Key Summary of Conference Abstract

Reduction of Diabetes and Cardiovascular Risk in a Workforce After Digital Behavioral Counseling

Background

- The US Preventive Services Task Force recommends screening for abnormal glucose levels when assessing cardiovascular disease (CVD) risk in overweight or obese patients (aged 40-70 years).1
- The organization also recommends offering behavioral counseling to adults who are at risk for diabetes and have additional CVD risk factors.2
- Large national studies in the general population have shown that programs involving such interventions help prevent diabetes and CVD.1,3
- **Objective:** The investigators of this study sought to determine if pairing digital behavioral counseling with employer-sponsored wellness screening can reduce risk of diabetes and CVD in a US workforce.

Methods

- Individuals were included in the study if they participated in an employer-sponsored wellness program and, at the 2015-2016 year-end, met the following criteria:
  - A body mass index (BMI) ≥26 kg/m²
  - Fasting glucose (FG) ≥ 100 mg/dL and/or HbA1c >5.7%
  - Agreed to enroll in a digital behavioral counseling program (Omada Health)
- Paired t-tests were used to compare changes in screening results before (2015-2016) and after (2016-2017) the counseling program was implemented.
- Screening results included BMI, HbA1c levels, fasting glucose, triglyceride levels, and 10-year atherosclerotic cardiovascular disease risk (ASCVD) based on 2013 ACC/AHA guidelines.4

Results

- Of the 107 study participants, 74% were women; 62% were Caucasian and 27% were African American.
- At 2015-2016 year-end, mean age was 50 years, mean BMI was 37 kg/m², mean FG was 107 mg/dL, and mean HbA1c was 6.1%.
- Compared to changes from 2015 to 2016 (before counseling was implemented), changes from 2016 to were significantly improved:
  - BMI: +0.61 to -1.19 kg/m² (P<0.0001)
  - HbA1c: +0.06% to -0.24% (P=0.001)
  - FG: +5.64 to -3.38 mg/dL (P=0.02)
  - Triglycerides: +11.0 to -17.3 mg/dL (P=0.02)
  - 10-year ASCVD risk: +1.09% to -0.04% (P=0.047)
- Both HbA1c and FG levels fell below prediabetic levels in almost a third (32%) of participants.

Conclusions

- The results of this study suggest that the combination of digital behavioral counseling and employer-sponsored wellness screening is associated with reduced risk of diabetes and CVD in a US workforce.

Posters presentation at the American Diabetes Association 78th Scientific Sessions

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**References**


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