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5-3-2021

Does Losing 5-7% of a Prediabetic's Body Weight While Completing the Diabetes Prevention Program Decrease ASCVD Risk?

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FRS041: Does Losing 5-7% of a Prediabetic's Body Weight While Completing the Diabetes Prevention Program Decrease ASCVD Risk?

Date

5/3/2021

Time

9:00 am - 5:00 pm

Room

On Demand

Presenters

Molly Kucera, DO, MS

Abstract

Purpose: According to the Centers for Disease Control (CDC), one-third of adults have prediabetes and are at risk for developing type 2 diabetes, a leading risk factor for cardiovascular disease. The Diabetes Prevention Program (DPP) focuses on lifestyle modifications to help participants lose 5-7% of their body weight and prevent type 2 diabetes. The purpose of this study is to determine whether successful completion of the DPP is associated with a decrease in atherosclerotic cardiovascular disease (ASCVD) risk.

Methods: One-site, prospective cohort study. The DPP was implemented on-site at Farmington Village Family Practice and virtually via Zoom from January 2020 through December 2020. For the first 6 months, participants met weekly for 1 hour. In the remaining 6 months, sessions were held monthly for 1 hour. Each session began with a private weigh-in followed by a uniquely designed lesson plan. Fourteen patients who were prediabetic based on hemoglobin A1c(A1c), fasting blood glucose, or diabetic risk score calculator. Systolic blood pressure (SBP), diastolic blood pressure (DBP), smoking status, anti-hypertensive medications, age, race, sex, hemoglobin A1c, fasting blood glucose, total cholesterol and HDL were measured initially, at six months and at one year. These parameters were used to calculate ASCVD risk percentages based on the 2013 risk calculator from AHA/ACC.

Results: The 6-month analysis showed a statistically significant improvement in ASCVD (mean initial 2.00, mean reduction 0.74, p < 0.001), SBP (mean initial SBP 129, mean reduction of 6.571 mmHg, p < 0.001), weight (mean initial weight 262 lbs, mean reduction of 24.643 lbs, p = 0.003), and HDL (mean initial HDL 40.86, mean increase of 7.143, p = 0.001). These data points will also be analyzed at the completion of the study.

Conclusions: After 6 months of the DPP program, statistically significant improvements in ASCVD, SBP, HDL and weight were observed. Once the data is collected with regards to twelve-month vitals and lab values, a similar statistical analysis will be performed. The findings at the six-month mark are promising and are consistent with the reduction of cardiovascular risk factors. These interim findings further support the value of a structured, evidence-based educational curriculum focused on nonpharmacologic intervention for cardiovascular risk reduction.

Upon completion of this session, participants should be able to:

1. Identify the association of weight loss through a structured program and reduction of type 2 diabetes and ASCVD risk.
2. Use the resources provided to implement the DPP for their clinic patients.
3. Identify risk factors for type 2 diabetes and ASCVD.

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Date ↑↓	Time ↑↓	Room ↑↓
5/3/2021	9:00 am - 5:00 pm	On Demand

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[\(through Friday\): STFM Conference Now Virtual! Spring Conference](#)
[Conference on Practice Quality &](#)

DEADLINES

January 28, 2022: [Comments Regarding Program Requirements Are Due to Medical Education \(ACGME\)](#)

February 4, 2022: [STFM Education Due](#)

February 7, 2022: [CERA Clerkship Discharge Submissions Due](#)

February 8, 2022: [Proposals Due to Conference on Practice Quality & Improvement](#)

February 14, 2022: [CERA Fellowship Applications Due](#)

March 1, 2022: [STFM Medical Editorials Due](#)

April 15, 2022: [Health and Aging Policy Applications Due](#)

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