A Qualitative Analysis of Emergency Department Patients’ Experiences with TExT-MED, a Text-message Based mHealth Program to Improve Diabetes Management

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ABSTRACT

BACKGROUND In the United States, diabetes plagues Latinos, and their diabetes can be difficult to manage due to cultural, language and access barriers. The extent of benefits from mHealth technologies to improve the management of diabetes among low-income Latinos is currently unknown. Understanding the complex changes to self-efficacy and health beliefs can be difficult to measure quantitatively, especially in minority populations were traditional health belief models may not translate well culturally.

METHODS A text-messaged based educational and motivational program designed to improve disease knowledge, self-efficacy and glycemic control among low-income, inner-city Latinos was piloted for feasibility. Self-efficacy, diabetes knowledge and frequency of healthy behaviors were measured at the start and end of the trial. Focus groups were then convened to explore patient experiences with the program, and the program’s impact on patients’ self-efficacy and health beliefs. The findings of these sessions were used to reanalyze the quantitative data measured previously in the study.

RESULTS 23 patients were recruited for the feasibility study. Through qualitative analysis, we found that men and women had different information sources and differing self-efficacy towards diet management. Using this knowledge, the quantitative data gather was stratified by gender, and differential changes were noted between genders in diabetes knowledge, self-efficacy and healthy food choices.

CONCLUSIONS Men and women have differences in self-efficacy towards diet management and information sources. These differences may affect the effectiveness of mHealth interventions to improve diabetes. Gender and culture should be considered when designing interventions to achieve maximal impact.