Title:
Implementation of a Diabetes Self-Management Intervention for Mexican-American Families in the Arizona-Mexico Border Region

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Session Title:
Translational Research: Dissemination and Implementation of Interventions From Research to Practice
Slot:
J 09: Saturday, 29 July 2017: 1:30 PM-2:45 PM
Scheduled Time:
1:50 PM

Keywords:
Community based diabetes family intervention, , Mexican Americans and Type 2 diabetes self-management

References:


Abstract Summary:
Refinement, implementation and testing of a culturally tailored diabetes self-management education community-based intervention for Mexican American adults with Type 2 diabetes and their family members will be described. A CBPR approach for refinement, implementation and testing, and challenges for future research before dissemination, the next translational phase, will be discussed.

Learning Activity:

<table>
<thead>
<tr>
<th>LEARNING OBJECTIVES</th>
<th>EXPANDED CONTENT OUTLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe engagement of a family action board to increase intervention reach.</td>
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<td>Discuss our findings and challenges for increasing intervention effectiveness.</td>
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</tbody>
</table>
Abstract Text:

Background: The 50 million Hispanics who represent 16% of the U.S. population are disproportionately affected by diabetes (12.8%) when compared to non-Hispanic Caucasians (7.6%). The chronic and complex trajectory of type 2 diabetes (T2DM) requires daily engagement in self-management activities and occurs in a family environment. Diabetes self-management education and support (DSME/SS) builds knowledge, skills and abilities for successful T2DM self-management, decreases A1C and weight, reduces A1C by 1%, has a positive effect on other clinical indicators and health care costs. But, there is a paucity of evidenced-based lifestyle modification programs tailored to Hispanic culture and integrate family members into the intervention. We report on the refinement and testing of a 3-month culturally tailored family-based T2DM DSME/SS intervention on behavioral and biological outcomes.

Purpose: The purpose of this study was to refine, expand (Phase I), test and evaluate the effectiveness of a culturally tailored family-based intervention to improve behavioral and biological outcomes for Hispanic adults with T2DM and their family members (Phase II).

Methods: In Phase I we used a CBPR approach to engage a Family Action Board (FAB) (n=24) to refine and expand a culturally tailored individual-based T2DM DSME/SS intervention to a family-based intervention. In Phase II we used a randomized, two group experimental design, participants with T2DM and a family member (n=87 dyads) completed questionnaires, biological measurements, immediately following intervention, and at 6 months post intervention.

Results: The FAB participated in intervention revision, improving the reach of the family level intervention. Participants with T2DM ranged in age from 38 to 73 (M=54, SD=9); family members from 18 to 88 (mean=48, SD=16), most had less than a high school education (73% participant; 53% family member), family income was $20,000 or less (69% participant; 58% family member). Participants had significant intervention effects for total self-management activities (p=.001), total self-efficacy (p=.003), and total diabetes distress (p<.001) with self-management and self-efficacy being sustained for 6 months. Family members had significant intervention effects for total family self-efficacy (p=.016), pedometer steps (p=.016), and pedometer miles (p=.008) with family self-efficacy being sustained for 6 months.

Conclusions: We are in the second translational research phase. We used CBPR to improve the reach of the study and promotoras and a diabetes educator to improve intervention effectiveness. Further research is required to strengthen the impact of the intervention on targeted outcomes before dissemination and adoption of the intervention can occur.