Field of Dreams Program Evaluation: Empowering the Latino Population in Type2 Diabetes Self-Management

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Field of Dreams Program Evaluation: Empowering the Latino Population in Type2 Diabetes Self-Management

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Submitted in Partial Fulfillment of the Requirements for the Degree

Master of Science in Education

School of Education and Counseling Psychology
Dominican University of California
San Rafael, CA
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Abstract

Adult onset, type2 diabetes affects Latino families at a higher rate than other ethnicities and negatively impacting their quality of life, ability to financially succeed, and ultimately impacting our overall economy. Multiple resources are available in the country to help people learn how to prevent, control, and manage diabetes. However, the need exists for creative ways to empower Latino families in diabetes self-management and increase their awareness and understanding of the nuts and bolts of this illness.

One specific segment of Latino families of major concern is those who may have remote or no access to health care due to their work in intense manual labor industries such as winery fields, dairies and others. This research uses a case study methodology to examine curriculum, Field of Dreams, as a model to empower this segment of our population, adult Latinos, working in such environments, in type2 diabetes self-management.
Chapter 1 Introduction

As the diabetes program coordinator at a major health institution in rural Northern California, my goal was to educate the Latino population about managing type 2 diabetes. I made outreach calls to encourage members of our program to attend classes. The majority of the families who signed up for classes worked in the winery fields and in labor intense industries. As the program attendees failed to show up to classes, the theory of "if they don't come to us, we will go to them" resonated in my mind. I quickly approached several colleagues who would play a major role in developing the theory of taking diabetes health education to the winery fields into practice. They immediately wanted to participate in this effort. Our purpose was to bring health education to the work-place in order to assist in health promotion, improving health, and saving lives. Hence, the health education Field of Dreams program.

In the upcoming weeks, I wrote a proposal that included an analysis of a needs assessment of the program as well as its strengths, weaknesses, opportunities, and threats. The team had a meeting to discuss this opportunity for our patients and community and we received major support from our medical group administration. The following is a description of how the plan to bring health education to the winery field workers was carried out.

Pilot Program

A pilot program was implemented at a Sonoma County Winery. When the team concluded presenting the program; winery participants, human resources, and our
medical center administration were convinced that the Field of Dreams program is another way to outreach Latino families and provide much education needed to improve, proactively manage their health, and share lessons learned at the program with their families and friends.

Field of Dreams Presented at Other Wineries

As the Field of Dreams program gained its recognition around other wineries, the human resources representatives (HR) from those wineries were quickly informed about the availability of the Field of Dreams outreach program and sought it essential to be presented at their work sites. The winery’s goals and objectives for a healthy workforce, was exceeded when the employees assisted the Field of Dreams program and learned about disease prevention, risk factors, symptoms and problems concerning; diabetes, cholesterol, hypertension, HIV, as well as learning healthy eating, active living, and other lifestyle -self-care strategies.

The HR representative from one Sonoma Vineyard contacted the Field of Dreams outreach program manager at our medical center to schedule the date and time to implement the program for their employees at different winery field sites on the same day. Some of these sessions were held as early as 7:00 am, rain or shine, at a warehouse surrounded by vineyards, at luxurious conference rooms, or in plain sight of the beautiful green fields. The schedules were as follows: 7:00 am, 9:30 am, 1:30 pm and 3:00 pm.

Upon our arrival at the first scheduled site, approximately 30 employees were waiting to greet the team and help us get situated. A few minutes later, the team is in place, the employees are seated, and the human resources manager introduces our team. I introduced the agenda, specifics of the program, and speakers began their lesson plans in their respective areas of
expertise. As the team continued to present the program, we noticed that the quality of professional speakers, its group dynamics comprised by compassion, created a community of team cohesiveness, and a collaborative effort amongst the team. This group dynamics invigorated and impacted the positive outcomes of the session as follows: the employees were engaged; they asked health questions of concern and responded to health quizzes prompted by the speakers. At the conclusion of every presentation, the team felt a sense of accomplishment and privilege to serve a vulnerable population empowering them to control, and prevent illnesses, specifically type2 diabetes.

The team learned many lessons from these interactions, including the realization of the intensity of the work at hand. The need exists for more wineries to visit and partake in providing the health knowledge so desperately needed by this population. Our quest was to find diabetics who needed help to manage their type2 diabetes, bring them the tools and resources to empower them in type2 diabetes self-management and for them to feel comfortable approaching the health care providers at their health centers for guidance and management.

Statement of the Problem

Many people in the Latino community, particularly those who work in remote areas away from access to health care usually have a deficit knowledge in managing diabetes in an effective manner; their glucose numbers are out of normal range and the information regarding the nuts and bolts of managing diabetes such as: how the blood test, hemoglobin AIC, is applied to measure the everyday glucose control and what the acceptable or at risk number scores obtained in the blood screening results entail. This may not be readily available to them until the problem has exacerbated and it is out of control.
By reaching out to our community and giving people the tools and resources to help them understand this illness, many people may begin to realize the seriousness of this disease. Advocates for health education providers are behooved to continue to stress the importance of preventing type2 diabetes and provide the information regarding its complications to the Latino community. Some diabetes complications are: cardiovascular disease, end-stage renal disease, loss of visual acuity, and limb amputations. These are serious and costly diseases affecting more than 15 million Americans and its propagation affects many young families and their children. Its impact can have a dreadful effect to our economy.

Race, socioeconomic status, and acculturation challenges are factors that this population must deal with on a day to-day basis. Workers at vineyards; dairies, and construction companies etc. more so, than other Latino families can be a difficult group to reach in mainstream health education. Many winery field workers, for example, have unique needs; live with other workers in congested quarters in the outskirts of the winery fields, some have a literacy of 3rd grade education in their own language, lack of transportation, and work long hours. Opportunities to engage these people must be sought. Hence, Field of Dreams, a health education outreach program which reaches out to this population at their place of work. Our motto is; if they don't come to us, we will go to them.

Purpose Statement
The purpose of this study is to evaluate the effectiveness of Field of Dreams (FOD) components as a curriculum model to empower the Latino population in type2 diabetes self-management. Other health educators may want to adopt the FOD model to meet the needs of their communities.
Research Questions

What are the strengths and weaknesses of the FOD model? As an outreach program how can FOD be a model for community health educators? How was the Field of Dreams project developed and implemented?

Theoretical Rationale

My learning theoretical rationale comes from my personal conviction to impart my health education knowledge to those who need it most that will allow me to really hear someone as stated in Carl Roger’s theory and as Maslow’s hierarchy of needs eloquently puts it; my perceived actualization. This is an imperative in my life journey.

The American Diabetes Association (2000) has been at the fore front in proving education, resources, and support in the quest of finding a cure for diabetes. As a member of the board of directors in our local Sonoma County chapter in 1996-1997, I served my community in this continuous effort.

At the time the project was developed the Field of Dreams planning team sought to bring their health education workshops to the community in the workplace, where the participants would be given time to learn new concepts. No specific learning theory was considered as the project developed. The strategies implemented in the Field of Dreams project are aligned with Knowles (1950) theories of adult education, referred to as andragogy. The project sought to build community among the participant in the workshops, helped participants understand the
reasons for learning to manage their type2 diabetes, and take actions to prevent the disease for themselves and their families.
Assumptions

The following assumptions are present in this work. Adults in the Latino community, mainly those working in intense jobs, have a knowledge deficit about the relationship between nutritional guidelines, healthy blood sugar levels, and other behaviors that affect sugar levels. In the Latino diabetics served by the Field of Dreams project the balance of these management tools was a challenge. In the area of prevention, researcher assumes that Parents are not sufficiently aware of dietary needs for their children to avoid or prolong the incidence of diabetes. To help their families, diabetic adult Latinos need different self-management strategies than other diabetics and may need to be more engaged in learning self-advocacy. Education continues to play a major role in this effort.

Background and Need

In response to a propelling concern of astonishing data collected from the American Diabetes Association (2000) that over 2 million Latinos are diagnosed with type2 diabetes. A research study was led in Washington State, utilizing Latinos whose work is in rural areas away, from ready access to support and resources, in a focus group, was conducted to gather data about Mexican Americans’ type2 diabetes beliefs, attitudes, and treatment plans of action to manage it successfully.

The data collected characterized these beliefs and it was categorized as two major systems; one as the biomedical system which entails the belief of genetic and lifestyle contributors of the diabetes illness and second, the folk belief system which exemplifies their belief as strong emotions causing diabetes. In addition the study found “genetics” as compelling
association with type2 diabetes. To effectively manage and control diabetes, access to health
care is a significant barrier for this population: lack of health care information, transportation and
bilingual health educators amongst others were capitalized in the research study.
Chapter 2 Review of the Literature

Introduction
Many people in the Latino community, whose work is in predominantly remote areas away from access to health care, usually have difficulty in managing diabetes in an effective manner. As mentioned earlier; their monitoring of blood sugar levels show results are out of normal range and the balance of managing diabetes to avoid its complications that affect this population may not be easily understood.

The literature strongly points out that Latinos are disproportionally affected by type2 diabetes for many influences which are out of their humanly possible control. This section addresses published material related to this topic, type2 diabetes self-management.

Historical Perspective of the Diagnosis of Diabetes
According to literature, Kirchhof, Popat & Malowany (2008), noted “the term "diabetes" was first introduced in the 1st or 2nd century BC by Demetrius of Apameia” (p.7). The authors describe that “descriptions of abnormal polyuria were recorded as early as 1500 BC in the Egyptian papyrus Ebers, an ancient written document of medical knowledge.

…In 1776, Matthew Dobson performed a diagnostic experiment that led to the belief that diabetes was not just a disease of the kidneys but rather a system disorder. "John Rollo observed that carbohydrates increased sugar levels, and animal product consumption resulted in less sugar. He promoted the idea that the treatment for diabetes should be a diet low in carbohydrates and high in fat and protein” Kirchhof, Popat & Malowany (2008, p.8).
When in our history did the concept of diabetes and race emerge? Tuchman (2011) writes in the American Journal of Public Health Then and Now that “today, US government sources inform us that Native Americans, Blacks, and Hispanic/Latinos run the greatest risk of developing type2 diabetes. One hundred years ago, however, Jews were thought to be the population most likely to develop this disease” (p.24).

Statistical Information

Due to the fast propagation of diabetes and “according to the 2003 U.S. Centers for Disease Control and Prevention report, more than 1.5 million Hispanic Americans have diabetes, up from less that 1.2 million in 1997” (Fraser, 2005, para.2). The article states that this illness is affecting children as well. The alarming statistics prompt our health education community to continue to outreach people in an effort to inform, inspire them in preventing and self-manage this costly disease.

Genetics

By the mere fact of being a member of a race/ethnicity group, genetics Type2 Diabetes Mellitus is a disease prevalent in Latinos. According to Paster as cited in Fraser (2005), “the prevalence of diabetes in Hispanics is largely because of social injustices for minorities. Racial minorities are disproportionately poor and undereducated, and undereducated die younger and suffer more health problems than people with higher wealth and education” (para.11). Paster indicates that non-whites in America live an average of five fewer years than whites, and diabetes is a major contributor to that statistic.
Stress Levels

In addition to genetics and other environmental emotional turmoil stresses, such as those of "anxiety, depression, and anger are also associated with a greater likelihood of having diabetes" (Moskowitz as cited in Castro, Shaibi & Boehm-Smith 2009, p. 97). For these noted reasons and others, the Latino population particularly those who work in extreme manual labor industries is at a higher risk of developing type2 diabetes and can be a difficult group to reach in mainstream education. "The role of psychological factors, including cognition, affect, and behavior, has been examined in the onset, self-management and regulation of diabetes" (Hovell as cited in Castro, Shaibi & Boehm-Smith, 2009, p. 97).

In addition, barriers to exercise have been attributed to low socioeconomic status Latino immigrants as in the case of vineyard workers who “work long hours in two or more physically-demanding jobs, and thus are too exhausted to exercise during their limited leisure time” (Crespo as cited in Castro, Shaibi & Boehm-Smith, 2009, p. 97). Thus, Latinos have more challenges responding to the same methods of teaching about diabetes self-care than others and adhere to key components of diabetes self-management such as: nutrition, exercise, stress management guidelines. As a result, their blood sugars levels are consistently more out of range.

Similarly, to become knowledgeable about the clinical tools and other guidelines utilized in measuring diabetes control can be beneficial to diabetics, their families, and their communities. In an effort to halt the escalation of type2 diabetes diagnosis in Latinos/Hispanic Americans, our Latino families must become abreast of how hour bodies respond to the diabetes illness, what the symptoms are, and how to prevent it or self-manage it.
Once this education awareness is fully established, others in the community can be invited to participate in the challenge on what they know.

The statement "knowledge is power" is a cliché regularly used. Literature reveals that simply passing out information about diabetes; during a class session, at a health fair, or a forum, is not enough to be able to assess that these “practices will be adopted” Cyrino, Schraiber & Teixeira (2009). Particularly when it comes to diabetes self-care management, knowledge and action are two different factors to consider. In reviewing an article found in the Education of type 2 diabetes mellitus self-care: from compliance to empowerment, as noted by Cyrino, Schraiber & Teixeira (2009) "An excerpt shown below is taken from a statement by a patient with diabetes" exemplifies this thought:

Because I know what I 'm supposed to do and sometimes we...just don't do it, do we? Because I've been told what I have to do. What I have to avoid to have a better life. What I have to do for my diabetes "not to go up." And sometimes I overdo things! I don't know if it's when I'm angry.... when I'm anxious.... Then you look for everything you have ..that you can't eat and you go and eat it!

(Cyrino, Schraiber & Teixeira 2009 p.94).

Information dissemination is a way to keep individuals aware that one can live healthy lives with diabetes, prevent the risk factors associated with the disease, or prolong getting diabetes by incorporating into their life style some of the educational regimens as follows:
Healthy Balanced Lifestyle

A healthy balanced lifestyle is one which constitutes exercise is part of the regimen in Diabetes Care self-management. However, Crespo (as cited in Castro, Shaibi & Boehm-Smith, 2009), report that there are barriers associated with lack of exercise such as: "lack of time, feeling too tired, misperceptions about getting sufficient exercise on the job, and a lack of motivation to exercise" (p.97). Other barriers include: the ability to communicate in English, lack of transportation, and cultural health perceptions.

Studies reveal that adherence to a healthy balanced lifestyle, one that includes: "low fat foods and low caloric diets, physical activity, weight management, stress management, guidance, and social support as well as sustained motivation to attain and maintain a healthy lifestyle." (Pagoto as cited in Castro, Shaibi & Boehm-Smith 2009, p. 97), is a challenge.

According to the 2003 U.S. Centers for Disease Control and Prevention report, more than 1.5 million Hispanic Americans had diabetes, up from less than 1.2 million in 1997. As high as the rate of diabetes appears among Hispanics, it doesn't include undiagnosed cases (Fraser, 2005 para.2).

The statistics cited above, are astonishing. Community Health Educators and Medical Health Centers are challenged by the need to help ease the diabetes disease propagation. Patient self-efficacy is impetus to this success. "Various aspects of empowerment have been shown to be associated with improved health." (Lugo as cited in Wiggins et al., 2009, p.12).
Healthy Eating

Is another component in the regimen of type2 diabetes care self-management. In an article from the American Journal of Clinical Nutrition (Davis, Ventura, Weingensberg, Ball, Gabriel, Shaibi & Goran, 2005), studied the relation “in overweight Latino children, higher intakes of sugar and sugar-sweetened beverages were associated with lower acute insulin response (AIR) and disposition index, which suggests that these children already have early signs of poor Beta cell function” (p.1004). In his article, Davis et. al (2005) "the results emphasize the need for early nutritional interventions to reduce daily sugar intake in overweight Latino children and potentially reduce their risk for type2 diabetes” (p. 1004). Some reasons are: Markets selling unhealthy foods and drinks. Children see their parents drinking sodas, and as role models, the children want to drink the sodas, as their parents do.

Recommended Care Regimens

As the prevalence of diabetes continues to exponentially propagate, people tainted with this illness can potentially help the complication rates by following a recommended care or regimen. In addition to regimens stated in previous pages such as; diet, exercise, stress etc. (Sloan, Padron, & Platt, 2009, p.1068) note to include in our regimen: prescribed medications, blood glucose testing, screenings including a blood test at the laboratory, HbA1C, testing for lipid profiles (cholesterol screenings), have an eye exam and foot screenings. This care regimen is often not very well understood or followed by our Latino patients.

As Britigan, Murnan, and Rojas-Guyler (2009), noted in their study that “almost Two thirds of Latinos had low acculturation levels to the US culture” (p.222). And their average four grades
below the number of years of schooling. A culturally appropriate health education program assesses this important factor.

Strategies to Increase type2 Diabetes Self-Management

Peer Support

In a Family Practice article (Fisher, Earp, Maman, and Zolotor, 2010) report *A Cross-cultural and International Adaptation of Peer Support for Diabetes Management* found peer support to be particularly effective and may improve diabetes self-management by patients with challenges in this effort. The authors note that Peer support “three key functions of self-management are: a) assistance in managing and living with diabetes in daily life; b) social and emotional support and, c) linkage to clinical care” (p. i9).

... Applying management plans in daily life may benefit from discussion with a peer who has first-hand knowledge of the circumstances of one's daily life. That diabetes management entails efforts sustained over decades suggests the pertinence of encouragement from someone perceived as understanding ones perspectives and who has the time to develop a supportive relationship. Peer support may also facilitate regular attendance at clinical care or facilitate obtaining answers to questions that emerge in daily management” (Fisher et. al, 2010, p. i7).

The journal review above supports several strategies that may be implemented in diabetes self-management. I found this from learning theory. In addition, the article defines six broad functional terms of "Resources and Supports for Self-Management" as follows: Individualized assessment, Collaborative goal setting, Skills, Ongoing follow-up and support, Community
resources, and ongoing quality clinical care. Each of these terms is further analyzed in this article. However for the purposes of my paper I will cite two: skills and the on-going support.

Skills As articulated in the American Association of Diabetes Education (AADE7) seven self-Care Behaviors, individuals need diabetes-specific skills like monitoring, taking medication and more general skills such as; healthy eating, being active problem solving, reducing risks and healthy coping (Fisher et. al, 2010, p. i7).

At a recent community conference I attended “Taking Control of Your Diabetes,” on February 12, 2011 the physician presenters gave a compelling overview of diabetes self-management. The afternoon sessions included participants to attend different workshops, of their choice. One remark resonated with me is that “Physicians may prescribe medications but the control of type2 diabetes is in the hands of the diabetic patient,” (Taking Control of your Diabetes, 2011 para.3).
Ongoing Follow-up and Support

In a Family Practice Journal (Fisher et. al, 2010), note that “peer support may improve self-management among the millions of people with diabetes around the world” (p.i6).

…the tasks of diabetes self-management do not end when, e.g., 10% weight loss is achieved, but extend for decades, diabetes is for the rest of your life. Thus, program attendees need to reach and sustain contact with individuals to provide ongoing support for good diabetes management. Approaches varied widely and included training medical assistants to provide follow-up and support, a 'breakfast club', group, medical visits, promotora, and community health workers or a 10-session, biweekly support led by promotores for those who had completed a self-management course (Fisher et al., 2010, p. i7).

Summary

My review of the above articles offers information to the reader regarding what is already in place as a health promotion endeavor. The diabetes illness is so widely spread affecting millions in our society and our economy that continued efforts in education of the risk factors and its complications, will be an ongoing challenge for all.

Health Care Settings- concluded that “Self-management programs for type2 diabetes are cost-effective from a health systems perspective when the cost savings due to reductions in long-term complications are recognized” (Brownson, Fisher, Hoerger, & Kilpatrick, 2009, p.1).
Interview with an Expert

As part of the process of collecting information on the topic, I was able to conduct an interview with a local expert (anonymous, June 5, 2011, personal communication). The following is the description of the data from the interview.

Opening statement:

Thank you for taking time to discuss diabetes type2 self-management in the Latino population.

1. Question: How can outreach programs assist Latinos in empowering them to manage type2 diabetes?
   Response: By advising them of Diabetes Mellitus classes in Spanish. Giving them core concepts about diabetes will empower them to make life style changes.

2. Question: What has been your observation about the challenges Latinos have in self-management of type2 diabetes? Why do these challenges exist for this population?
   Response: Many challenges: education level, not able to read in their primary language. Time challenges: They work 2-3 jobs- chaotic lives. Economic level- cannot afford to shop at farmers’ markets.

3. Question: Explain how outreach programs work in the community. Describe your perceptions of the effectiveness of these programs.
   Response: Outreach can be done through local community clinics, at their churches, should be done at a local level where they live. Effective programs offer classes in their language, in the evenings, and on Saturdays at their convenience.

4. Question: What aspects of outreach programs have improved diabetes type2 self-management?
Response: Aspects of nutrition information, life style changes, exercise programs. How to use glucometers, and keep blood sugar and food logs. What are the causes of type2 diabetes, How to avoid the complications that come from uncontrolled diabetes mellitus?

5. Question: What other elements need to be considered in working within the community on this health issue?

Response: Cultural Issues. Include family members; invite the family to come to classes not just the patient. Offer healthy snacks, have nutritionist show actual plates of healthy foods. Have healthy food pot luck as part of the classes. Use Spanish bilingual/bicultural instructors.

Summary

My interview with the Field of Dreams expert concurs with the theory of many authors.

Culturally appropriate health education programs where delivery of service in Spanish and is located at the place of work are important factors in increasing Diabetes Self-Management
Chapter 3 Methodology

Qualitative research design using interviews as a way to explore the program’s features and advantages as a model Field of Dreams: Empowering the Latino Population in type2 diabetes Self-Management. The populations surveyed are: One diabetes health educator and many Field of Dreams program participants.

Sample and Site Who & Where

Approximately seven clinical health educators and a physician present the Field of Dreams program at various winery fields and dairies work sites. The employees of the company attend the workshop to receive the program’s information. At the conclusion of the health education program’s presentation regarding type2 Diabetes, Hypertension, Cholesterol, HIV, Hepatitis, Hypertension and Hand Hygiene (health problems that can be addressed early on to prevent illnesses), screenings for glucose, blood pressure and body mass index continue.

Access and Permissions

All participants fill out consent and release form, a program evaluation form, and a personal health evaluation and referral form; the program coordinator keeps these for specific record-keeping. The personal health evaluation and referral sheet is provided to the employees to note their screening results then they can hand this form over to the physician or health care provider on site for individual confidential counseling.

Data Gathering Strategies

We enlisted the winery employees at the company by sending out to the human resources manager a flyer in English and Spanish to give out to the employees and invite them to attend the
Field of Dreams presentation program. The flyer constituted an attention getter to encourage employee attendance, a list of the topics to be discussed, and the screenings to be performed as follows:

Field of Dreams Program Invitation

“Learn at Dawn”
What have you heard about diabetes, cholesterol hypertension and HIV? Did you know that 1 in 3 persons and 53% of our children will be diagnosed with diabetes? But it can be prevented! The employees at Sonoma County vineyards are cordially invited to attend a Health Awareness workshop on July 11, 2008
Vineyard employees at 7:30- 9:30 am;
Production and Landscape at 9:30-11:00 am;
English class at 9:30 am-11:00 am.
We will talk about: prevention, risk factors, and complications related to Diabetes, cholesterol, hypertension, other sexually transmitted diseases, hand hygiene and glucose, blood pressure and body mass index screenings.
You will be informed about how to prevent the above and to know what to do in care you already have these illnesses.
Thank you.
Location
The sessions noted above were held at a vineyard shop. The second session was held in the cellar and third session in the winery conference room near the tasting room. The screenings were held in a beautiful garden patio.
Assessment

Upon screenings completion, the health care provider records the screening results. At this time, participants have the opportunity to speak to a physician or health care provider on site, who provides recommendations (these recommendations are checked off), and gives it to the employee for follow-up after the event. This form may be handed to their clinic or personal physician in the community for follow-up care and or to attend health education classes.

Members of our health organization, Kaiser Permanente, are given a lab slip to visit one of our lab sites and further check for: cholesterol, a complete lipid panel, fasting glucose, hepatitis titer, and blood count for anemia, thyroid and an HIV test.

At the conclusion of the program the participants turn in their completed forms; evaluation, questionnaire, consent release etc. Then the team follows up with the Kaiser patients who were found with elevated results in their screenings or any other information they need; e.g. Physician assignment, telephone numbers, referrals to other departments etc.

Non-members are requested to follow-up with their health care provider. If they do not have health insurance, the team provides information for them to obtain health care services in the community.
Analysis Approach

**Program Evaluation Questions**

The following is an example of the evaluation questions:

<table>
<thead>
<tr>
<th>#</th>
<th>Type of Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Please tell us three healthy actions you learned at the field of dreams workshop</td>
</tr>
<tr>
<td>2.</td>
<td>How was the overall presentation?</td>
</tr>
<tr>
<td></td>
<td>Was the information clear?</td>
</tr>
<tr>
<td>3.</td>
<td>What is your commitment to improve your health and that of your family?</td>
</tr>
<tr>
<td></td>
<td>How will you follow up on the topics explained in the program?</td>
</tr>
<tr>
<td>4.</td>
<td>What other comments do you have to improve the quality of our program?</td>
</tr>
<tr>
<td>5.</td>
<td>What are the four principal screening numbers used to measure your health?</td>
</tr>
<tr>
<td>6.</td>
<td>Are there other topics you will like to hear in the next time?</td>
</tr>
</tbody>
</table>

Thank you very much. I hope you enjoyed the Field of Dreams Wellness program and please remember to share the information with your family and friends.

Name________________________ Telephone #___________________
How the Curriculum is presented

On a designated time and date (typically around 6:00 am), a team of hospital clinicians (usually volunteers) gathers by the fountain in the hospital’s main campus to load up the van and head out to our destination, a winery field site. Approximately 20 patients gather at each site to participate in the health education presentation and screenings. At the site, the team members roll up their sleeves and begin to work. According to the agenda, each team member takes turns in presenting lesson plans their area of expertise i.e. diabetes, cholesterol, hypertension, transmitted diseases, and hand hygiene.

Field of Dreams program is usually presented in the workers’ shop in the middle of vine hills, at a dairy in their office and on the second floor of the production shop, or at a hall that was rented to provide the construction employees their yearly Health and Safety communication. The workers gather in groups of 20-30. First group will hear the presentation in Spanish and the second group will hear it in English. The team takes turns to deliver the presentation. After the presentation, screenings follow. Each participant is given a log to keep track of their screening results. The clinician providing the screenings will keep track of the results and for further consultation, will refer the patient to speak to the Physician, Nurse Practitioner or Health Educator on site.
Data is collected and used for follow up with the employees’ respective physicians. An example is as follows:

Your Personal Health Evaluation and Referral Sheet

Name____________________ Date____________________

- Random blood sugar______________ (normal range is: less than <99)
- Blood pressure_________________ (normal range is: less than <120/80mmHg)
- Body mass index _______ less than 25%

This form offers other information including but not limited to next steps for employees to make

Suggestions for Successful Action Plans

Healthy lifestyle changes ____________________________________________

I will improve my physical activity by: ________________________________

Improve my food choices by: ________________________________

Reduce my stress by: _______________________________________

Quit smoking as follows: _______________________________________

Weight Management____________________________________________

Diabetes_______________________________________________________

High Blood Pressure___________________________________________

Nutrition/High Cholesterol______________________________________
Chapter 4 Findings

Description of Site, Individuals, Data

Modeled after Kaiser Permanente Santa Rosa medical center’s health education and group appointment programs, the Field of Dreams team completed yet another event speaking to as many as 80-125 employees in one day. The team worked selfless to provide health education and health screenings to the underserved segment of this population (Kaiser members and non-members).

The screenings performed at one winery group show the following results:

- Sugar levels ranged from 100’s to 322. Normal is less than 99.
- Blood pressure levels ranged from 139/89 to 201/95. Normal levels are: less than <120/80mmHg).

Initial consults with these individuals took place on site with our health care provider and were referred to their personal physician or physicians in local community health clinics. Information such as addresses and telephone numbers were provided to the employees. Other participants’ health concerns voiced were regarding gout and back problems.

The recent event of Field of Dreams concluded on the same positive note as other events. The team left with the self-satisfaction of having served the winery’s employees and our community. As with other health goals, the Field of Dreams team focused the importance of prevention providing this integral community service for a healthy community. The Field of
Dreams team continues to unselfishly give the gift of knowledge, commitment to compassion and well-being in the hopes to provide many more Field of Dreams events.

Overall Findings/Themes

The FOD team found the program participants to be interested and attentive to what they learned.

Employees at one winery evaluated the Field of Dreams program as follows:

<table>
<thead>
<tr>
<th>#</th>
<th>Type of Question</th>
<th>In a sample size of 42 employees at another winery:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Please tell us three healthy actions you learned at the field of dreams workshop</td>
<td>30 out of 42 said “they taught me how to prevent illnesses and take care of my health regarding: Hand washing, HIV, diabetes and cholesterol</td>
</tr>
<tr>
<td>2</td>
<td>How was the overall presentation? Was the information clear?</td>
<td>39 out of 42 said:</td>
</tr>
<tr>
<td></td>
<td></td>
<td> 11 Perfect/Great</td>
</tr>
<tr>
<td></td>
<td></td>
<td> 12 Very satisfied</td>
</tr>
<tr>
<td></td>
<td></td>
<td> 2 very good</td>
</tr>
<tr>
<td></td>
<td></td>
<td> 3 satisfied</td>
</tr>
<tr>
<td></td>
<td></td>
<td> 1 very happy</td>
</tr>
<tr>
<td>3</td>
<td>1. What is your commitment to improve your health and that of your family?</td>
<td>30 employees out of 42 responded to the two questions as follows:</td>
</tr>
<tr>
<td></td>
<td>2. How will you follow up on the topics explained in the program?</td>
<td> 19 - nutrition and exercise</td>
</tr>
<tr>
<td></td>
<td></td>
<td> 1 said: “whatever my doctor tells me to do”</td>
</tr>
<tr>
<td></td>
<td></td>
<td> 3 - will visit their doctor more often</td>
</tr>
<tr>
<td></td>
<td></td>
<td> 1 said “to be more conscientious about taking care of myself”</td>
</tr>
<tr>
<td></td>
<td></td>
<td> 2 - start an exercise program and a better nutritional plan</td>
</tr>
<tr>
<td></td>
<td></td>
<td> 1 - make a commitment to my overall health</td>
</tr>
<tr>
<td>4</td>
<td>What other comments do you have to improve the quality of our program?</td>
<td>Comments are as follows:</td>
</tr>
<tr>
<td></td>
<td></td>
<td> Very educational</td>
</tr>
<tr>
<td></td>
<td></td>
<td> Should repeat the program every three months</td>
</tr>
<tr>
<td></td>
<td></td>
<td> Should do this more often</td>
</tr>
<tr>
<td></td>
<td></td>
<td> This is a great program</td>
</tr>
<tr>
<td></td>
<td></td>
<td> I hope you do it again</td>
</tr>
<tr>
<td></td>
<td></td>
<td> Do screenings more often</td>
</tr>
</tbody>
</table>
Our post outreach evaluation is as follows:

<table>
<thead>
<tr>
<th>Screenings completed at the worksite:</th>
</tr>
</thead>
<tbody>
<tr>
<td>In a sample size of:</td>
</tr>
<tr>
<td>Blood pressure Checks</td>
</tr>
<tr>
<td>Blood sugar Screenings</td>
</tr>
<tr>
<td>110 employees</td>
</tr>
<tr>
<td>110</td>
</tr>
<tr>
<td>110</td>
</tr>
</tbody>
</table>

Field of Dreams Outreach Program
Post outreach follow-up

<table>
<thead>
<tr>
<th>Completed Lab Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>KP members</td>
</tr>
<tr>
<td>Distributed lab slips</td>
</tr>
<tr>
<td>Follow up visits</td>
</tr>
<tr>
<td>Cholesterol</td>
</tr>
<tr>
<td>Fasting Glucose</td>
</tr>
<tr>
<td>Hepatitis A</td>
</tr>
<tr>
<td>Hepatitis B</td>
</tr>
<tr>
<td>HIV</td>
</tr>
<tr>
<td>Totals</td>
</tr>
<tr>
<td>98</td>
</tr>
<tr>
<td>35.7%</td>
</tr>
<tr>
<td>30%</td>
</tr>
<tr>
<td>30%</td>
</tr>
<tr>
<td>26.5%</td>
</tr>
<tr>
<td>26.5%</td>
</tr>
<tr>
<td>2%</td>
</tr>
<tr>
<td>% of compliance</td>
</tr>
<tr>
<td>35.7%</td>
</tr>
<tr>
<td>30%</td>
</tr>
<tr>
<td>30%</td>
</tr>
<tr>
<td>26.5%</td>
</tr>
<tr>
<td>26.5%</td>
</tr>
<tr>
<td>2%</td>
</tr>
</tbody>
</table>

Notes: As a result of the outreach program, patients followed with their physicians and found diagnoses unrelated to diabetes and or cholesterol such as low thyroid etc. New patients are now established with their own primary care physician.

<table>
<thead>
<tr>
<th>Conditions identified or education provided during follow –up visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>The program approached the following:</td>
</tr>
<tr>
<td>Nutritional counseling</td>
</tr>
<tr>
<td>Exercise counseling</td>
</tr>
<tr>
<td>Pre – diabetes</td>
</tr>
<tr>
<td>High blood pressure</td>
</tr>
<tr>
<td>Smoking Cessation counseling</td>
</tr>
<tr>
<td>Anemia</td>
</tr>
<tr>
<td>Diabetes care management (referred )</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>15</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
</tbody>
</table>

In this data collection, the Field of Dreams outreach program met its objectives to reach-out and find people to provide health education on prevention, risk factors, symptoms and disease self-management. This will allow the vineyard workers to learn how to prevent, control and self-manage type2 diabetes and as importantly, to help minimize the risk of future chronic care conditions.

In addition, by providing this health education outreach, when KP members came in for lab work and health services they were diagnosed with other illnesses they would not have been aware of if they had not come in and the awareness level was heightened about ready- available health education classes free to the community such as support groups etc.
Strengths of the program

- Increased level of awareness regarding personal health, empowering employees to use the tools available to prevent illnesses, stay healthy and minimize risk of future chronic diseases.
- Field of Dreams focuses on our PHASE (Preventing Heart Attacks and Strokes Everyday) a chronic care conditions management program.
- We find people at risk. Our opportunity is to demonstrate Kaiser Permanente’s availability of services to help them keep healthy.
- Field of Dreams gives an opportunity for individuals to familiarize themselves with their physician & staff and feel more comfortable accessing care.

Weaknesses

- Employees may not be given the time available to attend the session away from their work.
- Customer-driven businesses may not be an appropriate site to present Field of Dreams as their customers need to be attended to the day-to-day business transactions.
- To be able to measure success
- Employees may not follow up with the recommendations / assessments discussed.
- May not share the information learned with their families.

Opportunities

There are many opportunities implementing the Field of Dreams program.

- Add a new theme to the menu of services such as hand washing; an important task to prevent cold and flu and other transmittable illnesses.
• Able to identify people potentially at health risks and congruently educate them on a healthy lifestyle.

• Be able to reach out to large numbers of people at the same time, delivering the message of prevention and healthy lifestyle. A medical center’s core value.

• Demonstrates commitment to contribute to a healthy community.

• Provide intervention through education and outreach.

• Share best practices across the health continuum for other health care community settings.

• Serves as a conduit to inform people of health education offerings available.

• To bring the County HIV testing Van to the site with the Field of Dreams team
Chapter 5 Discussion

The presence of a diabetes trained health educator at health fairs and community events is another way to capture the opportunity for providing diabetes prevention education to families. Often times, cultural community events are venues by which families come together to spend a day of fun-filled activities. The event coordinator can adapt the Field of Dreams model to enhance quality of education to its participants.

Physicians at their residency program may participate in providing diabetes health education to their communities by adapting a specific aspect of the FOD educational model. This specific aspect of the program may be implemented for greater diabetes awareness and service to the community.

As a member of the health educators in the community, I was at a Health Fair setting when a Mom asked me to speak to the Dad regarding his soda drinking habit and how their little girl demanded to drink a soda. Parent education on disease awareness and prevention is greatly needed. The education starts with the parents and I believe we (community) can help change this behavior.

Field of Dreams Model Story

Field of Dreams is a Mobile Wellness Intervention program that reaches out to wineries who employ a high concentration of Spanish-Speaking employees, however all employees are welcome. It has wide applications conducted as it looked at groups working in winery fields, dairies, construction companies etc. The program focuses on the service and health education of
the employee and provides an on-site health education workshop, health care services, and specific health screenings.

Why Field of Dreams?

Instead of accessing preventative health care, Latinos as a group, recurrently seek health care services on an urgent or emergency basis resulting in hospitalizations. This is a health-information deficit concern which results "in underuse of preventive services, routine physician dental visits, and increased hospitalizations and medical costs" as written in the Health Services Research article (Gazmararian as cited in Lee, Stucky, Lee, Rozier & Bender, 2010, p. 1106).

Often times, language, culture, work, or health education barriers preclude them from utilizing the preventative health care services available to them. In the Journal for Community Health, Britigan, Murnan, and Rojas-Guyler (2009), find that "the barriers to accessing health information included language and lack of confidence/knowledge." And the authors inform us that "even with access to information and services, however, disparities still exist because many people lack health literacy" (p.222).

Type2 Diabetes, Hypertension, Cardiovascular disease and other illnesses are prevalent conditions in the Latino community. Some eye and skin problems result from exposure to excessive sun-light. At health centers, we recognize that we have a low participation from vineyards field workers/members for preventative health screenings, who are at risk and have the greatest need for preventative health care. Hence, Field of Dreams a health education program presented at the employees’ place of work.
The curriculum includes a health education presentation regarding: Symptoms, Risk factors, Problems, and Prevention of the following: Type2 Diabetes Mellitus, Cholesterol, HIV & Sexually Transmitted Illnesses, and Hand hygiene. Health care screenings include: Blood Pressure Checks, Blood Screenings for Diabetes, BMI (body mass index) and lab work for additional preventive screenings are encouraged to be performed at the hospital site.

At the conclusion of the program the following tasks take place: a) brief question & answer session. b) Employees provide the team an evaluation and a questionnaire as to what they learned and c) how they will share this information with their families at home. This educational intervention model takes approximately 2.5 hours.

Benefits of the Field of Dreams

There are many benefits associated with this curriculum. One is the availability of another health education model/ creative resource to help combat the incidence of diabetes and heighten the awareness level for a healthy community, and a healthy economy. Some benefits are but not limited to:

- Better health maintenance through health information.
- Patient/Employer Satisfaction (this curriculum has been implemented at work-sites)
- Community building through increasing positive interactions between theory and practice in health education
- Increased participation in continuing care.
- Increased potential to follow the health care plan
Save cost on emergency hospitalizations for example:

- Undiagnosed Diabetes can go into ketoacidosis and require hospitalization.
- Cardiac arrest stemming from Hyperlipidemia.

Field of Dreams Team

Laboratory Services, Infection Control, Chronic Care Conditions Management, HIV Dept., Family Medicine Services, Community & Health Promotion, Member Services representatives & New Member experience.

Program Diversification

The Field of Dreams curriculum is enriched by its diversified potential. Currently, the curriculum has been expanded to include three other health education topics as follows:


2. Healthy Eating/Active Living (Includes: Escoge la Salud presentation (Choose Health), Relaxation Exercise, HIV and Nutrition). No screenings

3. Cancer Screenings (Includes: Blood Cancers; lymphoma, etc. OCC Med exercise, HIV and screenings.

For the purpose of this study curriculum #1 of the series; Diabetes, Cholesterol, Hypertension, Hepatitis, Hand Hygiene, HIV and screenings is the focus.
Program Opportunities for our Community

The strengths of this curriculum provide a wide variety of opportunities for Clinical Health Educators, Physician Residents, Medical Staff, and Community Promoters. It offers community building through increasing positive interactions between theory and practice in health education. Our community will benefit from learning Healthy Eating, Active Living, and other lifestyle - self-care strategies to prevent the health risks associated with Diabetes.

This disease can take its toll on the families’ financial security, mental health, and professional development. It is expensive to have Diabetes; Not only to our families but to the State, and the medical industry as a whole.

The field of Dreams: Empowering the Latino Population in type2 Diabetes Self-Management outreach program was created in response to the needs of a specific segment of our diabetic Latino population who have a challenge managing their diabetes, work in remote areas of the County winery fields, and have a limited proximity to clinics or health centers.

This paper discusses the strategy for empowerment in education for type2 diabetes self-management by way of a clinical team presenting a lecture in their native language at the employees' place of work. This unique and creative approach health education lecture is delivered to the hands of the people that most need it which promotes health awareness, discusses risk factors, and prevention interventions.
Comparison of Findings with Existing Literature

My findings indicated similarities in comparison with prior research. In the many wineries and other worksites visited, we found many pre-diabetics, hypertensive, and diabetics needing self-management awareness.

Field of Dreams’ outreach program curriculum was robust in serving a particular population with an approach to educate them with the purpose of having them change their lifestyles. Our passing out information efforts (in a folder) were enhanced by giving a wellness lecture, quizzing the participants on applying their knowledge, perform the screenings, and giving the employees the opportunity to meet with a health care provider. At this visit, the participants were able to confidentially confer, assign a primary physician to care for them and increase their confidence in approaching health centers at ease. This population needs to be engaged.

Limitations of the Study

Those who read this study are encouraged to keep in mind some of its research limitations. Field of Dreams’ curriculum is group focus specific. This study is based on the perspective of a team who work in a specific racial/ethnic geographical area. It focuses specifically in Latinos' type2 diabetics who work in vineyard field industries. Keywords B cells, overweight, sugary beverages, Hispanics/Latinos term will be used interchangeably throughout the paper.

Implications for Future Research

To date, few studies have investigated the association between insulin dynamics and dietary components in children, and, to our knowledge, none examined this association with sugar intake
in an overweight Latino youth population. Thus, the purpose of healthy lifestyle changes from a very young age families.

Few studies have examined the relation between dietary patterns and insulin dynamics in children (Davis et al., 2005). One study found that a high ratio of dietary fat to carbohydrate is correlated with lower SI (base units) as measured by euglycemic-hyperinsulinemic.

Also, very little has been documented with regards to folk–medicine treatments in Latinos. One herb used in our household is *cactus* which health nutritional properties aid in providing the green vegetable effect to our bodies. Healthy eating encompasses 5 vegetables and 5 fruits daily in addition to protein etc.

Overall Significance of the Study

What are you substantiated FOD approach documented changes and self-management strategies?

The winery employees tell the FOD team of their efforts to learning Healthy Eating, Active Living, and other lifestyle -self-care strategies for them and their families. Data show an increase participation in visiting their physicians, follow up with more test screenings and demonstrated more familiarity with their health center. An employee who came in for a provider’s appointment stated “after attending a Field of Dreams workshop my health care providers are like family to me.”

Conclusion

Overall, Field of Dreams has continued to meet its mission and vision by reaching out to the Latino population, providing services, education, and empowering them in type2 diabetes self-management in their own language at their work place. Not only does this create a better
relationship between their health care providers but it also establishes an ongoing trust and
comfort to approach their health centers for guidance and management. These relationships and
connections are essential in the overall health of the community, thus, providing health
prevention education and service to those who do not typically seek such care.

Field of Dreams is a viable model for outreach and provides education to our Latino population
specially those who work in the winery fields and other manual labor-intense industries away
from health care centers.
References


doi:10.1093/fampra/cmp013


doi:10.1111/j.1475-6773.2009.00957.x


Edie Urteaga Teaching About Type2 Diabetes Self-Management:
Lesson in a Winery Warehouse
The Field of Dreams Team

Vineyard Shop