Title

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EAT MOVE LIVE: HEALTHY LIFESTYLE PROMOTION AND DISEASE

PREVENTION INTERVENTION ANALYSIS WITHIN LATINX/INDIGENOUS WOMEN IN

THE EASTERN COACHELLA VALLEY

By

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A capstone project submitted for Graduation with University Honors

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University Honors

University of California, Riverside

APPROVED

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Abstract

Chronic disease prevention and management is difficult for individuals in rural communities due to limited access to services and programs. This is especially the case for Latinx/Indigenous Latin American immigrants in the Eastern Coachella Valley, a rural region that faces barriers to culturally relevant health education and disease prevention programs. The inclusivity of culture within health education, and how it is communicated is vital among non-English speaking immigrant communities. My capstone project focused on data collected as a student researcher for the Eat, Move, Live intervention study. The City of Hope alongside contributors of the cookbook Ancestral Recipes From My Grandma's Kitchen to Yours collaborated to implement a 10-week virtual program to study chronic disease prevention and management among Latinas in the Eastern Coachella Valley. During the 10-week intervention, participants in the study completed weekly ~70 to 90-minute classes that included an interactive presentation focused on health education, physical activity, and a cooking demonstration. Prior to the start of the intervention, pretest data were collected followed by posttest data at the end of the intervention, and focus groups were conducted. Comparisons of common themes across focus groups and data from surveys were analyzed. The study's findings indicate the Eat, Move, Live program increased knowledge and awareness of chronic disease prevention leading to changes in diet and lifestyle that enhanced participants' overall health. This culturally tailored program has important public health implications as it recognizes the unique challenges faced by the vulnerable Latino/Hispanic community. Ultimately, this project aims to identify ways to best support Latinos/Hispanics in rural communities to access health education and promotion programs decreasing the potential chronic disease burden among this population.

Acknowledgments

I would like to express my deep appreciation to Dr. Ann Cheney for her invaluable mentorship and unwavering support throughout my two-year capstone journey, as well as throughout my undergraduate career. Under her guidance, I have been able to forge a deeper connection with the community members of the Eastern Coachella Valley and hone my leadership skills. I am also profoundly grateful to the Eat, Move, Live or Coma, Muévase y Viva team for giving me the opportunity to be part of this exceptional program.

Additionally, I would like to extend my heartfelt gratitude to the community health workers/promotoras, whose dedication and efforts have made a significant difference in the lives of community members. Working alongside the community health workers/promotoras has been an unforgettable experience, and has given me a firsthand appreciation for the transformative power of community-driven approaches to health. This experience has also motivated my commitment to becoming a physician dedicated to serving communities like those in the Coachella Valley.

Lastly, I extend my sincerest gratitude to all the participants in the Eat, Move, Live program. Their eagerness to adopt healthier lifestyles not only inspired me but also allowed me to develop a sense of cultural belonging and acceptance. Being welcomed by a group of inspirational Latina women has taught me the true value of being a part of a community.

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Introduction

Problem Statement - Diabetes and its Prevalence by Race/Ethnicity

According to the Centers for Disease Control (CDC), as of April 2023, diabetes is the 8th leading cause of death in the United States (US). US adults over their lifespan have a 40% chance of developing type 2 diabetes. This percentage varies by race/ethnicity. Hispanics/Latinos have a 50% greater chance of developing type 2 diabetes and are more likely to develop it at a younger age compared to all US adults (CDC, 2023).

Risk Mitigations- Public Health Education and Prevention

The potential effectiveness of risk mitigation is dependent on early intervention and prevention strategies. One example of public health education and promotion is the Eat, Move, Live (EML) program, an intervention that promotes lifestyle behavior change through education, healthy eating, and physical activity. The objective of this program is to reduce the risk of chronic diseases through culturally relevant and sustainable prevention methods in low-income, rural racial and ethnic minority communities. Culturally tailored lifestyle interventions are effective in reducing diabetes risk among Hispanic individuals within the US (McCurly et al., 2017). Tailoring interventions to include cultural values is crucial to making curriculum relevant and meaningful to Latinx Spanish-speaking communities as it can increase the audience's engagement and participation in program activities.

Barriers- Accessing public health information and healthcare services

Latinx immigrant farming communities in rural areas do not have easy access to public health education resources to live healthy lifestyles and have limited access to healthcare services. Barriers such as insurance coverage, travel distance, legal status, and fear of deportation prevent some Latino/Hispanic community members in rural areas from attaining diabetes risk

reduction interventions (Tulimiero et al., 2021). Additionally, education and health illiteracy create additional barriers to engaging in public health education and promotion curricula (Vamos et al., 2020).

Capstone - Background and Significance

This capstone project focuses on the healthcare needs of Latino/Hispanic immigrant farm working communities in the Eastern Coachella Valley located in the rural inland southern California desert region. My capstone is part of a larger pilot randomized controlled trial (RCT), led by Dr. Ann Cheney, that aimed to decrease the chronic disease burden among low-income immigrant Latinos/Hispanics in rural communities. The project builds on existing research from the study "Ancestral Recipes" that culturally adapted existing MyPlate-based recipes to include Latinx cultural values and norms and adjust for health literacy levels and language to create a cookbook designed to reduce diabetes risk and promote healthier nutrition and lifestyles choices. The study showed success in addressing the chronic disease burden among rural Latinx/Indigenous Latin American populations in the Eastern Coachella Valley (Cheney et al., 2023). Drawing on prior research, my project investigates women's experiences of participating in the culturally tailored EML program, which focuses on diabetes prevention and healthy lifestyle intervention. Specifically, my goal was to gain insights into Latinas' perspectives on the program and determine whether participation in the program resulted in improved health outcomes and the adoption of disease prevention behaviors including healthy eating and physical activity.

This capstone is significant as it will uncover the challenges that many low-income Latinos/Hispanics face when accessing health education and promotion programs to prevent chronic diseases such as diabetes. Below, I present the findings from a qualitative analysis of

focus groups with participants in the EML program and a comparative analysis of the effectiveness of the intervention on health outcomes. Ultimately, this project aims to identify ways to best support Latinos/Hispanics in rural communities to access health education and promotion programs decreasing the chronic disease burden among this population.

Methods

Study Overview

The goal of the study is to examine the potential impact of the EML program on knowledge of chronic diseases and healthy lifestyle behaviors. This section outlines my capstone project in the context of the pilot RCT. The clinical trial is funded by the National Institutes of Health/National Cancer Institute. The investigative team included faculty, staff, and students in the UCR School of Medicine and clinical partners at the City of Hope–this team partnered with community health workers who are part of the Coachella Valley Free Clinic (CVFC), a student-led and community-engaged free clinic serving Latinx and Indigenous Mexican patients in the Eastern Coachella Valley. The UCR School of Medicine tailored the existing EML program developed by the City of Hope for low-income, rural Latinx communities.

The University of California Riverside Institutional Review Board (IRB) approved all study materials and data collection procedures, which included my participation in the study under the project team roster. In addition, I completed the CITI training that focused on social and behavioral research with human subjects. All participants completed a consent form prior to the start of the research. As a student researcher, I attended weekly EML sessions, participated in focus group data collection, and collected notes on participants' interactions during the sessions. To achieve the objectives of my study, I analyzed focus group data and survey data collected from participants before and after study participation.

Intervention: The Eat, Move, Live Program

EML is a dietary and lifestyle behavior change intervention focused on diabetes and chronic disease prevention and management. Nine CHWs/promotoras delivered the intervention with the goal to reduce chronic disease disparities among Latinas and female members of the Purépecha community, an Indigenous Mexican group from the state of Michocacán, in rural communities. The intervention is a 10-week program that includes weekly classes. Each class is anywhere from 90 to 120 minutes and includes a 45-60 minute presentation on a health education topic, a 15 to 30-minute food demonstration, and a 15 to 30-minute exercise activity. Figure 1 outlines the study design, including the sample size (N=40), randomization into the intervention group or the wait-list control (meaning this group receives the intervention after the initial intervention group), participant incentives, and data collection measures collected as part of the clinical trial.
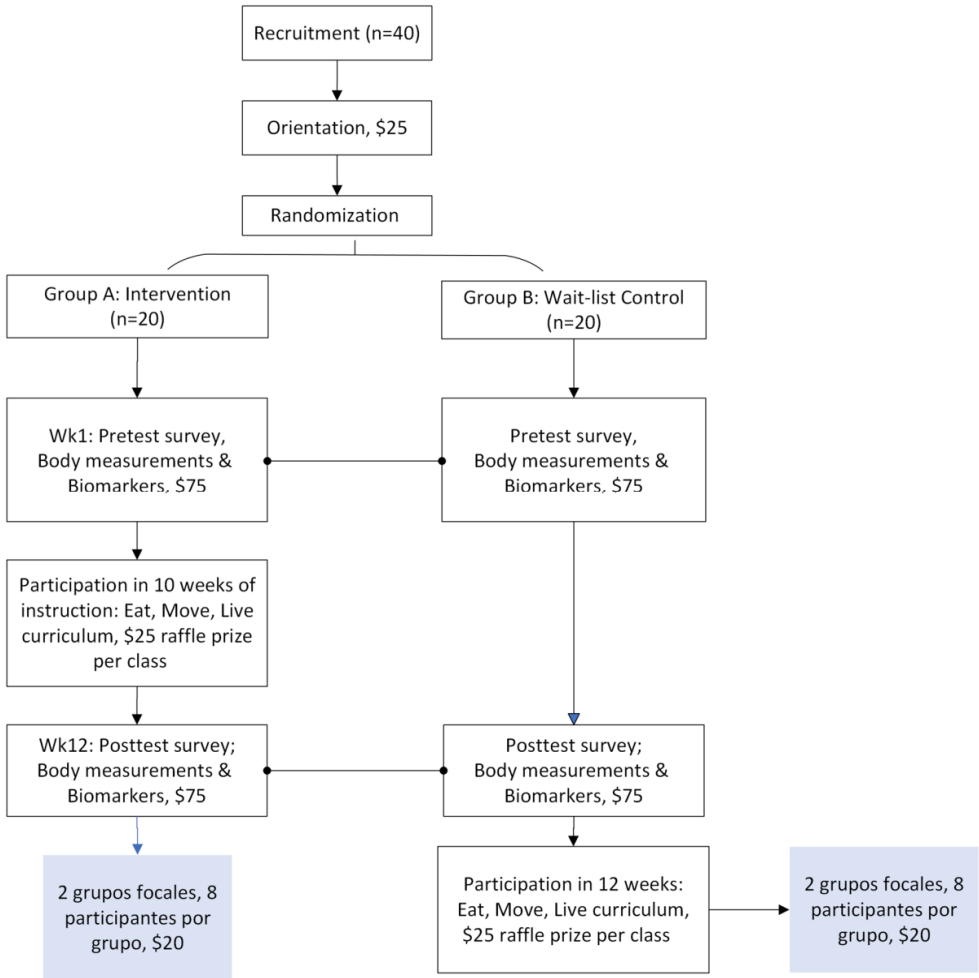
Figure 1. Overview of Eat, Move, Live Pilot Randomized Clinical Trial Design

The CHWs/promotoras recruited participants into the study through outreach and sharing study flyers on their networks. Friends, family members, and local community members in the Eastern Coachella Valley were invited to participate in the clinical trial. Patients eligible for the program were: 1) 18 years of age or older, 2) lived in the rural desert region of Inland Southern California, 3) were able to engage in physical activity, 4) identified as Latina/Hispanic and/or Indigenous Latin American, 5) and spoke Spanish, English, or Purépecha. Interested patients provided consent to share their contact information with the research team, committed to attending weekly classes, and completing the necessary data collection.

The material for the program was originally created by the City of Hope, Los Angeles, and included manuals, educational presentations, and exercise plans. However, the material was in English and was not tailored to the specific needs of low-income, rural Latinx immigrant communities. To address this, the EML administrative team, including myself, participated in translating all modules to Spanish and simplifying the language to make it more accessible to the community. Additionally, we adjusted all presentations to fit the community's needs and cultural background. An example of these presentations can be seen in Figure 2.

For the intervention cooking demonstrations, we utilized recipes from Ancestral Recipes: From My Grandma's Kitchen to Yours, a cookbook designed with traditional Hispanic recipes (Cheney et al., 2020). Figure 3 showcases one of the recipes shared in the program. We also integrated exercise activities that were accessible to all participants, including Spanish music appropriate for the community. Ultimately, we modified all program material to align with our project theme, which was inspired by the three sisters depicted in the Ancestral Recipes Cookbook. The sisters are a symbol of culture and tradition unique to our study population.

Figure 2. A slide from EML presentation on Diabetes

Figure 3. Fish Wrapped in Corn Husks Recipe Page 29 of Ancestral Recipes: From My

Grandma's Kitchen To Yours.

Data Collection

Several types of data were collected for this study. Data included observations during classes and WhatsApp group texts, survey data, and focus group data.

      Observational data. While I attended the weekly educational presentations, food demonstrations, and physical activity workouts, I made a series of observations about participants' motivation and activeness in the program. The observations focused on documenting the overall motivation, challenges, and development of confidence in healthy lifestyle changes among the participants.

      Pretest and pretest survey. Participants completed a comprehensive set of questions in both the baseline and follow-up surveys, with a 3-month difference between survey data collection. Questions were related to healthy eating, physical activity, general health status, and sociodemographic information. For the pretest survey, participants were asked to indicate three goals they would like to achieve by the end of the study and in the posttest to indicate if they accomplished their goals. For the post-test, both Group A (Intervention) and Group B (Control) completed surveys at the same time, with Group B completing the post-test without access to the intervention.

      Healthy eating. The following questions assessed healthy eating: "How many servings of vegetables do you eat every day?" Response options were: none, 1- 2 servings, 3- 4 servings, or 5- 9 servings. "How many times per week do you and your family eat out?" Response options were: none, 1-2 times a week, or 3-5 times a week. "In the past week, did you drink any soda/sugary drinks?" Response selection: 1, 2-3, 4-6, or 7 or more. "In the past week, did you eat any sweets/junk food?" Response options: none, 1, 2-3, 4-6, or 7 or more. "Since the classes, I cook healthier meals?" Response options: no or yes (question asked at posttest only).

Physical activity. The following questions assessed physical activity: "How many days per week do you do moderate physical activity for at least 30 minutes (e.g., brisk 1- 2 days/wk walking, sports, Zumba)?" Response options: 0, 3- 4 days/wk, or 5 or more days/wk. "I enjoy doing the physical activities I learned in class." Response options: yes or no (question asked at posttest only).

Health status. Questions included: "In general how would you rate your health?" Response options: excellent, good, fair, or poor. "Have you completed your goals?" Response options: yes / I plan to or no (question asked at posttest only).

Sociodemographics. The survey identified age, gender, ethnicity, number of household members, number of children, country of origin, marital status, maternal language, the highest level of education, health insurance coverage, annual household income, and food dispensary utilization.

Focus groups. The experiences of the participants will be observed and noted throughout the duration of focus groups, concluded at the end of the 10-week program, focus groups were conducted with participants. CHWs/promotoras conducted the interviews and used an interview guide to obtain information on the following topics: experiences in the program, impacts of the program on participants' knowledge of healthy lifestyles and prevention and management of chronic diseases, and the program's impact on participants' general health status.

Data Analysis

The qualitative data from focus groups were analyzed first followed by analysis of the quantitative data.

Survey data-quantitative analysis. The survey responses collected during the pretest and posttest were exported from Qualtrics and organized in an Excel file for further analysis.

Descriptive statistics such as frequency and percentages were computed using Excel to summarize participant characteristics. The mean and standard deviation were calculated for continuous variables. Additionally, the means of the pretest and posttest data were calculated and compared to evaluate any changes over time.

 Focus group data - qualitative analysis. An inductive analysis was used to analyze the focus group data. The primary goal was to discover patterns and themes in and across participants' narratives utilizing a line-by-line reading of the transcripts (Ryan & Bernard 2003). The first step of data analysis involved cleaning up the transcripts and importing them into MAXQDA, a qualitative data analysis software program, to facilitate the coding and categorization of the identified themes (Verbi Software, 2016). A codebook was developed by reading the transcripts various times during the open coding phase and establishing a set of codes, code definitions, and examples that served as a guide for the analysis process (DeCuir-Gunby et al., 2010). After revising the codebook, I met with the principal investigator, Dr. Ann Cheney, to discuss the application of the codes, and once an agreement was reached, the next step was in vivo coding. During this phase, the codes were applied to each participant's responses in all the transcripts. Finally, axial coding was carried out to compare the different themes and identify any relationships that emerged across the focus groups.

Results

Participant Characteristics

 A total of 40 participants completed the pretest surveys, and 36 completed the posttest surveys, resulting in a completion rate of 90% for the EML program. The majority of participants (88.9%) identified as Latina/Hispanic, while 8.3% identified as Purépecha. Spanish was the primary language for 94.5% of participants, and 77.8% of participants were from

Mexico. The average age of participants was 43, with a minimum age of 21 and a maximum age of 67.

Approximately half of all participants (50.0%) had less than a high school education, and 55.5% reported a household income of less than $25,000. Moreover, 38.9% of participants were uninsured, and 50.0% reported picking up food from the dispensary within the last month. Table 1 presents the sample characteristics and compares the control group (B) to the intervention group (A).

Table 1. Demographic Characteristics

	Control (N=17) n(%)	Intervention (N=19) n(%)	Overall (N=36) n(%)
Age			
Mean (SD)	42.4 (8.00)	44.2 (14.6)	43.4 (11.8)
Median [Min, Max]	40.0 [30.0, 60.0]	43.0 [21.0, 67.0]	42.0 [21.0, 67.0]
Ethnic Origin			
Latinx/Hispanic	15 (88.2%)	17 (89.5%)	32 (88.9%)
Indigenous Latin American	2 (11.8%)	1 (5.3%)	3 (8.3%)
European American/Caucasian	0 (0%)	1 (5.3%)	1 (2.8%)
Country of Origin			
USA	1 (5.9%)	4 (21.1%)	5 (13.9%)
Mexico	13 (76.5%)	15 (78.9%)	28 (77.8%)
EI Salvador	2 (11.8%)	0 (0%)	2 (5.6%)
Missing	1 (5.9%)	0 (0%)	1 (2.8%)
Number of Household Members (continuous)			
Mean (SD)	4.69 (1.70)	4.00 (1.67)	4.31 (1.69)
Median [Min, Max]	5.00 [2.00, 7.00]	4.00 [1.00, 6.00]	5.00 [1.00, 7.00]
Missing Answer	1 (5.9%)	0 (0%)	1 (2.8%)

Do you have Children?			
Yes	13 (76.5%)	10 (52.6%)	23 (63.9%)
No	4 (23.5%)	8 (42.1%)	12 (33.3%)
Missing Answer	0 (0%)	1 (5.3%)	1 (2.8%)
Number of Kids (continuous)			
Mean (SD)	2.54 (1.05)	2.20 (1.14)	2.39 (1.08)
Median [Min, Max]	2.00 [1.00, 4.00]	2.00 [1.00, 5.00]	2.00 [1.00, 5.00]
Missing Answer	4 (23.5%)	9 (47.4%)	13 (36.1%)
Married			
Single	2 (11.8%)	3 (15.8%)	5 (13.9%)
Married	12 (70.6%)	12 (63.2%)	24 (66.7%)
Single but living with Partner	2 (11.8%)	1 (5.3%)	3 (8.3%)
Divorced	1 (5.9%)	0 (0%)	1 (2.8%)
Widowed	0 (0%)	3 (15.8%)	3 (8.3%)
Language spoken at home			
English	1 (5.9%)	1 (5.3%)	2 (5.6%)
Spanish	13 (76.5%)	13 (68.4%)	26 (72.2%)
English and Spanish	2 (11.8%)	4 (21.1%)	6 (16.7%)
Purépecha and Spanish	1 (5.9%)	1 (5.3%)	2 (5.6%)
Education level			
Less than High School	9 (52.9%)	9 (47.4%)	18 (50.0%)
High School graduate	3 (17.6%)	4 (21.1%)	7 (19.4%)
High School graduate/Professional School	5 (29.4%)	5 (26.3%)	10 (27.8%)
Missing Answer	0 (0%)	1 (5.3%)	1 (2.8%)
Household Income			
Less than $15,000	2 (11.8%)	5 (26.3%)	7 (19.4%)
$15,000- $24,999	7 (41.2%)	6 (31.6%)	13 (36.1%)
$25,000-$39,999	5 (29.4%)	6 (31.6%)	11 (30.6%)
Above $40,000	3 (17.6%)	2 (10.5%)	5 (13.9%)
Insurance			
Insured	11 (64.7%)	11 (57.9%)	22 (61.1%)

Not Insured	6 (35.3%)	8 (42.1%)	14 (38.9%)
Food Dispensary Utilization			
No	8 (47.1%)	8 (42.1%)	16 (44.4%)
Yes	8 (47.1%)	10 (52.6%)	18 (50.0%)
Missing Answer	1 (5.9%)	1 (5.3%)	2 (5.6%)

Figure 4 shows how participation in the EML Program increased participants' knowledge and awareness of healthy lifestyles and disease prevention by motivating them to adopt a healthier diet, engage in regular exercise, and promote healthy habits among their family members. The program was particularly beneficial for individuals with chronic health conditions such as diabetes as it provided them with the tools to effectively manage and control their illnesses. These lifestyle changes resulted in improvements in physical and mental health, including weight loss, increased flexibility and stamina, improved self-confidence, and a better understanding of chronic disease management.
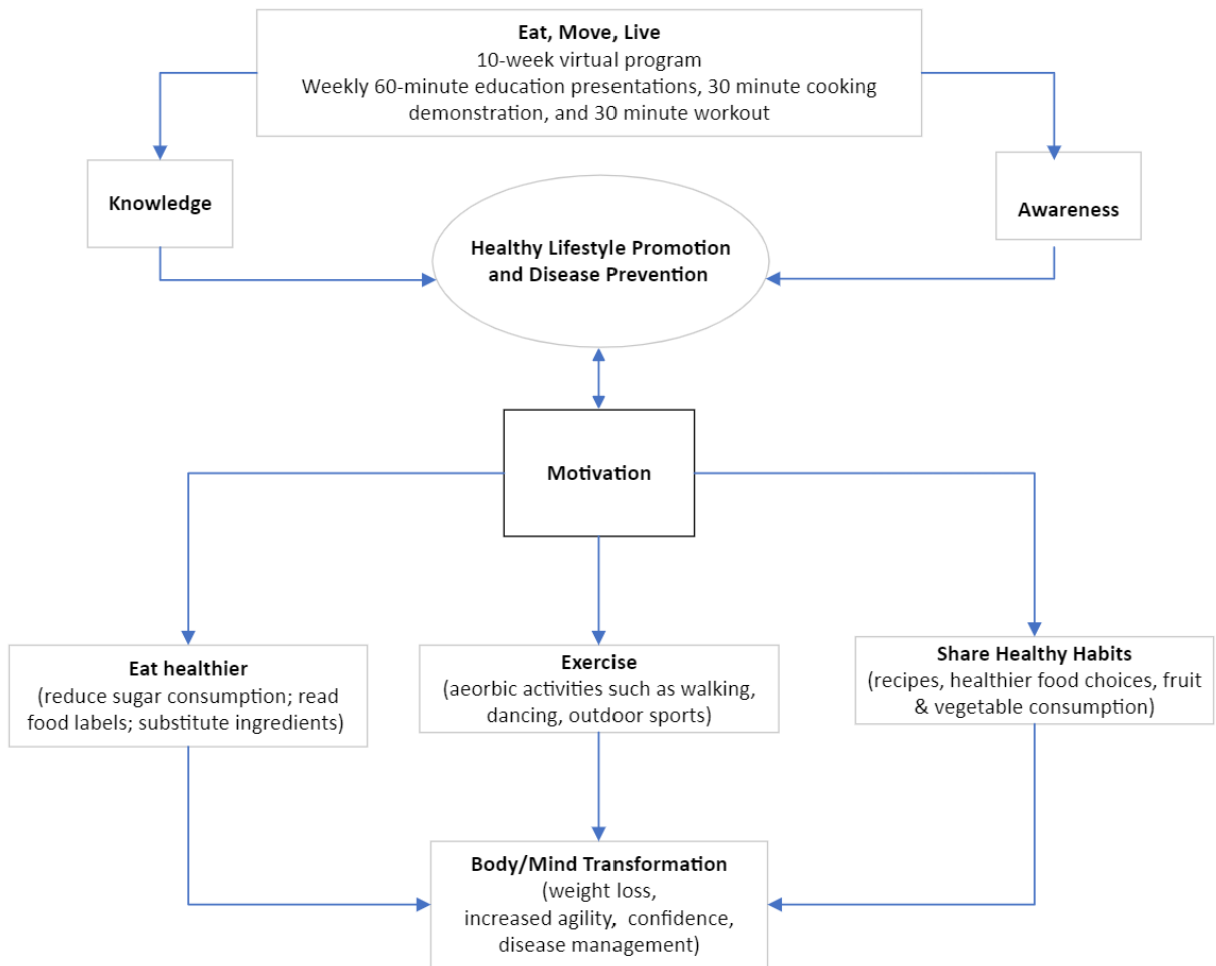
Figure 4. Eat, Move, Live Program Outcomes

Through formal educational presentations, participants received education on reading nutrition labels (i.e categories of dietary guidelines), controlling diabetes (i.e understanding risk factors), learning about factors that contribute to obesity (i.e visceral and subcutaneous fat), and understanding what is cholesterol (i.e. differences between HDL and LDL).

Table 2 indicates the pretest and post-test results of the 10-week virtual program, which included 60-minute educational presentations, 30-minute cooking demonstrations, and 30-minute workouts, effectively enhancing participants' understanding and awareness of healthy lifestyles and disease prevention. This newfound awareness motivated participants to embrace healthier

habits, such as consuming nutritious foods, engaging in regular physical activity, and promoting healthy behaviors among their families. These lifestyle changes, when implemented in combination, led to significant improvements in both physical and mental health, including weight loss, confidence, and disease management abilities.

Table 2. Pre-and Post-tests Measures Over Time

	Intervention (Group A)		Control (Group B)	
	Pre-Test (N=19)	Post-Test (N=19)	Pre-Test (N=17)	Post-Test (N=17)
How would you rate your health?				
Excellent	0 (0%)	2 (10.5%)	0 (0%)	0 (0%)
Good	6 (33.3%)	10 (52.6%)	3 (18.8%)	7 (41.2%)
Fair	9 (50.0%)	5 (26.3%)	12 (75.0%)	9 (52.9%)
Poor	3 (16.7%)	2 (10.5%)	1 (6.3%)	1 (5.9%)
How many times per week do you and your family eat out?				
None	4 (22.2%)	6 (31.6%)	2 (12.5%)	4 (23.5%)
1-2 times a week	12 (66.7%)	13 (68.4%)	14 (87.5%)	13 (76.5%)
3-5 times a week	2 (11.1%)	0 (0%)	0 (0%)	0 (0%)
How many days per week do you do moderate physical activity for at least 30 minutes?				
0 times	7 (41.2%)	5 (26.3%)	8 (50.0%)	8 (47.1%)
1-2 times	4 (23.5%)	3 (15.8%)	7 (43.8%)	4 (23.5%)
3-4 times	6 (35.3%)	7 (36.8%)	0 (0%)	2 (11.8%)

5 or more times	0 (0%)	4 (21.1%)	1 (6.3%)	3 (17.6%)
In the past week, did you drink any soda/sugary drinks?				
1	9 (47.4%)	15 (78.9%)	7 (43.8%)	9 (52.9%)
2-3	7 (36.8%)	3 (15.8%)	7 (43.8%)	6 (35.3%)
4-6	3 (15.8%)	1 (5.3%)	1 (6.3%)	1 (5.9%)
7 or more	0 (0%)	0 (0%)	1 (6.3%)	1 (5.9%)
In the past week, did you eat any sweets/junk food?				
None	0 (0%)	6 (31.6%)	0 (0%)	4 (23.5%)
1	7 (36.8%)	8 (42.1%)	6 (37.5%)	6 (35.3%)
2-3	7 (36.8%)	3 (15.8%)	9 (56.3%)	5 (29.4%)
4-6	4 (21.1%)	1 (5.3%)	1 (6.3%)	2 (11.8%)
7 or more	1 (5.3%)	1 (5.3%)	0 (0%)	0 (0%)
On average, how many vegetables do you eat per day?				
None	1 (5.3%)	1 (5.3%)	1 (6.3%)	0 (0%)
1 serving	6 (31.6%)	5 (26.3%)	9 (56.3%)	6 (35.3%)
2 servings	7 (36.8%)	3 (15.8%)	3 (18.8%)	8 (47.1%)
3 or more servings	5 (26.3%)	10 (52.6%)	3 (18.8%)	3 (17.6%)
State if this is a problem: I do not know how to prepare/cook healthy meals				
Yes	5(26.3%)	3(15.7%)	6(35.3%)	6(35.3%)
No	14(73.7%)	16(84.3%)	11(64.7%)	11(64.7%)

Since the classes, I cook healthier meals:				
Yes	N/A	14(73.7%)	N/A	6(25.2%)
No	N/A	5(26.3%)	N/A	11(74.8%)
I enjoy doing the physical activities I learned in class:				
Yes	N/A	18(94.7%)	N/A	11(64.7%)
No	N/A	1(5.3%)	N/A	6(35.3%)
Have you completed your goals?				
Yes / I plan to	N/A	17 (89.5%)	N/A	12 (70.5%)
No	N/A	2 (10.5%)	N/A	5 (29.5%)

Chronic Disease Management

At the beginning of the pretest survey, 69.4% of all participants expressed their health to be fair or poor whereas at the posttest 36.8% of the intervention group participants indicated their health to be fair or poor compared to 58.8% of the control group participants. During the focus groups, participants shared how the program increased their knowledge and awareness about chronic diseases. A participant stated, "I liked it [EML program] a lot, because we learned many things about the body, cholesterol disease, the heart, that maybe we are not aware of and the program helps us to become aware." By the end of the program, participants were especially knowledgeable about reading nutrition labels. A participant explains how she put into action what she learned:

I now look at the labels, the saturated fat, the two types of fat, how much salt it has, how much sugar, and how many calories. In other words, the program made me very alert and I am happy to have joined the group and to see so many things that I did not even imagine. Now, if I eat 3 tortillas, I say take out 1 and eat only two. I'm happy about this change and for the program.

This quote demonstrates participants put into practice their knowledge of nutritional values (i.e. reading nutrition labels) and understanding the importance of limiting sugar and fat intake. The pretest survey revealed that 53% of participants consumed two or more sugary drinks, such as sodas. However, after completing the 10-week program, among the Group A intervention participants, only 21% reported drinking two or more sodas. This suggests that by being part of the EML program individuals are becoming more aware of their sugar intake. Participants were also motivated to put into action what they learned as they have first-hand experience with the impacts of chronic diseases on their daily lives. This is shown through this participant's experience with diabetes: "Nutrition also helped me for my diabetes because I had to take the pills in the morning and at night … but right now I have more than a month that I haven't taken a pill because my sugar is at a controlled level."

Eat Healthier

Based on the pretest survey results, it was concluded that 30% of all participants lacked knowledge of how to prepare healthy recipes. By the end of the 10-week program, 84.3% of participants in the intervention group compared to 64.7% in the control group had increased their knowledge of healthy food preparation. The program aimed to help participants adopt healthier eating habits by teaching them how to cook nutritious meals. One of the strategies employed was demonstrating how to prepare healthy recipes, which the participants were able to replicate. As

one participant in the focus group said: "I also cooked the fish wrapped in a corn husk and prepared the chicken." These recipes were well-suited to the participants' needs, as they were straightforward and easy to follow and took into account their limited time for meal preparation. As one participant noted, "It's something we needed because we're always on the go and don't have much time to spend preparing meals that take longer but are more nutritious." It can be challenging to create nutritious recipes with the limited time available, but the program's recipes made it easier for them to do so. Following the intervention, 73.7% of the participants in the intervention group compared to 25.5% in the control group reported cooking healthier meals since attending the classes.

In addition to learning about new healthy foods, participants also discovered alternative ingredients to use in their cooking, such as replacing salt with other seasonings. One participant remarked, "I really liked learning about alternative ingredients for seasoning our food. It was something new that I learned and enjoyed." Learning about new enjoyable foods decreased the number of sweets or junk food participants ate weekly. In the pre-test, only 36.8% of the intervention group ate sweets or junk food 1 or fewer times a week whereas, after the intervention, 73.7% ate sweets or junk food 1 or fewer times a week.

The program's focus on healthy eating provided participants with the tools they needed to continue their healthy eating habits even after the program ended. As one participant reported, "I continued to eat well, and as a result, I feel much healthier. I even lost 12 pounds!" Participants recognized the positive impact of the program and continued to make healthier choices, leading to tangible benefits such as weight loss and improved overall health.

Exercise

The program's exercise routines were effective in motivating participants to become more physically active. The post-survey revealed that 94.7% of intervention participants enjoyed the exercise classes. One participant shared, "I have always enjoyed exercising, but sometimes I feel lazy. Seeing the demonstrations motivated me to exercise every Monday and try to continue during the week." The physical demonstrations not only inspired the participants to be more active but also encouraged them to maintain their exercise routines throughout the week.

The participants also reported feeling better as a result of the program. As one participant explained, "I feel more energized now. Before, I would only do a little bit of exercise, but now I am able to do more because I feel lighter and more capable of exercising." The program had a positive impact on the participants' physical well-being, providing them with more energy and motivation to continue exercising regularly.

Share Healthy Habits

The program not only empowered women to take control of their own health but also inspired them to encourage their families to make positive changes. Participants encouraged their family members to exercise regularly, make healthier food choices, and encourage their children to eat more fruits and vegetables.

Regular exercise became a habit for the participants and their families began to notice the positive changes in them, providing encouragement to continue. As one participant noted, "The class motivates me because I didn't walk at all. I have a son who says to me: 'Mom, have you gone for a walk?' . . . He is also reminding me that I have to walk, and that motivates me."

Many participants made healthier food choices learned from the program's cooking demonstration and recipes and often substituted less healthy ingredients for healthier ones. For instance, a mother reduced her family's meat consumption by replacing sausage with soy:

My daughter told me you're not going to cheat me [out of eating their favorite dishes]. I did trick them. I made chorizo with egg, but it was soy with egg. They even told me: 'You put sausages in it.' . . . I think I am going to integrate it [soy] back into my diet because I enjoyed it."

The knowledge gained about healthy eating habits in the program also influenced family members' behaviors. The post-test results indicate that there was a significant increase in the proportion of intervention participants who reported consuming three or more portions of fruit per day. Specifically, in the pretest, 26.3% of participants in the intervention group reported consuming 3 or more portions of vegetables per day, whereas in the post-test, this number increased to 52.6%. One participant, for example, shared how she passed on what she learned to her child: "I learned to eat healthier. And since I had problems [obesity] with my child, I also taught him to eat vegetables and more fruits".

Mind and Body Transformation

Of the participants who completed the intervention (Group A), 89.5% indicated they have completed or plan to complete one of their health goals. The EML program encouraged participants to put into action eating healthier and exercising as well as improving their emotional and physical well-being through weight loss, improving their endurance, agility, and flexibility, and increasing their self-esteem. Post participation in the EML program, 63.1% of the intervention participants selected they would rate their health as excellent or good whereas only 33.3% had this view of their health status prior to the intervention. One participant expressed

how the program motivated them to make significant changes to their overall health and well-being: "I became more aware of my health and that of my family with what I learned. My feet used to hurt a lot, but now I feel lighter. I lost about 14 pounds since starting the program."

This positive transformation of losing weight through healthy eating and exercise not only improves participants' physical health but also boosts their self-esteem, providing further encouragement to continue with healthy habits. Another participant shared how the program's emphasis on education about chronic diseases not only improved their health but also reduced their stress levels, saying, "With this program, I became more informed, became more aware of my health, I think I feel more at ease, calmer, more relaxed because I have learned more about how to control my diseases."

Discussion

Study findings indicate that the EML program promotes awareness and knowledge of healthy lifestyle changes and chronic disease prevention, leading to dietary and lifestyle changes and improved well-being. The program's effectiveness was enhanced by having conducted it in Spanish, the participants' preferred language, and taking into account their prior education and health literacy levels.

Quotes from participants suggest that substituting traditional Mexican foods that are typically not healthy, such as tortillas or chorizo, with healthier ingredients resulted in healthy eating habits and tasty food.

Despite the small sample size, the study's findings hold public health significance. First, having CHWs/promotoras implement the EML program motivated Latina women to participate in public health education programming. Second, their participation in the program motivated them to share with their families what they learned and educate them about healthy lifestyle

changes. Third, participation in the program improved women's emotional and physical health and motivated them to continue with the dietary and lifestyle changes they made during the 10-week program.

A limitation of this study is the lack of objective body measurements such as body mass index (BMI) and biomarkers including hemoglobin A1c and cholesterol levels. While the participants' quotes indicate improvements in weight loss, agility, and chronic disease management, incorporating these measurements as part of data analysis could provide more concrete evidence of the program's effectiveness. Future studies could consider including these measures to better quantify the impact of culturally tailored interventions on health outcomes.

Conclusion

The findings of my capstone project suggest that the implementation of a culturally tailored intervention program has the potential to significantly impact access to health education and promote the adoption of chronic disease risk reduction programs. The program successfully motivated individuals to make positive lifestyle changes, resulting in overall improvements in both physical and mental health.

These results highlight the need for a shift in the approach to medicine and educational resources provided to communities, particularly to minority groups, which should be designed to incorporate the voice of the community in public health programming in an effort to reduce health disparities. It is essential to recognize that a one-size-fits-all approach to health education is not effective, as many individuals face cultural, socioeconomic, or geographic (e.g., rural settings) barriers that limit their access to preventative health measures.

Therefore, it is imperative to provide education and resources that are accessible, culturally sensitive, and tailored to the unique needs of each community. This approach will help

to ensure that all individuals have access to the tools they need to make informed decisions about

their health and promote positive transformations in their overall well-being.

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