

## Correlation Between Depressive Symptoms and Diabetes Management Abstract

### Introduction:

Diabetes is a lifelong illness that requires constant attention. The chronic effects of diabetes include conditions such as coronary artery disease or peripheral vascular disease. Other comorbidities or symptoms may impact management of diabetes and can cause elevated glucose levels. Depressive symptoms are common for people with diabetes and may impede blood glucose control and lead to chronic diabetes complications as a result.

### Objectives:

The purpose of this study was to conduct a secondary analysis using baseline data from an intervention study to evaluate 1) the prevalence of depressive symptoms in participants with T2DM and 2) the relationship between depressive symptoms and total number of diabetes symptoms, symptom management, empowerment (feeling able to take initiative for one's health), and quality of life. This study addresses the following questions: what is the prevalence of depressive symptoms in Mexican Americans with T2DM? How do symptoms of depression affect empowerment and quality of life?

### Methods:

This study utilized data from "Home-Based Diabetes Symptom Self-Management Education for Mexican-Americans" (A. Garcia, PI). The baseline data of 72 Mexican American adult participants were analyzed to find the correlation between depressive symptoms and diabetes.

### Results:

Participants reported a mean of 4.25 depressive symptoms. The most commonly reported depressive symptoms were tiredness, problems sleeping, and anxiety while the least commonly reported depressive symptoms were trouble concentrating, weight loss, and weight gain. The number of symptoms of depression reported was significantly correlated with self-efficacy ( $r=0.338$ ,  $p=0.002$ ); the correlation between self-efficacy and empowerment was significant ( $r=-0.327$ ,  $p=0.003$ ); overall quality of life was significantly associated with more depressive symptoms ( $r=0.625$ ,  $p<0.001$ ); and the correlation between diabetes severity and depressive symptoms was significant ( $r=0.642$ ,  $p<0.001$ ).

### Conclusions:

Depressive symptoms impact self-efficacy, empowerment, and quality of life; the more depressive symptoms reported, the lower the self-efficacy score and the worse quality of life. Because depressive symptoms can impact diabetes management, it is important to address these symptoms before patients can experience an exacerbation in diabetes. One way to improve quality of life might be to help patients increase their self-efficacy