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Problems in Sexual Functioning among Male OEF/OIF Veterans Seeking Treatment for Posttraumatic Stress

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Abstract

Objective—Few studies have examined sexual dysfunction among Operations Enduring/Iraqi Freedom (OEF/OIF) veterans with posttraumatic stress disorder (PTSD). The present study investigated predictors of erectile dysfunction [ED] and self-reported sexual problems among 150 male combat veterans seeking outpatient treatment for PTSD within the Veterans Affairs healthcare system.

Method—Participants completed clinical interviews and several questionnaires including measures of sexual arousal and sexual desire. A medical records review was also conducted to document evidence of an ED diagnosis or associated medication use.

Results—An ED diagnosis was present for 12% of the sample, and 10% were taking associated medications. Sexual arousal problems were reported by sixty-two percent of partnered veterans. Sexual desire problems were endorsed by 63% of the total sample, and by 72% of partnered veterans. Age was the only significant predictor of ED diagnosis or medication use. Age, race, PTSD diagnosis (versus subclinical symptoms), depression, and social support predicted self-reported sexual arousal problems; while race, combat exposure, social support, and avoidance/numbing symptoms of PTSD predicted self-reported sexual desire problems.

Conclusions—Sexual problems are common among male OEF/OIF combat veterans seeking treatment for PTSD. Moreover, avoidance/numbing symptoms robustly predicted sexual desire problems. These findings highlight the importance of expanding assessment of sexual dysfunction and support the need for additional research in this area.

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Disclosures

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Keywords

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1. Introduction

Estimates place the risk of developing PTSD following deployments in Operations Enduring Freedom (OEF) and Iraqi Freedom (OIF) at about 20%.[1] Symptoms of PTSD include chronic re-experiencing of past traumas (e.g., nightmares, intrusive memories), avoidance of trauma reminders, emotional numbing, and hyperarousal (e.g., hypervigilance, exaggerated startle).[2] Both PTSD and subclinical symptoms of posttraumatic stress have been linked to reduced quality of life and impairment in various domains of functioning (e.g., employment, memory, physical functioning) across exposed populations, including OEF/OIF veterans.[3-7] Of particular relevance to the present investigation, PTSD symptomatology is consistently linked to deficits in interpersonal functioning.[8-12] This is critical as limited social support is associated with more severe PTSD symptoms,[13] increased suicidal ideation,[13,14] lower rates of improvement during treatment[15] and treatment dropout among OEF/OIF veterans.[16]

Intimate relationships serve as an important source of social support for many returning veterans. However, several problems with intimate relationship functioning have been linked to PTSD symptoms among OEF/OIF veterans including diminished relationship satisfaction,[10,17,18] increased marital discord,[11,19] and higher rates of intimate partner violence.[20] Despite this important emerging pattern, sexual problems within intimate relationships among OEF/OIF veterans have received little attention in the empirical literature. This is surprising given the high rates of sexual dysfunction including problems with desire, arousal, orgasm, and overall satisfaction identified among combat veterans with PTSD who served in prior conflicts (i.e., Vietnam, Gulf War).[21-24]

To our knowledge, there have only been a few studies investigating links between PTSD symptomatology and sexual functioning among male OEF/OIF veterans. Two studies involving large-scale descriptive medical record reviews within the Veterans Affairs (VA) healthcare system estimate the prevalence of any type of sexual dysfunction diagnosis to range between 5.5 and 7% for male OEF/OIF veterans.[25,26] Sexual dysfunction is more common among males (compared to females) and among veterans with a history of military sexual trauma (MST). [27] In this study, diagnoses of PTSD and depression among veterans with MST further increased the likelihood of having at least one sexual dysfunction diagnosis. Hosain and colleagues[25] demonstrated that sexual dysfunction is also more prevalent among older male OEF/OIF veterans (> 40 years: 15.7% vs. 18-40 years: 3.6%). Across age cohorts in this study, additional predictors of sexual dysfunction included PTSD, hypertension, or being separated/divorced/widowed. Among younger veterans, sexual dysfunction was further linked to depression, having a higher income, or being married. However, the interpretations of these findings were limited due to the methodology employed in these studies.

Three additional studies have examined self-reported sexual dysfunction among male OEF/OIF veterans.[27-29] One study found that the majority of veterans enrolled in a

residential PTSD treatment program endorsed sexual dysfunction symptoms, with the most common being decreased libido (73.6%), followed by erectile dysfunction (ED; 49.1%), and ejaculatory delay/anorgasmia (15.1%).[27] Importantly, these sexual problems predated initiation of psychotropic medications with known sexual side effects (e.g., selective serotonin reuptake inhibitors [SSRIs]. Another study involved a screening of over 300 active duty military personnel under the age of 40 who were recruited to complete a survey of sexual functioning via email and social media.[29] These findings suggested PTSD was associated with a nearly 30 times higher prevalence of ED and a 6 fold greater likelihood of endorsing other sexual dysfunctions. Finally, Nunnink and colleagues found that 30.5% of veterans participating in a physical and mental health screening upon enrollment in VA healthcare services reported experiencing sexual problems as defined by "diminished sexual desire/function" (18%), or "impotence or other sexual problems" (16%).[28] Self-reported PTSD symptom severity, specifically symptoms of emotional numbing, predicted a greater likelihood of endorsing sexual problems in this study. This is consistent with prior research demonstrating that avoidance/numbing symptoms are the strongest predictors of deficits in interpersonal and social functioning associated with posttraumatic stress among OEF/OIF veterans.[11,30] Emotional numbing may lead to impairment in interpersonal relationships by promoting withdrawal or by enhancing difficulties with emotional expression.[31,32]

Of note, although these latter three studies employed more sensitive assessment procedures than the first two studies presented above, participant samples (i.e., inpatient treatment setting, online recruitment, and screening in primary care setting) were widely divergent and findings may not generalize well to treatment-seeking veterans with PTSD symptoms in outpatient settings.

In sum, few studies have examined sexual functioning among male OEF/OIF veterans. Those that have suggest that sexual problems may be a prevalent concern, particularly among individuals with elevated PTSD symptoms. The present investigation addresses a number of gaps in this nascent literature by examining sexual functioning among OEF/OIF veterans participating in two PTSD treatment studies.[33,34] Moreover, the present study included both self-report (i.e., arousal, desire) and medically documented (i.e., ED diagnosis, ED medication use) indices of sexual problems. This is an important addition, as studies have yet to consider whether a portion of OEF/OIF veterans with PTSD experience significant sexual dysfunction that may be underdiagnosed, and potentially untreated. Finally, this study examined whether previously documented associations between PTSD symptoms and sexual problems remained significant after accounting for important demographic (i.e., ethnicity, age, education, employment, disability status) and clinical factors (i.e., PTSD diagnosis [vs. subclinical PTSD], major depressive disorder [MDD], perceived social support, combat exposure, and SSRI/serotonin and norepinephrine reuptake inhibitors [SNRI] use) that may be related to sexual functioning. In accordance with previous findings, we hypothesized that PTSD symptom severity, and in particular severity of avoidance/numbing symptoms, would be associated with ED (i.e., ED diagnosis, ED medication use), self-reported problems with sexual arousal in a current relationship and self-reported sexual desire problems (both in general and in the context of a current relationship).[25-28]

2. Materials and Methods

2.1. Participants

Participants included male OEF/OIF combat veterans (*N* = 150) recruited to participate in one of two clinical treatment studies following referral to a PTSD clinic within a large Southeastern VA medical center. Eligibility was determined by meeting diagnostic criteria for combat-related PTSD (*n* = 123) or sub-threshold PTSD (i.e., endorsement of Criteria A [traumatic event], Criteria B [re-experiencing], and either Criteria C [avoidance/numbing] or Criteria D [hyperarousal]; *n* = 27) on the Clinician-Administered PTSD Scale (CAPS).[35]

Participants with active psychosis, suicidality, or substance dependence (as assessed by the Structured Clinical Interview for Diagnostic and Statistical Manual of Mental Disorders [SCID-IV])[36] were excluded from the study. Participants had a mean age of 34.9 years (*SD* = 9.6), and were predominantly Caucasian (57.3%) or African American (37.3%), married (56.7%), employed (50.7%), and served in the Army (58.0%). Participants reported an average of 12.4 years of education (*SD* = 3.7), and 2.0 (*SD* = 1.8) deployments to OEF/OIF. A significant minority reported being disabled (39.3%), and nearly half had a comorbid diagnosis of major depressive disorder on the SCID-IV (48.7%)

2.2. Procedures

Full descriptions of the treatment protocols are published elsewhere.[33,34] All procedures were approved by the VAMC institutional review board and participants provided written informed consent prior to participating. Although these studies focused on examining relative efficacy of PTSD treatment delivered via in-person versus home telehealth sessions, all data presented here were obtained as part of in-person baseline assessments that were standardized across the two, concurrently running treatment studies (i.e., same assessors, identical measures). The assessment protocol included interview administrations of the CAPS and select modules from the SCID-IV. Participants also completed a number of self-report measures including a brief demographic questionnaire, the PTSD Checklist-Military Version (PCL-M), Beck Depression Inventory-Second Edition (BDI-II), Inventory of Psychosocial Functioning (IPF), Medical Outcomes Study (MOS) Social Support Survey, and Combat Exposure Scale (CES). Additionally, a review of Computerized Patient Record System electronic medical records was conducted to determine whether veterans in the sample 1) were taking any SSRI/SNRI medications, 2) were taking any medications for ED (e.g., sildenafil, tadalafil), or 3) had ED documented as an active problem in their medical problem list.

2.3. Measures

2.3.1. PTSD diagnosis and symptoms—Past-month PTSD diagnostic status was measured via the CAPS,[35] The CAPS is a semi-structured clinical interview that is considered the gold standard for PTSD assessment; it evidences excellent psychometric properties including strong convergent and discriminant validity, and adequate test-retest and interrater reliability.[37]

Total PTSD symptom severity, and severity within each Diagnostic and Statistical Manual for Mental Disorders (DSM-IV) symptom cluster (i.e., re-experiencing, avoidance/numbing, hyperarousal) was assessed via the PCL-M.[38] The PCL-M is a self-report measure that assesses past-month severity of distress associated with each of the 17 symptoms of *DSM-IV*[39] PTSD on a five-point scale (1 = *Not at all*, 5 = *Extremely*). This measure has good convergent and discriminant validity and demonstrates adequate test-retest reliability and internal consistency among veteran samples.[40]

2.3.2. Major depressive disorder (MDD)—Presence of comorbid past-month MDD diagnosis was assessed via the MDD module of the SCID-IV.[36] The SCID-IV demonstrates adequate to strong validity and reliability,[41] and is typically considered a gold-standard assessment of MDD.

2.3.3. Sexual Problems—Sexual problems were assessed via several indices. Two measures of ED were obtained via a review of VA electronic medical records at the time of study participation: 1) inclusion of ED within an active medical problem list, or 2) use of ED medication.

Subjective report of sexual desire problems among the entire sample was derived from an item on the BDI-II[42] designed to assess past two-week problems with sexual desire as a symptom of depression: “Loss of interest in sex” rated on a four-point scale (0 = I have not noticed any recent change in my interest in sex, 3 = *I have lost interest in sex completely*).

Problems with sexual desire and sexual arousal in the context of a current relationship were assessed among veterans reporting being in a romantic relationship with a spouse or partner during the past 30 days (n = 76) via two items from the romantic relationship scale of the IPF[43]: Desire—“I was interested in sexual activity with my spouse or partner” (reverse-scored), and Arousal—“I had trouble becoming sexually aroused with my spouse or partner”. Items were rated on a seven-point scale (1 = *Never*, 7 = *Always*).

2.3.4. Social support—Perceived social support was indexed by averaging scores across the 19-items of the MOS Social Support Survey[44] The MOS Social Support Survey is a questionnaire that assesses five dimensions of social support including emotional (e.g., empathetic understanding), informational (e.g., offering of advice or guidance), tangible (e.g., material aid), and affectionate support (e.g., availability of expressions of love and affection), as well as positive social interactions (e.g., availability of shared positive experiences). Items are rated on a six-point scale (1 = *All of the time, 6 = None of the time*). This measure evidences good convergent and discriminant validity, as well as adequate to strong internal consistency and test-retest reliability.[44]

2.3.5. Combat exposure—Combat exposure was assessed using the 7-item CES[45]. The CES, which evidences adequate internal consistency and test-retest reliability, assesses both duration and intensity of combat exposure.

2.4. Data Analytic Plan

Bivariate and point biserial correlations were first examined among measures of sexual problems and PTSD symptom severity. Independent samples *t*-tests and chi square tests of independence (or Fisher's exact test for cell sizes of less than five) were then used to examine differences in prevalence of sexual problems based on demographic and sample characteristics (i.e., race/ethnicity, marital status, disability status, SSRI/SNRI use, PTSD or MDD diagnostic status, age, years of education, combat exposure, perceived social support).

As age was the only demographic or clinical factor associated with prevalence of ED (i.e., ED-problem list, ED-medication use) in descriptive analyses, this was included as a covariate in step 1 of subsequent corresponding hierarchical logistic regression models. Age, nonwhite race, PTSD diagnosis (cf. subclinical PTSD), MDD diagnosis, and social support were included as covariates in step 1 of a linear regression predicting BDI-II-Desire based on descriptive analyses, while nonwhite race, severity of combat exposure, and social support were included as covariates in step 1 of linear regression models predicting self-reported sexual problems among veterans in a current relationship (i.e., IPF-Desire, IPF-Arousal). Step 2 of all models included either 1) PCL-M total scores or 2) PCL-M re-experiencing, PCL-M avoidance/numbing, and PCL-M hyperarousal scores. Missing data were handled via listwise deletion.

3. Results

3.1. Descriptive statistics

As presented in Table 1, measures of ED and sexual arousal problems in a current relationship were intercorrelated (i.e., ED-problem list, ED-medication use, IPF-Arousal), as were measures of sexual desire (i.e., BDI-II-Desire, IPF-Desire). In addition, IPF-Arousal was significantly associated with BDI-II-Desire. Avoidance/numbing symptoms on the PCL-M correlated with all self-report indices of sexual problems. Re-experiencing, hyperarousal, and total severity scores were positively associated with BDI-II-Desire only. Correlations between all PTSD symptom dimensions and either ED-problem list or ED-medication use were non-significant.

Of the total sample (Table 2), 12% had ED in their problem list and 10% were using ED medications. Self-reported sexual problems were much higher, with 63% of veterans reporting at least some sexual desire problems on the BDI-II (*much less* or *complete* loss of interest in sex: 29%). Among those in a relationship with a spouse or partner (Table 3), any problems with sexual desire rose to 72% (interest in sex with partner only *sometimes* to *never:* 32%), while problems with sexual arousal were reported by 62% (problems becoming sexually aroused with partner *sometimes* to *always:* 30%). Older veterans were more likely to have ED on their problem list, be taking ED medications, and report problems with desire on the BDI-II (Table 2). Nonwhite veterans were more likely to report problems with desire on the BDI-II (Table 2), but were less likely to report sexual desire or arousal problems on the IPF (Table 3). Lower perceived social support was associated with increased sexual problems for all self-report indices (Tables 2-3). A PTSD or MDD

diagnosis was associated only with desire problems on the BDIII (Table 2), while higher combat exposure predicted both desire and arousal problems on the IPF (Table 3).

3.2. Primary analyses

After accounting for covariates, PTSD symptom severity was unrelated to either index of ED (ED-problem list, ED-medication; Table 4) or to self-reported arousal problems for veterans in a current relationship (IPF-arousal; Table 5). In contrast, total PTSD symptom severity was positively associated with severity of sexual desire problems on the BDI-II after accounting for age, race/ethnicity, PTSD or MDD diagnoses, and perceived social support (Table 5). Consistent with hypotheses, this relation appeared to be driven primarily by avoidance/numbing symptoms. When controlling for the effects of race/ethnicity, combat exposure, and perceived social support, avoidance/numbing symptoms similarly positively related to severity of sexual desire problems on the IPF (although total PTSD symptom severity was not significant).

4. Discussion

The present study expanded our limited knowledge regarding sexual functioning in OEF/OIF veterans by describing the prevalence of ED and self-reported sexual arousal and desire problems in a sample of male OEF/OIF combat veterans seeking outpatient treatment for symptoms of PTSD. This study further explored associations between PTSD symptomatology and both the presence and severity of sexual problems. The majority of veterans reported at least some problems with both sexual arousal and sexual desire. Although less common, a substantial minority also had documented problems with ED in their medical record. Despite the frequency of ED in this sample, severity of PTSD symptoms was not predictive of ED in the problem list or ED medication use. Indeed, age was the only significant predictor of ED diagnosis or ED medication use. Although avoidance/numbing symptoms were correlated with the severity of self-reported sexual arousal problems among partnered veterans, this association did not remain significant after accounting for relevant covariates. In contrast, the most robust predictors of self-reported sexual desire problems were avoidance/numbing symptoms and lack of perceived social support. Sexual desire problems were greater among veterans who were older, nonwhite, had clinical diagnoses of MDD or PTSD (versus subclinical PTSD), or reported more severe PTSD symptoms overall. Severity of combat exposure was also positively related to sexual desire problems among veterans in a relationship with a spouse or partner.

These results converge with those of previous studies to suggest that sexual problems may be prevalent among OEF/OIF veterans with PTSD.[25,27,28] It is particularly notable that rates of ED diagnosis in the present sample were nearly double the estimated prevalence expected for any sexual dysfunction diagnosis (including ED) among general OEF/OIF veterans seeking VA healthcare.[25,26] In addition, the dramatically higher self-reported prevalence of problems with sexual arousal within the context of a current relationship suggests a number of OEF/OIF veterans may be choosing not to disclose sexual arousal problems with physicians or other healthcare providers. Low rates of disclosure may reflect occasional, and non-clinically significant problems among some veterans; however, nearly one third of

partnered veterans in the current sample reported sexual arousal problems that occurred *sometimes* to *always* during the prior 30-day period. Given the relatively young age of this cohort, providers may be less likely to routinely inquire about ED or other sexual dysfunctions in OEF/OIF veterans. These veterans, in turn, may be reluctant to disclose sexual arousal problems, and sexual dysfunction generally, due to embarrassment or discomfort.

Non-significant correlations between PTSD symptom severity and both indices of ED and self-reported problems with sexual arousal in the context of a current relationship were surprising. The restricted range in PTSD symptoms generated by sampling only veterans seeking PTSD treatment may have precluded observation of an otherwise significant association with ED and self-reported sexual arousal problems. A significant zero-order correlation between avoidance/numbing symptoms and self-reported arousal problems among partnered veterans supports this possibility. In addition, certain physical health concerns linked to risk of ED as men age (e.g., diabetes, hypertension, cardiovascular disease, tobacco use[46,47]) are more prevalent among OEF/OIF veterans with PTSD versus those without PTSD.[48] Such health conditions, or other factors not assessed in the current study, may have accounted for the elevated prevalence of ED documented here.

Present findings also replicate prior research demonstrating that avoidance/numbing symptoms of PTSD are strongly linked to self-reported problems with sexual desire both in general and in the context of a current relationship.[28] Given that avoidance/numbing symptoms are generally characterized by social and/or emotional withdrawal, it is not difficult to imagine how such symptoms might impact desire to engage in approach-oriented sexual behavior involving displays of both physical and emotional intimacy.

These findings offer a number of important clinical implications. While options for incorporating partners and families into the treatment of PTSD within VA settings have expanded in recent years,[19,49,50] these treatments have yet to yield formalized approaches to assessment and/or treatment of comorbid sexual problems. At the very least, systematic assessment within this domain is necessary; as it is unclear whether successful amelioration of PTSD symptoms and/or other relationship distress will lead to improvement in sexual functioning. As OEF/OIF veterans may encounter a number of barriers to seeking treatment for concerns with sexual functioning, it will be critical for VA providers to consider implementing sexual functioning screenings as part of routine medical/mental healthcare.

This study has a number of limitations. First, indices of sexual problems were restricted to self-reported symptoms (single items from established questionnaires) and a review of medical records. It is possible that active problem lists were not up-to-date for all veterans, as VA healthcare providers are not required to review all conditions and make associated updates to the problem list during each visit. In addition, the IPF is limited by its exclusion of veterans who are not in a current romantic relationships but for whom there may be sexual functioning issues both with and without a partner (i.e., during self-stimulation). Ideally, findings should be replicated using interview (e.g., Derogatis Interview for Sexual Functioning)[51] and physiological assessments (e.g., plethysmography) specifically targeting sexual problems as well as ongoing self-monitoring of sexual behavior. It will be important

to establish whether problems are constrained to interactions with the current partner, or if they are generalized to all sexual activity. Measures of sexual functioning should also index a broader range of problems (e.g., premature/delayed ejaculation, anorgasmia), and should differentiate between hypoactive sexual desire and sexual aversion. Second, while the assessment of ED medication and SSRI/SNRI use was considered a strength of this study, there may be additional psychotropic (e.g., benzodiazepines, mood stabilizers) and non-psychotropic (e.g., nonsteroidal anti-inflammatory drugs) medications as well as other factors (e.g., history of childhood sexual abuse) impacting sexual functioning that were not considered.[52] The present investigation was also limited to male veterans, precluding examination of unique concerns with sexual functioning, including sexual pain disorders, experienced by female veterans. Finally, the cross-sectional nature of the study precludes conclusions regarding any temporal associations between PTSD and sexual problems.

5. Conclusion

The present study adds to a growing literature documenting the overlap between PTSD symptomatology and sexual problems among OEF/OIF veterans. Avoidance/numbing symptoms, in particular, seem to be linked to problems with sexual desire. These findings underscore the need to expand assessment of sexual functioning among OEF/OIF veterans within the VA healthcare system, and they further highlight the importance of conducting additional research in this area.

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Highlights

We examined sexual dysfunction among OEF/OIF veterans seeking treatment for PTSD.

Problems with sexual arousal and sexual desire were common.

Avoidance/numbing PTSD symptoms were specifically related to sexual desire problems.

Table 1

Bivariate and Point Biserial Correlations Among Indices of Sexual Functioning and Posttraumatic Stress Symptom Severity

	1	2	3	4	5	6	7	8	9
1. PCL-M – Total score	--	.84***	.90***	.81***	−.02	−.01	.38***	−.20	.19
2. PCL-M – Re-experiencing	--	--	.66***	.59***	.00	−.01	.26**	−.12	.05
3. PCL-M – Avoidance/numbing	--	--	--	.63***	−.05	−.03	.45***	−.32**	.28**
4. PCL-M – Hyperarousal	--	--	--	--	−.05	−.05	.18*	.05	.08
5. ED-Problem list	--	--	--	--	--	--	.13	−.14	.23*
6. ED-Medication	--	--	--	--	--	--	.03	.67	.23*
7. BDI-II – Desire	--	--	--	--	--	--	--	−.77***	.41**
8. IPF – Desire	--	--	--	--	--	--	--	--	−.53**
9. IPF – Arousal	--	--	--	--	--	--	--	--	--

Note: Phi coefficient between ED-Problem List and ED-Medication = .42, $p < .001$. BDI-II = Beck Depression Inventory-II; ED = Erectile Dysfunction; IPF = Inventory of Psychosocial Functioning; PCL-M = PTSD Checklist-Military.

* $p < .05$

** $p < .01$

*** $p < .001$.

Table 2

Descriptive Statistics Among Entire Sample (N = 150)

		ED-Problem List			ED-Medication			BDI-II: Desire		
	Total Sample *N* = 150	**Yes *n* = 18**	**No *n* = 132**	**χ^2, Fisher's exact test, or *t***	**Yes *n* = 15**	**No *n* = 135**	**χ^2, Fisher's exact test, or *t***	**Yes *n* = 95**	**No *n* = 55**	**χ^2, Fisher's exact test, or *t***
Nonwhite	64 (43%)	8 (44%)	56 (42%)	$\chi^2 = .03$	8 (53%)	56 (42%)	$\chi^2 = .38$	50 (53%)	14 (26%)	$\chi^2 = 10.52$**
Married	85 (57%)	12 (67%)	73 (55%)	$\chi^2 = .83$	12 (80%)	73 (54%)	$\chi^2 = 3.70$	59 (62%)	26 (47%)	$\chi^2 = 3.12$
Disabled	53 (36%)	7 (39%)	46 (35%)	$\chi^2 = .11$	7 (47%)	46 (34%)	$\chi^2 = .94$	36 (38%)	17 (31%)	$\chi^2 = .74$
Employed	76 (51%)	10 (56%)	66 (50%)	$\chi^2 = .19$	8 (53%)	68 (50%)	$\chi^2 = .19$	47 (50%)	29 (53%)	$\chi^2 = .15$
SSRI/SNRI use	84 (56%)	12 (67%)	72 (55%)	$\chi^2 = .95$	11 (73%)	73 (54%)	$\chi^2 = 2.03$	55 (58%)	29 (53%)	$\chi^2 = .38$
PTSD Diagnosis (CAPS)	123 (82%)	15 (83%)	108 (82%)	*ns*- Fisher's	12 (80%)	111 (82%)	*ns*- Fisher's	85 (90%)	38 (69%)	$\chi^2 = 9.81$**
Comorbid MDD (SCID-IV)	73 (49%)	7 (39%)	66 (51%)	$\chi^2 = .89$	5 (33%)	68 (51%)	$\chi^2 = 1.71$	55 (59%)	18 (33%)	$\chi^2 = 8.70$**
Age	34.9 (9.6)	40.8 (11.9)	34.0 (9.0)	$t = -2.87$**	40.3 (9.9)	34.3 (9.4)	$t = -2.35$*	36.4 (10.1)	32.0 (8.2)	$t = -2.77$**
Years of Education	12.4 (3.7)	13.4 (3.6)	12.3 (3.7)	$t = -1.17$	12.4 (3.2)	12.4 (3.7)	$t = .04$	12.3 (3.6)	12.6 (4.0)	$t = .42$
Combat Exposure (CES)	20.0 (6.5)	20.6 (6.9)	19.9 (6.5)	$t = -.34$	16.2 (6.1)	20.3 (6.5)	$t = 1.93$	19.4 (6.8)	21.0 (6.0)	$t = 1.32$
Social Support (MOS)	56.1 (24.5)	62.8 (25.4)	55.27 (24.3)	$t = -1.08$	60.7 (29.1)	55.6 (24.0)	$t = -.68$	62.6 (24.5)	43.2 (18.7)	$t = -4.45$***

Note: CAPS = Clinician-Administered PTSD Scale; CES = Combat Exposure Scale; MDD = Major Depressive Disorder; MOS = Medical Outcomes Study Social Support Survey; PTSD = posttraumatic stress disorder; SCID-IV = Structured Clinical Interview for DSM-IV Axis I Disorders; SSRI/SNRI = Selective serotonin reuptake inhibitor/serotonin-norepinephrine reuptake inhibitor. Problems with desire were coded positive for BDI-II scores >0 (at least some loss of interest in sex during the past 2 weeks).

Table 3

Descriptive Statistics Among Subsample Reporting Being in a Romantic Relationship with a Spouse or Partner During Past 30 Days (N = 76)

		IPF: Desire			IPF: Arousal		
	Total Subsample *N* = 76	**Yes *n* = 55**	**No *n* = 21**	**χ^2, Fisher's exact test, or *t***	**Yes *n* = 47**	**No *n* = 29**	**χ^2, Fisher's exact test, or *t***
Nonwhite	28 (37%)	25 (46%)	3 (14%)	$\chi^2 = 6.35$*	22 (47%)[a]	6 (21%)[b]	$\chi^2 = 5.26$*
Married	52 (68%)	39 (71%)	13 (62%)	$\chi^2 = .57$	31 (66%)	21 (72%)	$\chi^2 = .35$
Disabled	24 (32%)	17 (31%)	7 (33%)	$\chi^2 = .04$	15 (32%)	9 (31%)	$\chi^2 = .01$
Employed	42 (55%)	28 (51%)	14 (67%)	$\chi^2 = 1.53$	25 (53%)	17 (59%)	$\chi^2 = 21$
SSRI/SNRI use	42 (55%)	29 (53%)	13 (62%)	$\chi^2 = .52$	23 (49%)	19 (66%)	$\chi^2 = 1.99$
PTSD Diagnosis (CAPS)	63 (83%)	47 (86%)	16 (76%)	*ns*- Fisher's	42 (89%)	21 (72%)	*ns*- Fisher's
Comorbid MDD (SCID-IV)	35 (47%)	26 (49%)	9 (43%)	$\chi^2 = .23$	22 (48%)	13 (46%)	$\chi^2 = .01$
Age	34.9 (9.6)	37.2 (10.2)	34.2 (9.4)	$t = -1.27$	37.2 (10.2)	34.2 (9.4)	$t = -1.27$
Years of Education	12.4 (3.7)	12.9 (3.3)	11.2 (3.8)	$t = -1.84$	12.9 (3.3)	11.2 (3.8)	$t = -1.84$
Combat Exposure (CES)	20.0 (6.5)	19.3 (6.3)	22.8 (6.3)	$t = 2.35$*	22.8 (5.7)	19.3 (6.3)	$t = 2.34$*
Social Support (MOS)	51.3 (21.7)	56.1 (22.5)	43.6 (18.2)	$t = -2.51$*	56.4 (22.0)	38.0 (14.4)	$t = -3.56$**

Note: Sexual dysfunction on the IPF was coded as present for scores below 7 for the IPF-Desire item and above 1 for the IPF-Arousal item.

Table 4

Logistic Regression Models Predicting Erectile Dysfunction

	ED-Problem List				
	B	***SE***	**Wald**	**OR**	**95% CI**
Step 1					
Age	.03	.04	.79	1.03	.96 – 1.11
Model 1: Step 2					
PCL-M – Total score	−.02	.03	.41	.98	.93 – 1.04
Model 2: Step 2					
PCL-M – Re-experiencing	.05	.12	.19	.66	.84 – 1.32
PCL-M – Avoidance/Numbing	−.05	.08	.35	.55	.82 – 1.11
PCL-M – Hyperarousal	−.05	.13	.16	.69	.73 – 1.23

	ED-Medication				
	B	***SE***	**Wald**	**OR**	**95% CI**
Step 1					
Age	.04	.04	1.22	1.04	.97 – 1.12
Model 1: Step 2					
PCL-M – Total score	.00	.03	.01	1.00	.95 – 1.06
Model 2: Step 2					
PCL-M – Re-experiencing	.00	.11	.00	1.00	.81 – 1.24
PCL-M – Avoidance/Numbing	.00	.08	.00	1.00	.86 – 1.17
PCL-M – Hyperarousal	.01	.13	.00	1.00	.78 – 1.30

Table 5

Linear Regressions Predicting Indices of Self-Reported Sexual Problems

BDI-II – Desire				
	B	***SE***	***t***	***sr²***
Step 1				
Age	.01	.01	1.76	.03
Nonwhite	.17	.16	1.02	.01
PTSD Diagnosis (CAPS)	.20	.22	.92	.01
MDD Diagnosis (SCID-IV)	.38	.18	2.12	.03*
Support (MOS)	.01	.00	3.92	.10***
Model 1: Step 2				
PCL-M – Total score	.02	.01	2.48	.04*
Model 2: Step 2				
PCL-M – Re-experiencing	−.00	.02	−.15	.00
PCL-M – Avoidance/Numbing	.05	.02	3.01	.05**
PCL-M – Hyperarousal	−.03	.03	−1.14	.01
IPF – Desire				
	B	***SE***	***t***	***sr²***
Step 1				
Nonwhite	−.76	.40	−1.89	.04
Combat Exposure (CES)	.07	.03	2.09	.05*
Support (MOS)	−.04	.01	−3.89	.16***
Model 1: Step 2				
PCL-M – Total score	−.02	.02	−1.06	.01
Model 2: Step 2				
PCL-M – Re-experiencing	−.01	.05	−.15	.00
PCL-M – Avoidance/Numbing	−.09	.04	−2.33	.06*
PCL-M – Hyperarousal	.12	.06	1.86	.04
IPF – Arousal				
	B	***SE***	***t***	***sr²***
Step 1				
Nonwhite	.88	.44	1.98	.05
Combat Exposure (CES)	−.05	.04	−1.40	.03
Support (MOS)	.02	.01	1.57	.03
Model 1: Step 2				
PCL-M – Total score	.02	.02	1.38	.03
Model 2: Step 2				
PCL-M – Re-experiencing	−.06	.06	−.97	.01
PCL-M – Avoidance/Numbing	.08	.04	1.73	.04
PCL-M – Hyperarousal	.02	.07	.31	.00