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Military Experience Can Influence Women's Eating Habits

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Abstract

Background.—Disordered eating, ranging from occasional binge eating or restriction to behaviors associated with eating disorder diagnoses, is common among military personnel and veterans. However, there is little information on how military service affects eating habits.

Objective.—To describe possible pathways between military service and disordered eating among women veterans, a high risk group.

Materials and Methods.—Twenty women veterans who reported changing eating habits in response to stress participated in audio-recorded focus groups or dyadic interviews between April 2013 and October 2014. We used thematic analysis of transcripts to identify and understand women's self-reported eating habits before, during, and after military service.

Results.—Participants reported entering the military with varied eating habits, but little disordered eating. Participants described several ways military environments affected eating habits, for example, by promoting fast, irregular, binge-like eating and disrupting the reward value of food. Participants believed military-related stressors, which were often related to gender, also affected eating habits. Such stressors included military sexual trauma and the need to meet military weight requirements in general and after giving birth. Participants also reported that poor eating habits continued after military service, often because they remained under stress.

Conclusions.—For some women, military service can result in socialization to poor eating habits, which when combined with exposure to stressors can lead to disordered eating. Additional research is needed, including work to understand possible benefits associated with providing support in relation to military weight requirements and the transition out of military service. Given

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Conflicts of Interest

The authors report no conflicts of interest.

the unique experiences of women in the military, future work could also focus on health services surrounding pregnancy-related weight change and the stress associated with being a woman in predominantly male military environments.

Keywords

Women; Military; Veteran; Disordered eating

Introduction

Obesity is a major public health concern, particularly among veterans using the Veterans Health Administration (VHA) (Breland, Phibbs, et al., 2017). Complicating matters is the fact that roughly 80% of the thousands of veterans using VHA's behavioral weight loss program report binge eating (Higgins et al., 2013). Indeed, a recent review suggests that disordered eating, which ranges from occasional binge eating or restriction to behaviors associated with eating disorder diagnoses, may be more prevalent among military personnel and veterans than the general US population (Bartlett & Mitchell, 2015). These high rates suggest that factors associated with military service may affect eating habits. Given poor weight loss outcomes among veterans who engage in binge eating (Masheb et al., 2015), a better understanding of how military service shapes eating habits could provide scientists, clinicians, and policymakers with important information on how to explain and ameliorate a pressing public health issue.

One way US military service may affect eating habits is by exposing individuals to military-specific forms of general eating disorder risk factors. In the general population, traumatic event exposure is associated with disordered eating (Brewerton, 2007; Forman-Hoffman, Mengeling, Booth, Torner, & Sadler, 2012; Harrington, Crowther, Henrickson, & Mickelson, 2006; Hirth, Rahman, & Berenson, 2011; Lucea, Francis, Sabri, Campbell, & Campbell, 2012; Mitchell, Mazzeo, Schlesinger, Brewerton, & Smith, 2012; Mitchell, Rasmusson, Bartlett, & Gerber, 2014). Among veterans, military-specific traumatic events – combat exposure and military sexual trauma – are associated with disordered eating (Bartlett & Mitchell, 2015; Jacobson et al., 2009; Maguen et al., 2012; Tanofsky-Kraff et al., 2013). Another way military service may affect eating habits is by exposing individuals to military-specific risk factors that lack a corollary in the general population. For example, disordered eating is more common during the fitness testing periods used by the military to determine whether personnel meet strict weight requirements (Bartlett & Mitchell, 2015; Bodell, Forney, Keel, Gutierrez, & Joiner, 2014).

To date, most work on disordered eating among military personnel and veterans has been quantitative (e.g., based on surveys or administrative data) and focused on investigating the relationship between traumatic events and disordered eating. However, these studies only explain a portion of the variance in outcomes, suggesting other, possibly unidentified pathways between military service and disordered eating. One way to identify such pathways is through qualitative work capturing veterans' own descriptions about how military service affects eating habits. Qualitative work is particularly suited to this task given its utility in providing insight into potential causal mechanisms and generating hypotheses

that can be tested in future research (Curry, Nembhard, & Bradley, 2009). Findings from the largest qualitative study on military service and eating habits, which was conducted among an almost entirely male sample, generally supported the relationship between stress, trauma, and disordered eating (Smith, Klosterbuer, & Levine, 2009). It also suggested additional pathways, including positive associations among binge eating, limited access to food, and learning to eat fast during boot camp.

The present work represents a qualitative investigation of the relationship between US military service and eating habits among women veterans. We focused on women because they report higher rates of disordered eating than men (Bartlett & Mitchell, 2015) and therefore represent a high risk population overlooked in past qualitative work. Our goal was to extend and triangulate quantitative findings regarding military service and disordered eating in this high-risk population in order to develop new ways to understand, identify, and help women who engage in disordered eating.

Methods

Recruitment and screening.

We recruited participants using a combination of flyers and referrals from mental health clinicians at an urban VHA medical center, with most women coming through clinician referrals. Study staff contacted women who expressed interest and verbally consented to a phone screen to determine eligibility either by making contact through the flyer or providing consent for contact to their clinician. We used homogenous sampling (Palinkas et al., 2015), an approach that allowed us to recruit participants from a specific group (i.e., women veterans). Women were eligible to participate if they were veterans, age 18–70, who said they changed their eating habits in response to stress or trauma and/or used food as a way to cope with stress or trauma. Women who reported diagnoses of schizophrenia or another psychotic disorder were not eligible due to their unique needs. Study staff completed the phone screen with 26 women, excluding one due to a diagnosis of schizophrenia. Five women who were eligible after the phone screen did not participate because they were not able to or were not interested in participating in focus groups. A final sample of 20 women (one who identified as a transgender woman) signed consent forms and participated in the focus groups/interviews. Participants also completed a self-report form with demographic information.

Focus groups and interviews.

Between the Spring of 2013 and Fall 2014, two researchers led five focus groups and two dyadic interviews using a semi-structured guide that asked about eating habits over time (see Supplementary Material). The two dyadic interviews were the result of only two participants attending scheduled focus groups. Group size ranged from three to five participants and groups lasted roughly two hours. All groups/interviews were audio recorded, transcribed verbatim, and imported into ATLAS.ti software. Three to four focus groups are usually sufficient to achieve thematic saturation (Morgan, 1996); therefore we planned for at least four groups. Study staff met after each focus group to discuss preliminary themes, deciding

that saturation of themes was reached when no new themes were discussed after the last focus group.

Qualitative analyses.

A thematic analysis approach adopted from Braun and Clarke (2006) was used to answer two research questions: 1) How do participants describe their eating habits before, during, and after military service?; and 2) To what extent do military environments shape participants' eating habits? The research team developed a preliminary codebook using deductive codes based on the interview guide and research questions, which included codes such as timing of military service (e.g., before military service), general discussions of eating habits (e.g., eating habits, disordered eating), and women's specific experiences (e.g., trauma, stress). The research team applied the codebook to portions of two transcripts to refine the code list and definitions. Two researchers then used a coding by committee approach adapted from Saldaña (2015) where the researchers worked together to apply codes and consulted with a third researcher in cases of disagreement (this happened on two occasions). Lastly, the two researchers reviewed all quotes under all codes separately and together to identify and synthesize themes based on frequency and salience. The same authors also reviewed transcripts looking for differences between groups and interviews, which were minimal. All procedures were approved by the University of California, San Francisco Institutional Review Board and the Human Research Protection Program at the San Francisco VA Medical Center.

Results

The women veterans who participated in this study came from a variety of racial/ethnic backgrounds (less than half were white). Socioeconomic status was less heterogeneous, with most women reporting incomes below the national median (~$53,000; United States Census Bureau, 2015). Mean age was 48 years (SD=15). Additional information on participant characteristics is provided in Table 1.

We identified five themes related to women's views of their eating habits before, during, and after military service. They are described below with illustrative quotes. We would like to note that participants did not use the terms "poor eating habits" or "disordered eating." As can be seen below, they were more descriptive. However, we decided to use the terms "poor eating habits" and "disordered eating" in themes and descriptions for clarity. Also of note is the fact that some women seemed to conflate eating behaviors and weight. Finally, as illustrated below, no themes were specific to binge eating versus restriction, however, binge eating was more commonly discussed.

Pre-military: Women described a variety of eating habits before military service.

Women reported varied eating habits before entering the military. Some described growing up with access to and interest in healthy foods. As one woman noted, she grew up with "…chickens in the coop, fresh eggs, canned fruit…food was just very natural and nobody made a big deal about it." (Participant 12, Group). Other women described growing up in more obesogenic environments. For example, several women said that in their households "wasted

food was a sin" (Participant 2, Interview) and that they were taught to clean their plates after every meal regardless of satiety.

Among the minority of women who reported engaging in disordered eating before military service, instances of disordered eating were often linked to stress management. For example, one woman reported being expressly taught by her mother to eat as a way to comfort herself. One noted, "I was living at home and had a really mean stepmother so I just binge ate and… didn't care much about myself…" (Participant 16, Group). Another woman described using disordered eating as a way to gain control. She said she grew up with a lot of rules surrounding eating and self-worth, "…we grew up feeling like if you are fat, you are not worth much and you are not worth being loved and you are not worth all these things…you have to be beautiful and perfect." (Participant 15, Group) For her, eating was a way to control her weight and, ultimately, the way the world saw and treated her.

During military service: Women described military environments as facilitating poor eating habits.

Women described three military environments as facilitating poor eating habits: 1) boot camp; 2) deployment; and 3) being on base.

Boot camp.—Almost all women described a salient characteristic of eating in boot camp as the need to eat a large amount of food quickly, which was expressly described as part of military training. As one woman said, "my family always asks why I eat so fast and I say I learned it from the military; we were always timed." (Participant 16, Group). Other women said they ate quickly in order to get second helpings. In addition to eating fast, women described eating extremely large portions while in boot camp, sometimes due to the abundance of free, prepared food. Many noted that this increased food intake did not result in weight gain because boot camp also required substantial physical activity. However, they said that when they stopped exercising, they continued to eat fast and large meals and eventually gained weight, which negatively affected their self-esteem.

The need to eat quickly during boot camp was described as a double-bind for women who were overweight or close to being overweight when joining the military. As one woman said:

> I remember going through the chow line, and the drill sergeant following behind me and [saying], oh you're not going to eat that, are you, lard ass…?… So it was like you're screwed no matter what you picked off the line…because if you ate junk they were going to come get you and…if you were going to eat healthy, you're not going to have enough time to eat it.
>
> (Participant 20, Group)

For these women, boot-camp seemed to mark the beginning of a struggle to balance limited time and an abundance of unhealthy food with the need to meet strict military weight requirements.

Deployment.—Women reported learning to eat on an irregular schedule and learning to use sweet foods as a "pick-me-up" while deployed (Participant 2, Interview). In addition, they reported continuing to engage in the fast, binge-like eating taught during boot camp. In fact, it was often required given that there was "no set schedule for eating" while deployed (Participant 7, Group). As the same woman said:

> Eating habits changed an awful lot [during deployment] because you ate when you could, you ate as much as you could before the flies ate your food or you had to run off and do something and get [to]…the next stressful situation…so that was difficult.

While some women said they picked up the habit of eating quickly "so that [they] could keep moving" (Participant 2, Interview), other women said they ate quickly to avoid social situations, "there were some girls who were so mean and it was hard to sit down and eat with them; so I tried to eat real fast and leave…" (Participant 16, Group). This was also the case for women trying to avoid trauma perpetrators.

Women also described how being deployed affected the reward value of food. Some women described military service as reducing the pleasure normally associated with eating due to the fact that military food was unpalatable and meal times were overly structured. As a result, eating during military service was seen as an unenjoyable, rote activity, where "you just eat it or you starve" (Participant 1, Group). However, other women described military service as increasing the reward value of food. For example, they noted that junk food (e.g., soda) was often used as a reward from supervisors during deployment. This resulted in the increased use of food for pleasure as opposed to for sustenance. As one woman said, "you [were] drinking your approval and acceptance." (Participant 11, Group). Women felt these changes in reward value persisted after military service. As one said, "my eating habits stayed the same [after military service]…eat it now and I'll taste it later…you eat so fast you don't enjoy what you're eating…" (Participant 7, Group). Regardless of whether the reward value of food increased or decreased during military service, women felt that it led to unhealthy eating habits.

On base.—Women spoke least about eating on military bases outside of war zones. They described eating on base as less irregular and fast-paced than eating during boot camp or deployment, but they did note that there were few healthy food choices when on base, as one woman put it, "your options are the mess hall or Burger King and Cinnabon." (Participant 15, Group).

During military service: Women described the need to "make weight" for military standards as affecting eating habits.—Many women felt boot camp marked the beginning of a battle to "make weight" (i.e., not exceed the military's maximum weight requirements that are based on gender, age, and height), which included near constant scrutiny by themselves and others over what they ate. They described this struggle as continuing throughout military service and affecting their eating habits on a daily basis. Many women described the need to make weight as directly tied to the stress of being a woman in the military. As one woman said:

> There is just a whole host of things that we have to deal with that the male veterans don't have to and one of those things is being constantly judged on our appearance which is so unfair… It's like there is nothing we can do right as women in the military and…that translates into these eating issues when we get home.
>
> (Participant 17, Group).

Other women described how this could be particularly pronounced around pregnancy:

> They give you nine months to gain the weight [during pregnancy] and if you're over when you come back to work in six weeks, it's career death, I mean really. You know, they start writing you up, they start demoting you, but the men don't have that, you know? If they're large it's just because they just worked out…so with that stigma you didn't eat in front of anybody that had any kind of pull in your career…
>
> (Participant 20, Group)

Unsurprisingly, the heavy restriction described in this quote often led to bingeing that trapped women in a vicious cycle. As one woman said:

> You [could have] the start of a really serious eating disorder that could have killed you and it was reinforced by these people saying "Oh my God, look at how much weight you are losing, oh my God how much weight" – like it was a good thing. Were they going to wait until you were dead before they said, you know this might not be so healthy?"
>
> (Participant 15, Group)

The focus on making weight seemed particularly frustrating for women because they felt that while it was directly tied to their employment, they got little support when trying to manage their weight. Although one woman felt supported by her commander, a more typical scenario was described by a woman who said:

> I actually had a commander, when he gave me my counseling on weight; tell me how I was a disgrace to the uniform…I am technically and tactically proficient and I can kick your ass on the battlefield and you are going to sit there and tell me that I am a disgrace because I weigh too much? How many kids has he had?
>
> (Participant 15, Group)

Not only did women feel that the weight standards were unfair to women, but they felt that the weight standards were irrelevant to them being able to complete their work.

During military service: Women described poor eating habits and military-related stress and trauma as leading to disordered eating.—As noted above, women described military environments as socializing them to poor eating habits, namely eating large amounts of food quickly and on an irregular schedule. Women said that such habits were necessary in some military environments (e.g., war zones). However, women described how unhealthy habits could lead to disordered eating as a way to find comfort and control in stressful situations. As one woman said, "…there would be these alarms going off,

like right in the middle of the night you had to get out of bed…[when] that was over [the] first thing we [did] was start eating." (Participant 10, Group).

Some women described using disordered eating to cope with loneliness related to being one of a few women among many men. As was the case with many women, one woman talked about being one of only two women in a unit. She said that she and the woman she worked with felt isolated and bullied due to their gender and used food as a way to experience pleasure:

> When we got in port, we would just hole up in a hotel room and just buy a whole bunch of just comfort food, candy, cookies and whatever it was that we wanted to pig out and eat on, so like [on the ship] it was junk food, in port it was more junk food and it was…just only us and the food, so we was in a relationship with the food, her and me which…helped us out a lot.
>
> (Participant 19, Group)

Others used disordered eating to cope with trauma-related negative affect (often in relation to military sexual trauma), either by using food to numb emotions, to increase positive affect, or to reduce negative affect (Breland, Donalson, Dinh, & Maguen, 2017).

With regard to control, one woman described her military service as "ten months of really bad things" (Participant 17, Group) and said she coped by heavily restricting her food intake to the point that she could no longer engage in physical activity. She described knowing her habits were unhealthy, while also knowing that it was the only way for her to control her environment. Her feeling that restriction let her show "how much self-control [she had] and [that she was] that much better at this than [others]…and those little moments, that would make [her] feel so good…" was echoed by several women. Other women described binge eating as way to exert control by breaking the strict rules regarding eating in the military. For example, a woman described overeating during her military service by saying that "food was my control" and that she used food for "medication" (Participant 11, Group).

Post-military: Women described stress as continuing to lead to poor eating habits and disordered eating after military service.—Women discussed a number of stressors that affected their eating habits after military service. Several women said this stress began as soon as their military service ended. As one said, "…the transition of coming home was just as bad as being [deployed]." (Participant 17, Group). A commonly reported difficulty was feeling like one's family and friends could not understand the experience of being deployed. For example, one woman described the difficulty of relinquishing regimented military schedules as a civilian:

> [My family said], "we're not in the military; you have to slow down and back away and think about what you are doing;" so I had to change a lot when I got back to conform to their normality. So that was hard…it wasn't clicking in my head that I was no longer in the military and they didn't know my norm and I didn't know their norm and we were just clashing all the time.
>
> (Participant 2, Interview)

Women described feeling isolated as a result of these "clashes," which led to disordered eating as way to experience pleasure or comfort in difficult times. As the same woman said, "…my confidence came down and I retracted a lot and I was finding a lot of comfort in my food intake" (Participant 2, Interview). Another woman explicitly linked using food to cope with stress to poor eating habits learned in the military, saying, "…when you learn [to eat fast when under stress] that young, it is ingrained…and it is hard to untrain." (Participant 15, Group).

While some women said leaving the military was stressful, others described feeling free upon leaving the military, which led to unrestrained eating. A typical experience was described by a woman who said, "…I ate a lot [after the military]. I'd eat anything. I didn't have to get weighed in and I didn't have to do…physical training, and I ate real fast too…" (Participant 16, Group). The attitude was, "I'm going to eat what I want to eat. No one was going to tell me anything" (Participant 10, Interview). However, the same woman described how unrestrained eating led to stress and negative consequences:

> …I just thought I was free to eat whatever I wanted and in a sense it was; no one's watching me and so there my weight went up…then I just started looking in the mirror and I'd hate myself and criticize…

She said this led to a vicious cycle of restriction and bingeing. Women described having to "re-teach" themselves how to not eat quickly or needing to "[learn] how to eat" again (Participant 7, Group). They described varying levels of success with this goal, which may explain why women described poor eating habits and disordered eating as getting worse, getting better, or fluctuating after military service.

Other women said they felt stressed by the need to make their own dietary choices after having structured eating environments in the military. One woman said, "…having to deal with where to shop and getting recipes or looking for the fresh vegetables…is very much a learned thing and you have to get into the habit [after leaving the military]…" (Participant 1, Group). Unfortunately, some women also said they felt unsupported by the military as they navigated this stressful time, noting "it's like when you come off active duty [the military] just drop[s] you." (Participant 17, Group). Further, they said they found it difficult to use their VHA benefits. Others said the stress came from a lack of money, which several women directly tied to unhealthy eating:

> When I first got out I felt really depressed because…there is no money there in the transition and I got out injured so I [was] not able to work and you have to wait months for the VA [benefits] to kick in… So it is really hard to deal with that and not gain weight [when] the cheapest food is the highest fat food…
>
> (Participant 15, Group).

Finally, for several women, poor mental health after leaving the military was described as a stressor that affected eating habits. For example, one woman said when she got out of the military she did not think she "deserved to eat healthy and be healthy" and that she "felt [she] would fail if [she] tried to lose weight." (Participant 8, Group) Another noted that eating well "…depends on how you feel. If you like yourself versus if you don't like yourself." (Participant 5, Group). A group member agreed, saying:

> When I am feeling good about myself I will portion…[but], more times than not I am gouging, I am already full, my stomach is tight to the point where I'm hurting… but…I will eat. It is like a punishment almost. I just sit there and eat and not that it tastes good… I feel there is a hole in my body I am trying to fill, not just the stomach or the intestines; I've got a hole somewhere that I am really trying to fill it up.
>
> (Participant 13, Group)

Women said these feelings of inadequacy and low self-esteem could be exacerbated by other common life stressors, which were also dealt with by eating.

Discussion

The women in this study described entering the military with a variety of eating habits, but did not commonly report disordered eating before joining the military. They described several ways that military service affected eating habits and led to disordered eating, including by promoting fast, binge-like eating on irregular schedules and disrupting the reward value of food (both positively and negatively). Further, women reported that military service exposed them to a number of stressors, often related to gender, such as the need to meet military weight requirements after pregnancy, military sexual trauma, and isolation. They said these stressors affected eating habits and sometimes led to disordered eating, both restriction and bingeing, as a coping mechanism. Finally, women reported that poor eating habits continued after military service, often because they remained under stress.

Many of the experiences described by participants align with and add nuance to findings from past quantitative work demonstrating relationships between eating disorders and military sexual trauma or pressure to meet weight requirements (e.g., Bodell et al., 2014; Forman-Hoffman et al., 2012; Maguen et al., 2012; Mitchell, Porter, Boyko, & Field, 2016; Mitchell et al., 2014). Women in the present study also described significant distress due to weight- and eating-related judgements from peers and superiors. This distress was particularly pronounced around pregnancy-related weight gain, and many participants specifically tied their distress to the challenges of being a woman in predominantly male military environments. Indeed, past work has found that over half of military women experience gender harassment (i.e., non-sexual harassment that is nevertheless related to gender (Street, Vogt, & Dutra, 2009)). Such harassment is usually more common than sexual trauma and is associated with significant distress and poor mental health outcomes (Street et al., 2009). This is noteworthy given that women in the present study explicitly described eating as a way to cope with this type of distress, suggesting that military service could uniquely shape women's eating habits. In addition, the new information offered by these findings could be used to improve content validity of disordered eating questionnaires.

Participants' experiences also suggest another pathway between military service and disordered eating: socialization to the fast, irregular consumption of large amounts of food. This pathway is briefly mentioned in past qualitative work (Smith et al., 2009), but is not commonly assessed in quantitative work, highlighting the utility of qualitative methods when trying to understanding complex behaviors (Curry et al., 2009), like eating. Taken

together, current and past findings present the possibility of a diathesis stress model in which disordered eating among military and veteran populations may result from a combination of socialization to poor eating habits during boot camp, high stress military environments, and pressure to meet military weight requirements. This hypothesized model provides subtlety to research suggesting that individuals who diet to meet military weight requirements are more likely to engage in disordered eating (Jacobson et al., 2009). Perhaps it is not just pressure to make weight that leads to disordered eating, but rather the fact that military personnel are socialized into poor eating habits and then exposed to that pressure.

Future Research

Future work is needed to test the hypothesized diathesis stress model. Such work could include quantitative analyses to determine how frequently military personnel develop poor eating habits during boot camp and whether individuals who develop poor eating habits during boot camp are more likely to engage in disordered eating when experiencing stress than individuals who do not develop poor eating habits. Further, it may not be possible to avoid fast, irregular eating during boot camp or deployment. Therefore, it could be useful to investigate whether psychoeducation on the relationships among poor eating habits, stress, disordered eating, and weight gain could prevent the development of disordered eating by helping link potentially maladaptive behaviors to eating in specific military environments (e.g., combat zones) as opposed to eating in any environment (e.g., at home).

Given the number of participants who described using food as comfort, it may also be important to investigate the benefits of providing recruits with information on how to regulate emotions and stress without relying on food. If undertaken, these efforts may need to consider the primacy of food as a way to express and manage emotion across cultures (as was mentioned by several participants). One way to achieve this could be by helping individuals find pleasurable activities in addition to eating as opposed to taking away pleasure associated with eating. Such approaches may prevent military environments from changing the reward value of food (e.g., by preventing eating from becoming a rote activity), which participants associated with poor eating habits.

We also hope future research will investigate the varied forms of stress and times when stressors may occur, such as after pregnancy when it may be difficult to meet military weight requirements or during the transition out of the military. Investigating these and other hypotheses raised by the findings could improve understanding of the role of these stressors in disordered eating and help improve intervention and prevention efforts.

Limitations

Findings based on a cross-sectional qualitative investigation of eating habits among women at a single VHA medical center may not generalize to other populations. Generalization is also limited by the fact that all participants reported changing their eating in response to stress or trauma. However, generalization is not the goal of qualitative research and we believe our findings provide important nuance to prior work and therefore merit reporting.

Conclusion

Women veterans who reported changing their eating in response to stress said that military service can result in socialization to poor eating habits, which when combined with exposure to stressors, military or otherwise, can lead to disordered eating. Given the qualitative nature of the present study, further quantitative research is needed before generalizing these findings. This work could include developing disordered eating questionnaires and investigating possible benefits of providing resources to facilitate healthy eating and weight management, particularly in relation to military weight requirements and the transition out of military service. Given the unique experiences of women in the military, future work could also assess the effectiveness of health services for women that focus on pregnancy-related changes in weight and the stress associated with being a woman in predominantly male military environments.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Table 1

Participant characteristics

	N	%
Education		
Some college	5	25%
Associates degree	8	40%
College graduate	3	15%
Master's	3	15%
Doctoral Degree	1	5%
Marital Status		
Never Married	9	45%
Married	2	10%
Divorced	9	45%
Have children	10	50%
Household income		
Under $10,000	2	10%
$10,000–25,000	7	35%
$25,001–50,000	7	35%
$50,0001–75,000	3	15%
$75,001–100,000	1	5%
Have private health insurance	6	30%
VA service connection *§		
Yes	15	75%
Pending	10	50%
Service branch		
Air Force	4	20%
Army	9	45%
Navy	6	30%
Coast Guard	1	5%
Past Active Duty		
Yes	17	85%

*Not mutually exclusive

§VA service connection is a measure of severity of an injury or illness determined to be related to military service.