



Preventing Suicide Among Women Veterans: Gender-Sensitive, Trauma-Informed Conceptualization

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Abstract

Purpose of Review There is growing concern regarding suicide among women veterans, who have experienced an increase in suicide rates that has exceeded that reported for other US adult populations. Recent research has bolstered understanding of correlates of suicide risk specific to women veterans. Yet most existing suicide prevention initiatives take a gender-neutral, rather than gender-sensitive, approach. We offer clinical considerations and suggestions for suicide prevention tailored to the needs, preferences, and experiences of women veterans. Discussion is framed around the White House strategy for preventing suicide among military service members and veterans.

Recent Findings Considering high rates of trauma exposure among women veterans, we propose that a trauma-informed lens is essential for taking a gender-sensitive approach to suicide prevention with this population. Nonetheless, research to inform evidence-based assessment and intervention remains largely focused on veteran men or gender-neutral. Integral next steps for research are posited.

Summary Extant research provides an initial foundation for beginning to understand and address suicide among women veterans in a gender-sensitive, trauma-informed manner. Additional research that is specific to women veterans or that examines gender differences is critical to ensure women veterans receive optimal, evidence-based care to prevent suicide.

Introduction

Suicide prevention research and initiatives have often taken a gender-neutral approach, making broad recommendations without tailoring recommendations in response to gender differences. Until recently, this was particularly notable when considering suicide prevention research and clinical recommendations for US veterans, a population in which women are a numerical minority, yet comprise a growing proportion of the veteran population [1, 2]. Further, there has been growing concern regarding suicide in this population, as women veterans have experienced an increase in suicide rates that has exceeded that reported for other US adult populations [3]. This has prompted recognition of the need to understand gender differences in the prevalence of suicidal thoughts and behaviors, risk and protective factors, suicide methods, suicide prevention preferences and needs, and efficacy and effectiveness of interventions to prevent suicide among veterans [4, 5, 6, 7]. It has also prompted research focused specifically on women veterans, such as examining the prevalence of suicidal thoughts and behaviors [8] and understanding the acceptability of suicide risk assessment and prevention in settings where women veterans commonly use healthcare [9]. These initial efforts have yielded important information. Rates of lifetime suicidal ideation and suicide attempt are highly prevalent among women veterans, with 47.9% and 17.7% of women veterans in an anonymous survey reporting such experiences [8]. Women veterans also report significantly higher rates of suicidal ideation and suicide attempt than veteran men: in a recent study of post-9/11 veterans, lifetime suicidal

ideation and suicide attempt were, respectively, 1.2 and 2.2 times more prevalent among women compared to their men counterparts [7]. In contrast, the age-adjusted suicide rate among men veterans was 2.5 times higher than that for women veterans in 2019 [10]. This “gender paradox” of higher rates of suicidal ideation and suicide attempts among women, juxtaposed with higher rates of suicide among men, has been noted for various populations [11]. Gender differences in the lethality of suicide methods have been proposed as one explanatory factor, as lethality can distinguish who survives a suicide attempt [12, 13]. Among adults within the USA, including veterans, men tend to use more lethal means of suicide (firearms) than women [3].

As research accumulates regarding clinically relevant gender differences in the epidemiology of suicidal thoughts and behaviors among veterans, there is increasing impetus to take a gender-sensitive approach to suicide prevention. Determining how to optimally tailor suicide prevention initiatives to specific populations also aligns with the recently published White House strategy for preventing suicide among military service members and veterans, which states: “*This evidence suggests that one-size-fits-all approaches will not be effective...the application of evidence-based suicide prevention strategies must be tailored to the unique needs and contexts represented by important subpopulations...*” (p. 10) [14].

Nonetheless, guidance for taking a gender-sensitive approach to suicide prevention with women veterans remains limited. We seek to address this gap in

this article. Given high rates of interpersonal violence exposure among women veterans, including childhood abuse, intimate partner violence (IPV), and sexual trauma during adulthood (e.g., military sexual trauma [MST]) [15, 16, 17], we also advocate for a trauma-informed approach [18•, 19, 20] to suicide

prevention with women veterans. Specifically, we provide trauma-informed, gender-sensitive suicide prevention considerations for clinicians working with women veterans, framed around the five priorities of the White House strategy for suicide prevention among service members and veterans [14••].

Improving lethal means safety

Access to lethal means can distinguish who acts on suicidal thoughts and who refrains from doing so [21]. Consequently, efforts to reduce access to lethal means of suicide, or lethal means safety, are considered a cornerstone of suicide prevention. The White House strategy seeks to improve lethal means safety through a variety of initiatives that aim to increase awareness, education, and training [14••]. Highly pertinent to such efforts is the burgeoning literature on gender differences in lethal means of suicide. Among veterans, firearms are the most common method of suicide, although a higher proportion of men (70.2%) than women (49.8%) who die by suicide use a firearm as their suicide method [3•]. That said, women veterans are more likely to use firearms as a suicide method than non-veteran adult women (31.3%) [3•]. Conversely, women veterans (26.3%) are more likely than veteran men (7.5%) to die by suicide from poisoning [3•]. Use of suffocation (20.5% of veteran women vs. 16.8% of veteran men) or other methods (3.4% of veteran women vs. 5.5% of veteran men) of suicide are relatively similar by gender [3•]. These gender differences underscore the import of assessing for a broad array of potentially lethal means when working with women veterans deemed to be at risk. As firearms are the most common method of suicide among women veterans [3•] and are highly lethal [22], suicide risk assessment with women veterans should consistently include assessing for firearm access. Providers should also be aware that women veterans have higher rates of firearm ownership than women non-veterans (24.4% vs. 11.8% respectively in the 2015 National Firearm Survey) [23]. Nonetheless, assessing access to other lethal means, such as excess quantities of medications and toxic substances, is also essential.

For firearm-focused conversations (i.e., lethal means safety counseling), it is important to understand that women veterans' firearm access commonly occurs through firearms owned by other household members and to a greater extent than for veteran men. For example, 14.4% of women veterans, compared to 2.2% of veteran men, report living in a household with firearms that they do not personally own [23]. This may impact the approach to discussions about reducing lethal means access [23, 24•, 25]. For instance, wording indicative of "access" rather than personal "ownership" may be paramount to ensure accurate and comprehensive understanding of lethal means access [see [26, 27] for a larger discussion of this topic]. Additionally, sexual harassment and assault experiences may contribute to women veterans' access to firearms [24•, 25, 28]. For example, women veterans who have experienced traumatic

events, such as military sexual trauma or intimate partner violence, may seek access to firearms to engender a sense of safety and protection [24•]. Thus, lethal means safety conversations may be particularly important with women veteran patients with histories of MST or IPV.

Enhancing crisis care and facilitating care transitions

Quality crisis care and subsequent follow-up are also important parts of suicide prevention, particularly for those with high suicide risk [14••]. Single interventions in emergency settings or through crisis hotlines, though not a substitute for more in-depth and longer-term care, can be effective in connecting individuals with follow-up care and decreasing suicide risk [29].

Research on crisis care with women veterans has predominantly focused on the Veterans Crisis Line (VCL). The VCL is a 24/7 toll-free service offering phone, text and chat services and is an important part of the VA's suicide prevention strategy [30]. Women veterans contact the VCL for a variety of reasons, including mental health, suicidal crises, and relationship problems, which are also common among veteran men [31•]; however, there are salient gender differences in veterans' reasons for contacting the VCL. Chief among these are women veterans' concerns regarding MST, sexual assault, and family relationships (including parenting and intimate relationships) [31•]. VCL responders have also described gender differences in the clinical presentations and needs of veterans who contact the VCL—for example, that women veteran VCL callers more commonly describe overdose as a method of suicide that they have thought about, but are less likely than men to mention having considered using firearms as a suicide method [32]. Furthermore, posttraumatic stress disorder (PTSD), loneliness, and hopelessness appear to reflect the most common reasons for wanting to die among women veterans who contact the VCL [32]. Gender differences have also been observed in veteran suicide rates in the 12 months after initial VCL call; among women, suicide rates declined slowly and steadily over the duration of this time period; in contrast, for men, suicide rates declined sharply within the first 3 months, followed by a steadier decline for the remainder of the time period [33].

Knowledge of these gender differences can be used to ensure that crisis services and follow-up care are optimally poised to address factors contributing to suicidal thoughts and behaviors among women veterans. By recognizing the role of traumatic experiences in suicide, crisis services can facilitate connections with other services to address trauma sequelae. It is important that entities that provide crisis care or emergency services to women veterans provide training and support to responders on trauma-informed care. VCL responders should be prepared to discuss and provide referrals for trauma-related concerns that may be driving suicide risk. Enhancing collaboration and coordination between crisis care services and trauma-focused programs may improve the quality and trauma sensitivity of care for women veterans accessing crisis services. It may be beneficial, for example, to connect women veterans who have experienced IPV or MST to the VA's Intimate Partner Violence Assistance Program or their local MST Coordinator.

It is also essential to offer follow-up care that is accessible, feasible, and acceptable. Referrals may be most helpful to women veterans if there is the option to meet with a woman clinician and when women-specific services are available [34]. Additionally, for women veterans, caregiving, finances, and transportation may impede engagement in follow-up care [34] and should be discussed.

Increasing access to and delivery of effective care

Another suicide prevention priority is ensuring access to evidence-based mental healthcare, with a focus on encouraging help-seeking and reducing barriers to using mental healthcare [14••]. This is critical both during times of crisis and more broadly.

Reducing barriers

Women veterans experience unique barriers to healthcare utilization, including harassment from men veterans at Veterans Health Administration (VHA) facilities, gender bias, lack of childcare, and availability of providers trained in women's health and gender-specific services [35, 36, 37, 38]. Considerable research and policy efforts have sought to understand and address these barriers within VHA and to expand and optimize healthcare for women veterans [39, 40]. While some of these efforts (e.g., increasing the number of women's health providers) may improve suicide prevention services for women veterans, research aimed at understanding and reducing barriers to using healthcare when women veterans are suicidal has been more limited.

One recent study of women veterans that did address barriers in the context of suicide prevention found that a history of military sexual assault was associated with lower willingness to use VHA care for mental health symptoms [41]. Relatedly, MST-related institutional betrayal may deter women veterans from seeking specific types of VHA care [42]. Given the association between institutional betrayal and suicide attempts [43], preventing and addressing institutional betrayal may be particularly important to increasing healthcare engagement and preventing suicide. Thus, an upstream approach to suicide prevention among women veterans should include efforts to prevent and appropriately respond to experiences of trauma and abuse.

Additionally, a significant portion of women veterans experience harassment at VHA facilities [36]. Such experiences may be pertinent to suicide risk and prevention with this population. For example, women veterans may experience unique concerns about psychiatric hospitalization in VHA facilities due to concerns about being hospitalized near veteran men; this may trigger distressing reminders of MST. Thus, efforts to reduce barriers to mental healthcare utilization among women veterans should ensure that women veterans feel safe accessing such services, inclusive of entering the healthcare facility and its waiting areas. Continuing to address harassment of women

veterans at VHA facilities may be integral to increasing women veterans' use of mental health services within VHA, thus increasing opportunities for suicide prevention.

Improving risk assessment

Once engaged with healthcare, it is essential that clinicians offer women veterans optimal, evidence-based care. Using structured instruments (e.g., self-report measures) as part of suicide risk assessment and management can be useful in augmenting clinical interview data to identify factors driving suicide risk [44].

Unfortunately, many such measures have not been normed or validated with women veterans. As such, these measures may have limited utility with women veterans and would benefit from research to ensure optimal scoring prior to use clinically. For example, the Suicide Cognitions Scale is a self-report measure that has been predictive of suicide attempts among samples of military personnel [45, 46]; however, because it has an inconsistent factor structure among women veterans [47], it is unclear how to score and use this measure with women veterans clinically or in research. Notably, as measure development and testing often have been gender-neutral, understanding of psychometric performance by gender is needed.

Relatedly, current systems-level algorithms used in VHA to identify and outreach veterans at increased risk for suicide, such as Recovery Engagement and Coordination for Health–Veterans Enhanced Treatment (REACH VET) [48, 49], have not been developed or evaluated separately for men and women. Thus, they may not be optimally designed for women. Future research is warranted to ensure women veterans in need of care are identified on both population and individual levels. This may entail development and validation of items and predictive models with women veterans specifically, rather than confirming the validity of such assessment tools developed and normed primarily based on responses from men.

Building trust and rapport

Whether assessing risk through clinical interviews or structured screening instruments, women veterans may be reluctant to disclose suicidal thoughts and behaviors or other factors that may impact risk, particularly if rapport and trust have not been established [9•]. This finding has been reported in qualitative research with women veterans across a variety of topics, including firearm access and storage [24•], suicide prevention in reproductive healthcare settings [9•], MST [50], and IPV [51, 52, 53]. Women veterans have described disclosure of suicidal thoughts as vulnerable and intimate, noting concerns about suicide-related stigma and the ramifications of forthright disclosure [9•]. Likewise, concerns about distrust, provider compassion, privacy, and stigma may deter women veteran MST survivors from disclosing MST-related experiences [50]. Similarly, shame, stigma, embarrassment, safety and privacy

concerns, and discomfort with or distrust in providers may deter women veterans from disclosing IPV [51].

A trauma-informed approach that includes understanding of and response to the ways that psychological trauma can manifest in mental health symptoms and healthcare engagement [54] should be considered. While it may appear self-evident, providers should ensure they are paying careful attention to establishing rapport and trust in clinical interactions, supporting individual self-determination, describing the specific limits of confidentiality (e.g., with respect to topics such as suicide, trauma, and firearms), and considering re-assessment of potentially sensitive topics. Indeed, providers working within acute, time-limited settings may struggle to balance healthcare delivery with development of a strong therapeutic alliance. In these settings, it is particularly critical to be aware of interpersonal dynamics and have transparent dialogues. For instance, emergency room providers can acknowledge dynamics, review understanding of therapeutic content and limits of confidentiality, and normalize elements of building trust and rapport. Transparency and education surrounding suicide risk assessment to support understanding the purpose and import of questions is an important element of a trauma-informed approach that can support client empowerment.

Women veterans face barriers to disclosure of trauma and suicidality, including shame, stigma, trauma response, and concerns about adverse consequences, such as unnecessary involvement of child protective services. Thus, clients may be unlikely to disclose in clinical contexts in which they do not feel safe or trusting. Patients may be more likely to disclose and seek help when they have an established and trusting relationship with a provider, which may be more common, for example, in reproductive healthcare settings [9]. Patient-centered medical home models, such as the VHA Patient Aligned Care Teams (PACTs) approach, also may have potential for developing trusting relationships between women veterans and providers outside of traditional mental health settings. However, there are recognized challenges related to providing gender-sensitive care to women veterans via the PACT model; future research regarding women veterans' experiences with and preferences for suicide risk assessment and prevention in these settings is warranted [55, 56]. On the other hand, some women veterans feel more inhibited disclosing stigmatized issues, including suicidal ideation, within the context of an established relationship and thus may be more likely to disclose in a context that feels more anonymous or less personally connected, such as within a hotline context. It is important, then, that we do not limit opportunities to disclose and seek help to a particular clinical context and allow services to be flexible enough to respond to individual patient preferences and needs, rather than assume a one-size-fits-all approach.

Addressing upstream risk and protective factors

The White House strategy emphasizes addressing upstream factors which contribute to and protect against suicidal crises, placing emphasis on addressing social determinants of health (SDoH), such as financial and housing

concerns, and supporting connectedness [14••]. Next, we review what is known with respect to mental and physical health, traumatic experiences, and SDoH in relation to suicidal thoughts and behaviors among women veterans.

Mental health

Notable gender differences have been found in the relationship of mental health conditions to suicide risk among veterans [57]. Among women veterans in VHA care, suicide risk associated with having any mental health disorder exceeded that found among veteran men [57]. Additionally, the specific mental health disorders associated with the highest suicide risk differed by gender: bipolar disorder was associated with the highest suicide risk among men and substance use disorders (SUDs) were associated with the highest risk of suicide among women [57]. Other studies have also found SUDs, including opioid, cocaine, and alcohol use disorders, to be more strongly associated with suicide among women veterans, relative to veteran men, although these associations are attenuated when accounting for comorbid psychiatric diagnoses [58].

Thus, continued efforts to engage women veterans in effective mental health care, inclusive of services to address substance use disorders, are critical. Screening and assessment of mental health symptoms and substance use, regardless of service delivery setting (e.g., primary care, homeless services), are important to connect women veterans to care. Further, given known barriers to disclosure, even when screened, information about appropriate resources (e.g., mental health services, suicide prevention hotlines) need not be dependent on disclosure. Once connected, identification of treatment targets (e.g., distressing symptoms; or factors intersecting with treatment engagement, such as emotion dysregulation) and connection to effective treatment is important. Given the frequency of mental and physical health comorbidities among women veterans [59], healthcare providers—regardless of mental health background—may serve as critical intercepts for identifying and referring women veterans experiencing mental health concerns to appropriate services. While we do not suggest that providers operate outside of their scope, we implore providers, especially within systems of care, to establish interdisciplinary relationships and to communicate to ensure continuity of care and an appropriate conceptualization of the mental health needs of their women veteran patients.

Physical health

Research is limited with regard to understanding the intersection between physical health and suicide risk among women veterans, although physical and mental health comorbidities in this population are notable [59]. One emerging area of interest is the intersection between reproductive health and mental health among women veterans [60]. Nearly half (46%) of women veterans with a reproductive health diagnosis using VHA services are diagnosed with mental

health conditions [61]. Sexual dysfunction has also been associated with suicidal ideation among women veterans and service members [62]. Women's healthcare settings, including obstetrics and gynecology, are broadly recognized as critical opportunities to enhance integration of mental and physical healthcare [63]. Thus, women's health settings are promising settings for integrating gender-sensitive, trauma-informed suicide risk assessment and prevention.

Traumatic experiences

As noted previously, women veterans experience high rates of trauma throughout the lifespan [15, 16, 17]. Such experiences can heighten risk for suicide and deter engaging in potentially life-saving disclosure and healthcare services to prevent suicide. Sexual violence—including childhood sexual abuse [64, 65, 66] and MST [67••]—has been associated with suicidal self-directed violence among women veterans. Women veterans who screen positive for MST are also more likely than those screening negative to die by suicide [68]. Whereas some studies have found military sexual harassment (a specific type of MST) to be associated with suicidal ideation [69], military sexual assault is associated with particularly heightened risk for suicidal ideation [70]. Consequently, assessment of sexual violence across the lifespan, including but not limited to MST, is germane to suicide risk assessment and management with women veterans. Especially in the case of MST, experiences of institutional betrayal, distrust, and hopelessness may be salient and contribute to suicidal ideation [67••, 71•]. More information on suicide risk assessment and intervention with MST survivors is available elsewhere [71•].

Research on non-sexual violence and abuse, including physical and psychological violence, is also important to consider. Such abuse is also highly prevalent among women veterans and contributes to risk for suicidal thoughts and attempts in this population. Childhood physical abuse has been associated with suicidal ideation and suicide attempts among women veterans [64, 65]. Physical violence occurring prior to and during military service is associated with subsequent suicidal ideation [66]. In addition, IPV, which can include sexual, physical, or emotional abuse, is associated with suicidal ideation among veterans [72].

Survivors of physical violence may experience altered perceptions of trust and safety. While these may serve the function of preventing subsequent traumatization (e.g., the belief that “all men are bad” may reduce exposure to future violence), this view may impact psychosocial functioning. Due to heightened concerns around betrayals of safety and trust, a trauma-informed approach centralizes the critical importance of building trust and safety within the clinical setting.

Social determinants

Finally, social factors that contribute to health, often referred to as SDoH, are important to consider and integrate into clinical conceptualizations. While research is limited in regard to associations between SDoH and suicide for

women veterans, the knowledge base is growing. For example, women veterans who experience criminal justice involvement are three times more likely to report a lifetime history of suicide attempt compared to those without a history of criminal justice involvement [73]. Moreover, women veterans who experience both justice involvement and homelessness are significantly more likely to report a history of lifetime suicide attempt [74]. Although the aforementioned studies focused on lifetime justice involvement and homelessness, recent concerns about finances and housing are uniquely associated with suicidal ideation among women veterans [75]. Thus, prevention of homelessness and connection to housing services may be critical to preventing suicide among women veterans. Further, housing instability is closely linked to trauma among women veterans [76, 77, 78, 79, 80]. This emphasizes the import of trauma-informed approaches when working with women veterans experiencing housing instability or justice involvement. Of note, the COVID-19 pandemic may exacerbate SDoH for women veterans and limit connectedness; this may potentially increase suicide risk disproportionately for women veterans over time [81]. Future research is warranted to examine gender differences in associations between SDoH and suicide among veterans, as well as optimal ways to address such factors among women veterans.

Increasing research coordination, data sharing, and evaluation

The final White House strategy priority recognizes the need and import of improving interagency research collaboration and data sharing and linkages to improve suicide prevention [14•]. While less directly related to guiding clinical recommendations, we have highlighted numerous areas in which additional research is needed, for example, improving suicide risk assessment, identifying risk and protective factors, determining appropriate and preferred settings to implement gender-sensitive upstream suicide prevention. All such efforts would benefit from increased coordination and data sharing efforts.

Also critical for supporting this priority with respect to women veterans is the need for studies to be thoughtfully designed to assess gender and gender differences. Shortcomings of prior research have included inconsistent or unclear assessment of gender and sex, as well as insufficient samples sizes of women to detect gender differences. Furthermore, when possible, gender identity should be assessed in a comprehensive non-binary manner (e.g., inclusive of transgender and other gender minorities). While we have focused herein on clinical needs and recommendations for women veterans specifically, a comprehensive gender-sensitive approach to veteran suicide prevention will require expanding knowledge of risk and effective prevention strategies for gender minority veterans as well.

Finally, the majority of women veterans are not enrolled in VHA care [1]; yet these women have experienced concerning increases in suicide rates in recent years (from 2005 to 2018, 81.3% vs. 1.3% for women veterans

using VHA care) [82]. Initiatives focused on synthesizing data across health-care systems and community-level sources are critical to inform clinical guidelines, as are observational studies designed to assess suicide risk in the general population of women veterans. Assessing Social and Community Environments with National Data (ASCEND) for Veteran Suicide Prevention is a large-scale, observational study underway to address this need [83]. ASCEND oversamples women veterans and assesses suicide risk and drivers in the full veteran population, inclusive of those not using VHA services. ASCEND aims to link veteran survey data with population-level data to better understand community and societal risk and protective factors. In sum, by continuing and expanding research coordination, data sharing, and evaluation efforts, we can better understand clinical presentations, suicide risk, and interventions among this understudied subset of veterans.

Conclusion

Women veterans experience factors throughout their lifespan that can heighten risk for suicidal thoughts and behaviors and that may be distinct from those of men veterans. Interdisciplinary efforts across health and social service settings are warranted for comprehensive suicide prevention that is gender-sensitive, trauma-informed, and responsive to the unique experiences, contexts, and perspectives of women veterans. To fully inform such efforts, continued research is necessary. Research focused on community-based settings will be essential for understanding the suicide prevention practices and needs of healthcare providers who work with women veterans outside of VHA. Additionally, gender-stratified research will be critical for determining gender differences in the prevalence and correlates of suicidal thoughts and behaviors, as well as in the effectiveness of interventions to address these.

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Author Contribution

Drs. Monteith and Hoffmire conceptualized this manuscript. All authors, including Drs. Monteith, Holliday, Dichter, and Hoffmire, contributed to manuscript writing and editing. All authors read and approved the final manuscript.

Declarations

Conflict of Interest

Lindsey L. Monteith declares that she has no conflict of interest. Ryan Holliday declares that he has no conflict of interest. Melissa E. Dichter declares that she has no conflict of interest. Claire A. Hoffmire declares that she has no conflict of interest.

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