Linking Type 2 Diabetes Patients to Inland Valley Resources

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Introduction

Our community health project was focused on two parts. The first part was identifying what obstacles or difficulties Type 2 Diabetes patients face in the Inland Empire when trying to manage their diabetes. The second part of our project was to start finding resources in the area that could serve to mitigate these obstacles. This part also included aggregating all of this information into one place for the convenience of the average Inland Empire Type 2 Diabetes patient.

According to the American Diabetes Association, diabetes is the 7th leading cause of death in the United States. A whopping total of 29.1 million people in the United States have diabetes, which is 9.3 % of the U.S. population, or about 1 out of every 11 people (Center for Disease Control and Prevention [CDC], 2014). This number does not include the 86 million people who are pre-diabetic of which 15-30 % will develop type 2 diabetes within the next five years (CDC, 2014). Out of the 29.1 million people with diabetes, only about 5 % have type 1 diabetes. The remaining 27.6 million people have type 2 diabetes.

Type 2 diabetes, which was once referred to as adult-onset diabetes, most often affects those 45 years or older. Although the risk of type 2 diabetes increases with age, it has now become more prevalent among young people and children due to the increase in child obesity. It has also been noted that diabetes is more common in certain ethnicities. These groups include American Indians/Alaskan Natives, African-Americans, Asian Americans and Hispanics. An article on the rise of diabetes stated that 70% of American Indians, 55 % of Pacific Islanders and 50 % of African-Americans have prediabetes (Steinberg, 2016). Other major risk factors are, a

family history of diabetes, physical inactivity, heart disease, high blood pressure, obesity, and low levels of "good" cholesterol.

In California alone, there are about 3 million people diagnosed with diabetes and over 13 million with prediabetes. UCLA reports show that a diabetes epidemic is around the corner as almost half of both Riverside County and San Bernardino County residents have prediabetes (Wall, 2016). These extremely alarming rates of diabetes in the Inland Empire serve as a wake up call. If not treated appropriately, diabetes can lead to amputation, heart attack, stroke, blindness, and kidney failure. With simple lifestyle adjustments, healthy diet and regular exercise, type 2 diabetes can undoubtedly be prevented.

As we know, type 2 Diabetes, a type of chronic disease, is more frequently being attributed to a wide range of environmental causes. Unfortunately, Riverside County has consistently struggled to address its challenges with physician shortage, physical environment insults, and lack of familial and mental support (County Health Rankings, 2016). While the county has identified these issues, combatting these issues will be a long term battle.

For our project we decided to first hear directly from the type 2 diabetic community about their challenges through a survey. While administering the survey, we payed attention to what resources the community might need and started to reach out to local business that could provide health services or advice, or gym memberships. We also created a comprehensive diabetes informational website on details of the diseases, possible managing techniques, and resources found online and within the Inland Empire.

This county needs as much investment as possible from the community to achieve solidarity in working on these challenges. We wanted to get a better idea of what diabetics were

in need of and what we could do as students to scout out these resources, trying to make important, sustainable connections within the county.

Methods

Participants

Overall, we collected a total of fifty-two surveys from those who have been diagnosed with type 1 or type 2 diabetes. Throughout the Inland Empire, we received surveys from both male and female individuals ranging from the ages of eighteen to eighty-eight years old. The majority of participants identified as Hispanic or Latino and Asian or Pacific Islander. The first strategy our group employed in an effort to accumulate more surveys was to communicate with any willing family and friends currently living with type 1 or type 2 diabetes. Also, several group members attended events and classes hosted by the Riverside Community Diabetes Collaborate (RCDC) and presented our surveys to the general public. Finally, in order to gain more exposure of both the survey and the health resources we gathered, our group created an official website - iediabetes.org - where individuals could complete the survey online. All in all, these three strategies proved to be considerably successful as we were able to gain a significant perspective on how diabetes affects the people of the Inland Empire.

Health Education

As a way to provide health education to the community, our group created a website,
Inland Empire Diabetes Resources (iediabetes.org), focusing on those living in the Inland
Empire. This website is used not only to serve as quick access to information regarding diabetes
but also to provide awareness to this specific topic. One section of our website offers basic

knowledge about the different types of diabetes. Moreover, this section advises when it is the right time to see the doctor. The information and statistics were gathered from credible sources including the Centers for Disease Control and Prevention as well as the American Diabetes Association.

Our website continues to administer health education by having a region concerning nutrition. This portion includes various material including local healthy food places, healthy recipes, and questions answered by a local nutritionist. Since nutrition is a crucial aspect regarding diabetes, we made sure to include names to local farmers markets, grocery stores and restaurants. When it came to the healthy recipes, our group not only included recipes for each meal of the day, but also tried some of the recipes out for ourselves. We also contacted a local nutritionist who was willing to answer our questions and provide us with more information towards a healthy diet. Another essential topic that is discussed in our website includes exercises. This section contains various types of physical activity in addition to local, inexpensive exercise options including parks, trail maps, and community centers found in the Inland Empire.

The resources we provided can also be found on our website for we link various programs geared towards those with diabetes. Some Inland Empire organizations include the Riverside Community Diabetes Collaborative, American Diabetes Association, and the Diabetes Treatment Center at Loma Linda University Medical Center. Furthermore, we included information regarding local health coaches, support groups, free classes, and mental health organizations as a way to let those with diabetes know that they are not alone and there are numerous organizations that are willing to help.

Apart from the website, we created surveys that would help us have a further understanding on the challenges faced by those with diabetes and ways to provide resources needed in order to meet those challenges. Our survey was made in both English and Spanish and was distributed through online use or hard copy. They were delivered to different health centers including doctor's offices, senior centers, diabetes information classes, and exercise classes. The surveys were also given to family members of our own. It included the basic questions in regard to age, age when diagnosed with diabetes, gender, race / ethnicity, as well as questions asking if one is overwhelmed with their diabetes regimen or if one finds it hard to give up the food that he/she enjoys. Through our survey, we found a common challenge among those with diabetes including diet and exercise. From this, we contacted local healthy food places and gyms and received a collection of gift cards and free trial gym passes. Not only did this serve as an incentive to the people who took the survey but it also was used as a way to encourage those with diabetes to overcome the challenges that they face.

Results

Fifty-two individuals with diabetes responded to our survey. Of the 52 respondents, 65% are female, and 35% are male (Figure 1). The average age and average age of diagnosis are 52 and 43, respectively. In terms of racial and ethnic heritages, 42% of respondents identified themselves as Hispanic or Latino, 25% Asian / Pacific Islander, 18% non-Hispanic White, 11% African American, and 2% Native American or American Indian (Figure 2). Ninety-eight percent of survey participants reside in the Inland Empire (Figure 3). When asked of the frequency of exercising per week, 27% responded "Never," 27% "Once a week," 27% "Two to three times a week," 10% "Four to six times a week," and 10% "Every day" (Figure 4).

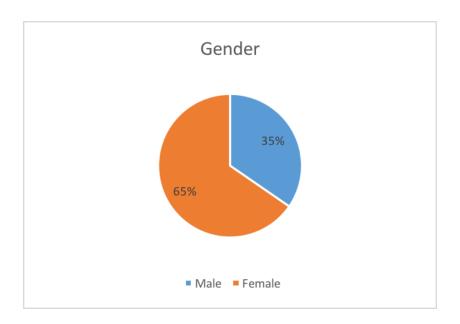


Figure 1 Gender of Survey Participants (N = 52)

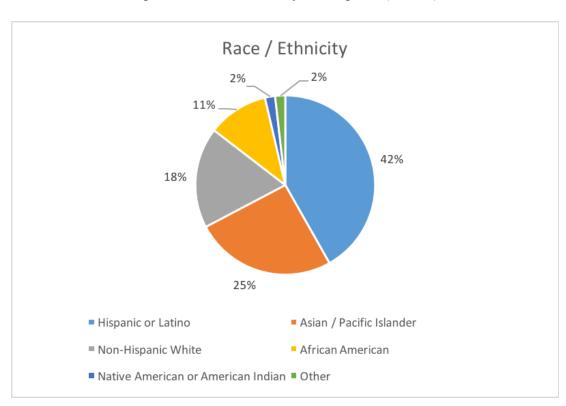


Figure 2 Race / Ethnicity of Survey Participants (N = 52)

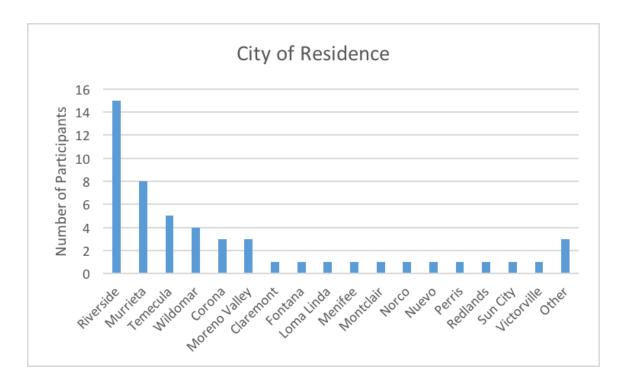


Figure 3 City of Residence of Survey Participants (N = 52)

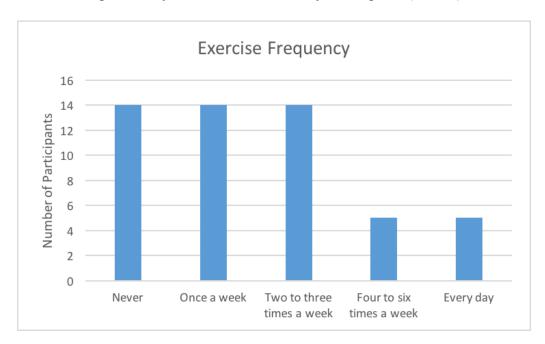


Figure 4 Exercise Frequency Per Week (N = 52)

Our survey included a set of statements that were intended to assess the emotional well-being of individuals coping with diabetes. For each statement, the respondent rated it using

a Likert scale ("Strongly Agree", "Agree", "Neutral", "Disagree", "Strongly Disagree"). Table 1 shows the data of this section of the survey. Two statements were positive statements regarding an individual's confidence in his or her ability to maintain a healthy diet and a lifestyle with regular exercise (Figure 5). 56% of respondents strongly agreed or agreed with the statement about confidence in maintaining a healthy diet, whereas 60% strongly agreed or agreed with the statement regarding confidence in maintaining a lifestyle with regular exercise. Five statements were stated towards negative experiences, including feeling overwhelmed by diabetes regimen, struggling to cope with the complications of diabetes, lack of support from family and friends, feeling of loneliness with diabetes, and difficulty with giving up the food that one enjoys (Figure 6). 45% of participants either strongly agreed or agreed with the statement of feeling overwhelmed by his or her diabetes regimen. 51% strongly agreed or agreed with the statement that "I often struggle to cope with the complications of diabetes." 27% strongly agreed or agreed with the statement regarding lack of support from family and friends. 27% expressed feeling alone with diabetes, and 59% finding it hard to give up the food that they enjoy.

Table 1 Statements rated by the Likert scale

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I feel confident in my ability to maintain a healthy diet.	9	20	9	8	6
I feel confident in my ability to maintain a lifestyle with regular exercise.	8	23	7	10	4
I feel overwhelmed by my			,		•
diabetes regimen.	4	19	13	11	4

I often struggle to cope with the complications of diabetes.	4	22	10	10	5
I feel that my family or friends are not supportive enough of my self-care efforts.	5	9	8	16	12
I often feel alone with diabetes.	4	10	8	14	15
I find it hard to give up the food that I enjoy.	14	16	11	10	0

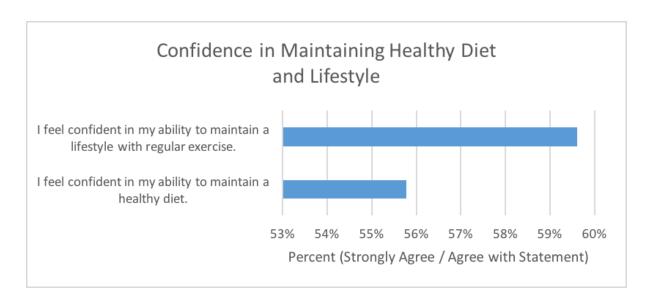


Figure 5 Positive Statements regarding Emotional Well-Being

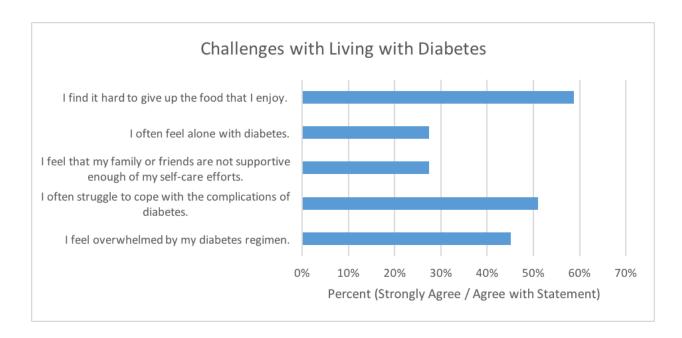


Figure 6 Negative Statements regarding Emotional Well-Being

Of the 59% of respondents who expressed difficulty in giving up the food that they enjoy, a number of them listed the specific types of food (number of respondents in parentheses):

- Sweets / Desserts (13)
- Pasta, Pizza, Rice, Bread, Tortillas (8)
- Fried Food (3)
- Fast food (3)
- Ethnic dishes (2)
- Soda (2)
- Meat (2)

Our survey also included a open-ended question about the greatest challenges that the respondents face while living with diabetes. The responses included the following main themes (number of respondents in parentheses):

- Controlling diet / Giving up one's favorite food (17)
- Taking medications / Insulin injections (5)
- Exercising (4)
- Maintaining a normal blood sugar level (3)
- Weight control (2)
- Dealing with co-occurring illnesses (2)
- Worry / Pain (2)
- Lack of motivation (1)
- Diabetes testing supplies (1)
- Lack of support from family (1)
- Lack of energy (1)

The final question of our survey asked the respondents to indicate resources in which they are interested and for each interested resource to indicate whether they have access to it (Table 2). The top resources in which respondents are interested but lack access are personal trainer (38%), nutritional advice (37%), group exercise classes (35%), and counseling (35%), followed by exercise facilities (25%), support groups (25%), and educational classes (21%) (Figure 7).

Table 2 Interest and Access in Diabetes-related Resources

	No Answer	No Interest	Interested but has no access	Interested and has access
Educational classes about diabetes	3	19	11	19
Group exercise classes	4	18	18	12
Personal trainer	3	22	20	7

Exercise facilities	4	13	13	22
Support groups	4	26	13	9
Counseling	5	19	18	10
Nutritional advice	4	9	19	20



Figure 7 Interest and Access in Resources by Percentages

Other resources in which the survey participants expressed interest include:

- Riding stationary bike every day for 30 mins 1 hour
- Walking 30 mins every day
- Gym membership
- Motivation
- Meal plans
- Personal guidance

- Nutritionist who is familiar with one's cultural food
- How to cope both kidney disease and diabetes and how to control diabetes in order to control heart attack and stroke
- Gastric bypass

Data from our survey provide us useful insights into the needs of individuals living with diabetes in our local communities. To provide easy access to and enhance awareness of local diabetes resources that address those needs, we have developed a web site, http://iediabetes.org. This web site provides information on topics in which our survey participants express interest, such as nutrition, exercises, health coaching, classes, and support groups. We feel that publishing resource information on a web site is an effective way to increase the public's awareness of the local resources that are available for diabetes management. The web site is readily accessible to everyone with Internet access and beyond the duration of this summer community health project. Moreover, we will share the results of our survey as well as our website with our community partner, Riverside Community Diabetes Collaborative, further strengthening the impact of our project.

Discussion

Conclusion

The focus of our project centered on individuals living with type 2 diabetes though we were inclusive of people living with type 1 diabetes as well. More specifically, our project hoped to help our group as well as the community at large gain an understanding about the challenges facing people living with type 2 diabetes as well as the barriers preventing them from managing

and taking control of their disease. We then used this data to help guide us in acquiring and aggregating resources and in the development of a comprehensive website filled with resources and information about diabetes. Considering the fact that in the Riverside County, diabetes is the 7th leading cause of death as well as the fact that this disease afflicts at least 8.3% of the US population, diabetes is clearly a pressing issue (County of Riverside Department of Public Health, 2013). Beyond the physical issues associated with the disease, diabetes carries with it a number of emotional and mental challenges which are often overlooked. From our survey data, there were a substantial number of people who responded that they feel alone with their disease and that their family members and friends were not as supportive as they would have hoped.

Our health education website hoped to address both the physical and mental challenges we found most commonly indicated on the survey responses. We also partnered with a number of local gyms to secure free memberships and free trial passes to address a common challenge indicated in the survey of a lack of access to group exercise classes and other exercise facilities. One such examples of these exercise related partnerships includes free monthly strength and conditioning classes taught by a diabetic specialist at Anytime Fitness in Riverside. In addition, we secured a number of gift card donations from healthy food places around the Temecula area which we used to distribute to the various diabetes informational classes and exercise classes that we attended to administer the survey. To address a resource that was commonly desired but was often difficult to access, we partnered with a number of nutritionists and conducted an interview to ask a number of common questions people had about diabetes, after which we uploaded the responses to the diabetes resource website so that those individuals who had questions about nutrition but had no access to a nutritionist could potentially have some of their questions

answered. Finally, we found that a large number of those surveyed indicated that they had trouble giving up foods that were detrimental to their health but which they enjoyed consuming and also that some indicated that they did not feel confident in their ability to maintain a healthy diet. We attempted to address these issues by creating a section on our website dedicated to healthy food places in the Inland Empire that these individuals can eat at as an alternative as well as a list of healthy recipes that they could incorporate into their diet to potentially help eliminate consumption of some of the foods they found hard to give up. Using the data collected from our surveys, we were able to create a website that will have a substantial impact in helping people living with diabetes find the resources that may need in order manage their condition. Through a number of partnerships with local gyms, we also anticipate that many of the people who lacked access to exercise facilities will have the opportunity to have access to these gyms. Our survey has provided insight on what people living with diabetes need and our gym partnerships and website has allowed these people to access what they need. These resources are the first step in helping the community get started on the path to a better, more healthy life.

Andrew Tran

Prior to my participation in this Community Health Project, I would have considered my knowledge about diabetes to be above average. I knew a great deal about the disease as a result of my classes. In conducting this Community Health Project, however, I realized that, though I knew a great deal about the science of the disease, I was drastically lacking in understanding what it was like to live with the disease. I have not personally been affected with diabetes and no one in my immediate family has the disease and as such, I found it difficult to comprehend the emotional aspects of being diagnosed and living with the disease. Clearly, there is more to

having a disease than just physical symptoms. While conducting the surveys and hearing from people living with the disease, I was able to gain a better understanding of the challenges people living with the disease face each and every day. From physical problems of pain, lack of access to education about the disease or exercise facilities, to feelings of isolation and lack of support, this project has shown me a side of disease that is not possible to learn from a textbook or a science class. Participating in this Community Health Project taught me the human aspect of disease. It showed me what it was like to live with a chronic illness and has motivated me more than ever to continue to pursue a career in medicine so that I can help those in need deal with both their physical health and their mental health.

Were I to lead a project next year, I would like to focus on mental health and how different disease diagnoses affect an individual's mental health, especially chronic and life-changing illnesses like cancer, Alzheimer's disease, diabetes and many others. I would like to administer a survey to help me better understand the emotions that these individuals living with the disease feel and use that information to develop an intervention plan focused on improving the mental health of these people.

Camilla Magday

Being a part of this Community Health Project has completely changed my perspective on diabetes. Surely I had the basic knowledge regarding the disease and the medical side of it; however, I never placed myself in the mindset of one who has diabetes and the challenges that they face every day. With this project, I was able to do so. I learned the personalities to those with diabetes and was able to put a face to one who is often seen as a statistic. My mentality towards this disease drastically changed when distributing the surveys. I found myself one night

handing the survey to my dad and asking if he could take it. Without thinking much about it, I continued to place his answers as well as others who participated in the document shared with my group. When inputting the data, I could distinguish my dad's handwriting from the rest. After reading some of his answers, I realized the reality of one who lives with diabetes. When I saw that he was one of many people who agreed to feeling alone with diabetes, it made me wonder how many more people are in this situation but are too scared to admit it. Personally, I feel that one should never have to feel alone, especially if faced with a disease. From this, my experience with this project became even more personal than it was before. It has been a pleasure to be a part of this group for without them, my mentality on this topic would not have changed. I feel that we did our absolute best to provide resources for those with diabetes and with the help of our website, we strive to make this a long lasting effort. In the future if I were to lead a project, I would love to choose the topic regarding resources for the families coping with one who has been diagnosed with cancer. In the course of this program, I lost a relative from this awful disease and I feel that this would serve as a way to remember my auntie as well as help encourage other families to not give up. A health education event I would like to try doing includes having a fair that promotes cancer awareness as well as serve the families who have been affected. I would like to thank those in charge for giving me the opportunity to make a change in the community during my summer vacation.

Margaret Yau

Diabetes is a chronic illness that affect millions in our nation, and I am grateful to have the opportunity to explore this important health topic in depth during the community health project experience. Understanding the nature of diabetes—its causes, symptoms, prevalence,

treatment, and prevention—is an intellectually enriching experience. Integrating my technical background into this project, I contributed to the construction of a diabetes resource web site, allowing me to describe in a creative format what I have learned regarding diabetes and its resources in the local communities. In addition, the process of designing a survey, deploying it, and analyze its results was enjoyable. The results of the survey helped me understand the challenges of living with diabetes and motivate to work hard on this project, even beyond its completion this summer. Working with my group members has been a truly positive experience. As a group, we build on each individual's strength and maintain regular communication conducive to the success of the project. Moreover, assigning each member concrete tasks to complete each week has been helpful, and our group members are responsible in fulfilling their roles. The greatest difficulty, in my perspective, is connecting with community partners who support our project. Given the relatively short duration of this project, establishing contact with community partners was challenging; nonetheless, different members of our group took charge in connecting with different community members, enabling us to obtain the resources that we need. I also appreciate the kindness of our community partner who provided us invaluable assistance. Overall, the collaborative group project has been an excellent learning experience and enhanced my team-work and research skills.

If I were to lead a project next year, I would pick the topic of mental health awareness in minority communities. I am passionate about mental health and would love to explore effective ways to eliminate stigma, especially in minority communities. As a Chinese American, I understand the stigma of mental illness in the Chinese culture, and I would like to help promote awareness and understanding of the nature of various mental illnesses. As a health educational

event, I would recruit members from various minority groups to speak about their experiences with mental illness as well as present the basics of mental illness and mental health resources in minority communities.

Nadia Siddiqi

Overall the community health project was an incredibly unique and educational experience. I learned so much more than I expected about my community, working with others, and how to conduct a research project. I am proud of what our group has accomplished and am confident it will impact the Inland Valley for the better.

Working with each member of my group was a pleasure. Everyone was responsible, supportive, and passionate about the project. When one member of the group ran into challenges with a specific task, there would always be at least one other person willing to help. It was amazing to see each member's strengths utilized throughout the development of the project and to witness the results of a seven talented individuals working towards a common cause.

In regards to health education, I think our website is very informative. In the beginning stages of our project, our group realized that there are many resources online for diabetics. However, there were not many resource guides with all the information compiled in one place. I feel by creating a website specific to diabetics in the Inland Empire and creating a very clean layout of information, we were able to create an educational, but not overwhelming tool for the community. Additionally, I am very excited about the free monthly strength and conditioning classes for diabetics soon to take place at Anytime Fitness. Given that financial circumstances often prevent people from going to the gym and one of the main risk factors of Type 2 Diabetes is a lack of physical health, I feel these classes will be highly beneficial.

Working with community members was both challenging and rewarding. It was incredible connecting with so many organizations and business in the community that were enthusiastic and willing to help our cause. I was amazed by the local restaurants willing to donate gift cards and the local health clubs that offered us free trial passes and promotion deals. However, it was difficult when we came across people that did not seem as excited or optimistic about our ideas. I also learned a lot from surveying people in the community. I realized most people will not take time from their day to take a survey unless there is an incentive. I was also reminded of the importance of learning Spanish especially in our community. Translators are helpful, but you can have an entirely different impact on someone when you speak to them yourself and create a personal connection with them.

I regards to workshops, I greatly enjoyed all them and found them very helpful. My favorite workshop was the one on social determinants of health. Those videos taught me so much and helped me to put a lot in perspective. I have always been interested in policy making, but now I know how imperative is for physicians to be involved in it. Additionally, I really enjoyed our group discussions. There is so much to learn from other people's opinion and it was great listening to what my peers had to say.

The most important lesson I learned from this experience is the vitality of passion, persistence, and optimism when conducting a community health project. In any research project, challenges are inevitable. However, if you believe in a cause, you can find a way to overcome any obstacle. As I mentioned earlier, one of the greatest challenges I faced was working with people in the community that were not as excited by our ideas as we were. In those times, I

learned it is crucial to hold tight to your purpose. If you are passionate enough, people will take notice and you may witness your ideas inspire the work of others.

I loved that our topic was Type 2 Diabetes because it is a disease heard of so often, but consequently is easily overlooked. I learned that living with Type 2 Diabetes can be very challenging and can impact a person's livelihood tremendously. It was great see how many resources already exist for diabetics within the community, but it was surprising how many of those resources were underutilized. In the future, it would be interesting to analyze why certain resources are more used than others and provide that information to organizations that help people with diabetes.

If I were to lead a project next year, I would choose the topic of obesity. When surveying people, I learned that eating healthy food is a prevalent challenge for many people. Even after consulting with nutritionists, some people found it hard to maintain a balanced diet because their nutritionists were not aware of certain cultural foods. I think since our community is slowly moving towards a minority-majority population, it would be highly beneficial to find nutritionists of various cultural backgrounds and connect them with their respective cultural centers within the community.

When applying to FPL, I was intrigued by the idea of a community health project. I had been involved in research in the lab, but I had never worked with the community the way I did this summer. It was such a rewarding experience and I learned so much. I am so grateful for my experiences and I look forward to taking part in more community health projects in the future.

Mariel Ardona

British Prime Minister Winston Churchill once said, "We make a living by what we get, but we make a life by what we give." As I wrote my application to the FPL program back in April, I used this quotation to explain precisely why I wanted to be a Future Physician Leader. My primary goal was not to learn about the science of medicine, but the art of medicine. I believe that this art involves the people behind all the injuries, ailments, and illnesses that we immediately see. Before beginning this year's Community Health Project, I possessed incredibly limited knowledge regarding diabetes. Even more so, I was entirely unaware of just how drastically this chronic illness affects individuals within the Inland Empire. Participating in this project was an extremely enlightening experience as I was able to gain a more personal, more intimate perspective on the struggle that is life with diabetes. This Community Health Project allowed me to witness the reality of the nature of a chronic illness. An illness that affects people for such a significant amount of time has the power to alter entire ways of living. Considering the fact that I have not been personally affected by diabetes, I cannot say that I fully understand the amount of resolve necessary to live happily with diabetes. That being said, today, I can confidently say that I, at the very least, recognize legitimate conflict so many individuals endure as a result of this illness.

If I were to lead a project next year, I would be interested in utilizing our group's finding from this year's Community Health Project in an effort to further aid the Inland Empire community in fighting diabetes. Whether it be a project focused on coping or prevention, I would be interested in further emphasizing not only the difficulties of living with diabetes, but also the many avenues people may take to avoid this hardship.

Morgan Bagingito

Going into this community health project, I knew the bare minimum about type 2 diabetes. Personally, this disease has not affected me as no one in my immediate family has type 2 diabetes. This project, however, opened my eyes to how many people it does affect and the impact it has on their lives'. I had no idea how widespread type 2 diabetes is, let alone that nearly half of the Inland Empire population is pre-diabetic. To be honest, the statistics were quite shocking to me, and knowing how bad the diabetes epidemic is gave me all the more reason to try and help find resources to manage and prevent this health issue in our community. I knew an obvious answer to preventing type 2 diabetes is maintaining a healthy diet and regular exercise, but what I did not realize right away was that there are barriers that prevent some people from living out a healthy lifestyle. Barriers such as, no access to resources like an exercise facility, a diabetes education class, a counselor, or support group. There are many socioeconomic factors that play into who is healthy and who is not, and I feel that by acknowledging these issues will help to improve the way in which we find what specific resources are needed for the members of the community. This experience not only opened my eyes to the community's health, but to my personal health as well. I realized that I could improve on my lifestyle and actively try to be healthier, as I should practice what I preach.

All in all, the community health project was a great and enlightening experience. I feel that everyone's willingness to work hard and passion for the project helped make the process easier. Our group definitely worked well together, and I have no doubt in my mind that each of my group members will continue to have a positive impact on the community. They are all kind,

intelligent people and it was a pleasure working with them. I am proud of what we have done so far with our project and I hope that our influence continues beyond the program's end date.

If I were to lead a community health project next year, I would be interested in researching the ketogenic diet. Not only does diet play a role in type 2 diabetes, but also in heart disease, cancer, epilepsy and Alzheimer's. Almost every chronic disease can be prevented with a healthy diet. I would love to research the positive effects that the ketogenic diet has on the body and spread awareness to the community. I know that costs of healthy food is a major deterrent for people, so I would love to find low-budget, quick recipes for those who are tight on money and have a busy schedule. I would also like to advocate that in the long run, spending time and money on eating healthy now is cheaper than paying for medical bills in the future.

Nazia Rahman

The process of implementing this community health project has taught me much about how the real world works in terms of making change on the community level. I have seen examples of both the difficulties that hinder a project's success as well as the opportunities in the community that hold promise for our society's health.

When we started off working on this project, we thought about focusing on how mental stress may play a role as an exacerbator in Type 2 Diabetes. We hit a roadblock when figuring out how looking for diabetic patients to interview would factor into our short FPL deadline, as well as the fact that we had no interview authorization for this type of study. Then we thought about moving out of mental stress to the existence of general stressors. Our group members, including myself, understood the value of putting in the time to listen to why it was hard for folks to manage this illness. Fighting Type 2 Diabetes is a life-long journey. There are reasons,

which are genetic, sometimes cultural, sometimes mental, that set up individuals to be at risk for diabetes. And after diagnosis, your life changes. It opens doors to more hurdles than you know how to handle.

I have seen my mother fight herself since I was born to ignore her comforts in food, stay sane minded through the double standards that exist in my cultural society, and push herself off of the couch after an inappropriately grueling physical workday to take a walk. Now my father has started to climb that very steep hill. As part of the population that is watching those with diabetes try to take control of their life, I know that the social and mental obstacles determine if you get better or if you don't.

I know that I am proud we set out to be better educated on this topic and how to address its resolution in the community. But I also know that gathering more powerful data will be a better tool to give proof to our local government that our community has good samaritans in our local business owners, youth and healthcare providers that we can bring together to really get this ball rolling. If I could chose this topic again next year, I would try to get more surveys and make a focus group where I could talk to people on a personal level about their obstacles.

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