Initiating Culturally-Directed Education for Hispanic Adults with Type 2 Diabetes Mellitus

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Implementation of Culturally-Directed Education for Hispanic Adults with Type 2 Diabetes Mellitus

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BACKGROUND

• The Hispanic population in the United States has the highest rate of Type 2 diabetes mellitus (T2DM) in both adults and children compared to the national average.
• The prevalence and incidence of T2DM in Hispanic adults are partly influenced by socioeconomic status, structural discrimination, language, and cultural barriers.
• The Hispanic adult has a 66% higher risk of developing T2DM compared to non-Hispanic Whites.
• The financial burden of transportation, healthy food, and opportunity costs of missing work to go to an appointment or exercise all impede successful diabetes management.

LOCAL PROBLEM

• The site for this evidence-based practice project is a free clinic in North Carolina.
• The targeted population included Hispanic adults with T2DM who were newly-diagnosed or new to DSME.
• The purposes of this project are to create a culturally-directed DSME bundle for Hispanic adults with the use of a Spanish interpreter to improve understanding of T2DM management.
• The aims of the project were:
  ➢ The primary aim of the project is to decrease HbA1c levels by 0.5% for Hispanic adults with diabetes.

METHODS

• Literature search and critical appraisal revealed good and consistent findings to make the following recommendations: (1) utilize a culturally-directed DSME bundle for Hispanic adults to improve patients’ understanding of T2DM management (2) utilize Spanish interpreter services to assist in education.
• The Johns Hopkins Nursing Evidence-Based Practice Model (JHNEBP) was the guiding framework to evaluate the effectiveness of DSME education.
• The measurements of outcomes for this project include pre/post-DSME diabetes knowledge and self-efficacy results.
• Private DSME sessions were piloted with a Spanish interpreter to seven Hispanic adult patients with T2DM.

RESULTS

• A one-way repeated measures ANOVA was conducted to compare the effect of DSME on diabetes knowledge, which demonstrated a statistically significant effect Wilks’ lambda = .068, F(2,3) = 20.461, p = .018.
• A one-way repeated measures ANOVA was conducted to compare the effect of DSME on diabetes self-efficacy, which demonstrated a statistically significant effect Wilks’ lambda = .060, F(2,3) = 23.516, p = .015.
• A paired samples t-test was conducted to determine the effect of DSME on HbA1c levels. The results indicated a significant change between HbA1c before DSME (M = 10.8; SD = 2.167) and HbA1c after DSME (M = 6.98; SD = 1.18); t(6) = 4.01; p = .004.

CONCLUSIONS

• Use of the DSME class resulted in a significant increase in diabetes knowledge and self-efficacy and a significant decrease in HbA1c levels in this setting.
• The SKILL-D and DES surveys effectively demonstrated measured knowledge and self-efficacy in diabetes management respectively.
• The SKILL-D and Patient Feedback surveys were integrated into standard care at the practice site.
• A culturally-directed format of DSME could be the proper tool to assist those with T2DM in feeling empowered and informed of diabetes management.

Diabetes Knowledge and Empowerment were significantly improved after the implementation of the Diabetes Self-Management Education class.