Military Sexual Trauma and Sexual Revictimization

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ABSTRACT

Military sexual trauma (MST), defined as experiencing sexual harassment or assault during military service, is associated with a host of deleterious outcomes, including sexual dysfunction. Less is known about how MST may relate to risk for future victimization. This systematic review identified 10 studies that examined the association between MST and revictimization. Studies generally indicated that the more frequent or severe MST was, the more strongly it was associated with risk for future victimization. Most of these studies did not statistically evaluate the role of gender in the relation between MST and sexual revictimization, suggesting an important avenue for future research. Clinicians working with survivors of MST, particularly those who have experienced military sexual assault, may need to address issues of sexual safety with these veterans. **[*Psychiatr Ann*. 2020;50(10):444-451.]**

Military sexual trauma (MST) refers to experiences of sexual harassment, unwanted sexual contact, attempted rape, or completed rape during active duty.[1] It is estimated that 16% of veterans will experience MST during their service.[2] This systematic review seeks to synthesize current findings regarding the relation between MST and sexual revictimization, and specifically, experiencing additional sexual assault post-service. Because research suggests that the impact of MST on other outcomes can differ based on MST characteristics (eg, sexual assault versus harassment),[3] the relationship between MST characteristics and sexual revictimization risk will be explored. Additionally, because male and female veterans may differ in their risk for sexual victimization, we will also describe findings regarding the impact of gender on the association between MST and sexual risk.

Civilian research has established that experiencing one incident of sexual victimization increases the likelihood that the victim will experience at least one other incident of sexual victimization during their lifetime.[4] Unfortunately, veterans may have particular difficulty establishing sexual safety, as they report higher rates of lifetime sexual assault compared to civilians.[5] Research among veteran and civilian populations suggest that posttraumatic stress disorder (PTSD) symptoms,[6] maladaptive cognitions,[7] threat perception,[8] and physiological reactivity[9] play a role in risk for sexual revictimization. Thus, as a population that suffers from high rates of severe PTSD,[10] survivors of MST may be particularly vulnerable to sexual revictimization.

MST characteristics are one factor that may affect the association between MST and sexual risk. MST can differ based on whether it is characterized exclusively by military sexual harassment (MSH), military sexual assault (MSA), or some combination thereof. Single-incident MSA can vary in the degree of violence or number of perpetrators involved. In other cases, veterans experience repeated MSA by other service members who outrank them, or repeated MSA from an intimate partner while they are serving. Research on the effect of sexual victimization on mental health among veterans and civilians suggests that the more severe[11] and frequent[12] sexual victimization is, the greater the effect it will have on the survivor.

Gender is another factor that may influence the association between MST and sexual risk. Because female veterans experience MST at much higher rates (38%) than male veterans (4%),[2] a higher percent-

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age of female veterans may be at risk for revictimization. However, it is not known if, among MST survivors, gender affects revictimization. A recent meta-analysis that examined sexual revictimization among survivors of childhood sexual abuse found no impact of gender on revictimization rates.[4] Additionally, research among male survivors of MST suggests that proving one's masculinity and sexuality is a chief concern for male survivors of MST.[13] Thus, although women generally bear the burden of greater exposure to sexual violence, it is possible that changes in male veterans' behavior after MST may increase their risk for violence.

Table 1.

Full Search Strategy for Articles on the Association Between Military Sexual Trauma and Sexual Risk

Database	Search terms
PubMed	((("military sexual trauma"[tiab] OR "military sexual assault"[tiab]) OR (("Military Personnel"[Mesh] OR military[tiab] OR "Veterans"[Mesh] OR veterans[tiab] OR Army[tiab] OR Navy[tiab] OR Marines[tiab] OR "Air Force" [tiab] OR "Coast Guard" [tiab] OR "National Guard" [tiab]) AND (("sexual abuse" [tiab] OR "Sexual Harassment"[Mesh] OR "sexual harassment" [tiab] OR "sexual trauma" [tiab] OR "sexual assault" [tiab] OR rape[tiab])))) AND ("Risk"[Mesh] OR risk[tiab] OR risks[tiab] OR future[tiab] OR likel*[tiab] OR odds[tiab] or predict*[tiab])) AND (revictimization[tiab] OR re-victimization[tiab] OR "re victimization"[tiab] OR repeat*[tiab] OR sequelae[tiab] OR subsequent[tiab]).
Scopus	(((TITLE-ABS ({military sexual trauma} OR {military sexual assault})))) OR ((TITLE-ABS (military OR veterans OR army OR navy OR marines OR {Air Force} OR {Coast Guard} OR {National Guard})) AND (TITLE-ABS ({sexual abuse} OR {sexual harassment} OR {sexual trauma} OR {sexual assault} OR rape)))) AND ((TITLE-ABS (risk OR risks OR future OR likel* OR odds OR predict*))) AND ((TITLE-ABS (revictimization OR re-victimization OR {re victimization} OR repeat* OR sequelae OR subsequent)))
CINAHL PsycINFO Cochrane Central Register of Controlled Trials	(((TITLE-ABS ({military sexual trauma} OR {military sexual assault})))) OR ((TITLE-ABS (military OR veterans OR army OR navy OR marines OR {Air Force} OR {Coast Guard} OR {National Guard})) AND (TITLE-ABS ({sexual abuse} OR {sexual harassment} OR {sexual trauma} OR {sexual assault} OR rape)))) AND ((TITLE-ABS (risk OR risks OR future OR likel* OR odds OR predict*))) AND ((TITLE-ABS (revictimization OR re-victimization OR {re victimization} OR repeat* OR sequelae OR subsequent)))
Google Scholar	(("military sexual trauma" OR "military sexual assault") OR ((military OR veteran) AND ("sexual abuse" OR "sexual trauma" OR "sexual assault" OR rape))) AND (risk AND (revictimization HIV OR AIDS OR OR "sexual abuse" OR sexually))

METHOD

Search Strategy

In this systematic review of the literature, controlled vocabulary (ie, medical subject heading terms) were used, and keywords were searched in the title or abstract fields. Databases searched include PubMed, Scopus, CINAHL, Cochrane Central Register of Controlled Trials, PsycINFO, and Google Scholar. No limitations were put on the search in terms of language, geography, or date of publication. Search terms are summarized in **Table 1**. This search yielded 280 citations that were imported into proprietary software that manages systematic reviews. Three additional studies that contained relevant variables were identified from a broader search previously conducted on MST, revictimization, and sexual health outcomes. In total, after 134 duplicates were removed, 149 citations were reviewed.

Inclusion Criteria

Inclusion criteria required studies to be conducted in a sample of veterans who were age 18 years or older. Studies were required to have measured MST and sexual revictimization, defined as re-experiencing sexual assault, sexual harassment, or sexual intimate partner violence (IPV). Studies were limited to peer-reviewed articles that were written in English. Studies were excluded if they did not contain any original data collection.

Study Selection

During the abstract review stage, groups of two authors evaluated each abstract on study criteria. In cases where there was a discrepancy between authors as to whether or not a study met inclusion criteria, the abstract was discussed among the study staff (V.T., J.M.B., R.B., K.P.) to achieve consensus. The same process was used to evaluate articles that were selected for full text review. **Figure 1** shows a PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) diagram that describes inclusion decisions for all articles identified in the search.

Data Extraction

A data extraction tool was created by the authors to assess sample characteristics, research methods, results, and quality. The extraction tool is described in detail in **Table 2**. The first four authors acted as coders and attended meetings to discuss the

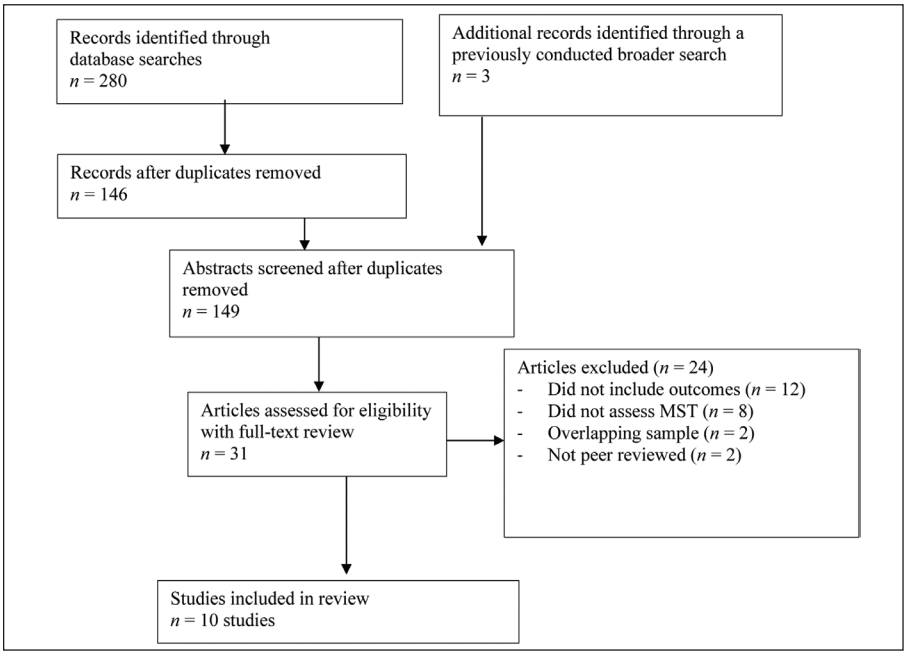

Figure 1. PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) flow chart used to evaluate articles that were selected for full-text review.

interpretation of each item to certify these items were being coded consistently. Coders were then split up into two pairs, with each pair reviewing the same articles and discussing discrepancies.

RESULTS

Study Characteristics

The sample characteristics and findings of included studies are described in **Table 3**. Most studies consisted of exclusively female samples (n = 7), were based on cross-sectional design (n = 8), and used self-report data collection (n = 6). Among studies that reported service-related characteristics, most participants served after the September 11, 2001 terrorist attacks (n = 3; 73%), and fewer were deployed and/or had combat exposure (n = 3; 38%). Most studies did not report sexual orientation of participants, but among those that did, participants were predominately heterosexual (n = 3; 84%). On average, studies were the strongest in terms of accounting for confounding bias (mean = 1.33; possible range 0-2) but were weaker in terms of validity (1.20; possible range 0-2). In many cases, validity ratings were affected by the use of a single item from a trauma checklist or incomplete information available regarding the measure used to assess sexual victimization. Most studies (n = 7) were rated as adequate in terms of their handling and description of missing data. No studies received minimal ratings on all three quality measures. Thus, all studies were deemed to be of adequate quality to be retained for review.

Sexual Revictimization

Studies generally fell into two main categories: (1) those that examined risk for any post-military sexual victimization, and (2) those that examined sexual victimization that occurred specifically in the context of a romantic relationship (ie, sexual IPV). Because studies of sexual IPV tended to focus on a restricted time period (eg, past 6 months), these results are summarized separately from general sexual revictimization.

Six studies examined general sexual victimization post-military service. The first examined the revictimization risk associated with MST (broadly defined). Booth et al.[14] reported a correlation of .13 (P < .001) between MST and experiencing rape after military service. The remaining five studies examined the revictimization risk associated specifically with having experienced MSA. Himmelfarb et al.[15] observed that compared to women without a history of MSA, women who had experienced MSA had a greater risk of post-military service sexual assault: χ^2 (N = 196) = 3.9; P < .05; odds ratio (OR) = 1.99; 95% confidence interval (CI), 1.01 to 3.95. In a logistic regression that controlled for age, length of time since military service, and service era, Creech and Orchowski[12] observed that women who experienced MSA were at risk for post-military forced sex (beta = 3.55; standard error = 1.11; P < .01, OR = 34.69, 95% CI, 3.91 to 84.92). Luterek et al.[16] found that among women survivors of MSA, 28.8% reported sexual assault after their service, and 47% reported post-service sexual harassment. This is compared to 10.5% and 26.3% among the no-MSA group. (Notably, 55.3% of this group did experience sexual harassment in the military). The statistical significance of differences between the MSA and no-MSA groups was not evaluated. Prevalence of post-service trauma was not reported for men due to low rates of MSA among men. Using pairwise comparisons, Sadler et al.[17] found that women who experienced multiple MSAs during their time in the military were more likely than women who experienced no MSA (P < .001) to be raped after completion of their military service, and their risk was also greater than those who had experienced a single MSA (P = .023). Women who experienced a single MSA during their service in the military were not more likely than those without a history of MSA to be raped after the military (P = .403). Women who were gang raped during their time in the military had a greater risk of post-military service rape compared to women who had no MSA (P = .005) or one MSA (P = .042) during their military service but did not differ from those who had been raped multiple times while in the military

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(P = .302). Schry et al.[18] used separate logistic regressions for men and women to examine revictimization risk. Among women, in a model that included race, time since active duty, and history of pre-military sexual assault, MSA trended toward risk for post-military sexual assault (OR = 2.81; Wald statistic = 3.12; 95% CI, 0.89 to 8.81]; P < .10). Similar results were observed among men (OR = 5.31; Wald statistic = 3.87; 95% CI, 1.01 to 28.08; P < .05). The authors discussed lacking power to observe a statistically significant effect for women.

Four studies examined the association between MST and sexual IPV. The first two studies described below focused on MST, broadly defined, whereas the remainder examined specific types of MST in more detail. Dichter et al.[19] found that among the 96 women who reported sexual IPV in the past year, 54.3% had a history of MST and 55.7% did not. This difference was not examined statistically. In the Iverson et al.[20] sample of women with a history of IPV-related traumatic brain injury the correlation between MST and sexual IPV in the past year was .28 (P > .05). Notably, due to the small sample size for this study, the authors may have lacked power for statistical significance in spite of a sizable correlation. Portnoy et al.[6] used a path model that simultaneously analyzed the direct and indirect effects (through PTSD) of MSH and MSA on three different IPV outcomes (severe psychological, physical, and sexual IPV in the past 6 months). MSA had a significant indirect effect on sexual IPV (χ = .10; P < .05). There were no direct or indirect effects of MSH on sexual IPV. Relyea et al.[21] found that, compared to women without MST, women with prior MST had higher odds of experiencing sexual IPV (OR = 3.20; 95% CI, 1.18 to 8.66). Among women, MSH was not associated with sexual IPV but MSA was, after controlling for age and child sexual abuse/adolescent assault (OR = 3.08; 95% CI, 1.30 to 7.54). Among men, general MST, MSH, and MSA were unrelated to sexual IPV.

Table 2.

Data Extraction for Included Articles

Variable type	Variable	Coding scheme
Sample characteristics	Sample size	*n*
	Age	*M*
	Gender	% female
	Race	% white
	Sexual orientation	% heterosexual
	Service era	% who served after September 11th, 2001
	Combat exposure	% who endorsed combat exposure or deployment
Method	Recruitment site	VA hospital, DOD, web-based, community, or other
	Design	Cross-sectional or prospective
	Inclusion criteria	Free text entry
	Data collection	Self-report, chart review, or interview
	MST measure	Free text entry
	Revictimization measure	Free text entry
Results	MST and revictimization	Free text entry
	MST characterisics	Free text entry
	Gender effects	Free text entry
Quality	Confounding bias	Sample selection and analyses were reviewed for matching, stratification, interaction terms, multivariate analyses, and other statistical adjustments; 0 = none of these methods were used; 1 = confounding variables were assessed but not used in the analyses; 2 = confounding variables were taken into account in the analyses[25]
	Validity bias	0 = reliable measures were not implemented consistently for MST and revictimization; 1 = MST and/or the revictimization were assessed consistently but some measures were low quality; 2 = all measures of MST and revictimization were high quality and used consistently[26]
	Missing data	0 = did not report the degree of missing data or missing data was > 10%; 1 = data were complete or the amount of missing data was <10% (ROBINS-I)[26]

Abbreviations: DOD, Department of Defense, MST, military sexual trauma; ROBINS-I, Risk of Bias in Nonrandomized Studies of Interventions; VA, Veterans Affiars.

Most studies, whether they examined the association between MST and risk for general post-service assault or sexual IPV, featured exclusively samples from women. The three studies that included men in their sample did not statistically evaluate potential differences between men and women in the association between MST and sexual revictimization.

Table 3.

Studies that Examined Military Sexual Trauma and Revictimization (*N* = 10)

Study	Participants, *N*	Mean age, *y*[a]	% F[a]	% W[a]	Site	Inclusion criteria	MST measure	Revictimization measure	Findings
Booth et al.[14]	1,004	38	100	80	VA	VA health care users younger than age 52 years	Author-developed items based on AMA and ACOG	Author-developed items based on definition from AMA and ACOG	Positive correlation between MST and post-military SA
Creech and Orchowski[12]	101	46	100	73	VA	VA health care users	Author-developed survey (including item adapted from McIntyre et al.[27])	Author-developed survey (including item adapted from McIntyre et al.[27])	MSA positively correlated with post-military SA
Dichter et al.[19b]	8,888	45	100	53	VA	IPV screen between 2014 and 2016	VA MST Screen[27]	E-HITS[28]	Among women with past year sexual IPV, 54% had history of MST and 55.7% did not
Himmelfarb et al.[15]	196	48	100	40	VA	MST that involved a Criterion A experience	Amended SLEQ[29]	Amended SLEQ[29]	MSA significantly correlated with post-military SA
Iverson et al.[20]	33	49	100	52	Knowledge panel	Veterans who completed surveys at T1 and T2 endorsing IPV-related TBI	VA MST Screen[27]	CTS-2[30]	Moderate correlation between MST and past year sexual IPV, not statistically significant
Luterek et al.[16]	208	49	50	75	VA	VA health care users not in substance use treatment or with psychosis	TLEQ[31]	TLEQ[31]	Among MST survivors 29% reported post-military SA, 47% experienced post-military sexual harassment
Portnoy et al.[6]	187	54	100	73	Other	Veterans	VA MST Screen[27]	CTS-2[30]	MSA had a positive indirect effect on sexual IPV through T2 PTSD; there were no direct or indirect effects of MSH on sexual IPV

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Table 3. (continued)

Studies that Examined Military Sexual Trauma and Revictimization (*N* = 10)

Study	Participants, *N*	Mean age, *y*	% F[a]	% W[a]	Site	Inclusion criteria	MST measure	Revictimization measure	Findings
Relyea et al.[21]	1,094	44	52	84	DoD dataset	OEF, OIF, OND VA health care users	VA MST Screen[27]	E-HITS[28]	Women with MST had higher odds of sexual IPV. MSH was not associated with sexual IPV, but MSA predicted recent sexual IPV. For men, MST, MSH, and MSA were unrelated to sexual IPV
Sadler et al.[17]	540	42	100	74	VA	Vietnam, post-Vietnam, Persian Gulf War VA health care users	Interview using legal definition of rape from AMA and ACOG	Interview using legal definition of rape from AMA and ACOG	Women who experienced multiple incidents of MSA or one incident of MSA by multiple perpetrators were at greater risk for post-military SA compared to women with no MSA or a one-time SA by a single perpetrator
Schry et al.[18]	3,106	37	20	49	VA	"Post-9/11" veterans	TLEQ[31]	TLEQ[31] with follow up assault questions	MSA trended toward risk for post-military sexual SA

Abbreviations: ACOG, American College of Obstetricians & Gynecologists; AMA, American Medical Association; CSA, child sexual assault; DoD, Department of Defense; CTS-2, Conflict Tactics Scale; E-HITS, Extended, Hurt, Threaten, Scream; F, female; IPV, intimate partner violence; MSA, military sexual assault; MSH, military sexual harassment; MST, military sexual trauma; OEF, Operation Enduring Freedom; OIF, Operation Iraqi Freedom; OND, Operation New Dawn; PTSD, posttraumatic stress disorder; SA, sexual assault; SLEQ, Stressful Life Events Questionnaire; TBI, traumatic brain injury; TLEQ, Traumatic Life Events Questionnaire; T1, Time 1; T2, Time 2; VA, Veterans Affairs; W, White people.

[a]*Means and percentages are rounded to the nearest whole number. The methods for these studies included interview, self-report, and chart review. Although design of these studies was mostly cross-sectional, one study was prospective and the other longitudinal.*

[b]*This sample included a small number of non-veteran VA users. The number of veterans in the sample was 8,247.*

DISCUSSION

This review identified 10 studies that examined the association between MST and sexual revictimization based on our search criteria. Studies that focused on the association between MST and risk for general post-military sexual assault suggest a positive association between a history of MST and sexual revictimization. However, the study by Sadler et al.[17] suggests that the association between MST and re-victimization may be stronger as severity and frequency of MSA increases. Findings also generally indicated a positive association between a history of MST and recent sexual IPV. Two studies suggested that although MSA and re-victimization risk are positively related, such a relationship does not exist for MSH.[6,21] Across studies that focused on general sexual revictimization and sexual IPV, most samples were exclusively female, precluding the examination of gender effects. Further, the two studies that examined the association between MST and sexual revictimization by gender ran separate analyses among men and women without statistically evaluating the significance of gender as a moderator.

The findings of this review suggest several clinical implications. Foremost, they support recommendations that clinicians should assess characteristics of patients' assault history,[3] because patients with the most severe sexual victimization histories may have the greatest need for sexual violence prevention interventions. Notably, self-defense treatment has been shown to decrease MST survivors's symptoms and increase their self-defense self-efficacy, although the impact on revictimization has not been evaluated. Additionally, although the literature supports screening female veterans in general for IPV,[22] more comprehensive or frequent screening may be appropriate for survivors of MST specifically due to their elevated risk.

The results of this review also suggest several avenues for future research. Further studies that include male as well as female participants are needed, and these studies should examine gender as a moderator of risk for sexual revictimization. Additional longitudinal research is also needed to better understand survivors' risk for revictimization over time. For example, although Sadler et al.[17] examined MSA during military service as a risk factor for assault post-service, the fact is that all the women in the multiple MSA group already experienced sexual revictimization after an initial MSA before leaving the service. It is possible that MST survivors' risk differs during their service, where they could be struggling to deal with the effects of the initial assault in isolation and could be targeted for retaliation, compared to after their service ends. Meanwhile, for some, the MST itself could be perpetrated by a person with whom the veteran is in an ongoing relationship post-service. Better understanding the trajectories of revictimization risk associated with MST could help shape assault prevention interventions.

STUDY LIMITATIONS

Limitations of the present review should be noted. Among the included studies, the MST screen was the most commonly used measure to assess experiences of assault or harassment in the military. Research suggests that this measure may lack sensitivity, particularly in identifying MST history for men.[23] This methodology may explain, in part, why some studies on the impact of MST exclude men entirely or lack power to examine MST-related consequences among male veterans. Additionally, few studies assessed sexual orientation and none assessed nonbinary gender identity. This represents a failure to account for a significant control variable within the literature, as sexual and gender minority persons experience particularly high rates of interpersonal violence.[24]

CONCLUSION

The results of this systematic review suggested that MST survivors are at increased risk for sexual revictimization. Risk for revictimization seems to vary based on whether veterans experienced assault or harassment. More research is also needed on the impact of gender on both aspects of sexual risk. Based on these findings, clinicians may want to incorporate interventions that reduce risk for violence.

REFERENCES

1. Mahoney CT, Shayani DR, Iverson KM. Differential indirect effects of military sexual trauma on posttraumatic stress disorder symptom clusters via past-year intimate partner violence [published online ahead of print February 27, 2020]. *Traumatology*. https://doi.org/10.1037/trm0000242
2. Wilson, LC. The prevalence of military sexual trauma: a meta-analysis. *Trauma Violence Abuse*. 2018;19(5):584-597. https://doi.org/10.1177/1524838016683459 PMID:30415636
3. Blais RK, Brignone E, Fargo JD, Livingston WS, Andresen FJ. The importance of distinguishing between harassment-only and assault military sexual trauma during screening. *Mil Psychol*. 2019;31(3):227-232. https://doi.org/10.1080/08995605.2019.1598218
4. Walker HE, Freud JS, Ellis RA, Fraine SM, Wilson LC. The prevalence of sexual revictimization: a meta-analytic review. *Trauma Violence Abuse*. 2019;20(1):67-80. https://doi.org/10.1177/1524838017692364 PMID:29333937
5. Williams RC, Holliday R, Holder N, Suris A. Childhood sexual assault, quality of life, and psychiatric comorbidity in veterans with military and civilian sexual trauma. *Mil Psychol*. 2017;29(4):307-315. https://doi.org/10.1037/mil0000166
6. Portnoy GA, Relyea MR, Street AE, Haskell SG, Iverson KM. A longitudinal analysis of women veterans' partner violence perpetration: the roles of interpersonal trauma and posttraumatic stress symptoms. *J Fam Violence*. 2020;35:361-372. https://doi.org/10.1007/s10896-019-00061-3

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7. Jaffe AE, DiLillo D, Gratz KL, Messman-More TL. Risk for revictimization following interpersonal and noninterpersonal trauma: larifying the role of posttraumatic stress symptoms. *J Trauma Stress.* 2019;32:42-55. https://doi.org/10.1002/jts.22372 PMID:30748027
8. Messman-Moore TL, Brown AL. Risk perception, rape, and sexual revictimization: a prospective study of college women. *Psychol Women Q*. 2006;30(2):159-172. https://doi.org/10.1111/j.1471-6402.2006.00279.x
9. Waldron JC, Wilson LC, Patriquin MA, Scarpa A. Sexual revictimization history, depression, and task physiology as predictors of sexual revictimization: results from a 6-month prospective pilot study. *J Interpers Violence*. 2015;30(4):622-639. https://doi.org/10.1177/0886260514535258 PMID:24923892
10. Jakob JM, Lamp K, Rauch SAM, Smith ER, Buchholz KR. The impact of trauma type or number of traumatic events on PTSD diagnosis and symptom severity in treatment seeking veterans. *J Nerv Ment Dis*. 2017;205(2):83-86. https://doi.org/10.1097/NMD.0000000000000581 PMID:28129258
11. Peter-Hagene LC, Ullman SE. Sexual assault-characteristics effects on PTSD and psychosocial mediators: a cluster-analysis approach to sexual assault types. *Psychol Trauma.* 2015;7(2):162-170. https://doi.org/10.1037/a0037304 PMID:25793692
12. Creech SK, Orchowski LM. Correlates of sexual revictimization among veterans presenting to primary care. *Traumatology*. 2016;22(3):165-173.
13. Monteith LL, Gerber HR, Brownstone LM, Soberay KA, Bahraini NH. The phenomenology of military sexual trauma among male veterans. *Psychol Men Masc.* 2019;20(1):115-127. https://doi.org/10.1037/men0000153
14. Booth BM, Davis TD, Cheney AM, Mengeling MA, Torner JC, Sadler AG. Physical health status of female veterans: contributions of sex partnership and in-military rape. *Psychosomatics*. 2012;74:916-924. https://doi.org/10.1097/PSY.0b013e31827078e2
15. Himmelfarb N, Yaeger D, Mintz J. Posttraumatic stress disorder in female veterans with military and civilian sexual trauma. *J Trauma Stress*. 2006;19:837-846. https://doi.org/10.1002/jts.20163
16. Luterek JA, Bittinger JN, Simpson TL. Posttraumatic sequelae associated with military sexual trauma in female veterans enrolled in VA outpatient mental health clinics. *J Trauma Dissociation.* 2011;12(3):261-274. https://doi.org/10.1080/15299732.2011.551504 PMID:21534095
17. Sadler AG, Booth BM, Mengeling MA, Doebbeling BN. Lifespan and repeated violence against women during military service: effects on health status and outpatient utlization. *J Womens Health (2002)*. 2004;13(7):799-811. https://doi.org/10.1089/jwh.2004.13.799 PMID:15385074
18. Schry AR, Beckham JC, Calhoun PS; VA Mid-Atlantic MIRECC Workgroup. Sexual revictimization among Iraq and Afghanistan war era veterans. *Psychiatry Res*. 2016;240:406-411. https://doi.org/10.1016/j.psychres.2016.04.016 PMID:27149409
19. Dichter ME, Sorrentino A, Bellamy S, Medvedeva E, Roberts CB, Iverson KM. Disproportionate mental health burden associated with past-year intimate partner violence among women receiving care in the veterans health administration. *J Trauma Stress.* 2017;30(6):555-563. https://doi.org/ 10.1002/jts.22241 PMID:29193289
20. Iverson KM, Dardis CM, Grillo AR, Galovski TE, Pogoda TK. Associations between traumatic brain injury from intimate partner violence and future psychosocial health risks in women. *Compr Psychiatry.* 2019;92:13-21. https://doi.org/10.1016/j.comppsych.2019.05.001 PMID:31203176
21. Relyea GL, Mengeling MA, Booth BM, Torner JC, Syrop CH, Sadler AG. Voluntary and involuntary childlessness in female veterans: associations with sexual assault. *Fertil Steril*. 2014;102(2):539-547.
22. Brignone E, Sorrentino AE, Roberts CB, Dichter ME. Suicidal ideation and behaviors among women veterans with recent exposure to intimate partner violence. *Gen Hosp Psychiatry*. 2018;55:60-64. https://doi.org/10.1016/j.genhosppsych.2018.10.006 PMID:30412860
23. Bovin MJ, Black SK, Kleiman SE, et al. The impact of assessment modality and demographic characteristics on endorsement of military sexual trauma. *Womens Health Issues*. 2019;29(suppl 1):S67-S73. https://doi.org/10.1016/j.whi.2019.03.005
24. Chen J, Walters ML, Gilbert LK, Patel N. Sexual violence, stalking, and intimate partner violence by sexual orientation, United States. *Psychol Violence*. 2020;10(1):110-119. https://doi.org/10.1037/vio0000252 PMID:32064141
25. Sterne JAC, Hernán MA, McAleenan A, Reeves BC, Higgins JPT. Assessing risk of bias in a non-randomized study. In: Higgins JPT, Thomas J, Chandler J, et al., eds. *Cochrane Handbook for Systematic Reviews of Interventions version 6.1* (updated September 2020). Accessed September 20, 2020. https://training.cochrane.org/handbook/current/chapter-25
26. Sterne JAC, Hernán MA, Reeves BC, et al. ROBINS-I: a tool for assessing risk of bias in non-randomised studies of interventions. *BMJ.* 2016;355:i4919. https://doi.org/10.1136/bmj.i4919 PMID:27733354
27. McIntyre LM, Butterfield MI, Nanda K, et al. Validation of a trauma questionnaire in veteran women. *J Gen Intern Med*. 1999;14(3):186-189. https://doi.org/10.1046/j.1525-1497.1999.00311.x PMID:10203625
28. Chen PH, Rovi S, Vega M, Jacobs A, Johnson MS. Screening for domestic violence in a predominantly Hispanic clinical setting. *Fam Pract*. 2005;22(6):617-623. https://doi.org/10.1093/fampra/cmi075 PMID:16055473
29. Goodman LA, Corcoran C, Turner K, Yuan N, Green BL. Assessing traumatic event exposure: general issues and preliminary findings for the Stressful Life Events Screening Questionnaire. *J Trauma Stress.* 1998;11(3):521-542. https://doi.org/10.1023/A:1024456713321 PMID:9690191
30. Strauss MA, Hamby SL, Boney-McCoy S, Sugarman DB. The Revised Conflict Tactics Scales (CTS2): development and preliminary psychometric data. *J Fam Issues.* 1996;17(3):283-316. https://doi.org/10.1177/019251396017003001
31. Kubany ES, Haynes SN, Leisen MB, et al. Development and preliminary validation of a brief broad-spectrum measure of trauma exposure: the Traumatic Life Events Questionnaire. *Psychol Assess.* 2000;12(2):210-224. https://doi.org/10.1037/1040-3590.12.2.210 PMID:10887767

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