



Prevalence, Comorbidity, and Prognosis of Mental Health among US Veterans

AUTHORS: Ranak B. Trivedi, Ph.D.

Edward P. Post, M.D. Haili Sun, Ph.D.

Andrew Pomerantz, M.D. Andrew J. Saxon, M.D. John D. Piette, Ph.D. Charles Maynard, Ph.D. Bruce Arnow, Ph.D.

Idamay Curtis, M.S.

Stephen D. Fihn, M.D., M.P.H. Karin Nelson, M.D., M.S.H.S.

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ABSTRACT

"Objectives. We evaluated the association of mental illnesses with clinical outcomes among US veterans and evaluated the effects of Primary Care-Mental Health Integration (PCMHI). Methods. A total of 4,461,208 veterans were seen in the Veterans Health Administration's patient-centered medical homes called Patient Aligned Care Teams (PACT) in 2010 and 2011, of whom 1,147,022 had at least 1 diagnosis of depression, posttraumatic stress disorder (PTSD), substance use disorder (SUD), anxiety disorder, or serious mental illness (SMI; i.e., schizophrenia or bipolar disorder). We estimated 1-year risk of emergency department (ED) visits, hospitalizations, and mortality by mental illness category and by PCMHI involvement. Results. A quarter of all PACT patients reported 1 or more mental illnesses. Depression, SMI, and SUD were associated with increased risk of hospitalization or death. PTSD was associated with lower odds of ED visits and mortality. Having 1 or more contact with PCMHI was associated with better outcomes. Conclusions. Mental illnesses are associated with poor

outcomes, but integrating mental health treatment in primary care may be associated with lower risk of those outcomes."

RESEARCH HIGHLIGHTS

- Previous studies have found that integrating mental health in primary care settings improves screening and detection of mental illness. Though most care in the United States remains fragmented, the Veterans Health Administration (VHA) has integrated mental health in primary care settings. Therefore studying the mental health of veterans receiving care in the VHA might shed light on the effects of integrated care.
- This study examines the prevalence of mental health disorders among veterans served by the VHA, association between mental disorders and risk for emergency department (ED) visits, hospitalizations, and mortality risk within the first year, and whether the VHA's integration of mental health into primary care settings has led to a reduced risk of ED visits, hospitalizations, and mortality among veterans with a mental disorder.
- There was a high prevalence of mental illnesses among patients who receive VHA primary services, with significant co-morbidity. Almost 26% of veterans seen in the Patient Aligned Cate Teams (PACT) were diagnosed with at least 1 of the 5 mental illnesses: depression, posttraumatic stress disorder (PTSD), serious mental illness (SMI), substance use disorder (SUD), or anxiety, with depression being the most prevalent.
- Contact with the Primary Care-Mental Health Integration (PCMHI) program was associated with better outcomes among patients with depression, SUD, SMI, and anxiety, compared with patients who did not have those conditions. Therefore, although patients with mental illness are at risk for poor outcomes, this risk may be mitigated by at least 1 PCMHI contact.

IMPLICATIONS

FOR PRACTICE

Veterans should continue seeking and receiving care from their primary care providers, and discuss with their primary care provider (PCP) any health concerns, including mental health. Since integrating mental health treatment in primary care may be associated with lower risk of poor outcomes associated with mental illnesses, PCPs should integrate their veterans' care. Since the burden of mental illness appears to be very high among veterans, PCPs should continue to make coordinating care of mental illness a priority. PCPs should continue monitoring their veterans for mental illness and conduct a complete assessment, including the PTSD Checklist.

FOR POLICY

The VHA has made many strides to improve quality of, linkage to, and care coordination for veterans. For example, in 2007 the VHA instituted the Primary Care – Mental Health Integration (PCMHI) program, which collocated mental health services within primary care. Additionally, in 2010, the VHA implemented a patientcentered medical home model in primary sites called the Patient Aligned Care Teams (PACT). The purpose of PACT is to further increase care coordination, continuity, and veteran-centered care among more than 5 million veterans with and without mental illnesses. Given that integrating mental health treatment in primary care appears to be associated with lower risk of negative outcomes among veterans receiving care from the VHA, the VHA might continue such efforts to improve care for veterans. The VHA might continue evaluating how it can help veterans who are not being served by the VHA receive necessary mental and primary care, especially minorities and those living in rural areas. The authors found that existing datasets that include the PTSD Checklist have significant missing data. The VHA might investigate how it can increase data collection of the PTSD Checklist done with mental health screenings. Policymakers might continue implementing policies that encourage health providers to collect and report complete information during mental health screenings. Based on the study findings, policymakers might prioritize defragmenting healthcare for civilians by integrating mental health treatment into primary care.

FOR FUTURE RESEARCH

This study has several strengths, including its large sample size and the use of administrative data, which eliminated biases inherent in self-reported data. However, this study could be subject to biases introduced by misdiagnosis or underdiagnosis of mental disorders. Limitations of this study include the authors not being able to determine duration or severity of the five mental illnesses, and absence of necessary self-report data on symptom severity for the mental disorders. Future researchers should use data that includes information on duration and severity of mental illnesses. Though self-reported data can have biases, such as reporting or recall bias, researchers should consider using it in conjunction with medical records to determine symptom severity for the diagnosed mental disorders. Another

AUTHOR INFORMATION

Ranak B. Trivedi, Ph.D. ¹
Edward P. Post, M.D. ²
Haili Sun, Ph.D. ³
Andrew Pomerantz, M.D. ⁴
Andrew J. Saxon, M.D. ³
John D. Piette, Ph.D. ²
Charles Maynard, Ph.D. ⁵
Idamay Curtis, M.S. ³
Stephen D. Fihn, M.D., M.P.H. ⁶
Karin Nelson, M.D., M.S.H.S. ³

- ¹ranak.trivedi@va.gov; Veterans Affairs Palo Alto Health Care System; Department of Psychiatry and Behavioral Sciences, Stanford University
- ² Veterans Affairs Ann Arbor Health Care System
- ³ Veterans Affairs Puget Sound Health Care System
- ⁴ Veterans Affairs Mental Health Services
- ⁵ Stanford University
- ⁶ Office of Analytics and Business Informatics

limitation of this study is that the authors weighed all comorbidities equally even though it is likely that the effect of comorbidity may vary across different combinations and severity of diseases. Future analyses on comorbidities should take into account the effect of comorbidities and weigh accordingly. This study only analyzed emergency department (ED) visits and hospitalizations at Veterans Affairs (VA) facilities. Future researchers might access utilization of non-VA facilities for ED visits or hospitalizations of veterans. Given the fragmented state of healthcare in the United States, more evidence-based studies on the integration of mental health services into primary care services are needed.