Assessing Response to Crisis Response Planning for Suicide Risk in Active-Duty Military Personnel with Different Levels of PTSD Symptoms

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Introduction

- Posttraumatic stress disorder (PTSD) affects approximately 8% of the general population, but the prevalence is twice as high in active duty service members and in military veterans (Judkins et al., 2020).
- PTSD is associated with increased suicide rates. Those with PTSD were twice as likely to die by suicide than individuals without PTSD. (Fox et al., 2021).
- PTSD is a risk factor for suicide planning and suicide attempts (Pompili et al., 2013).
- Crisis response planning (CRP) is an extremely effective and personalized tool for reducing suicide risk in acutely suicidal individuals. Written on a card, a crisis response plan identifies one's personal warning signs, coping strategies, reasons for living, social support, and professional services. (Bryan et al., 2017).

The primary aim of this study was to compare differences in the reduction of suicide risk among active-duty soldiers with differing levels of PTSD symptoms over a six-month period.

Research Question: Do active-duty soldiers with different levels of PTSD symptoms respond differently to a crisis response planning intervention?

Hypothesis: There is a difference in responses to a crisis response planning intervention among active-duty soldiers with differing levels of PTSD symptoms, with those having higher levels of PTSD symptoms seeing greater reductions in suicide risk after completing a crisis response plan intervention.

Materials and Methods

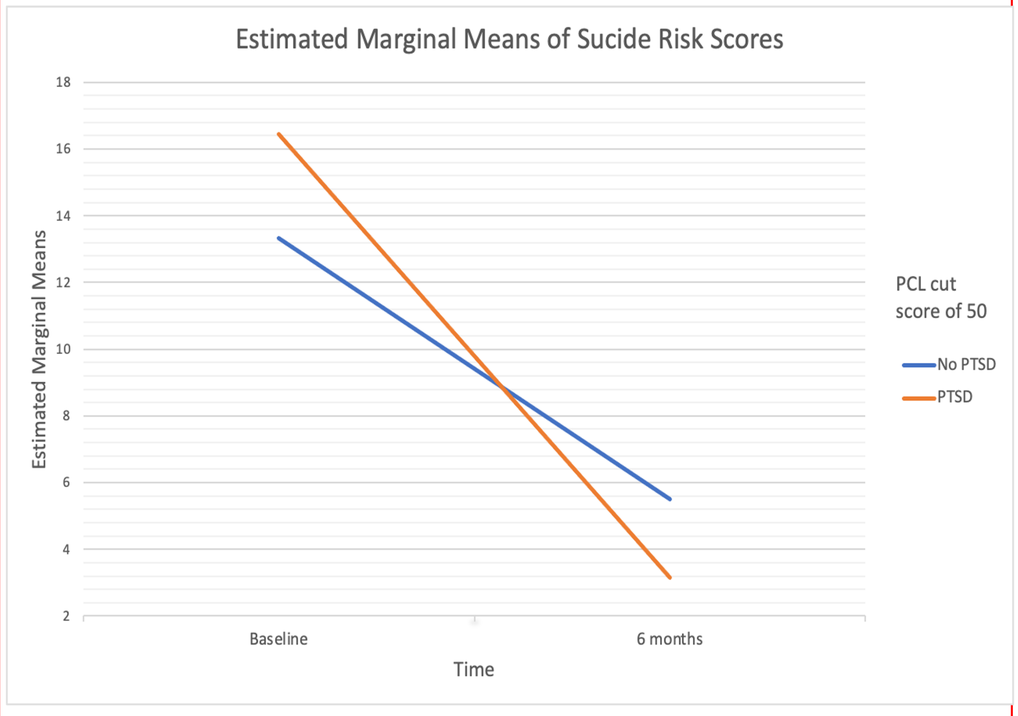
- Secondary analysis assessing the effectiveness of CRP at three months follow-up in 48 soldiers with current suicidal ideation and/or lifetime suicide attempts (Bryan et al., 2017).
- n=20, postive screen for PTSD; n=28, negative screen for PTSD based on the cutoff score of 50 (Weathers et al.,1993).
- Participants included 40 (83.3%) males and 8 (16.7%) females with a mean age of 26.64 ± 6.7 years (range 19-53). Racial distribution was as follows: 37 (77.1%) whites, 5 (10.4%) blacks, two (4.2%) Asians, two (4.2%) Pacific Islanders, 3 (6.3%) Native Americans, and two (4.2%) others (Bryan et al., 2017).

Measures:

- PTSD Checklist (PCL; Weathers et al., 1994)
- Beck Scale for Suicide Ideation (BSS; Beck & Steer, 1991). Soldiers were classified as screening positive (n=20) or negative (n=28) for PTSD at baseline based on the recommended PCL score of 50 (Weathers et al.,1993).
- A mixed effects (ANOVA) was conducted to test the study hypothesis.

Suicide Ideation Scores Three Months After CRP

Figure 1 - Estimated Marginal Means of Suicide Risk Scores Over Time



Results

- Results indicated both a significant decrease in suicide risk for soldiers across time, $F(1,46)=79.48$, $p<.001, \eta_p^2=.63$ and a significant interaction effect between time and PTSD scores, $F(1,46)=5.35$, $p=.03, \eta_p^2=.10$).
- Soldiers endorsing above-threshold PTSD scores experienced significantly greater reductions in suicide risk ($M_{difference}=13.30, p<.001$) than those with subthreshold PTSD scores ($M_{difference}=7.82$ SD=1.53).
- Those with higher PTSD scores endorsed higher suicide risk at baseline ($M_{PTSD}=16.45$, $SD_{PTSD}=6.32$; $M_{No\ PTSD}=13.32$, $SD_{No\ PTSD}=6.85$) and lower suicide risk at follow-up ($M_{PTSD}=3.15$, $SD_{PTSD}=5.46$; $M_{No\ PTSD}=5.50$, $SD_{No\ PTSD}=6.80$), when compared to those with subthreshold PTSD scores.

Discussion

- Soldiers endorsing above-threshold PTSD scores experienced greater reductions in suicide risk following CRP, indicating CRP may be impactful for this population.
- CRP should be administered to every individual leaving the military, especially if they have higher PTSD scores as these individuals benefit the most from it.
- Further studies must be done in order to determine whether redesigning CRP may be beneficial for other groups.

Limitations:

- Lack of comparison group to CRP
- Relatively homogenous demographic makeup
- Lack of generalizability to other military, veteran, and nonmilitary groups
- Limited sample size (Bryan et al., 2017).

Despite these limitations, this study represents an incremental step in clarifying which military personnel benefit most from CRP in reducing suicide risk.

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