

Management of Diabetes and Cardiovascular Risk Factors

Why is this study needed?

There is a high prevalence of diabetes and cardiovascular risk among adults in the Eastern Caribbean. Cardiovascular risk is the likelihood that a person will experience an event that damages their heart, like a heart attack.

Elevated cardiovascular risk in adults who also have diabetes contributes to premature mortality.

Researchers wanted to understand how Caribbean adults living with diabetes manage their illness. They looked at participants' blood sugar levels and other risk factors, like high blood pressure and smoking habits, to learn about their risk of having a heart attack or stroke in the next ten years.



Who was involved?

The study participants were recruited through the ECHORN Cohort Study. The ECHORN Cohort Study follows approximately 3,000 adults who are 40 years of age or older and who have lived in the U.S. Virgin Islands, Puerto Rico, Barbados, or Trinidad for at least 10 years. All participants reported that they were diabetic.

What were the study results?

- The study showed that there is high prevalence of diabetes in the cohort study. More than half of the participants had poor glycemic control and a high cardiovascular disease risk score.
- Participants with diabetes tended to be older and more likely to have less than a high school education, compared to adults in the cohort that did not have diabetes.
- Participants with diabetes on average had a higher body mass index (BMI), higher blood pressure, and lower rates of physical activity.
- More than 40% of the participants with diabetes are at very high risk of having a cardiovascular event in the next ten years.

Takeaway message

This study highlights the need for more adequate management of cardiovascular risk factors and blood sugar control. Many study participants had uncontrolled risk factors like high blood pressure, high cholesterol, and lower use of preventative medications. Future work will engage local community members to implement evidence-based programs. These programs can help patients and clinicians manage risk factors and reduce the risk of death. They can be tailored to participant preferences and needs, like reading levels.

Citation: Hassan S, Magny-Normilus C, Galusha D, Adams OP, Maharaj RG, Nazario CM, Nunez M, Nunez-Smith M. Glycemic control and management of cardiovascular risk factors among adults with diabetes in the Eastern Caribbean Health Outcomes Research Network (ECHORN) Cohort Study. *Prim Care Diabetes*. 2021, July.