Introduction

- Despite the high prevalence of posttraumatic stress disorder (PTSD) among military veterans, there is a lack of knowledge about differences by race/ethnicity and gender.
- A small body of research shows that compared with White veterans, Black/African-American and Hispanic/Latinx veterans have higher rates of PTSD, and Asian-American veterans have similar or lower rates.
- In post-9/11 Veterans, there is some evidence that racial/ethnic differences in PTSD persist after accounting for factors such as socioeconomic status, trauma exposure & clinical factors.
- Racial/ethnic minorities experience more life stress and lower social support than their white peers, which may contribute to differences in PTSD risk.
- Limited research on intersection of race/ethnicity & gender.
- It is unclear whether racial/ethnic differences in PTSD will operate similarly among men and women.
- Past research limited by a focus on predominantly older veterans, infrequent consideration of gender differences, small sample sizes for racial/ethnic subgroups, and reliance on VA medical records.
- The current study describes patterns and correlates of PTSD screening across race/ethnicity and gender in a sample of 9,420 Veterans recently separated from the military.
- Elucidating PTSD screening patterns by race/ethnicity and gender can inform targeted outreach, prevention, and intervention during transition out of the military.

Methods

Participants
- The Veterans Metrics Initiative (TVMI) is a longitudinal sample of 9,420 Veterans recruited within 90 days of separation from the military.
- Veterans included in analyses identified as White (n=6,222), Hispanic/Latino (n=1,313), Black (n=1,027), Asian/Hawaiian/Pacific Islander (n=420) & multiracial (n=438).
- Eligible veterans were identified from a VA Department of Defense repository.
- Outreach methodology followed a modified Dillman mail survey procedure.

Measures
- Self-reported race and ethnicity were assessed based on National Institutes of Health clinical research reporting policies.
- Trauma exposure: 4 dichotomous variables (childhood, adulthood before military, military, after separation).
- PTSD screen: 5-item Primary Care PTSD Screen for DSM-5. Positive screen ≥3.
- Life stress: 5-point scale assessed intensity of stress related to various life domains (e.g., discrimination, caregiving, finances) over the previous three months (α=.82).
- 8-item Medical Outcomes Study Social Support Survey assessed practical and emotional support from others (α=.95).
- SES: Highest education attained & Household income.

Analyses
- Analyses conducted with STATA 8.0 using survey analysis methods to include probability sampling weights.
- Group differences: Design-corrected Pearson chi-squared test (categorical outcomes) or independent samples t-tests (continuous outcomes) with effect sizes (Cohen’s d).
- Main analyses: Logistic regression for complex survey designs, fitting the odds ratio (OR) of having a positive PTSD screen as a function of variables of interest, stratified by gender.
- Model 1: Race/ethnicity; Model 2: SES; Model 3: Add trauma exposure; Model 4: Add life stress; Model 5: Add social support.
- Reference group = White

Conclusion

- Findings suggest that there are significant racial/ethnic differences in positive PTSD screening within this cohort of recent post-9/11 veterans.
- In line with past research, positive PTSD screening rates were highest among Black, Hispanic/Latino and multiracial veterans, and lowest among White and AHPI veterans.
- Multiracial women had the highest positive screening rates of all subgroups.
- Multiracial women continued to be 2x more likely to screen positive for PTSD.

Table 2. Weighted prevalence and effect sizes for within race/ethnicity gender differences in positive PTSD screening and trauma exposure

<table>
<thead>
<tr>
<th>Variables</th>
<th>White</th>
<th>Black</th>
<th>Hispanic/Latino</th>
<th>AHPI</th>
<th>Multiracial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive PTSD Screen</td>
<td>W M</td>
<td>M d</td>
<td>W M d</td>
<td>W M d</td>
<td>W M d</td>
</tr>
<tr>
<td>Any Trauma</td>
<td>66.0</td>
<td>80.5</td>
<td>63.0</td>
<td>56.0</td>
<td>67.0</td>
</tr>
<tr>
<td>Childhood Trauma</td>
<td>28.7</td>
<td>24.8</td>
<td>25.0</td>
<td>21.9</td>
<td>29.5</td>
</tr>
<tr>
<td>Adult Pre-military Trauma</td>
<td>18.3</td>
<td>13.9</td>
<td>16.1</td>
<td>11.5</td>
<td>17.3</td>
</tr>
<tr>
<td>Military Trauma</td>
<td>33.3</td>
<td>41.5</td>
<td>35.3</td>
<td>32.2</td>
<td>42.0</td>
</tr>
</tbody>
</table>

Results

Between-race/ethnicity group differences in trauma exposure and PTSD screening rates

- Rates of positive PTSD screens lowest among AHPI Veterans (20.7%).
- Highest rates among Black (36.3%) and multiracial (35.7%) Veterans, followed by Hispanic/Latino (30.6%), and White (22.5%) Veterans.
- Among Native American or Alaska Native veterans (n=67), 43.3% had a positive PTSD screen (not included in regressions).
- Largest group differences in PTSD:
  - AHPI and Black (d=.31); White and Black (d=.29)
  - Hispanic/Latino and AHPI (d=.21).
- AHPI veterans reported lower trauma exposure compared with all other racial/ethnic groups to any trauma (any trauma: d’s=.23 to .37; military trauma: d’s=.25 to .39).

Multivariable models for women
- Model 1 (pseudo R²=.027, p<.001):
  - Higher odds of positive screens among Black (OR=1.50), Hispanic/Latino (OR=1.76) and multiracial (OR=2.68) women.
- Model 2 (SES; pseudo R²=.038, p<.001) slightly reduced ORs.
- Model 3 (Trauma; pseudo R²=.241, p<.001) fully explained elevated positive screening rates among Black women.
- Model 4 (Life stress; pseudo R²=.312, p<.001) slightly reduced ORs.
- Model 5 (Social support; pseudo R²=.328, p<.001) fully explained positive screening rates for Hispanic/Latina women.

Multivariable models for women
- Model 1 (pseudo R²=.018, p<.001):
  - Higher odds of positive screens among Black (OR=2.07), Hispanic/Latino (OR=1.48) and multiracial (OR=1.68) men.
- Model 2 (SES; pseudo R²=.040, p<.001) and Model 3 (Trauma; pseudo R²=.241, p<.001) slightly reduced ORs.
- Model 4 (Life stress; pseudo R²=.313, p<.001) fully explained elevated positive screening rates among Hispanic/Latino and multiracial men.
- Model 5 (Social support; pseudo R²=.326, p<.001) reduced ORs.

Black men continued to be 1.5x more likely to screen positive for PTSD.

Group Differences in Demographics
- Greater proportion of women among Black Veterans (27.9%).
- Fewer Veterans of Color are officers.
- Fewer AHPI Veterans deployed.
- More White Veterans have graduate degrees & household income of ≥ $100,000.
- Greater proportion of Black, H/L & multiracial Veterans report trauma in childhood and post-military, cf. White & AHPI.
- Greater proportion of Black and multiracial Veterans report military trauma, cf. White & AHPI.
- More life stress among Veterans of Color.
- Lower social support among Veterans of Color.

Contact

Juliette McClendon, PhD
Advanced Women's Health Fellow
National Center for PTSD
Women's Health Sciences Division
VA Boston Healthcare System
Boston University School of Medicine
juliette.mcclendon-lacovino@va.gov
857-364-3475

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