

SUICIDAL BEHAVIOR IN A MILITARY VETERAN WITH MULTIPLE PSYCHIATRIC COMORBIDITIES AND TYPE 2 DIABETES: AN EDUCATIONAL CASE REPORT

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INTRODUCTION

United States (U.S.) military veterans have a lot of psychiatric and medical problems. One study reviewed data from 4,461,208 veterans receiving primary care within the Department of Veterans Affairs (VA), and found that 1,147,022 had at least one of the following psychiatric disorders: substance use disorders (8.3%), anxiety (4.8%), posttraumatic stress disorder (PTSD) (9.3%), depression (13.5%), or serious mental illness (i.e. schizophrenia or bipolar disorder) (3.7%) (Trivedi et al. 2015). In 2020, diabetes was one of the top-10 leading causes of death for U.S. military veterans (Department of Veterans Affairs 2022).

Psychiatric and medical problems are frequently associated with suicidal behavior (Aziraj-Smajić & Hasanović 2020, Giupponi et al. 2018). For example, an epidemiological study of the population of Sweden showed a 3.4-fold risk increase in suicide death among patients with diabetes in comparison to the general population (Sher 2022). Military veterans have higher rates of suicide than the general population. According to the VA National Veteran Suicide Prevention Annual Report, the suicide rate for veterans was 57.3% higher than non-veteran U.S. adults in 2020, after adjusting for age and sex differences (Department of Veterans Affairs 2022).

CASE REPORT

This case report aims to describe suicidal behavior in a military veteran with multiple psychiatric comorbidities and type 2 diabetes. We hope this case report adds

educational value to medical professionals who work with patients with diabetes.

LR is a 69-year-old, Black, male, non-combat Navy veteran who received psychiatric admission at the VA following intentional overdose of 30 units of insulin. LR served in the U.S. Navy from 1979 to 1982, and he received an Honorable discharge. LR has medical diagnoses consisting of type 2 diabetes mellitus, hepatitis C, gastroesophageal reflux disease, hyperlipidemia, and benign essential hypertension. He has psychiatric diagnoses consisting of schizoaffective disorder – depressive type, PTSD, cocaine use disorder, alcohol use disorder, and cannabis use disorder. LR is diagnosed with PTSD as a result of his service, but he did not experience combat and the trigger is unknown. It was cited that LR had “problems with authority” during his service. LR has psychosocial stressors consisting of unemployment, financial issues, lack of social supports and a history of homelessness. He has a history of multiple inpatient psychiatric and residential substance abuse rehabilitation program admissions at the VA.

LR reported that he had been experiencing difficulties maintaining his activities of daily living at his supportive housing residence, and he became quite depressed. He indicated that he relapsed on cocaine as a result of his depression, and this is what prompted him to attempt suicide with 30 units of insulin. Prior to his overdose, LR reported that he had been non-compliant with his medical and psychiatric medications for several weeks. His Hemoglobin A1C was 10.0% upon admission. Upon discharge from the inpatient psychiatric unit, his insulin was discontinued as his glucose was sufficiently managed on oral agents, and to reduce risk of insulin overdose in the future.

DISCUSSION

In this case, psychiatric illnesses including schizoaffective disorder, PTSD and substance use disorders, medical conditions including diabetes, and social issues including financial problems and lack/insufficient societal support could contribute to the psychobiology of a suicide attempt.

Mood, stress-related and psychotic disorders are associated with non-lethal and lethal suicide attempts. Research shows that approximately 90% of suicide attempters and victims have a diagnosable psychiatric disorder (Rihmer 2007). According to a study that examined suicidal behavior in individuals with schizoaffective disorder and schizophrenia, 34% reported a history of suicide attempts (Harkavy-Friedman et al. 2004).

A review of the literature found that military veterans with posttraumatic stress disorder were at elevated risk for suicide and suicide-related behaviors (Pompili et al. 2013). Stressful situations related to military service could contribute to the pathophysiology of psychiatric and medical issues and suicidal behavior in this case. “Problems with authority” during the military service could be related to this individual’s maladaptive behavior, or to the fact that he was abused, or both – maladaptive behavior leads to abuse and abuse leads to maladaptive behavior.

Alcohol and other substance use disorders significantly increase suicide risk (Lynch et al. 2020). For example, a large study in the U.S. showed that all categories of substance use disorders were associated with increased risk of suicide mortality (Lynch et al. 2020). Mood, stress-related and psychotic disorders are frequently associated with substance use disorders (Petrakis et al. 2011). For example, amongst the U.S. general population, 20% of those with mood disorders, 22% with PTSD, and 47% with schizophrenia had comorbid substance use disorders (Petrakis et al. 2011). The study further examined U.S. military veterans and concluded that post-Vietnam era veterans (1975-1991) had the highest rates of comorbid substance use and psychiatric disorders as compared to veterans from other eras (Petrakis et al. 2011). Dual-diagnosis disorders are frequently associated with high rates of suicide (Szerman et al., 2012).

Medical disorders such as diabetes are associated with suicidal behavior (Sher 2022). Individuals with diabetes are at greater risk for depression, and depression can also contribute to the increased likelihood of diabetes (Sher 2022). A person with depression is less likely to effectively manage their diabetes through insulin injections, monitor dietary habits and exercise. This creates a vicious cycle of poorly managed diabetes, which can result in higher hemoglobin A1C levels and impact quality of life (Sher 2022). To further complicate matters, the depression may contribute to suicidal behaviors, and insulin can be used to make a suicide attempt. Therefore, depressed individuals with diabetes need to be monitored for suicidality. In such cases, if possible, insulin should be replaced with long-acting medications such as semaglutide or dulaglutide.

CONCLUSION

Appropriate psychiatric and medical management may help prevent suicide in military veterans. Mental health professionals should make sure that veterans with diabetes are getting appropriate treatment from endocrinology or internal medicine. Medical professionals who are working with patients with diabetes need to regularly screen for suicide. Psychosocial stressors such as homelessness, financial issues and unemployment should be identified and addressed, as psychosocial stressors have been found to increase suicide risk in military veterans (Levine & Sher 2021, Pompili et al. 2013).

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None

Conflict of Interest

None to declare

Contributors

LS conceived the research topic. LS and JL reviewed the literature and identified eligible research. LS and JL interpreted the findings. JL wrote the initial manuscript draft. Both LS and JL were involved with revisions, and have approved the final submitted version.

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