

# Learning to live with diabetes: Educational intervention for improving self-management

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## Significance

The Mexican health system has recognized the importance of diabetes management through different strategies implemented in the health sector however, national studies show an inadequate glycemic control of people with diabetes. Because of the foregoing, it is evident the need to implement an intervention in patients with type 2 diabetes to improve their self-care and glycemic control.

## Purpose

To test the feasibility of the pilot educational intervention "Learning to live with diabetes" for improving self-management behaviors in low income Mexican people with type 2 diabetes; The primary outcome: A1c from Time 1 to Time 3. The secondary outcomes: adiposity and weight status, and diabetes self-management behaviors from Time 1 to Time 2 and Time 1 to Time 3.

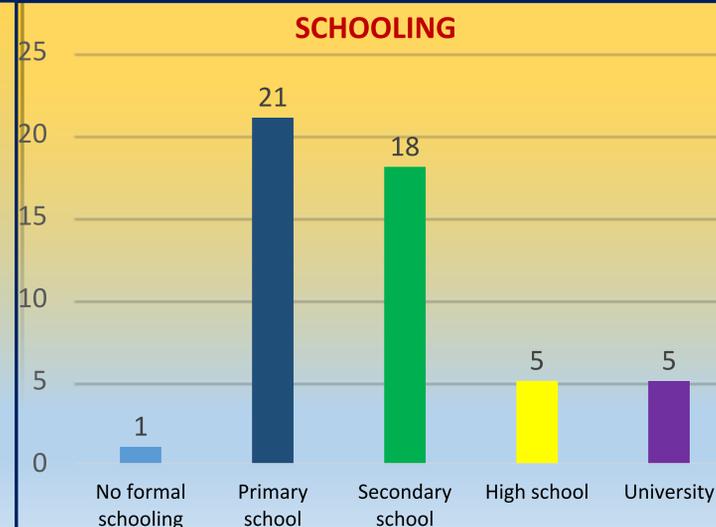
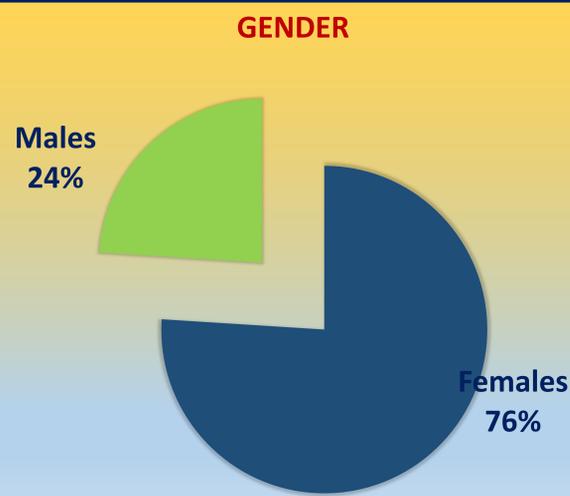
## Methods

The study used a two-group (experimental group = 25 participants and control group = 25 participants) repeated measures design with participants of Mexican heritage from Tampico, México. The experimental group received an intervention focused on type 2 diabetes self-management weekly for 8 weeks and then had 3 months on their own. The control group received usual care. Data collection: from Time 1 (Baseline-0 months), Time 2 (Post Intensive Intervention-2 months), and Time 3 (After 3 months on their own-5 months). The intervention was based on social cognitive theory.



The classes included: A1C goals, exercise goals, weight goals, cholesterol goal, blood pressure goals, portion control, fast food, sweetened beverages, social problem solving. IRB approval was obtained. Data analysis included descriptive and inferential statistics in the SPSS program.

## Results



**Exercise.** Significant differences between groups in Time 2 in the number of times the intervention group did **exercise a week** ( $p = .002$ ), and in the **number of times they rode a bicycle a week** ( $p = .009$ ).

**Nutrition.** Time 2, in that the intervention group **drank milk with their breakfast** ( $p = 0.34$ ).

**Glucose Meters.** Time 2 ( $p = .012$ ) and Time 3 ( $p = .004$ ) in that the intervention group were more likely to **have a glucose meter**. Time 2 ( $p < .001$ ) and Time 3 ( $p = .051$ ) in that the intervention group **checked their finger stick glucose more days per week**.

**Symptoms.** Time 2 ( $p < .001$ ) and Time 3 ( $p = .057$ ) in that the intervention group **had fewer episodes of hyperglycemia** compared to the control group in the past week.

**Confidence.** Time 2 ( $p = .009$ ) and Time 3 ( $p = .011$ ) in the intervention felt more confident that they knew what to do when their blood sugar went higher or lower than it should be.

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