



## **A Prospective Longitudinal Two-Phase Study of a Family-Based Behavioral Intervention in Type 2 Diabetes**

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### **ABSTRACT**

Considering that self-care behaviors occur in contexts where cohabitants participate and that family support increases treatment adherence, this prospective two-phase longitudinal study aims to evaluate the impact of an online, group-based behavioral intervention for patients with type 2 diabetes (T2D) and their family members. Phase 1 will validate the psychometric properties of the Diabetes Family Support and Conflict Scale (DFSC) in the Mexican T2D population, which measures supportive and unsupportive behaviors related to diabetes care, and will also develop the DFSC-F to assess families' perceptions of the support they provide. Phase 2 will pilot a four-week online group intervention consisting of weekly 90-minute sessions focused on identifying and reducing barriers to family support for diabetes self-care. The target population will be patients attending a multidisciplinary care center for patients with diabetes with low family support that interferes with management. A total of 30 patients with T2D and their cohabiting relatives will participate. Participants will be randomized into intervention and waitlist control groups. Both DFSC-P (patient-reported support) and DFSC-F (family-reported support) will be administered before and after the intervention, while clinical parameters such as HbA1c, lipid profile, and blood pressure will be assessed to explore quantitative changes in self-care behaviors. Expected outcomes include greater perceived family support, improved treatment adherence, and favorable changes in clinical indicators, highlighting the relevance of incorporating family-based behavioral strategies into clinical management of T2D.

**Keywords:** family supports; glycemic control; psychometric; self-care; treatment adherence