

Translating and Piloting a Community Based Diabetes Prevention Intervention for Vietnamese Americans

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Introduction

Diabetes (DM) is a serious chronic medical condition that has well-established links to devastating health outcomes including heart disease, stroke, and peripheral vascular disease [1].

Type 2 DM has reached epidemic proportions in the US; with over 18.8 million people diagnosed with the disease in 2010 as compared to 1.5 million in 1958 [2].

While the increase in DM is widespread, there is evidence of racial and ethnic disparities. To illustrate, the age-adjusted incidence of developing DM among Vietnamese Americans is 8.4 %, as compared to 7.1% for the general US population. [3]

Translating a DM prevention intervention for this population is important because the diets and cultural norms among Vietnamese Americans are vastly different from the general population, and are distinctly different from other Asian American sub-groups [4]. This work will ensure that existing DM related disparities are reduced, rather than widened in this hard to reach minority population.



Study Purpose

Therefore, the aims of this study are to:

1. Explore the literature for existing DM prevention programs
2. Translate the most appropriate DM prevention program for cultural and linguistic relevance to the Vietnamese American community
3. Test the feasibility & acceptability of the translated Diabetes Prevention Program among a sample of Vietnamese Americans at high risk for diabetes.

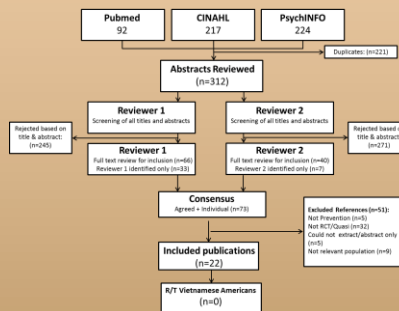
*This is an on-going study, as such this poster will focus on efforts toward the 1st & 2nd aim.

Method

A systematic review of the current literature was examined through the PsychINFO, CINAHL, and PubMed data bases for all community based diabetes interventions between 1980-2013.

Below are the search strategy used in CINAHL. The search strategies used in PubMed and PsychINFO were built to reflect similar key words.

((MM "Diabetes Mellitus") OR (MM "Diabetes Mellitus, Type 2/PC")) (MM "Diabetes Mellitus") OR (MM "Diabetes Mellitus, Type 2/PC")
 AND
 (("community based") or (MM "Community Health Services") or (MH "Community Health Nursing"))



Based on this systematic review of the literature, efforts to translate these findings to understudied and underserved minority populations, such as Vietnamese Americans, are lacking.

The most appropriate intervention we found to translate, adopt, and test was the Diabetes Prevention Program (DPP). It is a large multicenter randomized clinical control trial (n=3,234) which demonstrated that a lifestyle intervention focused on modest weight loss through dietary changes and increased physical activity can reduce the development of diabetes by 58%. [5]

Methods (Cont.)

Core principles of Community-Based Participatory Research (CBPR) will be utilized to guide this study. To facilitate CBPR, a Vietnamese American Advisory Board will be sought.

- Potential members include:
 - VA Pre-diabetic & diabetic patient
 - Endocrinologist
 - DM nurse educator
 - Nutritionist
 - VA Community NGO leader
 - VA Business leader
 - VA Church leader
 - Motivational coach
 - Senior Research Mentor
 - Nursing student

A formative and summative approach will be used to develop and test the translated Diabetes Prevention Program (aim #3).

- The **formative phase** will consist of several focus groups with Vietnamese Americans at high risk for diabetes (defined as a fasting glucose level of 100-125mg/dL) to identify perceived barriers to, strategies for, adopting the DPP as it currently exists.
- In the **summative phase**, a nonrandomized prospective one-group design will be used the feasibility of the translated Diabetes Prevention program

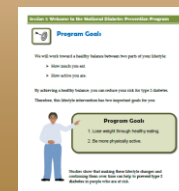
Translation of DPP

Progress to date:

- We have translated all 16 modules of the DPP program, which will be reviewed by our focus group participants & Advisory Board
- Some preliminary challenges we foresee include:
 - Lack of resource to “count calories” and track “fat content” of ethnic Vietnamese foods
 - Quantity of learning of modules
 - Delivery of the intervention (individual vs. group vs. on-line)
 - Mean weight of participants
- These challenges can serve as probing questions, and help us identify things we can start working

Next Steps

- Reach out to the community
- Draft focus group interview guide
- Submit IRB
- Review the literature for appropriate BMI cut-points for study inclusion
- Create platform/resource for counting calories & fat for Vietnamese Americans
- Write/submit systematic literature review
- Write/submit DPP translation “lessons learned” paper
- Order supplies/materials for feasibility trial



References

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5. Knowler, W.C., et al., *Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin*. N Engl J Med, 2002. 346(6): p. 393-403.