

# Research Update -- June 27, 2024

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# https://doi.org/10.1016/j.amepre.2024.06.017

# Sexual identity differences in chronic pain: Results from the 2019-2021 National Health Interview Survey.

Nicole A. VanKim, Corey E. Flanders, Elizabeth R. Bertone-Johnson

American Journal of Preventive Medicine Available online 20 June 2024

#### Introduction

Chronic pain has been highlighted as an important public health and clinical health issue. The prevalence of chronic pain has been increasing, with notable disparities for many minoritized populations. However, evidence regarding sexual minoritized populations and chronic pain is lacking. Therefore, the purpose of this study is to compare the prevalence of chronic pain among men and women by sexual identity.

#### Methods

Data from the 2019-2021 National Health Interview Survey (n=78,686), a population-based public health surveillance system were analyzed in 2023-2024. This included 592 lesbian/gay and 952 bisexual women as well as 868 gay and 317 bisexual men. Chronic pain measures included frequency, amount of pain, pain limiting activities, and pain affecting family and others. Covariates included age, race/ethnicity, relationship status, education attainment, income, and employment status.

## Results

After adjusting for covariates, significantly (p<0.05) more gay/lesbian (26.7%) and bisexual (31.6%) women reported experiencing chronic pain "most days or everyday" than straight women (21.7%). More bisexual women reported chronic pain as well as negative impacts in their life due to chronic pain than straight women. More bisexual men also reported experiencing chronic pain "most days or everyday" compared to straight men (26.1% vs. 19.6%), although no differences were found for other aspects of pain.

#### Conclusions

Sexual minoritized populations have a greater burden of chronic pain that should be considered in moving forward in pain work. Future work in this area is needed to understand why these disparities exist and how best to provide care and treatment to those affected.

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# https://doi.org/10.1080/16506073.2024.2369637

A guide for self-help guides: best practice implementation.

Roz Shafran, Sarah J. Egan, Madelaine de Valle, Emily Davey, Per Carlbring, Cathy Creswell & Tracey D. Wade

Cognitive Behaviour Therapy Published online: 20 June 2024

Guided self-help is an evidence-based intervention used globally. Self-help is a fundamental part of the stepped care model of mental health services that enables the efficient use of limited resources. Despite its importance, there is little information defining the role of the guide and the key competences required. In this context, the guide is defined as the person who facilitates and supports the use self-help materials. This article sets out the role of the guide in guided self-help. It considers practical issues such as the importance of engagement to motivate clients for early change, personalising the intervention, structuring sessions, how best to use routine outcome monitoring and supervision requirements. Key competences are proposed, including generic competences to build the relationship as well as specific competences such as being able to clearly convey the role of the guide to clients. Guides should be prepared for "self-help drift", a concept akin to therapist drift in more traditional therapies. Knowing how to identify mental health problems, use supervision and manage risk and comorbidity are all key requirements for guides. The paper concludes by calling for increased recognition and value of the role of the guide within mental health services.

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# https://doi.org/10.4088/JCP.23ed15239

JCP's Focus on Women's Mental Health: Twenty Years and Counting. (Editorial)

Marlene P. Freeman, MD

Journal of Clinical Psychiatry Published: June 17, 2024 Access to specialized mental health care during pregnancy and the postpartum remains elusive for many individuals. The health care system is notoriously difficult to navigate, and there are shortages of mental health professionals. Telehealth and digital therapeutics may make it more accessible for some. Yet, we must consider how to best reach those often marginalized by our standard health care systems.

Unplanned pregnancies still account for about half of pregnancies in the United States. However, we now have a patchwork of reproductive rights, and the legacy of state-by-state legislation of reproductive rights cannot yet be fully understood. Now more than ever, we must consider safety in pregnancy as paramount when prescribing medications to individuals of reproductive potential, not only those considering pregnancy, especially since many of the disorders we treat require ongoing maintenance therapy. Many of the most commonly utilized medications lack adequate safety data for use in pregnancy and lactation.

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# https://doi.org/10.1093/jamia/ocae153

On the utility of using the All of Us Research Program as a resource to study military service members and veterans.

Ben Porter, PhD

Journal of the American Medical Informatics Association Published: 18 June 2024

## Objectives

To illustrate the utility of the All of Us Research Program for studying military and veteran health.

#### Materials and Methods

Results were derived from the All of Us Researcher Workbench Controlled Tier v7. Specific variables examined were family history of post-traumatic stress disorder (PTSD), medical encounters, and body mass index/body size.

#### Results

There are 37 363 military and veteran participants enrolled in the All of Us Research Program. The population is older (M = 63.3 years), White (71.3%), and male (83.2%),

consistent with military and veteran populations. Participants reported a high prevalence of PTSD (13.4%), obesity (40.2%), and abdominal obesity (77.1%).

## Discussion and Conclusion

The breadth and depth of health data from service members and veterans enrolled in the All of Us Research Program allow researchers to address pressing health questions in these populations. Future enrollment and data releases will make this an increasingly powerful and useful study for understanding military and veteran health.

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# https://doi.org/10.1093/jaarel/lfae057

# Spiritual Fitness and Moral Responsibility in the Contemporary United States Military.

Rosemary Kellison

Journal of the American Academy of Religion

Published: 19 June 2024

In an effort to increase resilience and decrease moral injury among servicemembers and veterans, the US military has in recent years invested in the promotion of "spiritual fitness" among its members. The military's definition of spiritual fitness relies heavily on a popular contemporary American conceptualization of spirituality as essentially individual. Military materials strongly imply that spiritually fit servicemembers adopt military values as their own and consequently act in ways that serve the military's interests. By tying morality so closely to the individual "spirit," the concept of spiritual fitness serves to locate moral responsibility for harmful acts performed during war within the individual servicemember, obscuring the role that military leadership and the military as an institution play in shaping and constraining servicemembers' values and actions. This case shows that an ethics-focused approach adds a crucial dimension to religion scholars' critical analysis of how categories like spirituality are deployed by powerful institutions.

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# https://doi.org/10.1177/0095327X241257515

"I Just Don't Want to Be Part of It Anymore": How Harm and Betrayal Erode Cohesion in the Aftermath of Military Sexual Misconduct.

Silins, S.

Armed Forces & Society
First published online June 19, 2024

This study addresses the nature of harm and betrayal following sexual misconduct from the perspective of military personnel and veterans with lived experience, and its impact on military cohesion. A total of 67 semistructured interviews were originally conducted to explore experiences seeking related support in the Canadian Armed Forces (CAF). A secondary analysis revealed descriptions of interpersonal and institutional betrayal, which damaged their trust and regard for the organization and weakened organizational commitment and connection. Participants framed these impacts in relation to their peers, their leaders, and the organization more broadly, demonstrating that harm from poor organizational responses destabilizes the fundamental bonds that support military cohesion on multiple levels. These findings provide insight into the subjective experience of betrayal associated with sexual misconduct and highlight how organizational responses can substantially mitigate or exacerbate this harm.

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## https://doi.org/10.1080/16506073.2024.2368520

The long shadow of early-change patterns: a 3-year follow-up after the use of a web-based intervention for mild to moderate depressive symptoms.

Edelbluth, S., Klein, J. P., Schwartz, B., Hehlmann, M., Arndt, A., Rubel, J., ... Lutz, W.

Cognitive Behaviour Therapy Published online: 24 Jun 2024

Web-based interventions can be effective in treating depressive symptoms. Patients with risk not responding to treatment have been identified by early change patterns. This study aims to examine whether early changes are superior to baseline parameters in predicting long-term outcome. In a randomized clinical trial with 409 individuals experiencing mild to moderate depressive symptoms using the web-based intervention

deprexis, three latent classes were identified (early response after registration, early response after screening and early deterioration) based on early change in the first four weeks of the intervention. Baseline variables and these classes were included in a Stepwise Cox Proportional Hazard Multiple Regression to identify predictors associated with the onset of remission over 36-months. Early change class was a significant predictor of remission over 36 months. Compared to early deterioration after screening, both early response after registration and after screening were associated with a higher likelihood of remission. In sensitivity and secondary analyses, only change class consistently emerged as a predictor of long-term outcome. Early improvement in depression symptoms predicted long-term outcome and those showing early improvement had a higher likelihood of long-term remission. These findings suggest that early changes might be a robust predictor for long-term outcome beyond baseline parameters.

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# https://doi.org/10.1080/08995605.2023.2188046

Pain neuroscience education improves post-traumatic stress disorder, disability, and pain self-efficacy in veterans and service members with chronic low back pain: Preliminary results from a randomized controlled trial with 12-month follow-up.

Benedict, T. M., Nitz, A. J., Gambrel, M. K., & Louw, A.

Military Psychology Volume 36, 2024 - Issue 4

Post-traumatic stress disorder (PTSD) and chronic low back pain (CLBP) are frequently co-morbid. Some research suggests that PTSD and CLBP may share common neurobiological mechanisms related to stress. Traditional biomedical education may be ineffective for PTSD and CLBP, especially when co-morbid. The purpose of this study is to determine if pain neuroscience education (PNE) is more effective than traditional education in reducing PTSD, disability, pain, and maladaptive beliefs in patients with CLBP. Participants with CLBP and possible PTSD/PTSD-symptoms were recruited for this study. Participants were randomly allocated to a PNE group or a traditional education group. The intervention included 30 minutes of education followed by a standardized exercise program once a week for 4-weeks with a 4 and 8-week follow-up and healthcare utilization assessed at 12-months. Forty-eight participants consented for this research study with 39 allocated to treatment (PNE n = 18, traditional n = 21). PNE

participants were more likely to achieve a clinically meaningful reduction in PTSD symptoms and disability at short-term follow-up. At 12-months, the PNE group utilized healthcare with 76% lower costs. In participants with CLBP, PNE may reduce hypervigilance toward pain and improve PTSD symptoms. Participants who received PNE were more confident body-tissues were safe to exercise. These beliefs about pain could contribute to a decrease in perceived disability and healthcare consumption for CLBP.

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# https://doi.org/10.1080/08995605.2023.2189861

The role of unit cohesion and perceived resilience in substance use disorder.

Ward, R. N., Erickson, A. J., Carlson, K. J., & Yalch, M. M.

Military Psychology Volume 36, 2024 - Issue 4

Soldiers have high rates of substance use disorders (SUD), often in the aftermath of stressors experienced during military deployments. There are several factors that protect against SUD. For example, individual factors like perceived resilience and group factors such as unit cohesion may make someone less likely to abuse substances. However, there is little research on the differential influence of these resilience factors on SUD over and above deployment stressors. In this study, we examined the relative effects of perceived resilience, unit cohesion, and deployment stressors on SUD in a sample of 21,449 active duty and reserve soldiers from the U.S. Army (primarily White and male, mean age = 28.66, SD = 7.41) using structural equation modeling. We found that unit cohesion ( $\beta = -.17$ ) and perceived resilience ( $\beta = -.16$ ) had negative effects on SUD over and above deployment stressors. The study findings clarify research on resilience to SUD and have implications for addressing substance use in the military, specifically regarding the importance of building unit cohesion.

# https://doi.org/10.1093/milmed/usad049

Mental Health Outcomes Among American Indian and Alaska Native U.S. Army Soldiers: A Serial Cross-Sectional Analysis.

Beymer, M. R., Apostolou, A., Smith, C. M., Paschane, D. M., Gomez, S. A. Q., James, T. D., Bell, A. M., Santo, T., & Quartana, P. J.

## Military Medicine

Volume 188, Issue 7-8, July/August 2023, e2292-e2299

## Introduction

American Indian and Alaska Native (AI/AN) individuals in the USA experience higher rates of mental illness and preventable death than the general population. Published research demonstrates that AI/AN veterans experience similar disparities to other minorities compared to non-minority veterans; few studies, however, have assessed mental health outcomes in AI/AN active duty military members. The objective of this study was to determine differences in depression, anxiety, hazardous alcohol consumption, and suicidal ideation among AI/AN soldiers compared to soldiers of other races during the Coronavirus Disease 2019 (COVID-19) pandemic.

#### Materials and Methods

We conducted repeated cross-sectional electronic surveys to assess the mental health of active duty and activated reserve U.S. Army soldiers within three commands in the Northwestern Continental United States , Republic of Korea, and Germany during May-June 2020 (T1) and December 2020-January 2021 (T2). The primary exposure of interest in the present analysis was race and ethnicity, and the primary outcomes were probable depression with functional impairment (subsequently "depression"), probable anxiety with functional impairment (subsequently "anxiety"), hazardous alcohol use, and suicidal ideation. Multivariable logistic regression models were used to determine the association between demographics and COVID-19 concerns on mental health outcomes for each time point.

#### Results

A total of 21,293 participants responded to the survey at T1 (participation rate = 28.0%), and 10,861 participants responded to the survey at T2 (participation rate = 14.7%). In the multivariable model, Al/AN participants had 1.36 higher adjusted odds of suicidal ideation (95% CI: 1.02-1.82) at T1 and 1.50 greater adjusted odds of suicidal ideation at T2 (95% CI: 1.00-2.24), when compared to non-Hispanic White participants. During T1, there was no significant difference detected between Al/AN and non-Hispanic White participants for anxiety (adjusted odds ratio: 1.21; 95% CI: 0.91-1.60) (Table IV). However, Al/AN participants had 1.82 greater adjusted odds of anxiety when compared to non-Hispanic White participants at T2 (adjusted odds ratio: 1.82; 95% CI: 1.29-2.57). There were no significant differences detected between Al/AN participants and non-

Hispanic White participants in multivariable models for either depression or hazardous alcohol use at both time points.

## Conclusions

Although we hypothesized that all adverse mental health outcomes would be higher for Al/AN service members at both time points, there were no significant differences at each of the time points analyzed for most of the outcomes analyzed. However, differences in suicidal ideation were found at both time points. Analyses and proposed interventions should account for diversity and heterogeneity of Al/AN populations.

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## https://doi.org/10.1080/08995605.2023.2204790

The Purple Heart and suicide risk in Post-9/11 U.S. Army Combat Veterans with a traumatic brain injury: A mixed methods study.

Moceri-Brooks, J., Garand, L., Sekula, L. K., Zoucha, R., & Joiner, T.

Military Psychology Volume 36, 2024 - Issue 4

Active service members and Veterans with a combat-related traumatic brain injury (TBI) are four times more likely to attempt suicide than those without a TBI. TBIs are the signature injuries of the Post-9/11 conflicts and Combat Veterans (i.e., current and former service members who deployed in support of a combat mission) with these injuries are entitled to receive the Purple Heart medal. However, potentially tens of thousands of Combat Veterans did not receive, or were denied the Purple Heart during the first decade of the Global War on Terrorism because a TBI was not documented during the deployment. To our knowledge, this is the first study to explore the meaning of the Purple Heart and examine the impact of the Purple Heart on Army Combat Veterans with a combat-related TBI. Findings from this mixed methods study revealed that not receiving the Purple Heart is associated with increased suicide risk and lower quality of life after a brain injury. Additionally, thwarted belongingness, perceived burdensomeness, and perceived military institutional betrayal are associated with increased suicide risk in Army Combat Veterans with a TBI. This mixed methods study provides important insights into how Army culture is perceived and the power of the Purple Heart among this high-risk group of Combat Veterans.

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## https://doi.org/10.1093/milmed/usac232

Prospective Associations of Military Discharge Characterization with Post-active Duty Suicide Attempts and Homelessness: Results from the Study to Assess Risk and Resilience in Servicemembers-Longitudinal Study (STARRS-LS).

Naifeh, J. A., Capaldi, V. F., Chu, C., King, A. J., Koh, K. A., Marx, B. P., Montgomery, A. E., O'Brien, R. W., Sampson, N. A., Stanley, I. H., Tsai, J., Vogt, D., Ursano, R. J., Stein, M. B., & Kessler, R. C.

# Military Medicine

Volume 188, Issue 7-8, July/August 2023, e2197-e2207

## Introduction

Active duty service members transitioning to civilian life can experience significant readjustment stressors. Over the past two decades of the United States' longest sustained conflict, reducing transitioning veterans' suicidal behavior and homelessness became national priorities. However, it remains a significant challenge to identify which service members are at greatest risk of these post-active duty outcomes. Discharge characterization, which indicates the quality of an individual's military service and affects eligibility for benefits and services at the Department of Veterans Affairs, is a potentially important indicator of risk.

## Materials and Methods

This study used data from two self-report panel surveys of the Study to Assess Risk and Resilience in Servicemembers-Longitudinal Study (STARRS-LS) (LS1: 2016-2018, n=14,508; and LS2: 2018-2019, n=12,156), which were administered to respondents who previously participated while on active duty in one of the three Army STARRS baseline self-report surveys (2011-2014): the New Soldier Study (NSS), a survey of soldiers entering basic training; All Army Study, a survey of active duty soldiers around the world; and the Pre-Post Deployment Study, a survey of soldiers before and after combat deployment. Human Subjects Committees of the participating institutions approved all recruitment, informed consent, and data collection protocols. We used modified Poisson regression models to prospectively examine the association of discharge characterization (honorable, general, "bad paper" [other than honorable, bad conduct, dishonorable], and uncharacterized [due to separation within the first 180 days of service]) with suicide attempt (subsample of n=4334 observations) and homelessness (subsample of n=6837 observations) among those no longer on active duty (i.e., separated or deactivated). Analyses controlled for other suicide attempt and

homelessness risk factors using standardized risk indices that were previously developed using the LS survey data.

#### Results

Twelve-month prevalence rates of self-reported suicide attempts and homelessness in the total pooled LS sample were 1.0% and 2.9%, respectively. While not associated with suicide attempt risk, discharge characterization was associated with homelessness after controlling for other risk factors. Compared to soldiers with an honorable discharge, those with a bad paper discharge had an increased risk of homelessness in the total sample (relative risk [RR] = 4.4 [95% CI = 2.3-8.4]), as well as within subsamples defined by which baseline survey respondents completed (NSS vs. All Army Study/Pre-Post Deployment Study), whether respondents had been separated (vs. deactivated), and how much time had elapsed since respondents were last on active duty.

#### Conclusions

There is a robust association between receiving a bad paper discharge and post-separation/deactivation homelessness. Policies that enhance transition assistance and access to mental healthcare for high-risk soldiers may aid in reducing post-separation/deactivation homelessness among those who do not receive an honorable discharge.

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# https://doi.org/10.1136/military-2024-002724

Identifying psychological risk and resilience in high-risk military personnel.

Bennett, N., Lawrence-Wood, E., & McFarlane, A.

BMJ Military Health First published June 19, 2024

#### Introduction

Combat exposure has been associated with the emergence of post-traumatic stress disorder (PTSD) symptoms in military personnel; however, not all veterans are negatively impacted by their operational experience. In many instances, the absence of symptoms following operational service is attributed to resilience. This study explored the construct of resilience by examining the relationship between levels of deployment-

related exposures and psychological symptoms, as well as identifying factors that may contribute to resilience and emerging risk.

#### Method

Participants were special forces personnel who completed self-report questionnaires 1 month before deployment and 4 months post deployment. Subgroups were created based on psychological reactivity to deployment exposures, representing risk, vulnerability and resilience. Regression analysis assessed the contribution of factors that were predictive of risk or resilience groups specifically.

# Results

Results showed the overall levels of psychological reactivity in this population post deployment were low; however, differences between risk and resilience subgroups were found. Subthreshold indicators of psychological reactivity, as well as deployment factors such as increased deployment frequency and time spent away from home, were found to contribute to differences between risk and resilient trajectories.

#### Conclusion

Findings reflect a military population with low psychological symptoms despite high trauma exposure. However, subtle underlying differences between subgroups suggest that the early identification of risk and emerging trajectories is possible. Risk and resilience in military populations needs to consider subthreshold indicators and individual differences over time.

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https://www.canada.ca/en/department-national-defence/corporate/reports-publications/health/2023-report-on-suicide-mortality-in-the-caf-1995-to-2022.html

# 2023 Report on Suicide Mortality in the Canadian Armed Forces (1995 to 2022).

David Boulos, MSc, Directorate of Mental Health (DMH)

Surgeon General Health Research Program SGR-2024-001 February 2024

## Introduction:

Each death from suicide is tragic. Suicide prevention is an important public health concern and is a top priority for the Canadian Armed Forces (CAF). In order to better

understand suicide in the CAF and refine ongoing suicide prevention efforts, the Canadian Forces Health Services annually examine suicide rates and the relationship between suicide, deployment and other potential suicide risk factors. This analysis, conducted by the Directorate of Mental Health (DMH), is an update covering the period from 1995 to 2022.

#### Methods:

This report assesses suicide data for Regular Force males over the 1995 to 2022 period and Regular Force females over the 2001 to 2022 period. It provides an interpretation of several statistics, including the crude suicide rates observed among various characteristics, the differences in suicide rates that result from comparisons between the Canadian population and the CAF using Standardized Mortality Ratios (SMRs) and the differences in suicide rates that are observed by deployment history when using both SMRs and direct standardization assessments. It also examines the variation in suicide rates that are observed by environmental command and among the suicide deaths that occurred in 2022 and during the prior five years, 2018-2022, it uses data from Medical Professional Technical Suicide Reviews (MPTSR) to examine the prevalence of a number of mental health factors and work or life stressors that are known to be suicide death risk factors.

#### Results:

Over 2018 to 2022 there were 66 CAF Regular Force male suicide deaths with a mean age of 35.0 years. This mean age was not statistically different from the mean age among Regular Force males over this period. Crude suicide rates were also computed for a number of characteristic and for various periods over 2010-2022. Over each time period, the crude suicide rate was higher among ages less than 45 years but there were no statistically significant differences between age groups. For the 2018-2022 period, and for the 2015-2019 and 2020-2022 periods, the suicide rate was higher with statistical significance among Regular Force males who were separated, divorced or widowed when compared to other marital status categories. Additionally, the suicide rate tended to vary by rank category, highest among the junior non-commissioned (JNCM) ranks for the 2018-2022, 2010-2014 and 2015-2019 periods; however, this elevated suicide rate among JNCM ranks was not statistically significant relative to the other rank categories. Moreover, the suicide rate did not differ substantially, and the differences were not statistically significant, by environmental command or by deployment history for each period assessed; however, it was notable that the suicide rate among the Air Force command was elevated in 2015-2019, relative to the prior 2010-2014 period, and this increase just missed being statistically significant as indicated by the minimally overlapping confidence intervals. In contrast, the rate of suicide was higher with statistical significance among males who were in the Army

combat arms occupations, relative to those in other occupations, but only during the 2010-2014 period.

In comparison, the general observations among CAF Regular Force females were similar to those among Regular Force males but the absolute numbers were lower. Over 2013 to 2022 there were 11 Regular Force female suicide deaths with a mean age of 32.9 years. This mean age was not statistically different from the mean age among all Regular Force females over this period. Crude suicide rates were also computed for a number of characteristic and for various periods over 2005-2022. The crude suicide rate varied among age groups, tending to be a little higher among those who were younger than 45 years but there were no statistically significant differences by age group. Although the suicide rate tended to be higher among Regular Force females who were single, lower in rank, in Army combat arms occupations and those who did not have a history of deployment, the confidence intervals overlapped for all categories of each characteristic, indicating that these differences were not statistically significant. Similarly, there was no discernable pattern in the suicide rate by environmental command and no indication that the suicide rate was higher with statistical significance in one command or another.

Crude suicide rates were computed over 1995 to 2022 to evaluate for indications of a changing suicide risk over time. There were no statistically significant increases in the overall suicide rates for either Regular Force males or females when comparing each 5year incremental time segment over 1995 to 2022. The 5-year rates for males varied from a low of 19.9 per 100,000 population during 1995-1999 to a high of 24.5 per 100,000 in the more recent 2010-2014 and 2015-2019 periods and this difference was not statistically significant. The three-year crude rate for 2020-2022 among males, the most recent period, was 23.0 per 100,000 population and it was not a statistically significant change from any of the prior 5-year rates. Similarly, among Regular Force females the 5-year crude rates varied from 8.2 per 100,000 population in the 2015-2019 period to a high of 15.5 per 100,000 in 2010-2014 and again, this difference was not statistically significant. The three-year crude rate for 2020-2022 among females, the most recent period, was 12.8 per 100,000 population and it was not a statistically significant change from any of the prior 5-year rates. The number of Regular Force males that died by suicide was not statistically higher than that expected based on male suicide rates in the Canadian male population for each period that was evaluated. In contrast, the number of Regular Force female suicides were higher with statistical significance than the number expected based on the suicide rate in the Canadian female population over the 10-year period from 2005-2014, a result that was largely attributable to the higher than usual three female suicide deaths that occurred in 2012,

and although also elevated for the other assessed periods, these were not statistically significant.

Rate ratios that separately compared Regular Force males and females with a history of deployment to those without this history did not establish a statistically significant link between deployment and increased suicide risk. Among males with a history of deployment, the suicide rate tended to be elevated relative to those without this experience for almost all periods assessed but none were determined to be statistically significant. However, the rate ratio for the 2005-2014 period (age-standardized suicide rate ratio: 1.44 [95% CI: 0.97, 2.15]), which indicated a higher rate among those with a history of deployment, was close to being statistically significant. In contrast, the suicide rate among females with a history of deployments tended to be lower relative to those without this experience for almost all periods assessed and again, none of the differences were statistically significant. Moreover, the low number of suicide deaths among Regular Force females who had a history of deployment exemplifies the low suicide risk associated with deployment experience among females, but it is also associated with a limited power to conduct the statistical comparison.

These rate ratios also highlighted that, over 2002-2022 for both males and females, being part of the Army command was associated with a slightly higher rate of suicide relative to those who were part of the other environmental commands but the difference for both was not statistically significant. Although not a statistical test, the three-year, and 5-year, suicide rate moving averages provided an indication of how suicide rates fluctuated over time. These suggested that while Army commands appear to have had an elevated rate over 2008 to 2014 among males and 2011 to 2015 among females, the Army and non-Army command suicide rate differences appear to have changed from around 2015 or 2016 onwards. At approximately this time point, the moving average rates became more comparable among Regular Force male Army and non-Army commands and among Regular Force female Army commands, the suicide rate moving average dropped to zero from 2017 to 2019 and remained lower relative to non-Army commands for the subsequent 2020 year. Moreover, in the more recent years the suicide rate moving average appears to have been at a point where it was either more comparable or a little more elevated among non-Army commands.

For the 2002-2022 period, Regular Force males in the Army combat arms occupations had a statistically significant higher suicide rate (31.0/100,000 [95% CI: 25.1, 38.4]) compared to Regular Force males in other occupations (19.7/100,000 [95% CI: 16.8, 22.9]). Similarly, over the 2002-2022 period Regular Force females in the Army combat arms occupations had an elevated suicide rate (27.6/100,000 [95% CI: 3.3, 99.6]) relative to Regular Force females in other occupations (11.3/100,000 [95% CI: 6.9,

17.4]) but this difference was not statistically significant; however, the low numbers being compared limited the power of the assessment of these differences. These occupation comparisons were also assessed for the 10-year 2012-2022 period and the observations were similar to what was observed over the full 2002-2022 period for both males and females. However, the suicide rate difference between Regular Force males in Army combat arms relative to those in other occupations had begun to decrease from 2015 onwards and at this point, the difference in rates for the shorter, but more recent period, was not statistically significant.

Results from the 2018-2022 MPTSRs for both males and females continue to support a multifactorial causal pathway (this includes biological, psychological, interpersonal, and socio-economic factors) for suicide rather than a direct link between single risk factors (such as Post-Traumatic Stress Disorder (PTSD) or deployment) and suicide. This was consistent with MPTSR findings from previous years. Additionally, all CAF members experienced the COVID-19 pandemic and there was no evidence that it contributed to suicide risk. Moreover, during the COVID-19 pandemic the suicide rate and its related characteristics over 2020 to 2022 were comparable to observations from previous years.

#### Conclusions:

Suicide rates among Regular Force males and females in the CAF did not increase with any statistical significance over the period of observation described in these findings; however, after age standardization, the Regular Force female suicide rate was identified to have been higher with statistical significance relative to the rate in the Canadian female population during the 2005 to 2014 period while for Regular force males, the difference relative to the Canadian male population was not statistically significant for any period assessed. Despite the added stressors that CAF members may have experienced as a result of the COVID-19 pandemic, the suicide rate and its related characteristics over 2020 to 2022 were comparable to observations from previous years. However, small numbers do limit the ability, or power, of statistical assessments to detect differences with statistical significance when they are real and not chance occurrences. The elevated risk in Regular Force males under Army command, or more specifically, those in combat arms occupations, continues to be an area that is under observation by the CAF. Moreover, the CAF will also need to continue to monitor the slight elevation in suicide risk among Regular Force males in the Air Force command that was suggested by the data from the most recent period.

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# https://doi.org/10.1136/military-2024-002768

Personalising veteran healthcare: recognising barriers to access for minority and under-represented groups of veterans.

Campbell GM, Perry M, Milford J, Murphy D

BMJ Military Health First published June 19, 2024

Veterans are not a demographically homogenous group, yet minority groups continue to be under-represented in research and report feeling less able to access clinical services to seek support. While veteran-specific healthcare has responded to the needs of the majority, the success of veteran mental health services is contingent on serving the whole veteran population. Key to the personalisation of healthcare is the question of access and a need to address specific inequalities and barriers to help-seeking behaviour. In this paper, we explore the issues of access to veteran healthcare at three levels: those barriers common to all veterans; those common to all minority groups of veterans; and those relevant to specific minority groups of veterans. Stigma, military attitudes and culture (eg. stoicism), and access to services and professionals with veteran-specific knowledge are universal barriers across veteran groups. Minority groups report a heightening of these barriers, alongside being 'othered' in veteran care settings, a lack of representation of them or their experiences in service descriptions and advertising, a lack of professional cultural competencies on specific issue, and the veteran environment potentially being retraumatising. Finally, barriers specific to individual groups are discussed. Attending to these is essential in developing holistic approaches to personalised healthcare that meets the needs of all veterans.

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# https://doi.org/10.3138/jmvfh-2023-0065

Role of military context and couple well-being in the psychological vulnerability of military wives in the United States.

Mallory Lucier-Greer, Debra R. Campbell

Journal of Military, Veteran and Family Health First published: 29 April 2024

The psychological health of military spouses is essential for the health and readiness of the family system. Thus, it is essential to understand contextual and familial factors that play a role in the psychological vulnerability of military spouses. This study examined how aspects of military life (number of deployments, perceived social support from the military community, and assessments of military life satisfaction) and family life (namely, couple well-being) played a role in the psychological vulnerability (depressive symptoms and personal well-being) of 222 U.S. military wives. Results suggested that when military wives felt more social support from the military community, they typically reported greater well-being. Wives who were more satisfied with military life tended to indicate better couple well-being. In turn, greater couple well-being was linked to less psychological vulnerability, specifically, fewer depressive symptoms and higher wellbeing. Overall, the military context had some bearing on the psychological vulnerability of military wives, especially when they did not feel supported by the military community. Importantly, however, the couple relationship appeared to be the most salient factor associated with the psychological vulnerability of military wives. Promoting healthier couple relationships appears to be a potential leverage point for intervention.

#### Introduction:

Rooted in a socio-ecological and stress process framework, assumptions are that both distal contextual factors (military context) and more proximal interpersonal factors (couple well-being) have bearing on a person's psychological vulnerability.

## Methods:

Using cross-sectional data from 222 U.S. military wives, this study explored how military context (specifically, number of deployments, perceived social support from the military community, and assessments of military life satisfaction) was associated with psychological vulnerability (depressive symptoms and personal well-being). Furthermore, the authors examined the mediating role of couple well-being, a latent variable composed of marital quality, relationship communication satisfaction, and relationship warmth.

#### Results:

A series of structural equation models indicated that social support from the military community was directly associated with higher levels of personal well-being among military wives. Additionally, wives who were more satisfied with military life tended to indicate higher levels of couple well-being; in turn, higher levels of couple well-being were associated with less psychological vulnerability for spouses through both lower levels of depressive symptoms and higher levels of personal well-being.

#### Discussion:

Results suggest that military contextual factors have some bearing on the psychological vulnerability of military wives, especially when spouses do not feel supported by the military community. Nonetheless, couple relationship appeared to be the most salient resource for combating wives' psychological vulnerability and, thus, a potential leverage point for intervention.

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# https://doi.org/10.1111/famp.13003

Mental health profiles of depressive symptoms and personal well-being among active-duty military families.

Catherine Walker O'Neal, Justin A. Lavner, Todd M. Jensen, Mallory Lucier-Greer

Family Process

First published: 23 April 2024

Although some research has examined the mental health of individual family members in military families, additional research is needed that considers mental health among multiple members of the family system simultaneously and that characterizes subsets of families with distinct patterns. Mental health patterns of depressive symptoms and wellbeing in and among families were identified using latent profile analysis with a community sample of 236 military families with a service member (SM) parent, civilian partner, and adolescent. Drawing from the Family Adjustment and Adaptation Response model, we examined several military-related family demands (e.g., relocations, deployments) and capabilities (e.g., family cohesion, social support outside the family) as correlates of the family profiles. Three profiles emerged: thriving families (62.3% of the sample where all three family members reported relatively low depressive symptoms and high personal well-being), families with a relatively distressed SM (24.2%), and families with a relatively distressed adolescent (13.5%). Overall, there were no differences between the groups of families regarding military-related demands, yet there were differences between the groups regarding their capabilities, namely family cohesion and social support. In general, families in the thriving profile tended to have higher family cohesion and social support as reported by multiple family members compared to the other two profiles. Findings can inform the development of family needs assessments and tailored interventions (and intervention points) based on family profiles and current capabilities.

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# https://doi.org/10.1177/00302228241241098

Prevalence and Correlates of Complicated Grief in Military Primary Care: Implications for Healthcare Providers.

Gibson L. P.

OMEGA - Journal of Death and Dying First published online March 20, 2024

Grief is a universal experience, but for approximately 1 in 10 individuals, grief can become impairing. Despite servicemembers' frequent exposure to death, research on grief in the military remains limited. The purpose of the study was to explore the prevalence and correlates of complicated grief (CG) in military primary care. A quantitative survey was conducted with 161 non-treatment-seeking service members, veterans, and their dependents, of whom 138 reported a significant loss. Results revealed that 35% of the respondents who were bereaved met the cut-off score of 25 on the Inventory of Complicated Grief (ICG). Furthermore, 10% met the cut-off score of 30 on the Prolonged Grief Disorder-13-Revised Scale (PG-13-R). Importantly, death by suicide and pre-existing mental health conditions were associated with greater symptom severity. These findings have important implications for primary care providers and other clinicians working with military populations.

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## https://doi.org/10.1037/ccp0000882

What works better? 1-year outcomes of an effectiveness trial comparing online, telehealth, and group-based formats of a military parenting program.

Gewirtz, A. H., DeGarmo, D. S., & Lee, S.

Journal of Consulting and Clinical Psychology 2024; 92(5), 310–319

# Objective:

The present study, conducted with a population of military families, examined the comparative effectiveness of three program formats of Adaptive Parenting Tools

(ADAPT), a parenting program for families of school-aged children in which a National Guard or Reserve (NG/R) parent had returned from deployment to the post-9/11 conflicts. Despite well-documented need, parenting programs for NG/R families are scarce and often inaccessible. We predicted that both facilitator-delivered conditions (i.e., in-person group; individual telehealth) would result in stronger improvements in observed parenting than assignment to the online self-directed condition. We further proposed a noninferiority hypothesis wherein no significant difference would be detected between telehealth and group conditions.

#### Method:

Families (N = 244; 87% Caucasian) were recruited from NG/R units in two midwestern states. Families (with a 5–12-year-old child) were randomized to one of three conditions: in-person multifamily group, individual telehealth, or an online, self-directed condition. The intervention was delivered using the same content across conditions, over 14 weeks (group, telehealth conditions) or 12 modules (online condition); either or both parents could participate.

#### Results:

Intent-to-treat analyses supported both hypotheses: families in both in-person group and telehealth conditions showed significant improvements to observed parenting at 1-year postbaseline compared with those assigned to the self-directed online condition.

## Conclusions:

This is the first study to demonstrate that in-person group and telehealth parenting programs are equally effective and that both are superior to a self-directed online program. Limitations include differences between the session lengths in each format, as well as greater attrition in the in-person format.

## Impact Statement

Over the past decade or so, telehealth interventions (i.e., those offered by practitioners using a live video feed) have become common, but few studies have examined whether they are as effective as in-person parenting programs. This study compared telehealth, in-person group, and a self-directed online format of the same parenting program for military families. Families (N = 244) were randomly offered one of the three formats. Analyses of parenting practices at baseline and after 1 year showed that both the telehealth and the in-person group program led to significant improvements in parenting and were superior to the online self-directed program. Telehealth parenting programs appear to be a valuable and helpful way to support parents under stress. (PsycInfo Database Record (c) 2024 APA, all rights reserved)

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# https://doi.org/10.1037/tra0001678

Brief family involvement enhances veteran homework quality during traumafocused psychotherapy.

Fernando, M., Fite, R. E., & Thompson-Hollands, J.

Psychological Trauma: Theory, Research, Practice, and Policy Advance online publication

# Objective:

Homework has been shown to improve outcomes in cognitive-behavioral therapy, though less is known about the importance of homework during trauma-focused psychotherapy. Similarly, prior research suggests family context plays a key role in posttraumatic stress disorder (PTSD)-related distress and treatment engagement. One potential way that families can facilitate better treatment outcomes is by promoting homework engagement. This study examined the impact of a brief family intervention (BFI) for PTSD toward this aim. We hypothesized that veterans with PTSD whose family members (FMs) received the BFI would have better homework completion and quality than those who did not receive the BFI.

#### Method:

This mixed-methods analysis examined 24 veteran-family dyads enrolled in a randomized clinical trial examining the BFI. All veterans were currently engaged in trauma-focused psychotherapy. Each veteran's clinician rated their homework quality and completion after each therapy session. A subset of dyads also completed semistructured interviews posttreatment. A rapid qualitative analysis approach was used to examine themes in shifting family behavior post-BFI.

#### Results:

Quantitative analyses yielded partial support for our hypotheses: those in the BFI condition had significantly higher clinician-rated homework quality. While participants in the BFI condition had a higher homework completion rate, this difference did not reach statistical significance. Qualitative analyses suggested that the BFI prompted meaningful discussions about PTSD and increased FMs' use of supportive (rather than accommodative) behavior when responding to PTSD-related distress.

#### Conclusions:

Involving FMs in PTSD treatment appears to shift the family context in a manner that improves homework quality in veterans.

## Impact Statement

Family involvement during trauma-focused psychotherapy increases therapy homework engagement in a veteran sample. Educating family members (FMs) about posttraumatic stress disorder (PTSD) and trauma-focused psychotherapies may better prepare FMs to support those with PTSD in a manner that helps them engage in treatment effectively. (PsycInfo Database Record (c) 2024 APA, all rights reserved)

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# https://doi.org/10.1016/j.xjmad.2024.100064

Suicide without warning: Results from the Army Study to Assess Risk and Resilience in Servicemembers (STARRS).

Catherine L. Dempsey, Jingning Ao, Matthew W. Georg, Pablo A. Aliaga, ... Robert J. Ursano

Journal of Mood & Anxiety Disorders Volume 7, September 2024, 100064

# Objectives

The rate of suicide increased in members of the United States Army since 2011 after the Iraq and Afghanistan wars and continues to be a major concern. In order to reverse this disturbing trend, it is vital to understand the risk and protective factors for suicide death in servicemembers.

## Methods

Data were obtained from a case-control psychological autopsy study, which compared U.S. Army suicide decedent cases (n = 135) to a probability sample of living controls (n = 255) who are also service members weighted to be representative of the Army. Interviews were conducted with next-of-kin (NOK) and supervisor (SUP) informants. Multivariable logistic regressions models were constructed using predictors significant after controlling for multiple comparisons.

## Results

The most parsimonious multivariable model controlling for deployment status, as

reported by SUP predicting suicide death consisted of four significant variables: a spouse or partner left him or her in the past month (OR = 28.5 [95% CI = 1.8, 442.7]  $\chi^2$  = 5.72, p = .0168); a smaller social network (OR = 4.2 [95% CI = 1.0, 17.3]  $\chi^2$  = 3.97, p = .0462), less likely to seek help from a mental health counselor (OR = 3.4 [95% CI = 1.2, 9.7]  $\chi^2$  = 5.35, p = .0207) and more likely to be described as incautious (OR = 3.8 [95% CI = 1.2, 11.7]  $\chi^2$  = 5.42, p = .0199). The AUC = .88 [95% CI = 0.82, 0.94] for this regression model suggests strong prediction.

#### Conclusions

Our findings suggest that recent relationship problems, especially in soldiers who are less likely to seek out support from others, may be warning signs for detection and prevention of imminent risk of suicide and according to supervisor informant surveys, had neither evidence of a mental health disorder, nor disclosed suicidal ideation or self-harm. Implications for suicide prevention are discussed.

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# https://doi.org/10.1080/07481187.2024.2369858

Understanding the complexity of suicide loss: PTSD, complex PTSD and prolonged grief disorder following suicide bereavement.

Laura Hofmann & Birgit Wagne

**Death Studies** 

Published online: 24 Jun 2024

Suicide-bereaved individuals are often confronted with profound grief reactions and have an increased risk for mental health disorders. Little is known about the development of complex post-traumatic stress disorder (CPTSD) following a loss by suicide. This paper aims to assess the prevalence of CPTSD, PTSD, prolonged grief disorder (PGD), and depression as well as to identify sociodemographic and loss-related factors regarding their development. A total of 161 suicide loss survivors (91.3% female) completed a questionnaire, which collected symptoms of grief (TGI-SR+), PTSD, CPTSD (ITQ), and depression (PHQ-D). In total, 12.4% met the diagnosis for CPTSD, 5.0% for PTSD. A total of 22.0% fulfilled the diagnosis for PGD. 41.6% showed at least moderate symptoms of depression. Pearson's correlation showed that time since loss was negatively associated with PG and PTSD symptoms, kinship to the deceased was associated with PG severity. The sample scored high on all disturbances

in self-organization (DSO) symptom clusters typical for CPTSD. A focus on symptoms of CPTSD may be a necessary component in the care of survivors of suicide loss.

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# https://doi.org/10.1080/07481187.2024.2370468

Female military service members and veterans: Understanding treatment seeking behavior and previous suicide risk among suicide decedents.

Allison E. Bond, Claire Houtsma, Mary E. Shapiro, Shelby L. Bandel, Jayna Moceri-Brooks & Michael D. Anestis

**Death Studies** 

Published online: 24 Jun 2024

To examine the differences in treatment seeking behaviors, previous suicidal thoughts, previous suicide attempts, and disclosure of suicidal thoughts among female service members (SM)/Veteran suicide decedents who used a firearm and those who used another method. Data was acquired from the National Violent Death Reporting System which is maintained and monitored by the Center for Disease Control and Prevention. Data included in the present study were from suicide deaths that occurred between 2003–2018. Female SM/Veterans who died by firearm suicide had lower proportions of current mental health or substance use treatment, lifetime mental health or substance use treatment, and previous suicide attempts compared to those who used another method. Female SM/Veterans who die by firearm suicide are less likely to encounter mental health services than those who use another method. Conversations on secure firearm storage need to occur outside of the health care setting.

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# https://doi.org/10.1080/07481187.2024.2348057

Their final words: An analysis of suicide notes from the United States.

John Gunn, Patrick McGrain, Brielle Ördög & Mackenzie Guerin

**Death Studies** 

Published online: 06 May 2024

The present study sought to explore motivations (affective, relationships, life events, injury/medical diagnosis) in suicide notes (N = 49) from the U.S. Authors ranged in age from 18 to 74 years and were majority male (73.5%). Four raters analyzed the notes and, through a series of meetings, came to a consensus on the motives behind each note writers' suicide in terms of the broader motivational themes and the narrower second-level themes. All notes were primarily affectional in nature, with some gender and age differences. For example, suicide notes from males frequently refer to financial hardships whereas suicide notes from females were more focused on lowered selfworth and notes written by younger persons focused more on affect and relationships, while notes written by older adults focused on life events and marriage difficulties and separation. Findings illuminate the varied nature of suicide motivations but also highlight important patterns across groups.

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#### **Links of Interest**

What troops need to know about spouse and family support in 2024 <a href="https://www.militarytimes.com/smr/benefits-guide/2024/06/20/what-troops-need-to-know-about-spouse-and-family-support-in-2024/">https://www.militarytimes.com/smr/benefits-guide/2024/06/20/what-troops-need-to-know-about-spouse-and-family-support-in-2024/</a>

Army vet still paying the price for bad paper discharge for being gay <a href="https://www.militarytimes.com/veterans/2024/06/20/army-vet-still-paying-the-price-for-bad-paper-discharge-for-being-gay/">https://www.militarytimes.com/veterans/2024/06/20/army-vet-still-paying-the-price-for-bad-paper-discharge-for-being-gay/</a>

Other Nonspecified Feeding or Eating Disorders: Pushing the Envelope <a href="https://www.psychiatrist.com/pcc/other-nonspecified-feeding-eating-disorders-pushing-envelope/">https://www.psychiatrist.com/pcc/other-nonspecified-feeding-eating-disorders-pushing-envelope/</a>

Contingency Management for Substance Use Disorders <a href="https://crsreports.congress.gov/product/pdf/IF/IF12681">https://crsreports.congress.gov/product/pdf/IF/IF12681</a>

People often overestimate their resilience following failure, research suggests <a href="https://www.nbcnews.com/health/health-news/people-often-overestimate-resilience-failure-research-suggests-rcna156303">https://www.nbcnews.com/health/health-news/people-often-overestimate-resilience-failure-research-suggests-rcna156303</a>

Traumatic Brain Injury and Alcohol Misuse <a href="https://health.mil/Reference-Center/Fact-Sheets/2024/05/07/TBI-and-Alcohol-Misuse">https://health.mil/Reference-Center/Fact-Sheets/2024/05/07/TBI-and-Alcohol-Misuse</a>

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# Resource of the Week: Social Media in the Military Health System

We are pleased to participate in this open forum in order to increase government transparency, promote public participation, and encourage collaboration. These social media platforms, in conjunction with other public online presences, are intended to keep the general public, uniformed service members, and eligible beneficiaries informed about the mission, organization, leadership, events, and services available to them through the Military Health System.

- All pages are managed during regular business hours, 8 a.m. 5 p.m. ET.
- Information posted outside of regular business hours will not be reviewed until the next business day.
- All messages are public and visible to all for review and comment.
- Information provided on these platforms is not medical advice and is not intended to be a substitute for medical advice.



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Henry M. Jackson Foundation for the Advancement of Military Medicine