

Neighborhood Diabetes Education Program: Working to Lessen the Onset & Progression of Diabetes



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ABSTRACT

The goal of this project is to engage community members in becoming more informed about the health concerns of diabetes. I aim to do so by encouraging awareness through discussions along with tips on managing diabetes and exercise. In order to reach my goal, I intend to utilize lectures, group sharing, group exercise, and a log book. The log book will monitor each person's progress by tracking their diet and exercise. Each person will also get individualized attention through one on one phone calls outside of meetings.

This opportunity allowed me to witnessed firsthand how people view and live with diabetes. Far too often, I found people viewed diabetes as an inevitable and non progressive disease. One person referred to it as the normal things that happen as you get older. That was troubling, because it showed common misconceptions.

Overall, this project proved to be mutually beneficial for myself and the people I worked with. I have a better appreciation for how patients view and manage diabetes and am hopeful that efforts such as mine and those provided by this experience can have a meaningful impact. Through this, 38% of my cohort lost weight and we saw an average BMI decrease of 0.5 with at standard deviation of 0.88.

BACKGROUND

Diabetes is a lifelong progressive illness that requires substantial management.

There are multifactorial risk factors that can predispose someone to diabetes. It is known that diabetes has a familial component and therefore diabetes tends to run in families. While the genetics component plays a role in diabetes, it is only one component and there is little that can be done about one's genes. Luckily, there are other modifiable risk factors. These risk factors are largely based on lifestyle and can include a healthy diet and regular exercise. These are crucial risk factors that can be targeted to slow the progression and onset of diabetes. Therefore, my project aims at making people suffering from diabetes and at risk for diabetes more informed about modifiable risk factors for the progression and onset of diabetes.

OBJECTIVES

- Engage people with or at risk for diabetes or with a history of gestational diabetes
- Demystify and discuss managing diabetes
- Decrease the BMI of ALL participants

METHODS

- Group 1: Two patients recruited from Cooper Rowan Clinic, a medical student run clinic for local low income patients without health insurance.
- Group 2: Twenty seven patients recruited from the Volunteers of America.
- Biweekly meetings that included a short lecture, question and answer session and group sharing.
- Each participant was asked to complete a log book to detail exercise and diet.
- Height and weight was calculated at the beginning of enrollment in order to track BMI changes. BMI was rounded.
- Weight was recorded at the final session.

	Monday
Breakfast	3 eggs, 3 waffles and coffee
Lunch	Subway Turkey Sub with chips and Coke
Dinner	Baked Chicken, mash potatoes and gravy, macaroni and cheese, cheesecake
Snack	Skittles
What item can I cut out?	Skittles
What item can I reduce my intake of?	Dessert
What healthy decision did I make today?	I avoided a fast food breakfast and ate at home.
Exercise type and time spent?	I got off the train one stop earlier and walked to work. 30 minutes.
Comments?	I started using my fitbit again.

Sample Log book recording.

RESULTS

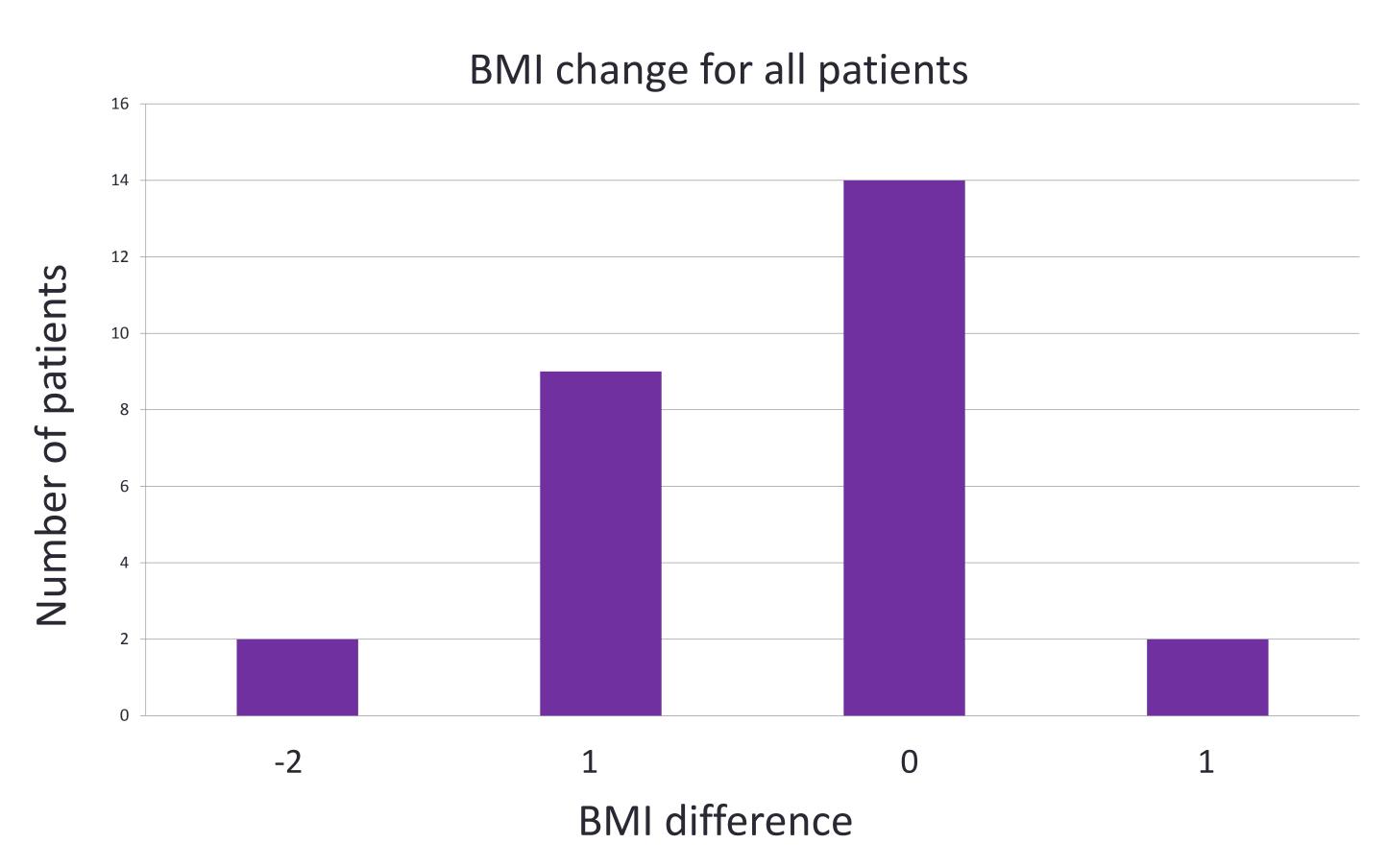


Figure 1. The final BMI change is displayed for all participants.

- 11 out of the 27 patient had a reduction in BMI.
- 14 of the 27 patients saw no change in BMI.
- 2 patients gained weight during their enrollment.
- The average BMI reduction was 0.5 with a standard deviation of 0.88.
- Patient recorded about 70% of days in the log books

CONCLUSIONS

- There are many misconceptions about diabetes that are grossly apparent.
- This project demonstrated that education, self awareness and positive encouragement can make a substantial impact in the lives of those suffering and at risk for diabetes.
- A continued effort is needed to ensure sustained lifestyle changes.