Abstract

The cost of treating diabetes in the United States has placed an economic burden on the country. The number of Hispanic people residing in the United States is rapidly growing. Many of these individuals suffer from socioeconomic strain leading to poor medical care, often resulting in poor diabetes outcomes. A review of literature revealed that the incorporation of innovative, culturally relevant interventions, such as face-to-face education, and tailored text messaging, are inexpensive ways to improve glycemic control in this patient population. **Purpose:** This DNP project sought to address social determinants of health experienced by this population by providing diabetes education in the clinic setting and supporting that education by text communication to improve glycemic control. **Method:** Using Plan-Do-Study-Act, the 12-week, evidence-based practice project was conducted in a free medical clinic serving Hispanic patients. Convenience sampling was carried out and consisted of 27 patients, between the ages of 18 and 70, with an elevated hemoglobin A1C (HbA1c) (M=9.9593%). Each participant received a brief diabetes education session and then communicated with the DNP student through personalized, bidirectional, biweekly text messages over 12 weeks. The Health Belief Model was used as a theoretical framework for this project, as concepts of this model were applicable to personal influences experienced by this patient population. **Results:** Data analysis utilizing a paired t-test revealed that basic diabetes education, accompanied by tailored, bidirectional, biweekly text messages, improved HbA1c results by 0.8562% in this Hispanic patient population (M=9.1 %, SD=1.79899, p<0.001).

Keywords: diabetes, T2DM, uncontrolled, text messaging, self-efficacy, Hispanic, glycemic control