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Original Research

Medication adherence challenges among patients experiencing homelessness in a behavioral health clinic

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Abstract

Background: Behavioral health medication nonadherence is associated with poor health outcomes and increased healthcare costs. Little is known about reasons for nonadherence with behavioral health medications among homeless people.
Objectives: To identify reasons for medication nonadherence including the sociodemographic, health-related factors, and behavioral health conditions associated with medication nonadherence among behavioral health patients served by a Health Care for the Homeless center (HCH) in Virginia.
Methods: The study sample was selected from an existing database that included sociodemographic, health-related information, and medication-related problems identified during a pharmacist-provided medication review conducted during October 2008–September 2009. Patients experiencing or at risk of homelessness who were $\geq$18 years old with at least one behavioral health condition who had a medication review were eligible for the study. A qualitative content analysis of the pharmacist documentation describing the patient's reason(s) for medication nonadherence was conducted. The Behavioral Model for Vulnerable Populations was the theoretical framework. The outcome variable was self-reported medication nonadherence. Descriptive and multivariate (logistic regression) statistics were used.
Results: A total of 426 individuals met study criteria. The mean age was 44.7 $\pm$ 10.2 years. Most patients were African-American (60.5%) and female (51.6%). The content analysis identified patient-related factors (74.8%), therapy-related factors (11.8%), and social or economic factors (8.8%) as the most common reasons for patients' medication nonadherence. Patients with post-traumatic stress disorder (PTSD) (adjusted odds ratio: 0.4; 95% CI: 0.19–0.87) were less likely to have a medication adherence problem identified during the medication review.

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Conclusions: The content analysis identified patient-related factors as the most common reason for nonadherence with behavioral health medications. In the quantitative analysis, patients with a PTSD diagnosis were less likely to have nonadherence identified which may be related to their reluctance to self-report nonadherence and their diagnosis, which warrants further study.

Keywords: Medication nonadherence; Homeless; Behavioral health

Background

Medication adherence is the extent to which a person's medication taking behavior corresponds with healthcare providers' recommendations.[1,2] Long-term adherence to chronic medications has been estimated to be as low as 50%.[2] Nonadherence is a concern because it can lead to poor patient outcomes and increased healthcare costs. In fact, the New England Healthcare Institute (NEHI) estimated that medication nonadherence alone contributes up to $290 billion in annual medical costs.[3]

Medication nonadherence is also prevalent in behavioral health treatment. Approximately 42% of patients discontinue their antidepressant in the first month and 72% discontinue their medication after 3 months.[4] Reasons for nonadherence to antidepressant therapy include adverse effects or anxiety about adverse effects, poor patient–physician communication, carelessness with taking medication, poor social support, low efficacy, and lack of knowledge.[5–8] Long-term adherence to medications for bipolar disorder, such as lithium, ranges from 20 to 66%.[9] Low adherence to behavioral health medications is a concern due to increased risk of relapse, suicide attempts, and hospitalizations leading to increased morbidity and mortality.[10,11] In addition, behavioral health medication nonadherence has been associated with an increase in emergency department visits and overall healthcare costs.[10,12]

In January 2010, approximately 649,917 people were homeless in the United States on a single night, with approximately 62% in a shelter.[13] At this time, an estimated 26% of sheltered homeless adults had a serious mental illness and approximately 34% had a chronic substance abuse problem.[13] Several barriers to medication adherence exist in the homeless, including limited or no prescription insurance coverage, financial instability, lack of storage space for medications, limited privacy, and lack of transportation to pick up their medications.[14,15] Furthermore, medication adherence may not be a primary concern to an individual who is homeless because of issues with meeting basic needs, such as obtaining food or housing.[15]

Only a few studies have examined medication use and adherence in homeless patients. These have focused on patients with human immunodeficiency virus (HIV) and tuberculosis (TB). Homelessness has been found to be associated with low adherence to medications associated with these chronic conditions.[16–22] In one study examining the factors associated with adherence to highly active antiretroviral therapy in homeless adults with HIV, it was found that younger age, lack of health insurance, illicit drug use, and greater risk of depression or stress was associated with lower medication adherence.[23]

While it is known that homeless patients poorly adhere to HIV and TB medications, there is limited information about specific reasons for behavioral health medication nonadherence in the homeless population. Therefore, the objectives of this study were to: 1) identify reasons for medication nonadherence; and 2) examine the sociodemographic, health-related factors, and behavioral health conditions associated with medication nonadherence in patients served by a behavioral health clinic at an urban federally qualified Health Care for the Homeless center (HCH). Identification of these patient-specific reasons may help pharmacists and other healthcare providers develop targeted interventions to improve medication adherence.

Methods

The study sample was selected from a behavioral health clinic database at an HCH center in central Virginia.[24,25] The database included sociodemographic, health-related information, and the number and type of medication-related problems identified during a pharmacist-provided medication review conducted between October 2008 and September 2009. Clinical faculty pharmacists and community pharmacy practice residents who