

# LIME: Using Workshops and Medication to Prevent Diabetes in the Caribbean

## Why is this study needed?

Diabetes prevention interventions are cost-effective ways of reducing diabetes. These interventions are not widely used in the Caribbean, where diabetes is very prevalent. The research team hosted an evidence-based diabetes prevention intervention called Lifestyle Intervention with Metformin Escalation (LIME). LIME provided lifestyle modification workshops that build healthy habits related to eating and physical activity. If needed, study participants were also prescribed a medication called metformin that controls high blood sugar levels.

## Who was involved?

The study team recruited adults ages 40-60 years old, with health insurance, from Barbados, Trinidad, the U.S. Virgin Islands, and Puerto Rico. All participants were considered pre-diabetic because of their hemoglobin A1C test results. This blood test measures a person's average blood sugar levels. Someone who is pre-diabetic is has not been diagnosed with Type 1 or Type 2 diabetes, but is considered at higher risk for developing Type 2 diabetes. Participants also agreed to attend weekly workshop sessions.



## Expected study methods and results:

- Participants will take surveys before and after the workshop series to see whether their health habits and behaviors have changed.
- After six months in the study, participants will have a follow-up visit which will determine whether they need metformin medications.
- The study team will also look at how effective the study is. They will look at how much the program cost, how many participants attended the sessions, and participants' and clinicians' experiences with the program. This will help determine whether this type of intervention can and should be continued in the region.

## Future Impact:

*This study describes a Caribbean diabetes prevention project that combines lifestyle workshops with medications that control blood sugar levels. The team will look at outcomes like weight changes, cholesterol, blood pressure, and quality of life. This study can have broad consequences for sustainable, cost-effective treatment of diabetes in the Caribbean. Including regional stakeholders and local groups such as clinics in the study planning will help to integrate the treatment into Caribbean communities.*

Citation: Hassan S, Sobers N, Paul-Charles J, Herbert J, Dharamraj K, Cruz E, Garcia E, Fredericks L, Desai MM, Roy S, Williams S, Linnander E, Crusto C, Horowitz CR, Arniella G, Cattamanchi A, Adams OP, Nunez-Smith M. Diabetes prevention in the Caribbean using Lifestyle Intervention and Metformin Escalation (LIME): Protocol for a hybrid Type-1 effectiveness-implementation trial using a quasi-experimental study design. *Contemp Clin Trials Commun.* 2021 June (22).