DEPRESSION IN DIABETIC PATIENTS PRESENTING TO THE EMERGENCY DEPARTMENT IN TRINIDAD AND TOBAGO—A HIDDEN EPIDEMIC

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INTRODUCTION

The World Health Organization (W.H.O) has established that depression is a significant contributor to the global burden of disease with an estimated 350 million people affected by depression worldwide (1). It is projected to be the second highest cause of disability after heart disease by the year 2020 (2). Depression is highly under-recognized and under-diagnosed; for this reason only 30% of patients who have been identified, received treatment (3). The prevalence of depression amongst patients with co-morbid illnesses including Diabetes mellitus, Ischaemic heart disease, hypothyroidism and those with neurological disorders including stroke and epilepsy has been well established. It has also been shown that the more co-morbid conditions a patient has the more likely they are to be depressed (3, 4). A systematic review of the literature estimated that the prevalence of depression in America and European countries was 19.1% amongst Type 2 diabetic patients (5).

This study investigated the prevalence of depression amongst diabetic patients presenting to an Emergency department (ED) setting in South West Trinidad as well as investigate whether depression has any effect or relation on glycaemic control and compliance with self care activities. A cross-sectional study was done at a tertiary care Emergency department in a tertiary care setting in Trinidad and Tobago and the Caribbean. Tertiary care emergency departments may be the first medical contact for many of these patients and hence are a good avenue for screening for depression in these patients.

RESULTS

The results of this study were as follows:

- 252 (69.7%) patients were of Indo Trinidadian descent, 15 (3.8%) were of mixed descent with 140 (51.5%) being females. The majority of local studies as well as those done in the Caribbean were undertaken in a primary care setting. This study was the first of its kind evaluating the impact of depression on clinical outcomes in Diabetic patients presenting to an Emergency department in a primary care setting in Trinidad and Tobago and the Caribbean. Tertiary care emergency departments may be the first medical contact for many of these patients and hence are a good avenue for screening for depression in these patients.

- Of the 300 participants, 140 (51.5%) had a history of stroke, 60 (20.0%) of myocardial infarction and 95 (57.6%) of hypertension.

- 272 (69.7%) patients were in a public sector job and 15 (3.8%) in the private sector. 140 (51.5%) of patients had private health insurance or were covered under Medicare.

- Of the 300 participants, 15 (3.8%) were married.

- The prevalence of depression in this subset of patients was found to be 46.2%. The patients were categorized according to their level of depression as follows: 35.1% had mild depression, 9.5% moderate depression and 1.5% had moderately severe depression.

- The factors independently associated with depression were age, marital status, education, employment, occupation and insulin use. Depression increased with age and education (p = 0.004). Depression decreased with increasing marital status (p = 0.002) and occupation (p = 0.001). Depression decreased with increasing education (p = 0.003) and occupation (p = 0.001). Depression decreased with increasing marital status and occupation (p = 0.001).

- Patients who were depressed were less likely to adhere to meal plans (p = 0.015) and exercise programs (p = 0.028).

METHODOLOGY

The aim of this study was to determine the prevalence of undiagnosed depression amongst diabetic patients presenting to a tertiary care Emergency department. The other objectives were to investigate the impact of depression on these patients with respect to concurrent co-morbidities, glycaemic control and compliance to self-care activities.

A cross-sectional study was done at a tertiary care Emergency department in South West Trinidad during the time period October 1st to December 31st 2014. Type 2 Diabetic patients who consented to participate in the study were given self-administered questionnaires pertaining to their diabetes and self-care as well as a self-administered depression module the PHQ-9. Chi-square testing, non-parametric tests and logistic and linear regression modules were used to determine if there were any associations between depression and demographic data, co-existing comorbidities glycaemic control and compliance with self-care regimes.

CONCLUSION

Depression in diabetic patients as well as patients with chronic illnesses is still highly under-recognized and undertreated. In diabetic patients this has serious implications as depression can lead to poor glycaemic control as well as the development of complications and increased morbidity and mortality in these patients. It is therefore important that we institute screening programs to detect depression in these patients and institute the appropriate management in order to curb these outcomes. This would require a multidisciplinary approach and would require a dedicated team effort. The prevalence of Diabetics in Trinidad and Tobago is quite significant. This study highlights the need for development of protocols in our tertiary centres to address this important health concern.

REFERENCES