**

Demographic characteristics significantly ( $p<0.05$ ) associated with any perceived gender-based discrimination in bivariate analyses included history of medical illness, mental illness, or MST (Table 3). Variables associated with a significantly lower likelihood of perceiving any gender-based discrimination included Hispanic and non-Hispanic African American race/ethnicity versus non-Hispanic white, history of deployment, and presence of a VA women's health clinic at one's site of care.

These associations remained significant in adjusted regression models that controlled for variables significantly associated with any perceived discrimination in bivariate analyses at the  $p<0.15$  level (i.e., race, medical illness, mental illness, history of deployment, history of MST, receives most healthcare from VA primary care provider, and women's health clinic present at site of care). Receiving most healthcare from the same VA primary care provider gained significance in the adjusted model. Women were more likely to perceive any gender-based discrimination if they had history of medical illness (adjusted odds ratio (aOR)=1.67, 95% confidence interval (CI)=1.34, 2.08), mental illness (aOR=2.06, 95% CI=1.57, 2.69), or MST (aOR=2.65, 95% CI=2.11, 3.32). Women who were of Hispanic and non-Hispanic African American race (aOR=0.61, 95% CI=0.43, 0.86 and aOR=0.61, 95% CI=0.47, 0.79, respectively); had a history of deployment (aOR=0.76, 95% CI=0.62, 0.93); received most healthcare from the same VA primary care provider (aOR=0.73, 95% CI= 0.57, 0.94); or received care at a site with a women's health clinic (aOR=0.76, 95% CI=0.61, 0.95) had reduced odds of perceiving any gender-based discrimination.

### **Variables Associated with the Summative Measure of Perceived Gender-based Discrimination**

Among women who reported any perceived gender-based discrimination ( $n=733$ ), the mean total score for perceived gender-based discrimination was 7.8 (sd=5.7). Increased age, history of medical illness, history of mental illness, and history of MST were associated with increased perceived gender-based discrimination scores (Table 4). Receiving most medical care from the same VA primary care provider was associated with lower perceived gender-based discrimination scores in unadjusted models. All relationships observed in unadjusted models remained significant in adjusted models with the exception of history of mental illness (Table 4).

## Discussion

In this national sample of 2,294 women Veterans, we found that one third of women perceived at least some gender-based discrimination when receiving healthcare in VA and identified multiple variables that were associated with the perception of gender-based discrimination. We also assessed a cumulative score of perceived gender-based discrimination in VA among the one third of women who reported any, revealing a mean of 7.8 on a 24-point scale. We found that women with history of medical and mental illness were more likely to report experiences they felt to be discriminatory. We also found evidence suggesting that receiving most medical care from the same VA primary care provider and having a women's health clinic at one's VA were associated with reduced perceptions of discrimination among women Veterans. These findings offer insight into areas of future research to explore ways to enhance patient experiences among populations at increased risk of reporting experiences with discrimination in healthcare.

This study is one of few specifically focused on gender-based discrimination in healthcare settings, and one of the first to account for the full range of perceived gender-based discrimination scores.<sup>24–26</sup> Our study is unique in that we assessed a sample of women Veterans within the context of the VA healthcare system, where women are underrepresented. Although receiving care in a setting where one is in the minority may increase one's likelihood of encountering discrimination, the rate of perceived gender-based discrimination observed in our sample, 33.7%, is within the range of rates of gender-based discrimination observed in other patient populations (10–39%).<sup>24–26</sup> Although we cannot make direct comparisons across these studies due to differences in how discrimination was measured, our findings do not suggest that gender-based discrimination is substantially higher among women Veterans receiving healthcare in VA.

Other studies within VA have focused primarily on perceived race-based discrimination. Perceived race-based discrimination in VA has been linked to negative patient perceptions such as lower patient ratings of provider warmth and respectfulness and less perceived ease of communication with providers.<sup>35</sup> Perceptions of race-based discrimination in VA have also been associated with negative patient outcomes such as use of effective contraceptive methods among women Veterans at risk of unintended pregnancy.<sup>13</sup>

Our study demonstrated an association between medical and mental illness and odds of reporting any gender-based discrimination in VA. We also found that women with history of medical illness had higher perceived discrimination scores than women without history of medical illness, though the same was not found among women with history of mental illness. These findings are consistent with prior analyses that have demonstrated relationships between racial/ethnic-based perceived discrimination and medical and mental illness.<sup>16,17,36,37</sup> Higher rates of medical illness, and higher rates of anxiety and depression have also been associated with perceived gender-based discrimination in the military training environment in a group of Marine recruits.<sup>38</sup> Although the direction of causality between health outcomes and perceived discrimination cannot be determined in these cross-sectional studies, the pattern of findings suggests a higher burden of perceived discrimination among women with greater medical needs. Greater illness burden may

provide more opportunity for exposure to discriminatory behavior via increased interaction with the healthcare system; unfortunately, we were not able to control for healthcare utilization with the current study. Devising strategies to ensure that women Veterans with greater medical and mental health needs feel respected and treated fairly in the VA system may be helpful for reducing gender-based perceived discrimination among women Veterans.

We also found strong relationships between having a history of MST and odds of perceiving any gender-based discrimination and a higher frequency of discriminatory experiences. To our knowledge, this has not been explored in prior studies. While we cannot determine the cause underlying this association, there is evidence that women Veterans who have experienced MST often have negative experiences with the legal and/or medical systems when seeking help related to MST.<sup>39</sup> In another study involving a small sample of women Veterans seeking medical care following a sexual assault during their military service, over 70% reported feelings of guilt and self-blame as a result of their contact with the medical system, and over 80% reported reluctance to seek further care.<sup>39</sup> We suspect that MST may make women Veterans more likely to have negative perceptions of the military system and, by extension, VA healthcare system, which may make them more likely to perceive gender-based mistreatment. Targeted research to explore this association may provide greater insight into causality of this relationship.

A somewhat surprising finding was that, compared to non-Hispanic White women, Hispanic and non-Hispanic African American women perceived less gender-based discrimination. One potential explanation for this pattern may be that women with multiple intersecting social identities, such as race and gender, may be more likely to attribute negative experiences in the healthcare system to race rather than to gender.<sup>40,41</sup> Additional research may help us understand how women Veterans make attributions about the reasons underlying negative experiences they encounter.

In response to the demographic changes to the Veteran population, the VA has developed several initiatives to enhance women Veterans' experiences.<sup>1</sup> These have included efforts to increase outreach, gather survey data, and support Women's Health Service campaigns to educate women Veterans on the health benefits available to them.<sup>1</sup> VA has also responded by creating a primary care model that aims to incorporate gender-specific needs into primary care visits, and by increasing the number of VA women's health clinics and women's health providers.<sup>4,42,43</sup> It appears these efforts are yielding positive results, as research has shown that women who are seen in VA women's health clinics are more likely to report excellent satisfaction with their care than those who are seen in traditional VA clinics.<sup>42</sup> Additionally, our analysis suggests that having a designated women's health clinic at one's VA is associated with reduced odds of perceived gender-based discrimination, and less frequent experiences of discrimination among those who do encounter it. Although we are unable to determine the mechanism underlying this association in the current study, it is possible that the presence of designated women's health clinics results in a facility being perceived as more welcoming by women Veterans. The presence of a women's health clinic may also communicate to staff and to Veterans that the facility prioritizes the health of women Veterans, which may influence the overall culture of a VA facility to reduce the acceptability of behaviors that may be disparaging to women Veterans.



We also found a significant association between receiving most care from the same VA primary care provider and reduced odds of perceiving any gender-based discrimination, as well as a lower frequency of perceived discrimination. The link between continuity of care and perceived discrimination, has not been well studied. One study of indigenous Maori patients residing in Australia identified a lack of continuity with a primary care provider as a barrier to accessing non-discriminatory care.<sup>44</sup> Interpretation of our finding is challenging in light of the cross-sectional nature of our study. We suspect women who have had negative experiences with their current primary care practice may seek care elsewhere, and women who have a strong positive relationship with the practice in which they receive care may be less likely to perceive discrimination in their interactions. Exploring whether this association is a result of women seeking care outside the VA due to negative experiences, or if having a strong relationship with a primary care provider reduces one's exposure to potentially negative experiences, is an area of future research.

We acknowledge the following study limitations. First, our measure of perceived gender-based discrimination did not assess the specific context or timing of experiences of discrimination, nor is it possible to determine the existence of objective discriminatory practices within VA. Additionally, we assessed perceived gender-based discrimination using a measure that was intended to capture experiences with members of the healthcare system (e.g., staff, doctors, and nurses). The extent to which participants experienced gender-based harassment from other patients<sup>9</sup>, or the extent to which such harassment influenced responses on our measure of perceived discrimination, is unclear. Understanding the context (e.g., whether they occur with medical providers, check in staff, fellow patients) and setting (primary care versus subspecialty clinics) of experiences of discrimination could help to direct future interventions. We were also limited in our inability to assess the amount of contact with the VA healthcare system respondents had prior to survey, and whether they sought care exclusively within VA or were also receiving healthcare in alternate environments. Additionally, as noted before, the cross-sectional nature of our data limits our ability to determine the directionality of our observed relationships, many of which could be bidirectional.

In conclusion, this national study of women Veterans found that one third of women Veterans of reproductive age perceived any gender-based discrimination while seeking care in VA. The mean perceived discrimination score was 7.8 on a 24-point scale, indicating a relatively low frequency of perceived discrimination in VA among those who do encounter it. Our findings suggest that the roles of women's health clinics and continuity of care with VA primary care providers in perceptions of gender-based discrimination among women Veterans deserve additional attention. Steps to enhance patient experiences and to guard against exposure to gender-based discrimination may be needed among women with a greater burden of medical and mental illness, and history of MST, as perceived gender-based discrimination is more common among these populations.

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**Table 1.**

## Sample characteristics

Characteristic	N = 2294 n (%)
Age	
20–29	453 (19.8)
30–34	687 (30.0)
35–39	582 (25.4)
40–45	572 (24.9)
Race	
Non-Hispanic White	1184 (51.6)
Non-Hispanic African American	664 (29.0)
Hispanic	283 (12.3)
Non-Hispanic Other	163 (7.1)
Marital Status *	
Single, never married	535 (23.3)
Married or Cohabiting	1144 (49.9)
Divorced/Separated/Widowed	613 (26.8)
Education	
Less than college degree	1077 (47.0)
Bachelor's degree or higher	1217 (53.1)
Annual Household Income *	
< \$20,000	460 (20.3)
\$20,000-\$59,999	1228 (54.1)
>= \$60,000	581 (25.6)
Has additional (non-VA) Insurance *	1192 (52.0)
Any Religious Affiliation *	1901 (83.0)
Medical Illness	1287 (56.1)
Mental Illness	1576 (68.7)
Most Recent Service Branch	
Army	1160 (50.6)
Navy	518 (22.6)
Air Force/Marines/Coast Guard	616 (26.9)
Ever Deployed *	1271 (55.5)
History of Military Sexual Trauma	1261 (55.0)
Female Provider *	1782 (78.6)
Sees VA PCP for most medical care *	1822 (80.1)
Primary Care Setting	
Community-based outpatient clinic	1038 (45.3)
Hospital-based clinic	1256 (54.8)
VA WHC at Primary Care Site	1578 (68.8)
Census Region	

Characteristic	N = 2294 n (%)
Northeast	200 (8.7)
Midwest	408 (17.8)
South	1220 (53.2)
West	466 (20.3)

\* Missing data: marital status (n=2), income (n=25), religious affiliation (n=4), deployment history (n=4), provider gender (n=27), sees VA primary care provider for most medical care (n=19), and dual insurance (n=1)

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**Table 2:**

Perceived gender-based discrimination while receiving healthcare in VA (n=2,294)

Perceived gender-based discrimination	n (%)
Answered rarely, sometimes, most of the time, or always to the question: When getting healthcare at the VA, how often have you	
Been treated with less courtesy because you are a woman?	629 (27.4)
Been treated with less respect because you are a woman?	600 (26.2)
Received poorer service because you are a woman?	500 (21.8)
Had a doctor/nurse act as if you were not smart because you are a woman?	424 (18.5)
Had a doctor/nurse acted as if they were better than you because you are a woman?	407 (17.7)
Felt like a doctor/nurse was not listening to you because you are a woman?	537 (23.4)
Rarely, sometimes, most of the time, or always experienced ANY of the above	773 (33.7)
Score of perceived gender-based discrimination among those who perceived any (range 1–24), mean (SD)	7.8 (5.7)

Women with a response of “rarely”, “sometimes,” “most of the time” or “always” were classified as perceiving gender-based discrimination. Women with responses of “never” were classified as not perceiving gender-based discrimination.

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**Table 3:**

Variables associated with any gender-based perceived discrimination (n=2,294)

Any Perceived Gender-Based Discrimination, n=773 (33.7%)					
Characteristic	%	Unadjusted OR (95% CI)*	p-value	Adjusted OR (95% CI)^	p-value
Age			0.48		0.86
20–29	32.0	Ref.		Ref.	
30–34	32.3	1.01 (0.79,1.31)		1.03 (0.76,1.4)	
35–39	35.7	1.18 (0.91,1.53)		1.09 (0.79,1.49)	
40–45	34.6	1.12 (0.87,1.46)		0.96 (0.7,1.32)	
Race			<0.001		<0.001
Non-Hispanic White	38.9	Ref.		Ref.	
Non-Hispanic African American	25.3	<b>0.53 (0.43,0.66)</b>		<b>0.61 (0.47,0.79)</b>	
Hispanic	27.6	<b>0.60 (0.45,0.80)</b>		<b>0.61 (0.43,0.86)</b>	
Non-Hispanic Other	41.1	1.10 (0.79,1.53)		1.36 (0.93,1.98)	
Marital Status			0.20		-
Single, never married	30.8	Ref.			
Married or Cohabiting	35.2	1.22 (0.98,1.52)		-	
Divorced/Separated/Widowed	33.1	1.11 (0.87,1.42)		-	
Education			0.22		-
Less than college degree	32.4	Ref.		-	
Bachelor's degree or higher	34.8	1.12 (0.94,1.33)		-	
Annual Household Income			0.27		
< \$20,000	33.9	Ref.		-	
\$20,000-\$59,999	32.2	0.92 (0.74,1.16)		-	
>= \$60,000	36.0	1.09 (0.85,1.42)		-	
Has additional (non-VA) Insurance			0.99		-
No	33.7	Ref.		Ref.	
Yes	33.7	1.00 (0.84,1.19)		-	
Any Religious Affiliation			0.99		-
No religion	33.7	Ref.		-	
Any religious affiliation	33.7	1.00 (0.80,1.26)		-	
Medical Illness			<0.001		<0.001
No	26.7	Ref.		Ref.	
Yes	39.2	<b>1.77 (1.48,2.11)</b>		<b>1.67 (1.34,2.08)</b>	
Mental Illness			<0.001		<0.001
No	20.6	Ref.		Ref.	
Yes	39.7	<b>2.53 (2.06,3.11)</b>		<b>2.06 (1.57,2.69)</b>	
Most Recent Service Branch			0.88		-
Army	33.3	Ref.		-	
Navy	34.6	1.06 (0.85,1.32)		-	
Air Force/Marines/Coast Guard	33.8	1.02 (0.83,1.26)		-	
Ever Deployed			0.002		0.009



Any Perceived Gender-Based Discrimination, n=773 (33.7%)					
Characteristic	%	Unadjusted OR (95% CI)*	p-value	Adjusted OR (95% CI)^	p-value
No	37.1	Ref.		Ref.	
Yes	30.9	<b>0.76 (0.64,0.90)</b>		<b>0.76 (0.62,0.93)</b>	
History of Military Sexual Trauma			<0.001		<0.001
No	21.4	Ref.		Ref.	
Yes	43.8	<b>2.86 (2.38,3.44)</b>		<b>2.65 (2.11,3.32)</b>	
Female Provider			0.56		-
No	34.8	Ref.		-	
Yes	33.4	0.94 (0.76,1.16)		-	
Sees VA PCP for most medical care			0.147		0.014
No	36.6	Ref.		Ref.	
Yes	33.0	<b>0.85 (0.69,1.06)</b>		<b>0.73 (0.57,0.94)</b>	
Primary Care Setting			0.84		-
CBOC	33.9	Ref.		-	
Hospital	33.5	0.98 (0.83,1.17)		-	
VA WHC at Primary Care Site			0.001		0.015
No or don't know	38.5	Ref.		Ref.	
Yes	31.5	<b>0.73 (0.61,0.88)</b>		<b>0.76 (0.61,0.95)</b>	
Census Region			0.40		-
Northeast	30.5	Ref.		-	
Midwest	33.6	1.15 (0.8,1.66)		-	
South	33.1	1.13 (0.82,1.56)		-	
West	36.7	1.32 (0.93,1.88)		-	

\* Unadjusted logistic regression for odds of any gender-based perceived discrimination by characteristic.

^ Adjusted for age and for variables associated with gender-based perceived discrimination in bivariate analyses at p<0.15. n=2,271 in adjusted model due to missing data.

**Table 4:**

Variables associated with frequency of perceived gender-based discrimination among those who reported any perceived gender-based discrimination (n=773)

Characteristic	Mean(sd)	Unadjusted Coefficient (95% CI)*	p-value	Adjusted Coefficient (95% CI)^	p-value
Age			<b>0.002</b>		0.078
20–29	6.4 (4.7)	Ref.		Ref.	
30–34	8.1 (5.9)	<b>1.65 (0.57,2.74)</b>		<b>1.27 (0.10,2.44)</b>	
35–39	8.0 (5.6)	<b>1.57 (0.50,2.65)</b>		<b>1.25 (0.06,2.44)</b>	
40–45	8.4 (6.0)	<b>1.96 (0.83,3.10)</b>		<b>1.50 (0.29,2.71)</b>	
Race			0.59		-
Non-Hispanic White	7.9 (5.6)	Ref.			
Non-Hispanic African American	7.8 (5.9)	-0.1 (-1.13,0.94)		-	
Hispanic	7.2 (5.6)	-0.7 (-2.04,0.63)		-	
Non-Hispanic Other	8.4 (5.6)	0.56 (-0.87,1.99)		-	
Marital Status			0.064		0.37
Single, never married	6.9 (5.8)	Ref.		Ref.	
Married or Cohabiting	7.9 (5.6)	0.99 (-0.05,2.03)		0.63 (-0.38,1.64)	
Divorced/Separated/Widowed	8.3 (5.5)	1.36 (0.2,2.53)		0.78 (-0.38,1.94)	
Education			0.54		-
Less than college degree	7.7 (5.7)	Ref.		-	
Bachelor's degree or higher	7.9 (5.6)	0.25 (-0.55,1.06)		-	
Annual Household Income			0.59		-
< \$20,000	7.6 (5.5)	Ref.		-	
\$20,000-\$59,999	7.7 (5.8)	0.10 (-0.94,1.13)		-	
>= \$60,000	8.2 (5.7)	0.54 (-0.62,1.7)		-	
Has additional (non-VA) Insurance			0.78		
No	7.9 (5.9)	Ref.			
Yes	7.8 (5.5)	-0.11 (-0.92,0.69)			
Any Religious Affiliation			0.80		-
No religion	7.9 (5.5)	Ref.		-	
Any religious affiliation	7.8 (5.7)	-0.14 (-1.18,0.91)		-	
Medical Illness			<b>&lt;0.001</b>		<b>0.003</b>
No	6.9 (5.3)	Ref.		Ref.	
Yes	8.3 (5.8)	<b>1.47 (0.65,2.28)</b>		<b>1.26 (0.42,2.1)</b>	
Mental Illness			<b>0.004</b>		0.23
No	6.6 (5.5)	Ref.		Ref.	
Yes	8.1 (5.7)	<b>1.48 (0.48,2.47)</b>		0.63 (-0.41,1.67)	
Most Recent Service Branch			0.34		
Army	7.6 (5.7)	Ref.		-	
Navy	8.0 (5.7)	0.49 (-0.51,1.5)		-	
Air Force/Marines/Coast Guard	8.1 (5.7)	0.55 (-0.41,1.5)		-	

Characteristic	Mean(sd)	Unadjusted Coefficient (95% CI)*	p-value	Adjusted Coefficient (95% CI)^	p-value
Ever Deployed			0.27		-
No	8.0 (5.5)	Ref.			
Yes	7.6 (5.8)	-0.45 (-1.25,0.35)		-	
History of Military Sexual Trauma			<0.001		<0.001
No	6.3 (4.9)	Ref.		Ref.	
Yes	8.4 (5.8)	<b>2.17 (1.36,2.98)</b>		<b>1.91 (1.01,2.81)</b>	
Female Provider			0.26		-
No	8.3 (5.6)	Ref.			
Yes	7.7 (5.7)	-0.55 (-1.51,0.41)		-	
Sees VA PCP for most medical care			<b>0.02</b>		<b>0.024</b>
No	8.7 (5.7)	Ref.		Ref.	
Yes	7.6 (5.6)	<b>-1.17 (-2.15,-0.18)</b>		<b>-1.10 (-2.06,-0.15)</b>	
Primary Care Setting			0.76		-
CBOC	7.9 (5.8)	Ref.		-	
Hospital	7.8 (5.6)	-0.13 (-0.93,0.68)		-	
VA WHC at Primary Care Site			0.96		-
No or don't know	7.8 (5.6)	Ref.		.	
Yes	7.8 (5.7)	0.02 (-0.81,0.85)		-	
Census Region			0.57		-
Northeast	7.1 (5.8)	Ref.		-	
Midwest	7.4 (5.8)	0.28 (-1.46,2.01)		-	
South	7.9 (5.7)	0.80 (-0.74,2.34)		-	
West	8.1 (5.5)	0.91 (-0.75,2.57)		-	

IRR: incidence rate ratio

\* Unadjusted linear regression for odds of any gender-based perceived discrimination by characteristic.

^ Adjusted for variables associated with gender-based perceived discrimination in bivariate analyses at p<0.15. n=766 in adjusted model due to missing data.