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Rates of Subthreshold PTSD Among U.S. Military Veterans and Service Members: A Literature Review

Hannah E. Bergman, Amy Przeworski, and Norah C. Feeny

Case Western Reserve University, Department of Psychological Sciences, 10900 Euclid Avenue, Cleveland, OH 44106, USA

United States military veterans and service members (i.e., active duty personnel) represent less than 10% of the total U.S. population, yet they are disproportionately affected by mental health problems, such as posttraumatic stress disorder (PTSD; e.g., Hoge, Auchterlonie, & Milliken, 2006; Seal, Bertenthal, Miner, Sen, & Marmar, 2007). Additionally, many military veterans and service members may experience symptoms of psychological disorders as well as impairment related to these symptoms, but may not meet criteria for the disorder. For example, a growing body of evidence suggests a need to focus attention on military veterans and service members struggling with subthreshold PTSD, as subthreshold PTSD is associated with significant clinical impairment (e.g., Jakupcak et al., 2007). Individuals with subthreshold PTSD generally endorse clinically significant PTSD symptoms and impairment, but do not meet full diagnostic criteria (American Psychiatric Association [APA], 2013).

Subthreshold PTSD is consistently associated with elevated depression and suicidal ideation (Cukor, Wyka, Jayasinghe, & Difede, 2010; Marshall et al., 2001), increased alcohol use (Adams, Boscarino, & Galea, 2006), anger and aggression (Jakupcak et al., 2007), diminished social and family functioning (Stein, Walker, Hazen, & Forde, 1997; Zlotnick, Franklin, & Zimmerman, 2002), work-loss days (Breslau, Lucia, & Davis, 2004), and increased healthcare use (Breslau et al., 2004). Additionally, individuals with subthreshold PTSD symptoms report clinically significant psychological and functional impairment (Mylle & Maes, 2004) that is greater than that of individuals without PTSD (Jakupcak et al., 2007), but less than individuals with full PTSD (Breslau et al., 2004).

Unfortunately, the literature on subthreshold PTSD is fraught with methodological difficulties that make it difficult to know how common subthreshold PTSD is in military and veteran populations. For example, four different terms have been used: partial, subthreshold, subclinical, and subsyndromal PTSD (Blanchard, Hickling, Taylor, Loos, & Gerardi, 1994, Grubaugh et al., 2005; Stein et al., 1997) and many different definitions exist. For example, some definitions of subthreshold PTSD including meeting Criteria A (exposure to traumatic event) and B (re-experiencing), meeting diagnostic criteria for either Criterion C (avoidance/numbing) or D (hyperarousal), and Criterion F (impairment) (Blanchard et al., 1994) or as scoring a 35–49 on the PTSD Checklist-Military Version (PCL-M; Forbes, Creamer, &

Biddle, 2001; Jakupcak et al., 2007). Some definitions of partial PTSD include meeting at least one symptom in each symptom cluster, Criteria B-D (Stein et al., 1997). Other definitions of subclinical PTSD include having numerous symptoms, but failure to meet full criteria (e.g., Elhai et al., 2007). Finally, some definitions of subsyndromal PTSD include meeting Criteria A, B, E, F, and Criterion C or D (Inslicht et al., 2013) and scoring > 30 on the Clinician-Administered PTSD Scale (CAPS; Blake et al., 1995). In the current paper, the terms partial, subthreshold, subclinical, and subsyndromal PTSD are used when reporting the results of reviewed studies, but for brevity, the term “subthreshold PTSD” will be used to collectively refer to this population. The lack of a standardized term *and* definition of subthreshold PTSD likely cause difficulty in reporting results and discussing implications across studies, but may also account for the variability in rates reported. Thus, one purpose of the current paper is to examine rates of subthreshold PTSD in the literature as well as to evaluate what methodological variables predict differences in subthreshold PTSD symptoms in military and veteran populations.

Prevalence estimates of subthreshold PTSD appear to be similar to those of full PTSD in civilians (Stein et al., 1997) and military veterans (Weiss et al., 1992). In a community epidemiological study, past month prevalence estimates of full PTSD and partial PTSD were comparable for men (full PTSD: 1.2%, partial PTSD: 0.3%) and women (full PTSD: 2.7%, partial PTSD: 3.4%; Stein et al., 1997). From the National Vietnam Veterans Readjustment Study, lifetime prevalence of full PTSD and partial PTSD were comparable for men (full PTSD: 30.9%, partial PTSD: 22.5%) and women (full PTSD: 26.0%, partial PTSD: 21.2%; Weiss et al., 1992). Of note, the Weiss et al. (1992) article used DSM-III PTSD criteria for determining rates of partial PTSD. The current review focused on studies that used DSM-IV PTSD¹ criteria when examining subthreshold PTSD rates in order to provide more up-to-date findings.

There is little consistent evidence regarding the time course of subthreshold PTSD. Some studies suggests that subthreshold PTSD improves and remits at a higher and faster rate than full PTSD (Blanchard et al., 1997; Shiner et al., 2012), while others find that if left untreated, subthreshold PTSD symptoms can be persistent and worsen over time (Cukor et al., 2010). Among 9/11 World Trade Center disaster recovery workers, about 30% who were classified as having subthreshold PTSD at baseline also met subthreshold or full PTSD criteria one year later, and 25% still were classified as having subthreshold PTSD two years later (Cukor et al., 2010). Similarly, meta-analytic findings suggest that subthreshold PTSD may develop into late onset full PTSD (Smid, Mooren, van der Mast, Gersons, & Kleber, 2009; Utzon-Frank et al., 2014). Among individuals initially classified as having subthreshold PTSD, 26.2% developed late onset full PTSD compared to 4.1% of individuals with less or no initial symptoms (Smid et al., 2009). Individuals with subthreshold PTSD may not only struggle with associated symptoms and impairment, but these clinically significant problems may not remit on their own for a substantial number of individuals.

A recent meta-analysis on subthreshold PTSD provided estimated prevalence of and recommendations regarding standardized assessment methods of subthreshold PTSD

¹None of the studies under review used DSM-5 PTSD criteria.

(Branču et al., 2016). Examining subthreshold PTSD prevalence across a variety of samples (e.g., civilian, military), using one of three definitions based on DSM-IV PTSD criteria, and including articles that contained the term “subthreshold PTSD” or “partial PTSD,” they found an overall prevalence estimate of 14.7%. While this meta-analysis contributes greatly to the subthreshold PTSD literature, it includes both civilian and military populations. In contrast, our review focuses specifically on U.S. military veterans and service members, includes articles that mention any definition of subthreshold PTSD, and includes articles that contain the terms “subclinical” and “subsyndromal”, along with “subthreshold” and “partial PTSD”. Focusing specifically on military veterans and service members is also important given differences between these individuals and their civilian counterparts. For example, military veterans and service members may be less likely to report problematic symptoms than civilians due to stigma regarding receiving mental health treatment (e.g., Hoge et al., 2004). It is also important to consider the unique circumstances of military life, such as deployment and readjustment postdeployment, as these factors may influence types of symptoms, comorbidity, and impairment experienced. Thus, it is essential to review the subthreshold PTSD literature exclusively within service member and veteran populations.

The goals of the current literature review were to (a) examine rates of subthreshold PTSD by definition and assessment used (clinician-rated versus self-report), (b) discuss articles that reported on functional impairment, (c) evaluate what methodological variables are predictive of reported subthreshold PTSD rates, and (d) provide recommendations that can be used to inform future research of subthreshold PTSD. The methodological variables we included are based on those contributing to variability in a review of combat-related PTSD rates (Richardson, Frueh, & Acierno, 2010), such as assessment and definitions used. As the prevalence of full PTSD and subthreshold PTSD may be similar (e.g., Weiss et al., 1992), the same type of methodological variables influencing full PTSD rates may also impact subthreshold PTSD rates.

Method

Peer-reviewed articles were found using PubMed, PsycInfo, ProQuest, Web of Knowledge, Google Scholar, and relevant articles' reference lists to identify relevant studies. Search terms included “PTSD” in combination with “partial,” “subthreshold,” “sub-threshold” “subsyndromal,” “sub-syndromal,” “subclinical,” or “sub-clinical,” and “military” or “veteran.” Peer-reviewed articles were included if (a) published in 2015 or earlier, (b) the sample was U.S. military veteran and/or service members, (c) included the term partial, subthreshold, subsyndromal, or subclinical PTSD, (d) rate of below threshold PTSD was reported or could be calculated, (e) included a definition of below threshold PTSD, (f) written in English, and (g) were not case studies or reviews. If more than one sample was included in an article (e.g., Goldberg et al., 2013), each sample was coded independently, though not used twice, to ensure that all necessary characteristics were coded and analyzed.

To capture the most clinically useful set of studies, we excluded articles from the current review for the following reasons: (a) participants in the study were selected on the basis of PTSD symptoms (27 studies; e.g., Gros et al., 2012; Naylor et al., 2013), (b) studies that used DSM-III criteria (8 studies; e.g., Schnurr et al., 1993), (c) studies that did not report

clear definitions and/or measures used to capture subthreshold PTSD (5 studies; e.g., Teten et al., 2009), and (d) studies that employed small sample sizes or used a sampling approach that captured a very specific population of interest (4 studies; e.g., Levin et al., 2009).

The remaining 16 articles were included in the current review. The following variables related to subthreshold PTSD were coded, if present, in each study: rate, term used (e.g., partial, subthreshold), definition of term, PTSD measure used, and other variables associated with subthreshold PTSD, such as impairment and comorbidities. Percentages were only included in the current results if they were provided or could be calculated for variables associated with the subthreshold PTSD population. To account for varying sample sizes, current subthreshold PTSD rates were reported in two ways, 1) range of rates and 2) weighted mean rates. The weighted mean rate was calculated by multiplying the sample size by subthreshold PTSD rate and dividing by the total sample size.

Results

Description of Studies

Table 1 provides a summary of the 16 studies, including military branch, war era, study design, sample description, subthreshold term, measure and definition used, subthreshold PTSD rate, and comorbidity. Below threshold PTSD was referred to as subthreshold PTSD ($n = 7$ studies), partial PTSD ($n = 7$), subclinical PTSD ($n = 1$), and subsyndromal PTSD ($n = 1$). Of the 16 studies, 12 were conducted with veterans and 4 with service members. By war era, 11 studies were conducted with veterans and/or service members from Operation Enduring Freedom (OEF) and/or Operation Iraqi Freedom/Operation New Dawn (OIF/OND), 1 study with Vietnam veterans, 1 study with World War II veterans, and the rest done with veterans from multiple war eras. Across all studies, current subthreshold PTSD rate ranged from 2.3% to 22.3%, with a weighted mean rate of 7.6%.

Subthreshold PTSD Rates by Definition

Given the definitional variation across and within each term, we reported rates by definition used, rather than by term (see Table 1). Three studies defined subthreshold PTSD based on total CAPS or PCL score (range = 6.4-17.9%, weighted mean = 7.7%). Two studies defined it based on a combination of PCL score and DSM-IV PTSD criteria met (range = 6.9% and 17.1%, weighted mean = 14.3%). Eleven studies defined subthreshold PTSD via specific DSM-IV PTSD criteria met. Four studies defined it as individuals meeting Criteria A and B, and either Criterion C or D (range = 3.0-18.4%, weighted mean = 4.4%). Three studies defined it as individuals meeting Criterion A and at least 1 symptom from Criteria B, C, and D (range = 5.7-11.4%, weighted mean = 9.5%). Three studies reported that individuals could meet for subthreshold PTSD in one of two ways: meeting Criteria A and B and either Criterion C or D *or* meeting Criterion A and at least 1 symptom from Criteria B-D (range = 2.3-22.3%, weighted mean = 12.7%). One study reported that individuals could meet for subthreshold PTSD in one of two ways, stringent or lenient, with all meeting Criteria A, E and F: (a) Stringent: meeting at least 1 Criterion B, 2 Criterion C, *and* 2 Criterion D symptoms (i.e., 1 Criterion C short of full PTSD diagnosis) or (b) Lenient: meeting at least 1 Criterion B, 3 Criterion C *or* 2 Criterion D symptoms (i.e., did not need to endorse

symptoms in all three clusters) (Dickstein et al., 2015). Overall, differing definitions produced variability in the rates reported.

PTSD Assessment Type

Clinician-rated measures were used in 7 studies, with most using the CAPS (Blake et al., 1995). Subthreshold PTSD rate obtained from clinician-rated assessments ranged from 2.3% to 17.3%; weighted mean rate of 5.4%. Self-report measures were used in 8 studies, with most using the PTSD Checklist (PCL; Blanchard, Jones-Alexander, Buckley, & Forneris, 1996). Subthreshold PTSD rate obtained from self-report measures ranged from 6.9% to 22.3%; weighted mean rate of 16.5%. Additionally, an independent t-test revealed a large effect size that clinician-rated measures compared to self-reports produced lower subthreshold PTSD rates reported, $t(14) = 3.48$, $p = .004$, $d = 1.74$.

Predicting Subthreshold PTSD Rates

We utilized standard multiple regression to examine what variables coded from the articles were potentially predictive of reported subthreshold PTSD rates. We included predictors in the model that were differential features across the 16 articles: sample size, definition used, assessment used (self-report versus clinician-rated), and if subthreshold PTSD definition included impairment criterion. The subthreshold PTSD definition and impairment criterion predictor variables were coded as no = 0 or yes = 1. Each of the five definitions used (as shown in Table 1) were their own separate predictor variable. PTSD assessment used (coded as self-report = 0, clinician-rated = 1) was a significant predictor of the subthreshold PTSD rate reported ($\beta = -.67$, $p = .04$), indicating that studies using clinician-rated measures produced lower reported subthreshold PTSD rates. These findings suggest the importance of thinking about the assessment used when considering the reported subthreshold PTSD rate.

Functional Impairment

Six studies reported functional impairment comparisons between those with full, subthreshold, and/or no PTSD. Individuals with full PTSD reported the greatest impairment, followed by subthreshold PTSD and/or no PTSD in the following domains: mental and general health (Gellis, Mavandadi, & Oslin, 2010; Grubaugh et al., 2005), psychosocial functioning (Pietrzak, Goldstein, Malley, Johnson, & Southwick, 2009), and overall functioning/quality of life (Kehle et al., 2011). Individuals with subthreshold or full PTSD reported greater mental and physical health impairment (Goldberg et al., 2013; Pietrzak et al., 2009; Schnurr et al., 2000) and aggression (Jakupcak et al., 2007) than those without any PTSD symptoms.

Discussion

Our current review indicates that various definitions used produced wide variability in subthreshold PTSD reported rates, ranging from 2.3% to 22.3%. Findings from the current review provide a unique contribution to this growing field of study, as we sought to determine the rate of subthreshold PTSD among U.S. military personnel, which can help us gain a greater understanding of demographics and functional impairment characteristics related to subthreshold PTSD. This variability appears to be due to differing definitions

used, various assessment tools used, and different ways the same measure can be scored and interpreted, such as the PCL (see Table 1). Self-report measures appeared to produce higher rates than clinician-rated measures. Findings from the current review can be used to inform recommendations for future research of subthreshold PTSD in the U.S. military. These recommendations include (a) having a standardized term and definition of subthreshold PTSD, (b) systematically assessing subthreshold PTSD symptomatology, (c) clarifying subthreshold PTSD diagnostic stability, and (d) identifying appropriate sampling methods. We believe that our recommendations compliment and extend those made by Brancu et al. (2016).

Standardized Term and Definition

A universal term and definition for subthreshold PTSD needs to be identified. In line with Brancu et al. (2016), we recommend that the field use the term “subthreshold PTSD” to talk about this population, as the majority of articles under review used this term. Recognizing this lack of a standardized definition, a few articles have examined this issue. These studies either compared commonly used subthreshold PTSD definitions (Franklin, Piazza, Chelminski, & Zimmerman, 2015; Kasckow, Yeager, & Magruder, 2015), examined the relationship between scores on the CAPS and PCL in order to determine an efficient cutoff score on the PCL (Dickstein et al., 2015), or tested different definitions based on the DSM-5 PTSD criteria (McLaughlin et al., 2014). Overall, these articles found wide variability in subthreshold PTSD rates, depending on the definition used. Across these studies, no specific conclusion was made as to what definition to use.

Although studies included in the current review used criteria from the DSM-IV, we believe our findings should be kept in mind for studies using DSM-5 PTSD criteria. For example, the most common definitions used in the studies were meeting for (a) Criteria A and B, and either Criterion C or D *or* (b) meeting Criterion A and endorsing at least one symptom from Criteria B-D. The first definition produced a wider range (2.8% to 18.4%), while the second definition produced a narrower range (5.7% to 11.4%). We recommend using a more conservative definition of subthreshold PTSD, meeting Criterion A and endorsing at least one symptom each symptom cluster, as it was associated with a lower reported rate and was used in studies examining prevalence rates. As establishing a definition for subthreshold PTSD should include not only the symptoms, but also the functional impairment that these symptoms cause (Brancu et al., 2016), we recommend that the subthreshold PTSD include a functional impairment criterion. Given the many individuals with subthreshold PTSD report functional impairment, understanding this impairment is important as it can help to identify the impact the symptoms have on the individual (Karsten, Penninx, Verboom, Nolen, & Hartman, 2013) and address whether treatment may be needed. The purpose of this standardized definition should be to identify which components of subthreshold PTSD predict long-term impairment or the development into full-blown PTSD.

PTSD Assessment

When assessing PTSD, self-reports tend to produce higher PTSD rates, whereas clinician-rated measures appear to produce lower and potentially more accurate rates (Terhakopian, Sinaii, Engel, Schnurr, & Hoge, 2008). In this regard, when assessing for subthreshold

PTSD symptoms it is recommended that self-reports should not be used independently to establish subthreshold PTSD rates, but only in conjunction with clinician-rated measures, as suggested in the full PTSD literature (McDonald & Calhoun, 2010). Moreover, self-reports typically do not assess functional impairment. Our review and statistical findings revealed that clinician-rated measures produced a lower reported subthreshold PTSD compared to self-report measures. We recommend that whenever possible efforts should be made to use clinician-rated assessments, such as the CAPS (Blake et al., 1995), given they may be more accurate in determining PTSD diagnosis.

Diagnostic Stability

Evidence is mixed about the trajectory of subthreshold PTSD, whether it remits at a higher and faster rate than full PTSD (e.g., Blanchard et al., 1997), remains stable and chronic (Cukor et al., 2010), or develops into full PTSD (Smid et al., 2009). An important point of these findings, although mixed, is that subthreshold PTSD does not always worsen or develop into full PTSD. It is also possible that subthreshold PTSD is the improved state of someone who had full PTSD, but underwent treatment or identified ways to manage their symptoms without treatment. It is for these reasons that longitudinal studies are needed to better understand the diagnostic stability of subthreshold PTSD, whether it naturally recedes, remains stable, or worsens and requires intervention.

Sampling Methods

Sampling characteristics that should be considered are sample recruitment, representativeness, and sample size. We recommend that studies examining subthreshold PTSD rate in the U.S. military use stratified randomized designs to attain representative samples (McDonald & Calhoun, 2010). For example, prevalence rates should not be based on studies that include participants on the basis of their PTSD symptoms, as this will skew reported rates of both subthreshold and full PTSD. It is also important to keep in mind sample size, as that can influence the rates being reported. Additionally, given that majority of the studies in the current review examined subthreshold PTSD rate among military veterans, more studies are needed that specifically investigate the rate of subthreshold PTSD among representative samples of active duty service members so that direct comparisons can be done.

Conclusion

In conclusion, we found wide variability in subthreshold PTSD rates reported for military veterans and service members. Understanding the rate of subthreshold PTSD is important given that its rate may be comparable to full PTSD, it is associated with significant and clinically relevant functional impairment, and it may develop into full blown PTSD. Given the wide variability in rates reported, methodological issues that need to be considered include sampling methods, sample size, and how subthreshold PTSD is assessed and defined. Although studies in the current review used definitions based on DSM-IV, future studies using DSM-5 PTSD criteria should keep these findings in mind so that we can compare rates between DSM-IV and DSM-5 and further advance our understanding of subthreshold PTSD.

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Table 1
Summary of the 16 studies by military branch, war era, study design, sample description, below threshold PTSD term, measure and definition, below threshold PTSD rate, and comorbidity rate of disorders and symptoms among those with below threshold PTSD

Study	Military branch/War era	Study design/Sample description	Term Used	Measure/Definition	Rate (%)	Comorbidity (%)
<i>CAPS or PCL Score (n = 3 studies)</i>						
Jakupcak et al. (2007)	Not specified; OEF/OIF/OND	Cross-sectional; 117 veterans	Subthreshold	PCL-M; score 35-49 ^a	17.9%	
Tomassetti-Long et al. (2015)	Not specified; OEF/OIF/OND	Cross-sectional; 94 male veterans	Subthreshold	PCL-M; score 35-49	17.0%	
Yungil et al. (2014)	Navy & Marine Corps; OEF/OIF/OND	Prevalence; 1648 male service members	Partial	CAPS; score 40-64 ^b	6.4%	43.0% mild TBI
<i>PCL score and DSM-IV PTSD criteria (n = 2)</i>						
Jakupcak et al. (2011)	Air Force, Army, Marine Corps, & Navy; OEF/OIF/OND	Cross-sectional; 275 veterans	Subthreshold	Endorsed 1 symptom from Criteria B-D; PCL-M score 35-49	17.1%	31.9% MDD 29.8% AUD 8.3% suicide risk
Kolkow et al. (2007)	Not specified; OEF/OIF/OND	Cross-sectional; 102 active duty healthcare providers	Subclinical	Met Criteria B-D, but PCL score < 50	6.9% (total sample) 10.2% (enlisted) 2.3% (other personnel)	
<i>DSM-IV Criteria A and B and either Criterion C or D (n = 4)</i>						
Gellis et al. (2010)	Not specified; OEF/OIF/OND	Cross-sectional; 201 veterans	Partial	PCL; met Criteria A-B and either Criterion C or D	18.4%	16.2% bipolar disorder 10.8% psychosis 5.4% panic disorder
Gibbons et al. (2012)	Air Force, Army, & Navy; OEF/OIF/OND	Cross-sectional; 445 active duty healthcare providers	Subsyndromal	PCL-C; met Criteria A-B and either Criterion C or D	14.6% (total sample) 18.2% (enlisted) 7.8% (officers)	
Grubaugh et al. (2005)	Not specified	Prevalence; 669 veterans	Subthreshold	CAPS; met Criteria A-B and either Criterion C or D; endorsed functional impairment	4.6%	38.2% MDD 20.6% GAD 14.7% dysthymia 11.8% panic disorder 2.9% SUD 23.5% suicide risk
Goldberg et al. (2013)	Air Force, Army, Marine Corps, & Navy; Vietnam	Prevalence; 5574 male veterans	Subthreshold	CIDI; met Criteria A-B and either Criterion C or D	3.1% (total sample)	4.7% MDD 4.2% AUD 3.9% GAD

Study	Military branch/War era	Study design/Sample description	Term Used	Measure/Definition	Rate (%)	Comorbidity (%)
3.5% (theater twins) 2.8% (era twins)						
<i>DSM-IV Criterion A and > 1 Symptoms from Criteria B-D (n = 3)</i>						
Erbes et al. (2011)	Army; OEF/OIF/OND	Prevalence; 262 National Guard/Reserve veterans	Subthreshold	CAPS; met Criterion A and endorsed 1 symptom from Criteria B-D; endorsed functional impairment	5.7%	33.0% MDD 27.0% AUD
Kehle et al. (2011)	Army; OEF/OIF/OND	Prevalence; 348 active duty National Guard veterans	Subthreshold	CAPS; met Criterion A and endorsed 1 symptom from Criteria B-D; endorsed functional impairment	8.6%	36.7% MDD 23.3% anxiety disorders 16.7% AUD 3.3% SUD
Hoffman et al. (2012)	Air Force, Army, Marine Corps, & Navy; Vietnam, Gulf War, OEF/OIF/OND	Prevalence; 700 veterans	Partial	Not specified; met Criterion A and endorsed 1 symptom from Criteria B-D	11.4%	
<i>Meeting Below Threshold DSM-IV PTSD in 1 of 2 Ways (n = 4)</i>						
Pietrzak et al. (2009)	Not specified; OEF/OIF/OND	Prevalence; 557 veterans	Partial	PCL-M; met Criterion A and (a) Criterion B and either C or D or (b) Criterion B and 1 Criterion C and 1 Criterion D symptoms	22.3%	
Schnurr et al. (2000)	Army & Navy; WWII	Cross-sectional; 363 male veterans	Partial	PCL; met Criterion A and (a) Criterion B and either C or D or (b) Criterion B and 1 Criterion C and 1 Criterion D symptoms	10.5%	
Schnurr et al. (2002)	Not specified; WWII & Korea	Prevalence; 436 male veterans	Partial	CAPS; met Criteria A, E, and F and (a) Criterion B and D or (b) Criterion B and have 1 Criterion C-D symptoms	2.3% (current) 9.8% (lifetime)	
Dickstein et al. (2015)	Marine Corps and Navy; OEF/OIF/OND	Prevalence; 1,016 male service members	Partial	CAPS; met Criteria A, E, and F and (a) Stringent: 1 Criterion B, 2 Criterion C, and 2 Criterion D symptoms (the same criteria as full PTSD, but 1 less Criterion C) or (b) Lenient: 1 Criterion B, 3 Criterion C or 2 Criterion D symptoms (did not need to endorse symptoms in all three clusters)	17.3% (total) 6.2% (stringent) 11.1% (lenient)	

Note. AUD = Alcohol Use Disorder; CAPS = Clinician-Administered PTSD Scale; CIDI = Composite International Diagnostic Interview; DSM = Diagnostic and Statistical Manual; GAD = Generalized Anxiety Disorder; MDD = Major Depressive Disorder; OEF/OIF/OND = Operation Enduring Freedom/Operation Iraqi Freedom/Operation New Dawn; PCL = PTSD Checklist (C = civilian, M = military); PTSD = Posttraumatic Stress Disorder; SCID = Structured Clinical Interview for DSM; SUD = Substance Use Disorder; TBI = traumatic brain injury.

The clinical cutoff score for the PCL is a score of 50 or greater
 The clinical cutoff score for the CAPS is a score of 65 or greater

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