Depression screening in uninsured patients in a primary care setting

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ABSTRACT

There is a strong correlation between chronic disease and depression; however, screening patients for depression is not typical in the primary care setting due to factors such as time constraints and the provider's ability to diagnose and manage depression. This study sought to: (1) determine the prevalence of depression in uninsured or underinsured patients with chronic diseases using a screening instrument validated for use in the primary care setting, (2) provide a referral to the patient's primary care provider (PCP) for depression management prior to disease management as needed, and (3) enroll patients for chronic disease management services. The study utilized a cross-sectional design consisting of a self-administered survey and medical record review after physician and nursing appointments. Patients completed the Beck Depression Inventory for Primary Care (BDI-PC) upon program enrollment. Patients that screened positively for depression were referred to the PCP for follow-up services prior to entry into one of the disease management programs. After PCP appointments took place, medical records were reviewed to obtain medical and depression diagnoses, along with mediation recommendations. Forty-one patients were enrolled in the clinic program and completed the depression screening. Eight patients were found to have mild depression and two patients had moderate depression as determined by the BDI-PC, which accounted for 24% of the clinic patients. Four of the patients with mild depression and both patients with moderate depression initiated antidepressant therapy. Additionally, three patients with minimal scores on the screening began medication therapy based on symptoms reported to the PCP. The results of this study suggest that it is feasible to incorporate a depression-screening tool in a primary care setting with further evaluation and follow-up by primary care providers.

KEYWORDS

depression, primary care, chronic disease, uninsured

INTRODUCTION

A strong, positive correlation exists between chronic disease and depression. Presence of major depressive disorder is associated with poor health outcomes.[1,2] Depressed patients are three times more likely to be nonadherent with medical recommendations.[3] Observational studies have illustrated diminished self-management in patients with chronic disease (e.g., COPD, diabetes) and depression.[4,5] Uninsured, low income patients already have existing barriers to perform self-care behaviors. Patients with a chronic condition and co-morbid depression are more likely to have a condition-related hospitalization or emergency visit compared to patients with the chronic medical condition alone, and may have an increased risk of mortality (e.g., heart failure and depression).[6-8]

Screening patients for depression within a primary care setting is not typical due to concerns regarding time commitment and the provider's ability to diagnose and manage depression appropriately.[2,9] When patients present to their primary care provider (PCP) with other conditions plus depression, typically the other conditions become the priority leaving depression untreated.[10] However, Ani and colleagues discovered that depression treatment in primary care settings is not influenced by concurrent conditions.[11] Primary care providers are often the sole provider for patients with mental illness.[12] Although a Cochrane Collaboration meta-analysis concluded the use of standardized questionnaires without organizational enhancements is not justified, the decision to use this tool within a primary care setting is warranted as it reminds the provider to ask the patient about depressive symptoms.[13] Therefore, the objectives of this study were to: (1) determine the prevalence of depression in uninsured or underinsured patients with chronic disease(s) using a validated instrument for use in the primary care setting, (2) provide a referral to the patient's

PCP for depression management prior to disease management as needed, and (3) enroll patients for chronic disease management services.

METHODS

Study Setting

Patients included in this study are enrolled in the St. Vincent's Providing Access to Healthcare (P.A.T.H.) program – a program providing primary care access, prescription assistance, and nurse and pharmacist-led disease management services. Adult uninsured or underinsured patients must meet the health system's financial guidelines and have one of the following ambulatory care sensitive conditions: asthma, chronic obstructive pulmonary disease (COPD), diabetes, heart failure, or hypertension.

Design

A cross-sectional design using a self-administered survey and medical record review after physician and nursing appointments was used. All patients were asked to complete the Beck Depression Inventory for Primary Care (BDI-PC) upon program enrollment.[14] The BDI-PC is a 7-item questionnaire that focuses on symptoms of sadness, pessimism, past failure, loss of pleasure, self-dislike, self-criticalness, and suicidal thoughts or wishes. All items are rated on a 4-point scale, from 0 to 3. The sum of all the items represents the total score. A scores of 0-3 is minimal, 4-8 is mild, 9-12 is moderate, and 13-21 is severe. A BDI-PC score greater than 4 had a sensitivity of 97% and a specificity of 99% for major depressive disorder.[14] Therefore, a cutoff score of 4 and above is indicative of further evaluation for depression. Patients that screened positively were referred to the PCP for follow-up services prior to entry into one of the disease management programs.

Medical records were reviewed after healthcare provider appointments to obtain medical diagnosis, medication recommendations, and depression diagnosis. This study was approved by the hospital's institutional review board. Descriptive statistics were used to evaluate data.

RESULTS

Demographic data

Table 1 describes the patient population of this clinic. Participants were enrolled between February 21 and June 8, 2012. The average age of the clinic patients was 49.5±9.21 years. The majority of patients were white, male, and unemployed. Approximately 40% were single and had an income less than $5,000 per year.

Table 1. Characteristics of patient population

	N (41)	%
Sex		
Male	22	54
Female	19	46
Ethnicity		
White	24	59
Black	17	41
Marital Status		
Single	17	42
Married	10	24
Divorced	9	22
Widowed	5	12
Employment		
Unemployed	28	68.3
Part-time	5	12.2
Full-time	3	7.3
Retired	3	7.3
Student	2	4.9
Income		
<5,000	16	39
5-10,000	10	24
>10,000-20,000	8	20
>20,000	7	17

Study outcomes

Forty-one patients were enrolled into the clinic program and completed the BDI-PC. Figures 1 and 2 show the breakdown of these patients in the disease management programs and their BDI-PC score categories. Based on BDI-PC results, eight patients had mild depression and two patients had moderate depression, which accounted for 24% of the clinic patients. These patients were referred to the PCP for symptom evaluation. Six of the patients with mild depression and one of the patients with moderate depression had two or more chronic conditions. Four of the patients with mild depression and both patients with moderate depression initiated antidepressant therapy. Three patients with a minimal score (0-3) also started medication therapy based on reported depressive symptoms to the PCP. Pharmacotherapy decisions were based on medications available through $4 lists at Walmart or Target, and prescription assistance program availability.[15-17] Three patients were placed on a selective serotonin reuptake inhibitor (citalopram 20 mg/day) and six patients were placed on a serotonin and norepinephrine reuptake inhibitor (duloxetine 60 mg/day). One patient with mild depression was already on a tricyclic antidepressant prior to clinic enrollment for sleep disorders solely. All patients who took the BDI-PC were enrolled into one of the chronic disease management programs.

Figure 1. Number of patients within each disease management program

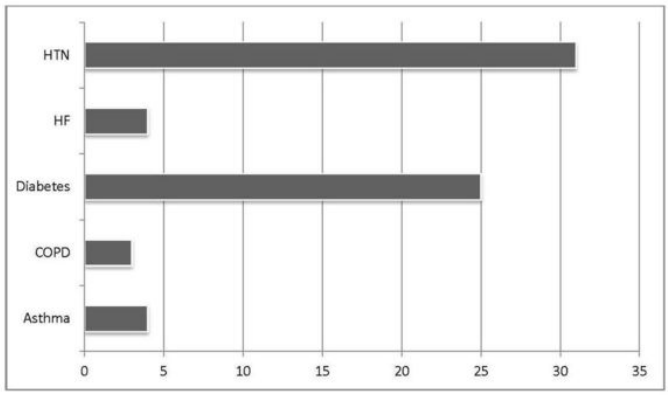
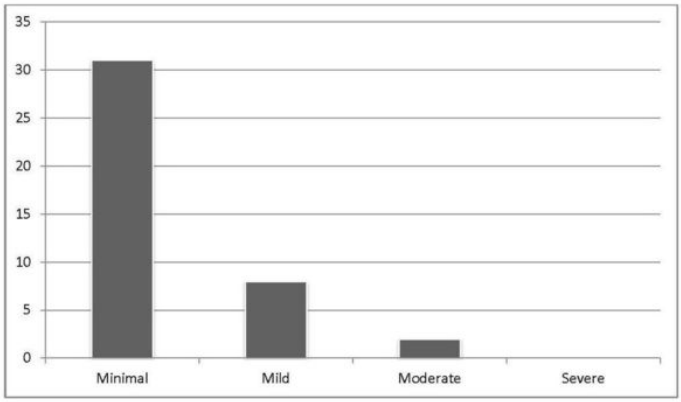


Figure 2. Number of patients within each Beck Depression Inventory – Primary Care category



DISCUSSION

Results from the WHO World Health Survey indicated the need to make depression a public-health priority.[2] The P.A.T.H. program decided to incorporate depression screenings by a clinical pharmacist to reduce adherence issues. Prior published programs, such as the TEAMcare group illustrated significant improvements in chronic disease measures and quality of life when co-management of depression and chronic disease were integrated.[7,18] Prior research has demonstrated that depression screenings should be an integral component of any outpatient setting.[8] The BDI-PC requires minimal time, usually about 5 minutes to complete. Other programs have used the 9-item Patient Health Questionnaire, 2-item Patient Health Questionnaire, and Geriatric Depression Scale.[7,8,11,18] There are a number of screening tools available; however, our use of the BDI-PC was based on provider preference, cost to obtain license, and a review of the literature.

Although implementation of group screening has not been recommended previously, the use of this tool serves as a reminder to the provider to initiate a conversation on mental health.[13] Since our clinic serves the uninsured and underinsured, access to mental health services is limited and usually available to those with more severe psychological conditions such as bipolar disorder or psychosis. Within the nurse-led disease management programs at the P.A.T.H. program, the nurses act as care managers, and ensure patients do not have gaps in medication therapy and are quick to set up a provider appointment if patients are not meeting therapeutic goals.

Limitations

This pilot study had a small number of patients. The clinic is using the BDI-PC only upon program enrollment and does not re-evaluate the patient's score at a scheduled follow-up visit(s). Only patient-reported symptoms will be taken into account for future assessment. The instrument can be a limitation within itself since the BDI-PC screens for depression solely during the past 2 weeks and disease severity is not considered. Lastly, longitudinal follow-up would be ideal to determine whether depression and other chronic conditions improve with treatment.

CONCLUSION

The diagnosis of depression and initiation of treatment is an integral component within a chronic disease management program to achieve improved outcomes. The results of this study suggest that it is feasible to incorporate a depression-screening tool in a primary care setting with further evaluation and follow-up by primary care provider(s).

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