Increasing Obesity Education in an Underserved Latino Population

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Executive Summary

Increasing Obesity Education in the Underserved and Latino Population

Nearly half of the American population suffers from obesity which is defined as a body mass index of greater than 30 or a waist circumference over 35 inches in women and 40 inches in men (CDC, 2021a). Obesity can increase the risk for developing life threatening comorbidities such as cardiovascular disease, type 2 diabetes mellitus, respiratory conditions, joint and musculoskeletal disorders, gastrointestinal disorders, and certain cancers (Fruh, 2017). Approximately 45% of Hispanic adults are considered to be obese (CDC, 2021). Not only are Hispanics more likely to develop obesity, but they also face multiple barriers and disparities when it comes to healthcare access and treatment.

Literature Review

The barriers to education faced by Spanish speaking Hispanic patients and low-income populations include lack of health literacy, time, family support, and resources. These barriers specifically can include lack of a telephone or phone at home, inability to take time off of work, lack of transportation, and trouble with childcare (Testerman & Chase, 2018). Ahmed et al., (2017) also noted that providers felt insecure communicating with patients with a language barrier and felt they were misunderstanding patients when it came to education. These factors have led to immigrant patients with a language barrier to be reluctant to seek treatment, struggle with understanding, and are hesitant to interact with providers due to provider’s lack of cultural competence (Ahmed et al., 2017).

In addition to barriers to education, Spanish speaking Hispanic patients are also considered to be at a higher risk for developing obesity due to genetics, environment, income,
and culture. The Office of Minority Health in the Department of Health and Human Services reports that Hispanics are twice as likely to develop obesity and associated complications than non-Hispanics (Valencia et al., 2014). One important factor to consider in order to analyze why Hispanics are more at risk is the culture and acculturation that takes place when they relocate in the United States. (Valencia et al., 2014). Another cultural factor to consider is the Hispanic body image. In the Hispanic culture, a larger and fuller body shape is actually ideal and is symbolic of wealth and good health and is even considered to be more attractive to the opposite sex (Tung & McDonough, 2014).

In order to address the growing epidemic of obesity in the Hispanic population, multiple different means of education delivery were analyzed. Education plays a tremendous role in obesity management especially given the dietary patterns of Hispanic immigrants. In order for the education to be effective it must be tailored to patients’ specific needs and education level (Chrvala, Sherr & Lipman, 2016). Handouts and pamphlets are traditional tools that can supply information to high volumes of patients (Arora et al., 2017). These tools reinforce education provided by providers and ease patient anxiety on making lifestyle changes (Arora et al., 2017). Visual tools can assist providers with setting realistic weight loss goals with patients (Fruh, 2017).

**Project Methods**

Implementation of this project included surveying clinic employees including medical assistants, nurses, and providers to identify and confirm obesity as a prevalent condition within the patient population receiving care at the clinic. Meetings with the physician and staff surveys at the primary care clinic in the Southern Illinois urban primary care clinic revealed the need for obesity education as a top priority for the patient population of the clinic. This clinic provides
care to a large population of Spanish speaking Hispanic patients and is staffed with a Spanish speaking medical assistant and physician’s assistant. An education tool focused on obesity and weight management was implemented. The education tool was available in both English and Spanish. Implementation of the project took place from September 2021 to December 2021. IRB approval was obtained prior to implementation of the project.

The education tool was implemented using Lewin’s Change Management Model. The model identifies the phases as allowing employees to become open to change, implement change, and then allow the change to become permanent (Nursing Theory, 2020). It is important for staff to become open to implementing the education tool, and receive education on when and how to provide the education tool to the patients. Having the education tool become a standard of care in the clinic will be helpful in sustaining long-term outcomes.

Patients received an education tool on management of obesity in Spanish and English depending on their language needs. The education tool defined obesity, discussed health risks associated with obesity, lifestyle changes, and impact of obesity on child bearing. Additional tools included a BMI chart and a handout on physical activity. The BMI chart included instructions on use beneath the chart. The physical activity handout advised patients how to increase their activity to coincide with weight loss. The tool was provided to identified patients with elevated BMI during their clinic visit. Patients were asked to complete an anonymous survey before and after receiving the education tool for obesity. Analysis of the survey responses for clinic providers and patients were listed in a word document. All survey responses were anonymous. Results of the surveys have been used in the evaluation of the project. The results were discussed with the clinic providers in March of 2022 along with a potential plan for
long-term use of the education tool in the clinic. Clinic providers were supplied with copies of anonymous data results and PDFs of the education tools in Spanish and English for future use.

**Evaluation**

Nineteen patients participated in the project. On the survey prior to receiving the education tool, one of the survey questions asked patients to mark how they felt about their overall health as either ‘poor’, ‘fair’, ‘very good’, or ‘excellent’. Out of the fourteen participants that responded to this question, 15.8% marked their health as ‘poor’, 31.6% ‘fair’, 21.1% ‘very good’, and only 5.3% ‘excellent’. When asked if they had knowledge on weight management, 68.4% ‘no’, and only 31.6% ‘yes’. The final question on the pre-education survey asked if the participants already applied basic healthy and unhealthy habits to his/her life including ‘exercising three times weekly’, ‘eating at least five servings of fruits and vegetables daily’, and ‘eating fast food more than once weekly’. Almost half of the participants (42%) marked only one of these healthy/unhealthy habits statements, 26.3% marked two applicable statements, 15.8% marked three applicable statements, and only 5.3% of participants marked four of the statements. Overall, the participant responses support the use of an education tool to increase their knowledge on weight management. With the majority of patients marking that they do not have any knowledge of weight management, the need for education is clearly identified.

The participants were asked if they perceived the education tools as helpful for weight loss education. The survey data supports the use of the education tools with 52.6% marking the tool as ‘very useful, and 47.4% of participants marking the tool as ‘somewhat useful’. No participants marked the tool as ‘not useful’. All of the participants marked that they now know more about weight loss after receiving the education tool. In addition, 36.8% of participants marked one intervention they thought they could complete to improve their weight, 36.8% of
participants marked two interventions, 15.8% marked three interventions, and 10.5% of participants marked four interventions.

There were several limitations that affected the implementation of this project. While the education tools were obtained from reputable national organizations, use of the tools with this specific population would need further evaluation with larger populations, since the sample size of this project was small. In addition, due to the limited time frame of this project, participant weight loss was not tracked post use of the education tool. The participants were not asked to obtain a follow-up appointment to determine if the tool was effective in making weight management progress. Long-term follow up would be needed to evaluate long-term outcomes and impact. The clinic did not track which patients were included in the project and did not ask patients to obtain a follow-up appointment to track progress. This limited any possible follow up with participants. Additionally, patients have the option of making telehealth appointments rather than in person, which may have limited how many patients received BMI screening and survey participation. Other limitations include the short time frame in which this project was completed. The participants were not screened for education level during the study to ensure their education level was adequate to understand the education tool. The providers in the clinic went over the education tool with the patients to make sure they understood, but this may limit the participants’ ability to reference the tool later. The providers stated that they went over the education tool with participants, but there was no mechanism in place to track how much time was spent with each patient.

**Impact on Practice**

The impact on practice was implementation and evaluation of an obesity education tool for Spanish speaking Hispanic patients that can be used long-term in the clinic setting. Patients in
the project site clinic are flagged for obesity already in the charting system based on their weight and BMI. Providers now have an obesity focused too that they can use for their English and Spanish speaking populations. With continued use of the tool, potential long-term outcomes could include improving the BMIs of patients with or at risk for obesity in the population this clinic serves. Hispanic patients at this clinic can now receive education that is both linguistically and culturally sensitive. The clinic has been provided with paper and electronic PDF copies of the education tools for long-term use. Providers have access to Uptodate from which the tools were obtained from, thus, they can reevaluate to make sure patients received the most up to date information in the future as time evolves.

Future implications for implementation of this education tool include evaluation of the patient’s reading level. Reevaluation of the education tool is necessary to make sure the tool provides the most up to date information. Additionally, tracking of patients receiving the education tool would allow for further follow up. The addition of follow up appointments post education could help determine if patients are incorporating weight management strategies in their lifestyle and allow reinforcement of weight management education.

**Conclusion**

Language and cultural barriers are the most prominent risk factors for developing obesity in the Spanish speaking Hispanic population. The education tools used in this project were useful in increasing obesity knowledge and awareness in the Spanish speaking population and can be used by primary care providers as an efficient resource for this clinic and other clinics providing services to Spanish speaking Hispanic populations.

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