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# Severe Mental Illness and Type 2 Diabetes: How to Help Manage and Teach Lifestyle Modifications

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## INTRODUCTION

Patients with severe mental illnesses who can no longer take care of themselves are often relocated to mental health facilities. Within these facilities, patients receive treatment for their mental illnesses; however some facilities have few resources available to treat the patient's debilitating co-morbidities like type 2 diabetes. The prevalence of diabetes is twice as high in people with severe mental illness and very little research has been done with this population about how to help manage their disease process (Osborn, 2008). Without insight into lifestyle modifications needed for type 2 diabetes the patients' condition will continue to worsen. This inevitably leads to an increased risk for long-term complications from diabetes including blindness, renal failure, loss of limbs, stroke, and death.

## PURPOSE

This study aims to ascertain if providing patients with simplified background information about the disease process and possible lifestyle modifications can help the patients manage their blood sugar and lower the incidence of long-term complications.

## METHODS

### Types of Participants

14 patients with Severe Mental Illness (SMI) and Type 2 Diabetes from the UT Northeast Mental Health Facility were taught and monitored.

### Diagnostic Criteria

SMI will be defined as schizophrenia, schizoaffective disorder, bipolar disorder, depression with psychotic features or personality disorder. Diagnosis of type 2 diabetes will be consistent with the standard classification of criteria (ADA, 2008).

### Types of Interventions

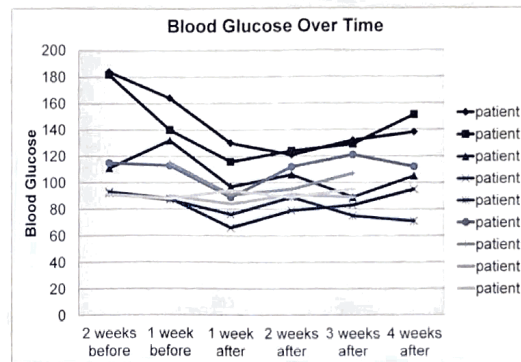
One 30 minute teaching session was given about their disease process and how to enact lifestyle modifications. Pamphlets, diagrams, posters and learning activities were used.



### Types of Outcome Measures

To assess if the patients changed their habits, their blood glucose levels were recorded for 5 weeks before and after my session. Only 9 patients had enough blood glucose levels to assess over 10 weeks. Since this was a more short-term assessment chronic complications of diabetes like renal failure or incidence of stroke were unable to be assessed.

## RESULTS



Above is a table that shows the mean averages of the patients blood glucose levels from 2 weeks before to 4 weeks after the educational session.

## DISCUSSION

Analyzing the blood glucose levels at 1 week after the session we can see a drop from the levels before the session. There is an upward trend after the initial drop at 1 week after the session indicating that another refresher education session was needed. Also accounting for the upward trend is the spikes in blood glucose from Thanksgiving.

Future education should be held over a period of 6 months to a year with at least 6 to 10 sessions spread out. Other measures like creatinine and BUN should be monitored for 5 years in order to assess for long term kidney damage.

## CONCLUSIONS

My results suggest that blood sugar can be managed better with patient education; however in order for the changes to be maintained these facilities need to integrate a diabetes self-management (DSM) program into their care. DSM includes access to healthier food, daily exercise and educational programs. DSM programs are found to have a positive impact on clinical, lifestyle and psychosocial outcomes (McBain, 2014).

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