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PTSD (SK Creech and LM Sippel, Section Editors)

Addressing Diversity in PTSD Treatment: Disparities in Treatment Engagement and Outcome Among Patients of Color

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Abstract

Purpose Posttraumatic stress disorder (PTSD) is a prevalent mental disorder characterized by difficulty recovering from exposure to a traumatic event. The prevalence of PTSD varies by race/ethnicity, with studies in US samples indicating higher prevalence and lower treatment use among some racial and ethnic minority groups compared with Whites. Clarifying the extent to which race and ethnicity influence PTSD treatment outcomes is crucial to delivering treatments that are equitably effective and culturally relevant.

Recent findings There are few rigorous studies of racial/ethnic differences in PTSD treatment-related outcomes, making it difficult to draw conclusions. Evidence suggests that, compared with Whites, there may be lower treatment initiation and retention among Black/African American and Hispanic/Latino/a individuals. The bulk of evidence does not support racial/ethnic differences in treatment-related symptom reduction, though findings are contradictory. Cultural adaptations of evidence-based treatments for PTSD warrant further research.

Summary There is a critical need for research that is designed to answer questions about racial/ethnic differences and the experiences of People of Color in PTSD treatment. In clinical settings, widely implementing culturally relevant assessment and treatment, enhancing cultural competence of clinicians, and increasing representation of clinicians of Color are crucial steps toward improving PTSD treatment for People of Color.

Introduction

Posttraumatic stress disorder (PTSD) is a mental disorder characterized by difficulty recovering from exposure to a traumatic event resulting in psychological, social, and behavioral reactions that interfere in an individual's daily functioning [1]. PTSD symptoms fall into four clusters: re-experiencing (e.g., nightmares, flashbacks), avoidance of reminders of the trauma, negative alterations in cognition and mood (e.g., exaggerated self-blame, negative affect), and alterations in arousal and reactivity (e.g., irritability, hypervigilance) [2]. The prevalence of PTSD varies by race and ethnicity, with studies in US samples consistently indicating higher prevalence among Black/African Americans (8–9%) and lower prevalence among Asian/Asian Americans (2%) compared with White Americans (6.5–7.4%) [3, 4•, 5–7]. Prevalence among Hispanic/Latino individuals is more variable (4.4–7.8%); some studies find higher prevalence compared with Whites and others do not [3, 4•, 7, 8]. While research with Alaska Native/Native American populations is limited, there appear to be significantly higher rates of PTSD within this population compared with Whites [9]. Studies have consistently found lower rates of treatment use among People of Color with PTSD [10–13].

People of Color comprise approximately 40% of the US population and these numbers are growing [14]. For the purposes of this review, *People of Color* (PoC) refers to people from historically disenfranchised and oppressed racial and/or ethnic groups, such as Black/African Americans, Hispanic/Latinos, Asian/Asian Americans, Native American/American Indians, and those who identify with more than one racial and/or ethnic identity. This list is not exhaustive, and we acknowledge the limitations of categorizing race and ethnicity based on predefined categories. Thus, we use the broader term of PoC to encompass the diversity of racial and/or ethnic identities that are distinct from the dominant White Anglo-Saxon culture of the USA. Throughout this review, we refer to racial and ethnic groups using the terminology employed by the authors of each article reviewed; thus, multiple terms may be used for a single group (e.g., Black, African American; Hispanic, Latino/a). Further, we acknowledge that labels used in research may or may not reflect the preferred terminology for a particular racial or ethnic group.

Over the past three decades, empirical support for several trauma-focused therapies has grown exponentially, resulting in the identification of best practices for the treatment of PTSD by Clinical Practice Guidelines published by workgroups from international agencies and professional organizations [15•]. These evidence-based practices have been successfully implemented within a variety of clinical care settings across the USA [16]. Cultural factors such as ethnic identity, acculturation, and discrimination are associated with PTSD-related outcomes and satisfaction with mental health care among PoC [17, 18•]. However, there is limited empirical understanding of the ways in which race and ethnicity might impact PTSD treatment outcomes. Given that PoC are estimated to comprise the majority of the US population by 2050 [19], it is crucial to identify the most effective strategies for maintaining the core therapeutic elements of a given intervention while enhancing its cultural relevance [20]. This can optimize treatment engagement and symptom improvement among PoC with PTSD, ultimately enhancing health equity.

In the current review, we synthesize research from the past 10 years examining PTSD treatment outcomes among PoC (Table 1). Our review focuses on two outcomes: PTSD treatment engagement (defined as treatment initiation and retention) and treatment-related symptom reduction. In addition, we review studies of culturally adapted treatments for PTSD. Finally, we discuss the implications of the findings from this review for clinical practice and future research.

Table 1. Summary of 23 studies that discuss PTSD treatment published between 2009 and 2019

Reference	Population(s) examined	Treatment type	Outcomes discussed re: racial/ethnic differences
Ehlers et al. 2013	Not provided (collapses any non-White participants into "ethnic minority")	Cognitive therapy for PTSD	Symptom reduction
Graves et al. 2011	African American adults in primary care	Medication and psychotherapy	Treatment use
Gros et al. 2011	VA sample: African American and Caucasian adults	Exposure therapy for PTSD in person vs. telehealth	Symptom reduction; treatment completion
Haller et al. 2016	VA sample: Hispanic/Latino, White, African American, Asian, Pacific Islander, American Indian, Biracial, other/unknown race	PTSD psychotherapy, medication	Treatment engagement
Hebenstreit et al. 2015	VA sample: (f) White, Black, Hispanic, Asian/Pacific Islander, other/unknown race	PTSD psychotherapy, medication	Treatment engagement
Hinton et al. 2011	(f) Latina adults	Culturally adapted CBT vs. applied muscle relaxation for PTSD	Retention; symptom reduction
Iverson et al. 2011	(f) Caucasian, African American, other race adults	Cognitive processing therapy	Treatment initiation
Jain et al. 2012	VA sample: White, Black, Hispanic/Latino, other race, unknown race	Medication for PTSD	Treatment initiation
Jeffreys et al. 2014	VA sample: Latinx/Hispanic adults, White adults, Black adults	Cognitive processing therapy vs. prolonged exposure	Symptom reduction
Kelly and Pitch et al. 2014	(f) Latina adults	Supportive therapy vs. PTSD psychoeducation vs. acceptance and commitment therapy skills	Treatment retention; symptom reduction
Koo et al. 2016	VA sample: White, African American, Hispanic, American Indian/Alaska Native, Asian/Pacific Islander, other race adults	Residential treatment for PTSD	Additional factors (e.g., expectancies) related to treatment engagement
Lester et al. 2010	(f) White and Black adults	Cognitive processing (with or without account); prolonged exposure	Symptom reduction; treatment dropout
Maguen et al. 2014	VA sample: White adults, Black adults	PTSD psychotherapy	Symptom reduction; treatment initiation delay
Maguen et al. 2019	VA sample: White and Black adults	Cognitive processing therapy vs. prolonged exposure	Treatment completion
Nobles et al. 2017	White, Black, Latinx/Hispanic, Asian adults	PTSD psychotherapy or medication	Treatment initiation and retention

Table 1. (Continued)

Reference	Population(s) examined	Treatment type	Outcomes discussed re: racial/ethnic differences
Pearson et al. 2019	(f) Native American adults	Culturally adapted cognitive processing therapy	Symptom reduction
Roberts et al. 2011	White, Black, Latinx/Hispanic, Asian/Hawaiian/Pacific Islander adults	Any method of treatment from the following sources: doctor, counselor, therapist, hospital	Treatment seeking
Ruglass et al. 2014	White and Black adults	PTSD psychotherapy	Symptom reduction
Rutt et al. 2017	VA sample: White, African American, Hispanic, other race adults	Cognitive processing therapy vs. prolonged exposure	Symptom reduction
Spoont et al. 2015	VA sample: White, African American and Latino/a adults	PTSD psychotherapy and/or medication	MAC retention
Spoont et al. 2017	VA sample: White, African American and Latino/a adults	PTSD psychotherapy	Treatment retention
Valentine et al. 2017	Spanish-speaking Latinos	Cognitive processing therapy	Treatment acceptability and appropriateness
Williams et al. 2014	Black adults	Culturally adapted prolonged exposure therapy	Treatment seeking; symptom reduction
Zandberg et al. 2016	VA sample: Black/African American, Hispanic/Latino, White/Caucasian, other adults	Prolonged exposure + Naltrexone vs. prolonged exposure only	Symptom reduction

(f) female sample, *PTSD* posttraumatic stress disorder, *MAC* minimally adequate care, *CBT* cognitive behavioral therapy, *VA* Veterans Administration

Treatment engagement

Research on racial and ethnic differences in treatment engagement has focused primarily on treatment initiation and retention. Most of this research has been conducted with veterans using Veterans Administration (VA) mental health services, though a number of studies have also included community samples. Many studies have included diverse samples, with groups such as White, Hispanic/Latino/a, Black/African American, Asian/Asian American, American Indian/Alaska Native, and Native Hawaiian/Pacific Islander represented. The most diverse samples are seen among studies using VA data. It is important to note, however, that there is a tendency toward lower sample sizes for certain groups (i.e., typically any groups besides White, Hispanic/Latino/a, and Black/

African American), which may impact power to detect differences for those groups. Below, we summarize current research on racial/ethnic differences in treatment initiation, engagement, and other related outcomes (e.g., treatment preferences) among those with PTSD.

Treatment initiation

Research suggests that there are racial/ethnic disparities in initiation of psychotherapy for PTSD. In a medical record review of a diverse cohort of over 39,000 veterans who served in Afghanistan and Iraq and used VA mental health services over 4 years, Black veterans with a diagnosis of PTSD took an average of 3 months longer to initiate mental health treatment than their White peers [11]. In a randomized-controlled trial (RCT) of cognitive processing therapy (CPT) with a community sample of 150 African American and White women, African American women were significantly less likely to initiate CPT than White women [21]. In another RCT of CPT, African American women were three times less likely to initiate treatment than Caucasian women, even after controlling for age, income, education, treatment expectancies, and trauma exposure [22].

In contrast, no racial or ethnic differences were found in the initiation of pharmacotherapy with selective serotonin or norepinephrine reuptake inhibitors (SSRI or SNRI) in a cohort of 482 veterans with new diagnoses of PTSD [23]. In a diverse sample of over 2000 individuals with PTSD treated in a community medical center, however, there were differences found in prescribing practices by ethnicity, such that Latinos with PTSD were more likely to be prescribed both SSRIs and antipsychotics [24•]. The constraints of this study did not allow the authors to ascertain the reasons for these differences. They cautioned that higher rates of antipsychotic prescriptions—which are not recommended as first-line medications for PTSD—may be associated with over-pathologizing of PTSD presentations among PoC due to a lack of culturally relevant case conceptualization. However, this interpretation requires further study [24•]. This study did not find other racial or ethnic differences in pharmacotherapy prescription patterns.

Treatment retention

Research on treatment engagement has also examined racial/ethnic differences in treatment retention (i.e., the likelihood of completing a course of treatment for PTSD). In a diverse sample of female veterans who served in Iraq and Afghanistan and were new to using VA health care, Black and Hispanic veterans with PTSD were significantly less likely to receive minimally adequate care (i.e., 9+ psychotherapy visits or 12 weeks of psychopharmacological treatment) compared with White female veterans, within a year after treatment initiation [25]. This analysis controlled for a range of potentially confounding variables, including sociodemographics, military demographics, access factors, and psychiatric factors. In another large study of post-9/11 veterans from various racial/ethnic backgrounds who had recently returned from deployment, Maguen and colleagues [26•] found that Hispanic veterans were less likely to complete CPT and completed fewer sessions than non-Hispanic veterans. Similarly, in a diverse sample of individuals receiving psychotherapy or pharmacotherapy for PTSD in a community hospital, those who were Latino or Spanish-speaking were less likely to complete the full course of an empirically supported treatment for PTSD (i.e., 12 sessions) compared with non-Latinos and English-speaking individuals, respectively, though they were equally likely to initiate treatment [24•].

Spoont and colleagues [27] found that, in a large, diverse prospective cohort of veterans recently diagnosed with PTSD, African American veterans were less likely to be retained in any treatment (i.e., psychotherapy or pharmacotherapy) and Latinos were less likely to be retained in pharmacotherapy in the 6 months following PTSD diagnosis. Access barriers (e.g., travel distance, dependents to care for) accounted for lower psychotherapy retention, but not lower pharmacotherapy retention for both groups. Treatment-related beliefs fully accounted for the Latino-White difference in pharmacotherapy retention, whereas the African American-White difference was not fully explained [27]. The authors thus concluded that the difference between African American and White veterans in pharmacotherapy retention meets the Institute of Medicine's definition of a disparity. They did not find any other group differences. In an RCT of CPT with a community sample of women with PTSD secondary to sexual trauma, African American women were one-and-a-half times less likely to complete CPT than Caucasian women; 45% of African American women and 73% of Caucasian women completed CPT [22]. There did not appear to be racial differences in symptom improvement among those who initiated treatment or among those who dropped out, however, suggesting that African American women may have benefitted just as much from CPT as Caucasian women despite lower treatment completion rates [22].

In contrast, there is some evidence suggesting that PoC are equally or more likely to complete evidence-based treatments for PTSD compared with their White peers. Maguen and colleagues [26•] found that Black male and female veterans were more likely to complete CPT and prolonged exposure (PE) than White veterans. A smaller study in which the majority of participants were African American or White/Caucasian veterans found no racial differences in treatment completion in telehealth or in-person PE treatment [28].

Nonspecific factors and treatment engagement

Other studies have examined nonspecific factors that may impact treatment engagement (particularly treatment retention), such as treatment beliefs, preferences, and therapeutic alliance. In a study examining factors that accounted for retention in PTSD treatment in a diverse cohort of veterans, Spoont and colleagues [29•] found that perceptions of mental health providers were most strongly associated with treatment retention. Black veterans persisted in pharmacotherapy when they perceived that their psychiatrist effectively managed side effects. They persisted in psychotherapy if they perceived that their therapist focused on military stressors about half of the time (versus most of the time for White veterans) [29•]. Latinos were more likely to persist in psychotherapy if they perceived their therapist as caring both in individual treatment [29•] and in group treatment for PTSD [29•]. A study of veterans in residential treatment for PTSD found that racial/ethnic minority veterans reported lower therapeutic alliance, bond, and goal agreement with their therapists than White veterans, but this did not lead to differences in treatment expectancies (i.e., beliefs that treatment will be helpful) [30]. The impact of differences in nonspecific factors of psychotherapy on treatment retention or symptom reduction was not examined in this study.

Finally, a study of PTSD treatment preferences among Iraq and Afghanistan veterans found that there were no differences in preference for psychotherapy, pharmacotherapy, or both between PoC and non-Hispanic white veterans presenting for treatment in a PTSD mental health clinic [31]. No other studies have examined racial/ethnic differences in preference for psychotherapy and pharmacotherapy in the treatment of PTSD, and the extent to which such treatment preferences impact treatment engagement among PoC has not been studied.

Summary

Research on PTSD treatment engagement among PoC is somewhat mixed. This small body of research suggests that Black/African American individuals may be less likely to initiate evidence-based PTSD treatment [11, 21, 22]. However, findings regarding treatment retention among Black/African Americans were less consistent, with some studies suggesting lower treatment retention and completion compared with Whites [22, 25, 27], and others finding no differences [28] or greater likelihood of completion among Black/African Americans [26•]. Conversely, Hispanic/Latino/a individuals were consistently found to be less likely than Whites to complete a full course of PTSD pharmacotherapy or psychotherapy [24•, 25, 26•].

It is not clear whether disparities in treatment completion lead to disparities in symptom reduction. Lester and colleagues' [22] findings suggest that early dropout may not negatively impact symptom improvement, but more research is needed to replicate these findings and to examine this question in more racially and ethnically diverse samples and with a wider range of treatment modalities.

There was a notable contrast between Hebenstreit and colleagues' [25] study, in which there were disparities in completion of evidence-based treatment for PTSD among Black and Hispanic female veterans and Maguen and colleagues' [26•] study that found lower completion among male and female Hispanic veterans but higher completion among Black veterans compared with Whites. These samples were similarly drawn from VA medical records, with the main difference being that Hebenstreit and colleagues [25] focused on female veterans and found more consistent racial/ethnic disparities. This suggests that considering the intersection of race and gender is an important area for future studies designed to examine disparities in treatment completion and related outcomes.

Finally, some studies reviewed assessed treatment engagement via medical record review, which assesses real-world treatment engagement [11, 25, 26•, 32]. In contrast, other studies reported on treatment engagement as part of an efficacy study (e.g., RCT) [21, 22]. It is important to note that lower engagement in efficacy studies may be influenced in part by participants' willingness to engage in research and may not reflect disparities in treatment engagement per se.

Symptom reduction

There is limited research examining racial and ethnic differences in the efficacy or effectiveness of trauma-focused treatments for reducing symptoms of PTSD. The bulk of research suggests that there may not be racial or ethnic differences [22, 28, 33]. Lester and colleagues [22] found a non-significant difference between Black and White women in PTSD symptom reduction following CPT. Gros and colleagues [28] compared PE delivered via telehealth versus in person and did not find any racial differences in PTSD symptom reduction between Black and White veterans participating in either modality. Zandberg and colleagues [33] also did not find racial/ethnic differences in PTSD symptom change in an RCT of PE and naltrexone for individuals with comorbid PTSD and alcohol use disorder. Notably, there were very small numbers of participants who were Hispanic/Latino ($n = 7$) or other race/ethnicity ($n = 3$) and thus, there was likely no power to detect differences for these groups.

Furthermore, a large study of the medical records of 750 White, African American, and Hispanic veterans found that there were no racial or ethnic differences in the rate of symptom reduction following CPT or PE, nor were there differences found between White and minority (i.e., African American and Hispanic) veterans in the number of sessions completed [34•]. A fifth study actually found greater reductions in PTSD symptoms for Black as compared with White veterans 1 month after finishing PE; however, conclusions from this study are limited given the small sample of Black veterans ($n = 9$) [35].

In contrast, some research has found racial/ethnic differences in PTSD symptom reduction following treatment. In a large archival study of nearly 40,000 veterans' medical records, Maguen and colleagues [11] found that Black veterans reported less symptom improvement than their White peers following mental health treatment at a VA medical center. Specifically, the authors found that Black veterans were less likely to have a negative PTSD screen at least 1 year after starting treatment, controlling for sociodemographics, military demographics, distance from nearest VA, and time between last deployment and initiation of therapy. This was partly driven by Black veterans being more likely to screen positive at follow-up after an initial negative screen [11]. This suggests that Black veterans may be more likely to experience exacerbation of PTSD symptoms during treatment or may experience a new traumatic event. Alternatively, Black veterans may at first underreport their trauma symptoms and later engage in more disclosure of symptoms once having established a strong therapeutic relationship. There was also no information about the type of treatment received; it may be that Black veterans are less likely to receive evidence-based treatments for PTSD, leading to disparities in symptom reduction.

Summary

In sum, the research on racial and ethnic differences in symptom reduction following PTSD treatment is limited. Whereas the majority of PTSD treatment studies with diverse samples control for race and/or ethnicity, only a minority of these specifically examine racial and/or ethnic differences in treatment outcomes [16]. The bulk of research reviewed here does not provide evidence for racial or ethnic differences. However, these samples had small or non-existent samples of groups other than White, Hispanic/Latino, and/or Black/African American. More research, preferably studies designed to examine racial/ethnic differences in treatment outcomes a priori and with a wider variety of treatment modalities, is needed to ensure treatment equity for individuals suffering from PTSD.

Culturally adapted treatments

In the move from laboratory-based efficacy to real-world effectiveness, identifying culturally relevant modifications to treatment protocols may positively impact engagement and outcomes. Research examining culturally adapted treatments for PTSD [36–38, 39•] has typically modified existing evidence-based treatments, such as CBT or PE, to address issues relevant to a specific racial or ethnic minority population.

Latino/as

Culturally adapted CBT (CA-CBT) was compared with applied muscle relaxation (AMR) in a sample of Latina women with PTSD [37]. CA-CBT included a number of adaptations to traditional CBT, including incorporation of emotion regulation strategies, emphasis on ways to manage somatic symptoms, and use of cultural idioms for distress (e.g., *ataque de nervios*). CA-CBT was found to be superior to AMR in reducing symptoms of PTSD, and effects of CA-CBT were similar to those found for traditional CBT in previous studies [37].

Another study used a community-based participatory research (CBPR) approach to partner with community stakeholders to enhance PTSD treatment engagement among Latinas [29•]. They utilized mixed methods to compare three group treatments for PTSD among women who had experienced interpersonal violence and also examined pre-implementation outcomes. These researchers engaged in an ongoing process of modification of the study protocol to maintain its acceptability to the community, to which they attribute high study retention (i.e., 67–100% across treatment groups). This study highlighted the importance of partnering and communicating with community stakeholders in order to improve the cultural relevance, acceptability, and effectiveness of treatment.

Valentine and colleagues [39•] utilized formative evaluation methods and the five-stage model for cultural adaptation to implement an adapted version of CPT for Spanish-speaking Latino patients in a community health center. The authors integrated adaptations related to cultural needs (i.e., ethnicity, language, urbanicity) such as more accessible language and wording, and culturally relevant clinical examples that reflected the types of traumas patients are most likely to experience (e.g., community and domestic violence) [39•]. These adaptations were found to improve acceptability and appropriateness of CPT for Spanish-speaking patients. This study highlighted the importance of concurrent adaptation and implementation research for enhancing accessibility of culturally relevant evidence-based treatments for PTSD.

Native Americans

Pearson and colleagues [40•] also took a CBPR approach to adapting CPT for Native American women with PTSD symptoms and substance use who were at risk for HIV infection. The authors solicited feedback from local clinicians, tribal elders, and potential participants on delivery and content of CPT. Adaptations included improving readability (e.g., removing jargon), including culturally relevant concepts and definitions, integrating content that reflected indigenous beliefs, and incorporating content about historical trauma [40•]. The authors conducted an RCT that compared the adapted CPT to a wait-list control and found that the treatment was effective for reducing PTSD symptoms, as well as risky sexual behavior and alcohol use. Dropout rates in the treatment were high (30% completed at least 9 of 13 sessions), but the authors could not conclude whether this was due to the treatment or to contextual factors that affect engagement (e.g., substance use, high levels of stress, and poverty) [40•].

Black/African Americans

Williams and colleagues [41•] provided an in-depth discussion of the various barriers to engagement in traditional trauma-focused treatments for Black Americans. They noted potential adaptations to traditional PE, including (1) integrating culturally relevant assessments (e.g., discrimination and ethnic identity measures) in culturally competent patient conceptualization, (2) assessing whether there are racialized elements of the traumatic experience, (3) tailoring in vivo exposures to incorporate race-related trauma stimuli when appropriate, (4) avoiding minimizing the impact of racialized elements of the trauma, and (5) being open to directly asking about racialized experiences in the context of the traumatic experience [41•]. In addition, the authors encouraged clinicians to consider and target racism-related stressors and traumas and discuss how chronic discrimination can shape individuals' pre-trauma cognitions [41•].

Summary

The literature on culturally adapted treatments for US populations suggests that these approaches may be efficacious for their target populations. Adapted treatments may particularly improve acceptability and retention in PTSD treatment, though more systematic research is needed to support this hypothesis. More research is also needed to further develop adapted treatments and identify which outcomes are improved compared with traditional treatments. Notably, adapted versions of treatments such as CPT for non-US populations have shown to be effective [42] as have other treatments such as narrative exposure therapy [43].

Discussion

We reviewed the past 10 years of research examining PTSD treatment for People of Color (PoC) in the USA. This literature is small and has examined several distinct treatment-related outcomes. Though we discuss approximately two dozen studies in this review, only a few examined overlapping outcomes. Most studies have found that Black/African American and Hispanic/Latino/a individuals are less likely to initiate and complete treatment, though some findings suggest no racial/ethnic differences in treatment engagement [28] or the opposite pattern of results [26•]. Findings regarding symptom reduction weigh toward no evidence of racial/ethnic differences in symptom reduction, but studies with larger samples of racial and ethnic minorities, particularly non-Black/African American minorities, are sorely needed.

Findings from this review are generally consistent with broader research on mental health service use. PoC with mental illness diagnoses are less likely than Whites to use mental health services, with 48% of Whites engaged in treatment compared with 31% of Black and Hispanic/Latino/a Americans and 22% of Asian Americans [44]. Common barriers to care include lack of insurance or underinsurance, mental illness stigma, lack of access to providers of Color or culturally competent providers, and mistrust due to historical and personal negative experiences with the health care system and medical research [44]. All of these factors likely contribute to disparities in PTSD treatment-related outcomes. Thus, these disparities must be addressed at various levels of analysis, including individual, provider, community- and system-level education, training, and policy.

There are several limitations of the current research that must be addressed to improve the quality and relevance of findings. Most research on PTSD treatment among PoC has been post hoc and not built into the original study design, limiting the rigor and usefulness of results. As noted above, there is a lack of consistency in outcomes examined across studies which is further exacerbated by inconsistency in the way that race, ethnicity, and "minority" are defined. It is not always clear how race and ethnicity data is collected (i.e., how the questions are phrased). For example, Black individuals may identify as African American, which would typically represent those descended from American slaves or recent immigrants or children of immigrants from Africa. Black individuals from the Caribbean or other parts of the world may not identify as African American. Thus, it is unclear who is represented in a given sample. Similar issues exist for other heterogeneous groups with distinct cultural traditions and norms, such as Hispanics/Latino/as and Asians. While not all cultural distinctions can be made in every study, it is important for authors to acknowledge these limitations and address some of their ramifications to the interpretation of findings.

Overall, the current state of research on PTSD treatment outcomes for PoC renders it difficult to make any convincing statements about for which groups, for what treatments, and at what stage in the treatment process we do or do not see differences. The lack of quality research on this topic is surprising given that PTSD has been found in numerous studies to be more prevalent among PoC [3, 5, 10, 45]. Below, we provide some suggestions for future research and clinical practice, which may ultimately optimize PTSD treatment for PoC.

Future directions for research

We have discussed some avenues for future research throughout this review. To summarize here, studies are needed that are specifically designed to prospectively evaluate racial/ethnic differences in PTSD treatment-related outcomes.

Such studies may examine, for example, racial matching of clinicians and participants or qualitatively assess reasons for drop out. This would require an emphasis on recruiting enough participants of Color to adequately power analyses of racial/ethnic differences. It would also behoove the field to emphasize specific and standardized study outcomes, such as minimally adequate treatment or clinically meaningful symptom reduction. Consistency in choosing outcomes will facilitate more meaningful results and enable meta-analysis.

Finally, improving data collection by increasing the specificity of demographic information collected will also enable the meaningfulness and consistency of results across studies. Consistent collection of race and ethnicity data is a broader problem for medical research. We suggest that researchers include, at minimum, the Office of Management and Budget (OMB) definitions of race and ethnicity [46] when collecting demographic information. It must also be noted that there have been problems identified with the completeness and accuracy of race/ethnicity data in VA medical records [47]. This represents an operational barrier to accurate assessment of racial/ethnic disparities. There is ongoing work to improve these data. Furthermore, measures of culture-specific factors that may influence PTSD symptoms and treatment, such as acculturation, racial/ethnic identity, and discrimination, among others, should be collected whenever possible.

Implications for clinicians working with PoC

Though knowledge is limited regarding the factors that contribute to lower PTSD treatment engagement among PoC, it may benefit clinicians to improve their competence to work with individuals from diverse racial/ethnic backgrounds through structured trainings, consultation, and/or supervision. As part of culturally competent practice, clinicians should be well-versed in the use of culturally relevant assessments that enable a holistic view of their clients and the ways in which their experiences as a PoC impact their worldview, treatment expectations, and mental health symptoms. Assessments such as the DSM-5 Cultural Formulation Interview [2], the Trauma Symptoms of Discrimination Scale [48], and the Everyday Discrimination Scale [49] (see Williams et al. [41•]) can enable clinicians to form culturally relevant conceptualizations of their clients. Culturally relevant assessment can also facilitate conversations about cultural factors that may influence treatment (e.g., discrimination, acculturation, racial/ethnic identity) [17].

Open conversations about race, ethnicity, and culture can facilitate a strong therapeutic alliance, particularly when clients and clinicians are not matched by race or ethnicity. Findings reviewed herein suggest that therapists who develop a strong therapeutic relationship with their clients of Color are more likely to retain them [29•, 30]. Interpersonal, medical, and cultural mistrusts (e.g., mistrust in the dominant culture) due to experiences of various forms of discrimination and trauma, including in health care, are important mediators of racial and ethnic disparities in mental health and treatment engagement [50–53]. Thus, setting the stage for welcoming discussions about race and ethnicity, while actively engendering trust and effectively expressing warmth and empathy, may be particularly important to providing high-quality PTSD treatment to PoC [30, 54]. Researchers must also attend to mistrust caused by past abuses of PoC in medical research to ensure the representativeness of research samples and relevance of findings.

Another important consideration for clinical practice is increasing the representation of *clinicians* of Color. While the research is mixed on racial matching and treatment outcome, some past research suggests that Black veterans with PTSD who are racially matched with their clinician are more engaged in treatment than those unmatched with their clinician [55]. Furthermore, in our clinical experience, many clients of Color express a desire to work with a clinician of Color by requesting one during their intake, and we have even been told of clients leaving a clinic due to lack of staff diversity. In instances in which the first two authors have had the opportunity to work with clients of Color, many have expressed appreciation at being able to work with clinicians of Color, whom they feel have a deeper understanding and appreciation of their racial, ethnic, and cultural experiences. Indeed, it is crucial that *all* clinicians develop such understanding and appreciation for diverse racial, ethnic, and cultural backgrounds through interactions with diverse colleagues and clients, and focused cultural training.

Conclusions

This review summarized recent research on PTSD treatment for People of Color. We found that there are few rigorous studies examining racial/ethnic differences in PTSD treatment-related outcomes, limiting our ability to draw any strong conclusions. Evidence suggests that there may be lower treatment initiation and retention among Black/African American and Hispanic/Latino/a individuals, which warrants additional study. There is little evidence of racial/ethnic differences in PTSD treatment-related symptom reduction, but again, more research is needed to make any definitive statements. Importantly, even if there are similar clinical outcomes among Whites and PoC who engage in PTSD treatment, lower treatment initiation and higher dropout among PoC may lead to a greater overall burden of PTSD among these populations.

There is a critical need for additional rigorous research that is specifically designed to answer questions about racial/ethnic differences and the experiences of PoC in PTSD treatment. In clinical settings, widely implementing culturally sensitive assessment and treatment, enhancing cultural competence of clinicians, and increasing the representation of clinicians of Color are crucial steps toward improving PTSD treatment—and all mental health treatment—for People of Color.

Compliance with ethical standards

Conflict of interest

The authors have no conflict of interests to report.

Human and animal rights and informed consent

There were no human or animal participants involved in creating this manuscript.

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