

## Prevalence of Suicidality Among Hispanic and African American Veterans Following Surgery

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### ABSTRACT

*Objectives:* We evaluated factors associated with suicidal behavior and ideation (SBI) during 3 years of follow-up among 89,995 Veterans Health Administration (VHA) patients who underwent major surgery from October 2005 to September 2006. *Methods:* We analyzed administrative data using Cox proportional hazards models. SBI was ascertained by International Classification of Disease, 9th Revision codes. *Results:* African Americans (18% of sample; 16,252) were at an increased risk for SBI (hazard ratio [HR]=1.21; 95% confidence interval [CI]=1.10, 1.32), whereas Hispanics were not (HR=1.10; 95% CI=0.95, 1.28). Other risk factors included schizophrenia, bipolar disorder, depression, posttraumatic stress disorder, pain disorders, postoperative new-onset depression, and postoperative complications; female gender and married status were protective against SBI. *Conclusions:* The postoperative period might be a time of heightened risk for SBI among minority patients in the VHA. Tailored monitoring and postoperative management by minority status might be required to achieve care equity.”

### RESEARCH HIGHLIGHTS

- Since 2000, the suicide rate has been increasing. 2012 VA and CDC data indicate that each day, suicide claims the lives of approximately 100 individuals, including approximately 18 veterans. Previous studies have found that suicidal ideation can be in response to a life event or psychosocial stressor; however, susceptibility to suicidal behavior may vary across major subgroups, such as race and ethnicity. Given the limited research on suicidal ideation among African Americans, this study evaluates the association between suicidal behavior and ideation following a major surgery.
- Pain and depression are commonly experienced by patients who have undergone surgical procedures. Past studies have shown that pain management is influenced by a patient's race. However, the authors know of no studies that explored whether the months following surgery are a time of heightened risk for suicidal behavior, and whether this risk varies by racial/ethnic minority status. Using administrative data, the authors collected the risk of suicidal behavior and ideation (SBI) for 89,995 VHA patients who underwent a major surgery between October 2005 and September 2006.
- The researchers did not observe an increased risk for SBI following surgery with Hispanic Americans. However, the analysis revealed that African Americans have an increased likelihood of experiencing SBI in the three years following a major surgery.
- Findings indicate that an increased likelihood of SBI is associated with mental anguish, primarily depression. Given the findings, the VHA and other health care institutions might be vigilant in monitoring and managing the care of those experiencing health care-related pain and anxiety.

## IMPLICATIONS

### FOR PRACTICE

Providers and patients must work together to ensure the patient is prescribed adequate pain medications following a major surgery. Patients should discuss with their health care provider any concerns they have pre- and post- surgery, including pain intensity. Consistent with compassionate care and the VHA's mission to reduce veteran suicide, providers must address not only physical pain or other postoperative symptoms, but also new or exacerbated mental distress. Other studies reported that minority race/ethnicity patients had more severe pain, and were more likely to be prescribed medications inadequate for their pain intensity following a major surgery. Given that patients often report suicide as an option to relieve long-term suffering or the burden they place on others, providers should monitor patients for several months post-surgery. If a veteran is experiencing long-term suffering from surgery, providers should discuss with their patient additional services available to them, including mental health counseling. When possible, providers should refer patients at-risk for suicide to mental health providers before they exhibit signs of suicidal behavior and ideation (SBI). To reduce the challenge in identifying patients with a high risk for SBI, providers should continuously collaborate with other providers to learn signs of SBI, especially for racial and ethnic minorities.

### FOR POLICY

The VHA might expand its system-wide suicide prevention program that includes outreach to patients identified by a provider as at-risk for suicide. To help eliminate disparities in mental health outcomes post-surgery and help manage care of those at a heightened risk for suicide, the VHA might offer more interventions tailored for cultural subgroups to enable minority patients to better cope with the perioperative period. Given that the VHA serves the most disadvantaged veterans, the VHA might continue offering services to veterans' family members, such as resources and tips to helping a veteran following a major surgery. The VHA might continue monitoring and managing the care of those experiencing health care-related pain and anxiety because health care encounters designed to increase veterans' life expectancy might put them at a heightened risk for suicide.

### FOR FUTURE RESEARCH

Given that some studies have found that providers prescribe inadequately for racial and ethnic minorities, future research is needed to explore prescriber characteristics and habits, and patient communication difficulties and intrapersonal barriers to requesting and using pain medications. Future researchers should determine if a confounder is affecting the relationship between race and post-operative SBI, such as cultural and socioeconomic level of veterans. A confounder could have led African American veterans with complex mental and physical health needs to use the VHA for inpatient and outpatient care. Differences in post-operative coping by race/ethnicity should be assessed in future research to spur development of tailored postoperative care plans that take into account variations in ability to cope with pain, disability, and recovery. A limitation of this study is that the researchers relied on retrospective archival data. As a result, they had no measure of subjective experience or severity of illness and pain. In addition to retrospective studies, future researchers should consider conducting prospective cohort studies with veterans planning to have a major surgery within a specific period of time. It might be beneficial to separate type of major surgery to further understand the association between a major surgery and SBI. Another limitation of this study is that demographic characteristics reflect the past 50 years. As a result, more recent cohorts had a higher proportion of African American and Hispanic veterans than did the Vietnam War cohorts. Future studies should oversample women to improve generalizability.

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