Suicide Prevention in the Department of Defense

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Over the past decade and a half, DoD has invested heavily in a vast array of programs and initiatives aimed at preventing suicide: more awareness and outreach, more public education, more screening, more antistigma campaigns, and more referrals for mental healthcare. Though diverse in their design and approach, efforts to date primarily share two common objectives: (1) identify which service members are at risk for suicide and (2) refer high-risk service members for treatment or intervention. Though logical, the identify-and-refer approach is limited because it assumes that suicide risk is a characteristic or trait of the individual. The prevailing model of suicide employed within and outside the Department of Defense (DoD) assumes that this characteristic or trait involves a mental health condition of some kind, such that suicide being a symptom or outcome of mental health conditions. Decades of research show that mental health conditions are only very weakly correlated with suicide, however, and over half of suicide decedents have no known mental health condition at the time of their death. For example, Centers for Disease Control and Prevention (CDC) data show that over half of U.S. citizens who die by suicide have no known mental health condition (Xu et al., 2021). The majority of service members who die by suicide similarly have no known mental health condition (Pruitt et al., 2017). Furthermore, mental health conditions are only weakly correlated with suicide (Franklin et al., 2017).

Instead of viewing suicide as a symptom or consequence of mental illness, <u>suicide is more usefully understood as a health behavior</u>. Health behaviors are actions (intentional or unintentional) taken by individuals that affect their health, well-being, and risk for mortality. Actions typically classified as health behaviors include smoking, substance use, diet, and treatment seeking (Short & Mollborn, 2015). These actions and behaviors are often correlated with or influenced by mental health conditions but are not <u>caused</u> by those mental health conditions. Most health behaviors are characterized by tradeoffs between short-term and long-term consequences. For example, maladaptive health behaviors like smoking and substance abuse often provide short-term rewards (e.g., relaxation, social connectedness, emotion relief) in exchange for long-term costs (e.g., cancer, shortened lifespan). Like other health behaviors, the decision to attempt suicide involves a tradeoff between short-term and long-term consequences, and primarily serves the purpose of alleviating emotional distress. For example:

- 100% of Soldiers who attempted suicide reported doing so "to stop bad feelings" and 82% reported doing so to escape or be removed from a stressful environment (Bryan et al., 2013);
- When asked what they experienced after surviving their first suicide attempt, Soldiers who
 said they "experienced relief from a terrible state of mind" were three times more likely to have
 made a second suicide attempt (Bryan et al., 2016); and

 Soldiers who are actively suicidal were 5 times more likely to attempt suicide in the following months if they believed suicide would reduce their emotional distress and pain (Bryan et al., 2019).

Suicide is therefore an action taken in response to stressful life circumstances. Among military personnel, the stressful circumstances that often precede suicidal behaviors include relationship problems, toxic work environments, financial strain, and disciplinary proceedings. The stress experienced because of these circumstances does not necessarily constitute mental illness, however; they may actually be expected and normative stress responses.

If the stress experienced by a service member is sufficiently extreme, a suicidal crisis can emerge. During a suicidal crisis, the subjective value of short-term relief and escape rapidly intensifies and overtakes the subjective value of continuing to live under duress and adversity. Any amount of relief <u>now</u>, even a very small amount, becomes more valuable than the possibility of a lot of relief later. Only 10% of suicidal military personnel report wanting to die (Bryan et al., 2019), however, further highlighting suicide's function as an extreme version of avoidance-based behavior rather than a symptom of mental illness. Service members attempt suicide not because they want to die, but rather because the act provides a means for escaping extremely stressful circumstances.

Viewing suicide as a health behavior instead of an outcome of mental illness provides a useful model for understanding why some suicide prevention strategies are more effective than others, why previous efforts to prevent military suicide have not been more successful, and how to change DoD suicide prevention strategy going forward. This perspective also holds important implications for public policy.

Suicide Prevention Strategies that Work in the Military

Over the past several decades, research aimed at reducing suicidal thinking and suicide attempts has expanded markedly (Fox et al., 2020; Nugent et al., 2019), revealing critical information that can inform clinical practice, community efforts, and policy. Randomized clinical trials (RCTs) provide especially valuable information because they can be used to consider the relative value and impact of multiple strategies when compared to one another. The accumulation of evidence over multiple decades for research suggests the most effective interventions and treatments for preventing suicidal behavior do not target mental health conditions like depression or anxiety. Rather, the most effective strategies include (1) suicide-focused psychological treatments, (2) reducing or limiting the availability of highly lethal suicide attempt methods, and (3) improving quality of life.

Strategy 1: Suicide-Focused Psychological Treatments

Suicide-focused cognitive behavioral therapies and problem-solving therapies have been shown to significantly reduce suicide risk by 19% or more as compared to traditional mental health treatments that focus on reducing symptoms of mental illness like depression and anxiety (Fox et al., 2020; Mann et al., 2021). These treatment approaches teach patients how to recognize when they are feeling emotionally overwhelmed, how to inhibit acting on suicidal urges, and how to use one or more alternative skills that can provide emotional relief or escape. Research funded by the DoD (W81XWH0910569 and W81XWH1020181) has found that interventions and treatments based on these models significantly reduce suicide attempts among active-duty military personnel as compared to standard mental health treatments:

- Brief Cognitive Behavioral Therapy for Suicide Prevention (BCBT) reduced suicide attempts among active-duty Soldiers by 60% as compared to standard mental health treatment (Rudd et al., 2015); and
- Crisis Response Planning (CRP), a 30-minute intervention used in BCBT, reduced suicide attempts among active-duty Soldiers by 76% as compared to standard mental health crisis interventions (Bryan et al., 2017).

DoD-funded research suggests that providing these specialized treatments to treatment-seeking military personnel instead of traditional mental health treatments could avert approximately 23-25 additional suicide attempts and 1-3 additional suicide deaths for every 100 military personnel who receive BCBT instead of standard mental health treatments (Bernecker et al., 2020). Implementing BCBT instead of standard mental health treatments could also save the DoD \$15,000-16,630 per patient in healthcare costs.

Unfortunately, multiple organizational and institutional barriers obstruct the potential impact and reach of BCBT and CRP. First, the DoD has no formalized training and implementation plan to ensure these interventions can be delivered with high quality across DoD medical facilities. Training in BCBT and CRP is therefore sporadic and inconsistent, limiting their potential impact. Second, increased administrative requirements (e.g., documentation) for DoD mental health professionals decreases treatment quality because clinicians are forced to shorten appointment times and/or work after hours to ensure compliance. These conditions increase clinician burnout, a known contributor to reduced treatment quality and clinician attrition. Third, expanded screening for suicidal ideation outside mental healthcare settings (e.g., primary care, community settings), combined with organizational policies mandating referrals to mental health professionals, yields extremely high false positive rates, compounding supply and demand issues. When implemented broadly and without restraint, more screening can paradoxically reduce access to and continuity of mental health treatment.

Policy aimed at eliminating and removing these barriers and hazards are therefore indicated:

- Develop and implement BCBT and CRP training for mental health professionals across DoD medical facilities. Training efforts should include follow-up consultation and supervision for trained clinicians.
- 2. Develop and implement CRP training for non-healthcare professionals including chaplains, military peers, frontline supervisors, family members, and other community partners. Trainings should be voluntary, not mandatory, to maximize effectiveness.
- Conduct a review of administrative and documentation requirements for DoD mental healthcare and compare current practices to civilian standard care expectations. Reduce or eliminate unnecessary administrative and documentation requirements that increase administrative burden.
- 4. Expand the Health Professions Scholarship Program (HPSP) across branches to improve recruitment of uniformed mental health professionals.
- 5. Improve recruitment of civilian mental health professionals by creating new professional training programs (e.g., predoctoral internships, postdoctoral fellowships, residencies) with contingent service commitments.

- 6. Expand loan repayment programs and retention bonuses for uniformed mental health professionals.
- 7. Eliminate policies that require commander notification and/or duty restrictions (e.g., flight status, top secret clearance) for military personnel who initiate mental health treatment.
- 8. Eliminate policies that mandate mental health evaluations, contacting law enforcement, and/or transport to hospitals when a service member reports suicidal ideation.

Strategy 2: Reducing or Limiting Access to Highly Lethal Suicide Attempt Methods

Only one suicide prevention strategy is reliably associated with reduced suicide rates at the population level: **means safety**. Means safety involves taking steps to limit or restrict access to potentially lethal suicide attempt methods. Numerous research studies show that where a suicide attempt method is (a) sufficiently lethal and (b) used sufficiently often within a population, limiting or reducing access to that method is consistently linked to large reductions in suicide (Mann et al., 2021). The life-saving effects of means safety is not limited to any specific suicide method: limiting and reducing access to a wide range of methods including pain killers, pesticides, carbon monoxide, bridges, and firearms are all supported scientifically. Of particular relevance to the military, however, is the potential impact of means safety efforts focused on firearms, which accounts for approximately two-thirds of military suicides (Pruitt et al., 2017), By comparison, firearms account for approximately half of all U.S. suicides (Xu et al., 2021).

Despite the overwhelming evidence supporting means safety, the strategy has until only recently been seriously considered as a component of comprehensive suicide prevention in the military. Given its considerable potential for saving lives, however, means safety should be prioritized. Research funded by the DoD (W81XWH1620003) has found that brief conversations with military personnel about secure firearm storage in their homes are well-received and significantly increases the use of locking devices and other secure storage methods when conducted in a culturally competent and sensitive manner that respects the autonomy of the service member.

Newer research further indicates the acceptability of means safety messaging is influenced by the messenger. Law enforcement, military personnel, and military veterans are ranked by firearm owners as the most credible sources for discussing firearm safety and secure storage (Anestis et al., 2021). Medical professionals and celebrities, by comparison, are generally seen as the least credible sources. Preliminary results from a recently completed DoD-funded research study (W81XWH162004) show similar patterns among active-duty military personnel: law enforcement and combat arms professions are generally associated with increased willingness to use secure firearm strategies whereas medical professionals are associated with no change or even decreased willingness to use secure firearm strategies.

Policy aimed at instituting and expanding means safety strategies, especially strategies specifically tailored to firearms, are therefore indicated:

- 1. Develop and implement public education campaigns that encourage, incentivize, and support secure firearm storage (e.g., safes and locking devices) and secure medication storage (e.g., lock boxes, pill dispensers) practices in service members' homes.
- 2. Subsidize the purchase and/or distribution of secure firearm storage devices and tools for service members.

- 3. Eliminate policies that restrict or discourage commanders and peers asking about firearm availability and access.
- 4. Require waiting periods for firearms purchased from vendors located on military installations (e.g., Army & Air Force Exchange Service, Navy Exchange, Marine Corp Exchange) and/or require the sale of firearm storage devices with on-base firearm purchases.
- 5. Include secure storage curriculum, demonstrations, and skills training as part of routine military safety briefings and weapons qualification training.

Strategy 3: Quality of Life

Suicide prevention efforts within the military have historically focused on changing assumed risk and protective factors within the individual service member. Much less attention has been paid to the environmental factors that surround service members. Resiliency training, therapy, and medications can help to reduce the harmful impact of common stressors like relationship problems, job-related strain, financial strain, toxic leadership, and disciplinary issues, but these individual-level interventions and strategies cannot necessarily eliminate these stressors. Indeed, in many cases the stressors that service members experience continue to impact them well after treatment ends. Strategies that eliminate or reduce these hazardous and stressful life circumstances can also reduce suicide risk by promoting quality of life. Suicide involves an action taken when the perceived value of death outweighs the perceived value of living. By increasing the perceived value of living, we can decrease the probability that a service member will choose to attempt suicide during a suicidal crisis. Critically, strategies that promote quality of life can prevent suicide even among service members who are not identified via screening and do not initiate mental health treatment.

Policy aimed at promoting quality of life are therefore indicated:

- 1. Include unit climate survey results as part of the annual evaluation and promotion processes for officers and noncommissioned officers.
- 2. Reform DoD policy surrounding the reporting, investigation, and prosecution of sexual harassment, sexual assault, and bullying perpetrated by military personnel.
- 3. Modernize and improve the safety and quality of on-base housing.
- 4. Modernize aging military facilities, especially morale, welfare, and recreation (MWR) facilities.
- 5. Enrich and invest in communities surrounding military installations to promote social connections and quality of life (e.g., improved access to green space, reduced crime).

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