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YMCA Diabetes Prevention Program

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YMCA Ineffective Gym Use

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YMCA DIABETES PREVENTION PROGRAM

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Abstract

The Central Coast YMCA Diabetes Prevention Program (DPP) is established to promote and encourage the reduction of pre-diabetes to the community members. Every Spanish cohort receives a free gym membership. Unfortunately it is being used less than expected. Numerous reasons the members aren't properly utilizing the gym membership are time management, distance, and work schedules. The lack of gym membership use is a health risk to the members because it can lead to diabetes. To interpret these specific barriers in the lack of usage of the gym a survey was conducted to all Spanish participants in each class. The survey resulted with time management and driving distance were the biggest barriers. From this perspective it is recommended that physical activity is implemented to the curriculum. Therefore the participants engage in physical activity together and reach the goal of reducing pre-diabetes.

Keywords: YMCA, diabetes, barriers, gym membership, time management

Agency & Communities Served

The non-profit organization, Central Coast Young Men's Christian Association (YMCA) has eleven branches whose focus is to improve national health and wellbeing. The YMCA holds the Diabetes Prevention Program, a Centers for Disease Control (CDC) based curriculum that aims to decrease the number of individuals with prediabetes. The program offers their services all around the central coast; Salinas, Monterey, Watsonville and Hollister. "Diabetes affects more than 29 million people. A condition called prediabetes occurs when blood sugar levels are higher than normal but not high enough for a type 2 diabetes diagnosis."(YMCA, 2019). Diabetes has no cure, however, pre diabetes can be reversed. "About 13.8 percent of Monterey County Latinos reported being diagnosed with diabetes, compared to 4.8 percent of Whites and 4.4 percent of Asians" (CHOMP, 2018). The individuals who are eligible into the program are those who are diagnosed with prediabetes and are 18 and over. Other factors considered are individuals who have a high risk score on the self referral pamphlet, and those with a Body Mass Index (BMI) > 25 (YMCA, 2018).

The YMCA Diabetes Prevention Program addresses social justice by adhering to the needs of the patients locations. Their mission statement is as follows: "To put Christian principles into practice through programs that build healthy spirit, mind and body for all. For decades, the YMCA Mission has been central and foundational to our work. ... In that Christian principles are caring and inclusive, we respect various expressions of religion" (YMCA, 2018). Their goal is to support and provide an impact to the community through healthy living .

Problem Description

About 84 million Americans undergo prediabetes and have the possibility of developing diabetes (YMCA, 2019). The Latino community is the most prevalent to develop diabetes. The CDC indicates that the Latino community are 50 percent more likely to die from diabetes than white people. The Diabetes Prevention Program offers the right tools to escape diabetes. The participants get a free gym membership to support their journey (YMCA, 2018). However, the concern is that the participants aren't effectively using the gym membership. The gym membership prices range with a starting rate of \$56 per individual (YMCA, 2019). With consistent use of the gym membership, the participants can reach the program goal of losing 5-7% body weight and prevent diabetes.

Contributing Factors

A variety of factors contribute to inhibit use of the gym membership are as follows: schedule conflicts, family obligations, language barriers and menopause. Mailey (2016) explains that parents have stated that time management is difficult when having children. Having schedule conflicts is already a norm among society but its "intensified in parents" due to the responsibilities and perhaps household duties they have which leads to no leisure time (Mailey, 2016). According to Mailey (2016), those who are parents feel guilty to leave their children behind and rather spend quality time with their kids. Those who are parents place parent responsibilities as their top priority and some don't value physical activity. Latino spanish speakers share that when facing someone who doesn't speak their language it can be intimidating

therefore, avoid it by not attending public physical activity practices (Cambridge Food and Fitness Policy Council, 2014). The Hispanic community needs people of their cultural background at the YMCA to therefore, communicate better with this subgroup.

Consequences

The program is designed for participants to succeed and if the participants don't utilize their resources it can lead to the following consequences: increase of health risks, contract diabetes and weight gain. Zisser (2012) emphasized that to live a healthy lifestyle, and prevent diabetes one needs to give value to diet and physical activity. Diabetes is a rapidly growing health concern, the CDC states that 33.9% of the U.S population is prediabetic. The U.S overall population carries 325 million people (Census, 2017). 9.4% of the U.S population has been diagnosed with diabetes, and 23.8% remain undiagnosed (CDC, 2018). The Hispanic/Latino subgroup: Mexicans are stated to have the highest prevalence (13.8%), followed by Puerto Ricans (12.0%), Cubans (9.0%), and Central/South Americans 8.5% (CDC, 2018).

The CDC shares that overweight (obesity) is an ongoing chronic illness that needs to be addressed with proper physical activity to prevent the growth. The YMCA is located in Salinas, in which the population is predominantly Hispanic. Salinas,CA has a population of 155,889, and 76.6% of this population is Hispanic (DataUSA, 2019). According to the CDC (2018), Hispanics are at a prevalence rate 47% of obesity, therefore, it puts Salinas at a higher risk of a BMI higher than 25 and getting diabetes. The CDC advocates that 150 minutes of physical activity per week has extensive health benefits, and as individuals increase the minutes the lower risk for developing heart disease is established. Regular physical activity has been proven to lower cholesterol levels and hypertension. These illnesses are more likely to invade an individual if

they lack physical activity (CDC, 2018). The health risks that can occur if the participants don't effectively use the gym and contract diabetes are as stated by the *American Journal of Public Health*, Latinos with diabetes have higher rates of end-stage renal disease than do Whites (2009). People who develop diabetes have higher risks to develop chronic health conditions that can lead to death.

Problem Model

Contributing Factors	Problem	Consequences
Family Obligation	Most YMCA participants aren't effectively using the gym	Increase health risks
Language barriers		Diabetes
Schedule conflicts		Gain Weight

Capstone Project Description and Justification

Project Purpose

The YMCA Diabetes Prevention Program gives the participants a free gym membership to be able to reach the CDC established goals. The problem is that these individuals aren't effectively putting it to use. Finding out why they aren't attending classes or using the gym equipment can be important so it is known if the gym memberships is beneficial to keep. Surveying participants can be a way to start and from the results discuss the solution. Making sure there are Spanish speakers at all times in the welcoming area is essential for the Hispanic community to approach. Hiring a bilingual individuals is practical to achieve this. The Spanish-speaking participants want to feel welcomed when approached or asking questions regarding the classes, equipment, or trainers. Implementing a group activity aside from the class

so they can all attend the gym can be effective. Adding another hour to the cohorts so the classes can include a gym session. The gym membership varies, but the starting rate is \$56 per individual (YMCA, 2019). Therefore, members should put it to use to reach the 5-7% body weight loss.

The gym membership ranges at a high price, therefore, they should take advantage of it, since it's free. The YMCA gym is a free resource to reach the two main goals.

Project Justification

The Center for Disease Control (CDC) has established that the Diabetes Prevention Program is a lifestyle change program and those who are pre-diabetics and participate reduce their risk of developing diabetes by 58% (CDC, 2019). The CDC ensures that physical activity improves overall health. Therefore, the gym is an essential resource to keep and deeply understand the barriers, so as a team there can be legitimate change. Congress authorized this DPP because of the multi center clinical research study success, incorporating a center in which a community can exercise is essential. The Central Coast is privileged to have the Diabetes Prevention Program to be able to meet the health needs of the local community.

Project Implementation

Physical activity is one of the most powerful tools individuals can participate in to prevent diabetes. The CDC clearly has stated the statistics on prevention of diabetes. Formulating and maintaining a healthy lifestyle is a key component leading to the reduction of diabetes. Therefore, understanding the lack of gym usage from the Central Coast Hispanic community is vital. It's important because the organization can find ways to accommodate the members, and increase the productivity of the program.

Formulating a survey for the Spanish cohorts to find out the reasons they are not utilizing the YMCA gym it will help create dialogue within the organization. The survey will help create change by offering actionable ideas and meaningful communication among YMCA leaders.

Conversation held after the survey can result in successful change.

The survey was developed by YMCA intern with support from the Executive Director of Branch of Operations and additional Spanish speaking office staff. After the survey was approved by YMCA staff, it was provided to the participants. The survey was provided to the lifestyle coaches who facilitate Spanish cohorts, with the request that they distribute the survey at the end of their sessions between May and September 2019.

Because of staffing transitions the surveys that were collected over the summer were misplaced. Due to this setback a new set of surveys were distributed in September 2019. This resulted in a smaller number of surveys collected. Survey results were then analyzed by the YMCA intern and recommendations will be provided to YMCA staff about how they can better support DPP participants in successful completion of the program. A detailed implementation plan and timeline can be seen in the Scope of Work in Appendix A.

Assessment Plan

The survey that was conducted was distributed to measure the effectiveness of the gym membership for the Spanish speakers. The survey would show effectiveness if 80 percent of people return the survey. The end goal was to determine barriers and formulate a plan that can better help the participants to increase the use of the gym resources.

Expected Outcomes

Of the 26 participants who completed the survey. The survey is expected to give a baseline understanding of the community needs to develop an intervention to help improve the program. This may also need to possibly thinking of ways to use the membership money elsewhere in the program, as the survey provides an insight into the understanding of how the DPP Spanish speaking members are using the memberships. The expected outcome was to create a closer community with more communication, to address any barriers the participants may have. Creating a tighter community can also improve the program itself because the participants will want to get involved. This will also continue to strengthen the diversity among staff members to accommodate the needs of the community.

Project Results

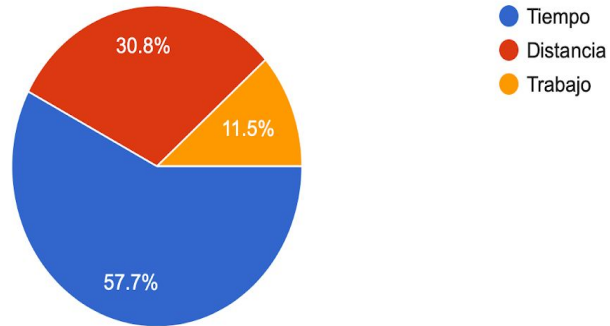
Of the 35 surveys that were sent out, 26 surveys were returned. The survey was created by incorporating it to each Spanish Diabetes Prevention Program class. The goal of the survey was to grasp the barrier of lack of gym usage. The lifestyle coaches took ten minutes of class to pass out the surveys and collect their results.

The Diabetes Prevention Program members responded to the survey and the results showed that 26.9% attended the gym to lose weight, 73.1% shared that they attend to better their overall health. The survey indicated that the biggest obstacle in not attending the gym was time management resulting in 57.7% of the participants. The other following barrier was 30.8% driving from a far distance. This can be seen in Figure 1 below.

Figure 1: Obstacles to utilizing the gym

Cuáles obstáculos lo detiene de ir al gimnasio?

26 responses



Conclusion & Recommendations

About 70 percent participated, data was still collected and analyzed. The above graph shows that implementing gym time into the DPP curriculum can be beneficial to these individuals who struggle with time management. It is recommended that in order for the members to achieve the two main goals that reduce pre diabetes at a faster and safer rate is by incorporating gym time into the curriculum. The participants create a bond in class and can use that to motivate each other during physical activity. The challenging part of this project was formulating the survey with appropriate questions that would be returned with working data. In addition, the misplacement of surveys was a disturbance when conducting the project. In the future it is advised that the surveys are emailed directly to the DPP coaches, and verbally communicate it to them, therefore, there is less room for mistakes such as misplacement of surveys.

References

- CDC. (2018).Adult Obesity Facts. Retrieved from
<https://www.cdc.gov/obesity/data/adult.html>
- CDC. (2018).Physical Activity Guidelines for Americans. Retrived from
https://health.gov/paguidelines/second-edition/pdf/Physical_Activity_Guidelines_2nd_edition.pdf#page=55
- Census Data. (2017).<https://www.census.gov/popclock/>
- Central Coast YMCA. (2018). Retrieved from <http://www.centralcoastymca.org/>
- Chomp. (2019). Retrived from
<https://www.chomp.org/app/files/public/6960/2016-PRC-CHNA-Report.pdf>
- Cambridge Food and Fitness Policy Council. Cultural considerations in physical activity. (2014).
Retreived from
<http://www.cambridgepublichealth.org/publications/FFPC/Cultural-Considerations-in-Physical-Activity-Report-Cambridge-MA.pdf>
- DataUSA. (2019). <https://datausa.io/profile/geo/salinas-ca/#intro>
- Deanne, M. (2014). Factors influencing adherence to regular exercise in middle-aged women: a qualitative study to inform clinical practice. Retrieved from
https://search.proquest.com/docview/1512727243?accountid=10355&rfr_id=info%3Axri%2Fsid%3Aprimo
- Mailey, E. (2016). Overcoming barriers to exercise among parents: a social cognitive theory perspective. Retrieved from

<http://eds.b.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=1&sid=ff37c87f-72ab-46dd-82d8-d93aa084136a%40pdc-v-sessmgr01>

Zisser, H. (2012). Advances in exercise, physical activity and diabetes mellitus. Retrieved from

<https://onlinelibrary.wiley.com/doi/10.1111/j.1742-1241.2011.02856.x>

Research Behind the National DPP.(2019).

<https://www.cdc.gov/diabetes/prevention/research-behind-ndpp.htm>

Appendix A

Scope of Work

Activities	Deliverables	Timeline/Deadlines	Supporting Staff
Research on barriers		January	
Design survey	Email	April	YMCA staff
Review Survey content w mentor	Via email / in person	May	YMCAstaff
Go over Excel to identify the amount of Spanish sessions.	In cabinet where all the cohort folders are located. Check excel for sites.	May	Lifestyle coaches
Print surveys and talk with coaches about survey.	In person	May	YMCA staff
Place surveys in envelopes in all Spanish folders.		May	Bill
Collected information from questionnaires		September	Bill

Formulated second set of surveys		September	Bill
Resend surveys		September	Bill
Analyze survey data		October	Bill
Recommendations		October	
Finalized capstone		October	Caitlin/ Shelby

Appendix B Participant Survey

I've invited you to fill out a form:

Encuesta de Gimnasio - YMCA DPP

Cuál es la ubicación donde queda su clase ?

Por qué razón vas o irías a un gimnasio?

Con qué frecuencia asiste usted al gimnasio?

- 1 vez por semana
- 2 veces por semana
- 3 veces por semana
- Todo el mes
- Nunca asisto

Other:

Va al gimnasio solo/a o con un amigo/a?

Cuáles obstáculos lo detiene de ir al gimnasio?

Ha hecho una cita con un representante para ayudarlo/a?

- Sí
- No

Se siente satisfecho con la atención brindada en el gimnasio de Salinas? -YMCA *

- Sí
- No
- Tal vez

Que beneficio ha notado desde usando el gimnasio ?

Never submit passwords through Google Forms.