

Psychiatric Pharmacist Management of Depression in Patients With Diabetes

To The Editor: Previous studies have concluded that depression is a risk factor, as well as a consequence, of diabetes.^{1–3} The presence of untreated depression in patients with diabetes has been associated with a multitude of negative consequences and cost implications, including poor self-care and poor treatment adherence, worsening glycemic control, an increase in severity or number of diabetic complications, an increased likelihood of adverse cardiovascular events, higher rates of functional disability, higher all-cause mortality, and an increase in health care use and expenditures.^{4,5}

Despite the well-established relationship between depression and diabetes, depression is underdiagnosed and undertreated in patients with diabetes.⁶ A growing body of evidence suggests that collaborative care may be an effective intervention to improve outcomes in patients with depression and diabetes.^{7–9} This report describes the outcome of depression management in patients with diabetes treated by a psychiatric pharmacist within a collaborative practice model in a safety net clinic in downtown Los Angeles, California.

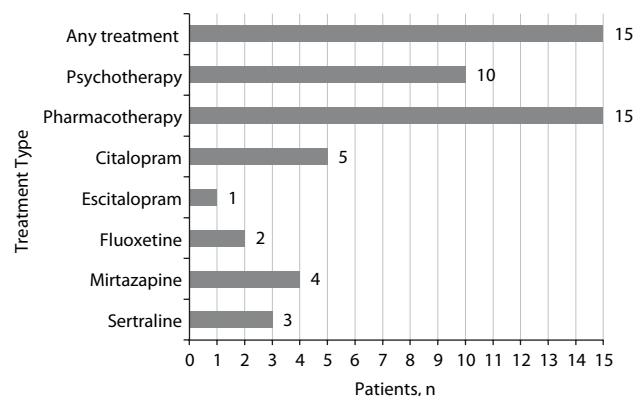
Method. A chart review was conducted to identify adults with diabetes who were diagnosed with depression and subsequently referred to the psychiatric pharmacist for management. The psychiatric pharmacist clinic occurred 1 day per week. Referrals were made by the primary care providers or the clinic psychologist. Upon referral, a diagnosis of major depressive disorder (MDD) was confirmed by the psychiatric pharmacist using *DSM-IV-TR* criteria.¹⁰ Demographic information, hemoglobin A_{1c} (HbA_{1c}) levels, Patient Health Questionnaire-9 (PHQ-9)¹¹ scores, and types of depression treatment (ie, medication, psychotherapy) were recorded. Patients were excluded from analysis if they had fewer than 2 appointments or if they had comorbid schizophrenia, bipolar disorder, or active substance abuse. Depressive symptoms were treated in accordance with the American Psychiatric Association's practice guideline for treating patients with MDD.¹² Diabetes care was delivered by the primary care provider. According to the collaborative practice agreement, the psychiatric pharmacist could initiate, change, or discontinue medications and obtain laboratory measures. Other services such as reviewing laboratory results, obtaining medication histories, and offering medication education were also provided. Response was defined as a reduction in PHQ-9 score from baseline greater than or equal to 50%, and remission was defined as a PHQ-9 score less than 5.^{13,14}

Results. During the 6-month study period (from October 2011 through March 2012), the psychiatric pharmacist treated a total of 15 patients with diabetes and depression. The majority of patients were male (n=9, 60%) and obese (mean BMI [kg/m²] = 31.8), with a mean age of 55.6 years. Patient ethnicities were predominantly African American and Hispanic (>80%). Patients had a mean of 3 medical conditions, including diabetes. The mean PHQ-9 score at baseline was 18.6, which reflects moderately severe depression. The mean HbA_{1c} level of 8.5% indicates that patients were above the American Diabetes Association treatment goal.¹⁵

Patients were followed for an mean of 3.75 months. Of the 15 initial patients, 6 (40%) were lost to follow-up. The mean change in PHQ-9 scores from baseline for the 9 remaining patients was -9.5 (range, 0 to -15). Response to therapy was achieved in 89% of patients (n=8), and one third of patients (n=3) attained remission of depressive symptoms. Selective serotonin reuptake inhibitors and mirtazapine were the only prescribed antidepressants (Figure 1).

Findings from this study demonstrate that medication management by a psychiatric pharmacist can effectively improve depressive symptoms in patients with diabetes. Psychiatric

Figure 1. Treatment Modalities for Depression Management



pharmacists complete 2 years of postgraduate training¹⁶ with an emphasis on providing comprehensive medication therapy management to patients with medical and psychiatric disorders.¹⁷ The psychiatric pharmacist was able to dedicate 30–60 minutes at each visit obtaining medication/medical histories, providing medication education to dispel myths, and building rapport with patients so they were more comfortable taking psychotropic medications. Forty percent of patients were lost to follow-up; however, this high attrition rate is common among the homeless population.¹⁸ Future work will focus on a larger-scale analysis of the effectiveness of psychiatric pharmacists' abilities to improve outcomes for the low-income and homeless subset of patients with coexisting diabetes and MDD.

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Potential conflicts of interest: None reported.

Funding/support: None reported.

Previous presentations: These findings were presented at the 2012 College of Psychiatric and Neurological Pharmacists (CPNP) Annual Meeting; April 29–May 2, 2012; Tampa, Florida; and the 2012 Western States Conference; May 22–25, 2012; Pacific Grove, California.

Acknowledgments: Mimi Lou, MS, University of Southern California School of Pharmacy, Los Angeles, provided consultation and analysis of descriptive statistics used to report results of the intervention. Paul Gregerson, MD, MBA, is the supervising physician named on the collaborative practice agreement that makes the psychiatric pharmacist–run clinic possible at the Center for Community Health JWCH Institute Inc, Los Angeles, California, at which he is the Chief Medical Officer. Neither Ms Lou nor Dr Gregerson reports any potential conflict of interest relevant to the subject of this letter.

Published online: October 17, 2013.

Prim Care Companion CNS Disord 2013;15(5):doi:10.4088/PCC.13l01543

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