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Follow-up care for alcohol misuse among OEF/OIF veterans with and without alcohol use disorders and posttraumatic stress disorder☆

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ABSTRACT

Little is known about follow-up care for alcohol misuse in the Veterans Affairs (VA) health care system among Operations Enduring and Iraqi Freedom (OEF/OIF) veterans with and without alcohol use disorders (AUD) and/or posttraumatic stress disorder (PTSD). Using data from 4725 OEF/OIF VA outpatients with alcohol screening (2006–2010), we compared the prevalence of follow-up for alcohol misuse—brief intervention (BI) or referral to treatment—among patients with and without AUD and/or PTSD. Among 933 (19.7%) patients with alcohol misuse (AUDIT-C ≥ 5), 77.0% had AUD and/or PTSD. Rates of BI or referral for alcohol misuse were higher among patients with AUD (76.9%) and both AUD and PTSD (70.1%) compared to those with PTSD only (53.1%) and neither AUD nor PTSD (52.3%). Among OEF/OIF VA outpatients with alcohol misuse, those with AUD had higher rates of follow-up for alcohol misuse than those without, but PTSD was not associated with differential follow-up.

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1. Introduction

Alcohol misuse is a significant public health problem among veterans returning from the wars in Afghanistan (Operation Enduring Freedom; OEF) and Iraq (Operation Iraqi Freedom; OIF). Between 22 and 40% of OEF/OIF veterans seeking care at the Veterans Affairs (VA) health care system screen positive for alcohol misuse (Calhoun, Elter, Jones, Kudler, & Straits-Troester, 2008; Hawkins, Lapham, Kivlahan, & Bradley, 2010), which includes the spectrum from risky drinking to alcohol use disorders (AUD) (Saitz, 2005; Whitlock, Polen, Green, Orleans, & Klein, 2004). Ten percent of OEF/OIF veterans seeking VA care between 2001 and 2010 were diagnosed with an AUD, and of those with an AUD diagnosis, 63% also received a diagnosis of posttraumatic stress disorder (PTSD) (Seal, Cohen, Waldrop, et al., 2011).

A number of factors may increase the risk for co-occurring alcohol misuse and PTSD among OEF/OIF veterans. The risk of alcohol misuse is greatest among men younger than 30 (Grant et al., 2004; Jacobsen, Southwick, & Kosten, 2001), and military personnel between the ages of 18–25 report higher rates of heavy drinking in the past year compared to their civilian counterparts (27.3% vs. 15.3%, respectively) (Bray & Hourani, 2007). OEF/OIF veterans are younger than other veterans and many experience heavy combat exposure, multiple tours of duty, and prolonged separation from friends and family that increase their risk for alcohol misuse in the context of PTSD (Jacobson et al., 2008). Moreover, the use of alcohol to cope with stress and trauma is a common feature of military culture (Fernandez, Hartman, & Olshaker, 2006; Milliken, Auchterlonie, & Hoge, 2007).

The VA implemented annual alcohol screening in 2003 and requires that the Alcohol Use Disorders Identification Test–Consumption Questions (AUDIT-C) be used to screen outpatients for alcohol misuse (Bradley, Lapham et al., 2011; Lapham et al., 2012). Documentation of follow-up brief alcohol interventions (BI) for VA outpatients with AUDIT-C scores ≥ 5 has been incentivized since

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2007, and rates of follow-up care for alcohol misuse have increased over time (Bradley, Lapham, et al., 2011; Lapham et al., 2012). BIs have been shown to reduce alcohol use (Jonas et al., 2012; Solberg, Maciosek, & Edwards, 2008) and are recommended for the spectrum of alcohol misuse (National Institute on Alcohol Abuse and Alcoholism, 2007), and a study of VA outpatients found that documented BI for alcohol misuse was associated with subsequent resolution of alcohol misuse at follow-up (Williams et al., 2010). The VA/Department of Defense Clinical Practice Guideline for the Management of Substance Use Disorders (SUD) (Department of Veterans Affairs and Department of Defense, 2009) recommends that clinicians offer SUD specialty care referral to patients diagnosed with an AUD or who screen positive for severe alcohol misuse (AUDIT-C score ≥ 8) regardless of whether they have a diagnosed AUD.

The VA has increased efforts to integrate and coordinate the delivery of concurrent treatment services for patients with AUD and PTSD (Bernardy, Hamblen, Friedman, & Kivlahan, 2011). Early detection of alcohol misuse is important in the prevention of AUD, which is associated with morbidity and mortality (Chwastiak, Rosenheck, Desai, & Kazis, 2010; Rehm, Gmel, Sempos, & Trevisan, 2003). Co-occurring AUD and PTSD are associated with suicidal ideation and attempts, chronic health problems, and family/relationship impairment (Hoge, Terhakopian, Castro, Messer, & Engel, 2007; Possemato, Wade, Andersen, & Ouimette, 2010). Treatment of AUD in patients with co-occurring PTSD is challenging, as they respond less favorably to standard AUD treatment, use more treatment services, and incur higher costs than patients without co-occurring PTSD (Jacobsen et al., 2001; Ouimette, Goodwin, & Brown, 2006). In recognition of the common co-occurrence of PTSD and AUD, integrated treatment approaches, including exposure- (Back et al., 2012) and non-exposure-based (Najavits, Norman, Kivlahan, & Kosten, 2010; Najavits, Weiss, Shaw, & Muenz, 1998) therapies, have received increased attention in the VA and wider treatment community. Although further evidence is needed to establish treatment effectiveness with returning veteran populations, screening and intervention protocols that address co-occurring PTSD and AUD may be necessary to optimize outcomes (Brief et al., 2012; Norman, Wilkins, Tapert, Lang, & Najavits, 2010). Negative attitudes about help-seeking and perceived stigma about mental health and SUD treatment may impede OEF/OIF Veterans' engagement and retention in VA specialty care services (Hoge et al., 2004; Erbes, Westermeyer, Engdahl, & Johnsen, 2007; Harpaz-Rotem & Rosenheck, 2011). Because many of these Veterans seek medical treatment in VA primary care settings, primary care providers may be ideally positioned to deliver BI to address alcohol misuse among OEF/OIF VA outpatients with PTSD and facilitate early engagement in treatment, if indicated (Seal, Cohen, Bertenthal, et al., 2011, Seal, Cohen, Waldrop, et al., 2011). Providing BI is consistent with evidence based guidelines for patients who screen positive for alcohol misuse (Jonas et al., 2012).

Although the rate of PTSD among patients with AUD has been previously reported (Seal, Cohen, Waldrop, et al., 2011), little is known about rates of recognized AUD and PTSD among OEF/OIF VA outpatients who screen positive for moderate and severe alcohol misuse or about rates of VA follow-up care provided to OEF/OIF veterans with alcohol misuse who also have documented AUD and/or PTSD. Because patients with PTSD may have high rates of AUD, and AUD is associated with a higher probability of receiving follow-up care for alcohol misuse (Lapham et al., 2012), they may be more likely to have alcohol misuse addressed (Burman et al., 2004; Volk, Steinbauer, & Cantor, 1996). In contrast, veterans with alcohol misuse and co-occurring PTSD might have lower rates of follow-up alcohol-related care than those with alcohol misuse alone, if alcohol misuse was neglected in order to address the complex mental health and somatic symptoms associated with PTSD (Hoge et al., 2007; Possemato et al., 2010). To determine whether PTSD with or without comorbid AUD might pose a barrier to addressing alcohol misuse, the current study described the prevalence of AUD and/or PTSD diagnoses among OEF/OIF VA outpatients who screened positive for alcohol misuse, and estimated and compared the prevalence of documented alcohol-related follow-up care across four subgroups of OEF/OIF outpatients with alcohol misuse: those with neither AUD nor PTSD, those with AUD or PTSD alone, and those with both AUD and PTSD.

2. Materials and methods

2.1. Study design and source of data

This retrospective, cross-sectional study used data obtained from the VA Office of Analytics and Business Intelligence (OABI), which contracts with an external agency—External Peer Review Program (EPRP)—to conduct standardized medical record reviews of the quality of outpatient VA care (Goulet et al., 2007). Data from EPRP's medical record reviews have included alcohol misuse screening since 2003 and BI for alcohol misuse since 2006. A sample of eligible outpatients from each VA medical center is randomly selected each month for EPRP medical record reviews that are conducted by trained reviewers to ensure reliable and accurate data abstraction (Goulet et al., 2007). Patients are eligible for EPRP sampling if they attended an outpatient visit in any VA medical clinic in the month prior to record review, also attended one or more visits in any VA outpatient clinic in the 13 to 24 months before record review, and were not previously sampled during the fiscal year. Study approval was obtained from the VA Puget Sound Human Subjects Committee and data were obtained through a Data Use Agreement with VA OABI.

2.2. Study sample

VA outpatients included in EPRP medical record reviews were eligible for the current study if they met the following criteria: (1) documented alcohol screening with the AUDIT-C between October 1, 2006 and September 30, 2010 based on EPRP reviews, (2) the EPRP medical record review occurred at least 30 days after the date of alcohol screening to allow time for clinical follow-up of a positive alcohol screen, (3) documented service in Operation Enduring Freedom (OEF) or Operation Iraqi Freedom (OIF) in their medical record; and (4) age ≤ 55 years to be consistent with prior studies of this population (Hawkins et al., 2010; Seal, Cohen, Bertenthal, et al., 2011, Seal, Cohen, Waldrop, et al., 2011).

2.3. Measures

2.3.1. Exposure variables

2.3.1.1. Alcohol misuse. Alcohol misuse was assessed with AUDIT-C scores abstracted by EPRP medical record review. The AUDIT-C is a three-item screening questionnaire for detecting alcohol misuse that has been validated in veteran (Bradley et al., 2003; Bush et al., 1998) and non-veteran samples (Bradley et al., 2007; Dawson, Grant, Stinson, & Zhou, 2005). Specific items of the AUDIT-C ask about the frequency and quantity of typical drinking and the frequency of heavy episodic drinking (Appendix A). Scores on the AUDIT-C range from 0 to 12, with higher scores indicating greater alcohol misuse severity (Bradley et al., 2004; Rubinsky, Kivlahan, Volk, Maynard, & Bradley, 2010). In 2006, VA OABI instituted a national performance measure for alcohol screening that incentivized annual alcohol screening with the AUDIT-C for all outpatients except for those in palliative care or with documented cognitive impairment.

2.3.1.2. AUD and PTSD diagnostic status. Documented AUD and PTSD diagnosed on the date of alcohol screening or during the prior year