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Chronic kidney disease prevention in the Hispanic/Latino community: SF Mission District

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Abstract

Chronic kidney disease (CKD) is a growing medical condition that affects many Americans; however, the largest minority group living in the US, Hispanic/Latinos, are suffering the most complications associated with the disease. Multiple research has concluded that due to barriers such as poverty, limited education, and limited English proficiency, it has prevented many Hispanic/Latinos from knowing their disease status. My internship at the Community Health Resource Center was to create a CKD campaign in Spanish that targets the Hispanic/Latino community living in San Francisco's Mission District. As well, the Campaign's goal was to tackle the challenges that prevent Hispanic/Latinos in the Mission District from understanding their kidney health. The Campaign gathered pertinent health information from the National Kidney Foundation, the American Heart Association, the CDC, the American Diabetes Association, and various evidence-based research to create lectures in Spanish. As mentioned by multiple studies, when individuals are presented with educational material that is easy to understand and in a preferred language, they become more receptive to learning, asking questions, and being proactive in managing their health. Although the Campaign had some challenges due to the COVID-19 pandemic, it continued via a virtual route using Zoom. Results concluded that there is still a huge need for free culturally and linguistically appropriate educational workshops and health screenings. When communities are presented with free workshops, such as a CKD campaign, they attend and are willing to learn.

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Introduction

Chronic kidney disease (CKD) continues to affect 14% of the U.S. population, yet the largest minority group (Hispanic/Latinos) living in the U.S. are suffering the most complications associated with this disease (Lederer et al., 2018; Fischer et al., 2016). The National Kidney Foundation (2020), mentions that many Hispanic/Latinos are not aware that they have kidney disease, and the condition is often diagnosed during the late stages. Once kidney disease is diagnosed, it is often too late to reverse or stop the disease from progressing into kidney failure (National Kidney Disease, 2020). In fact, in 2010, 13% of new kidney failure patients in the US were Hispanic/Latinos (National Kidney Disease, 2020).

It is still unclear to many researchers why Hispanic/Latinos are at higher risk of developing kidney disease, but some researchers suggest that a lack of healthcare access by this population could be one of the reasons (National Kidney Disease, 2020). Leading health experts recommend that individuals with diabetes and high blood pressure (the top two disease contributors) seek guidance from their healthcare providers about how often they should get screened for CKD. Once possible signs of CKD are detected, individuals can reduce their risks of developing further CKD complications (NIH, 2016). Dharmarajan et al. (2017) define CKD awareness as "the proportion of people with CKD who are aware of their condition." However, disease awareness has been reported low in the U.S.

The American Journal of Preventive Medicine estimates that CKD awareness is at 9% nationwide, and 9.3% in California (Dharmarajan et al., 2017). When individuals are aware of their kidney disease and the risk factors associated with the disease, there is a reduction in mortality, complications, and disease progression into end-stage renal disease (Dharmarajan et al., 2017). Multiple studies have shown that low socio-economic groups such as Hispanic/

Latinos living in the U.S. have lower disease awareness or are unaware of their CKD status, and the disease progresses faster in Hispanic/Latinos when compared to other ethnic groups in the U.S. (Lederer et al., 2018; Morales-Alvarez, Garcia-Dolagaray, Millan-Fierro, and Rosas, 2019).

To some Americans, seeing a healthcare provider is not a problem or concern. Unfortunately, this can become a challenge for many Hispanic/Latinos living in the U.S. Lederer et al. (2018) mentions that Hispanic/Latinos have barriers that prevent them from accessing healthcare services, which can result in reduced disease awareness and management. The most commonly cited barriers for this population were limited education, poverty, low reading levels, and the inability to understand or speak English (Forster et al., 2016). This vulnerable population may also be uninsured or live in areas where they may have poor access to healthcare services (Komenda, Rigatto and Tangri, 2016).

Due to the lack of disease awareness and English being a barrier for many Hispanic/Latinos living in the U.S., there is a need for a chronic disease campaign to tackle the challenges. In San Francisco county, 15.2% of the population is Hispanic/Latino (United States Census, 2019), and in San Francisco's Mission District (a district with Hispanic/Latino roots), 19,456 of Hispanic/Latinos living there have limited English proficiency (City and County of San Francisco, n.d.). By providing Spanish health education and a kidney disease health screening, a CKD campaign can bring awareness, decrease mortality, and improve the health of the Hispanic/Latino community living in the San Francisco's Mission district.

Background:

Top leading health experts agree that the two main causes of CKD are diabetes and high blood pressure (National Kidney Foundation, 2020). To many individuals with these diseases,

they can be managed and treated with early diagnosis and guidance from a healthcare provider. Yet, many U.S. adults are unaware that they have diabetes or high blood pressure. The American Diabetes Association (2020) mentions that in 2018, 26.8 million Americans had a diabetes diagnosis, and 7.3 million Americans were unaware that they had diabetes (American Diabetes Association, 2020). In terms of high blood pressure, the American Heart Association mentions that nearly half of U.S. adults, 103 million, have high blood pressure, a 46 percent increase in recent years (American Heart Association, 2018). These statistics are concerning, but both of these diseases are alarmingly increasing among the Hispanic/Latino community (Morales-Alvarez et al., 2019; Forster et al., 2016).

CKD awareness as well as management of existing diabetes and high blood pressure is critical to prevent disease complications in this vulnerable population; however, many Hispanic/Latinos are faced with barriers that prevent them from seeking preventative care and needed screening. Lederer et al. (2018) states that improving awareness of CKD and the diseases that cause it will encourage patients to seek assistance, obtain further disease education, and participate in their own disease management preventions. Multiple studies have concluded that when adults are aware of their disease status (high blood pressure, diabetes, and kidney disease) they are able to better control their disease thus preventing or slowing the progression of CKD (Lederer et al., 2018). To address many barriers (low disease awareness, limited education, poverty, low reading levels, and low English proficiency) that prevent Hispanic/Latinos from knowing their disease status, many organizations are pioneering new strategies to assist and reach this vulnerable population.

In the state of Illinois, the National Kidney Foundation developed a program called the KidneyMobile (KM), which ran from 2005 to 2011. The goal of the KM was to reach high-risk

vulnerable communities in Illinois and increase the awareness/detection of diabetes, high blood pressure and kidney disease (Lederer et al., 2018). Hispanic/Latinos made up 28.1% of study participants, and 21.3% of these participants stated that their primary language was Spanish. As well, a large percentage of all combined participants were uninsured or unaware of their insurance status. Lastly, researchers stated that they found a vast number of participants who were unaware that they had high blood pressure, diabetes, and kidney disease due to the lack of insurance (Lederer et al., 2018).

Although lack of insurance can be a barrier to accessing healthcare, the inability to obtain, read, understand and use available healthcare information can also be a barrier for Hispanic/Latinos. Lora et al. (2011) mentioned that Spanish speaking Hispanics are two times as likely to have weak or insufficient health literacy when compared to English speaking Hispanics. As well, a common cited barrier for this population was low reading levels and the inability to understand or speak English (Forster et al., 2016). In a poll conducted by AARP, results concluded that 6 in 10 Hispanic adults living in the U.S. had a difficult time communicating with their health care providers because English was a language barrier (Swanson and Contreras, 2018). In general, ½ of the U.S. population lack the literacy and numeracy educational level needed to effectively process, obtain, and act on the health information being provided to them (Seligman et al., 2007). To effectively promote disease awareness, disease prevention, and lifestyle changes, people need to understand health information being provided to them (Plimpton and Root, 1994). However, most health education provided in the U.S. is in English and written at a reading level that is hard to comprehend by many especially the non-English speaking Hispanic/Latino community (Plimpton and Root, 1994).

Unfortunately, due to poor health literacy and English being a language barrier, many Spanish speaking Hispanic/Latinos have poorer management of their chronic health conditions, which can lead to poorer health, increased hospitalizations and mortality (Lora et al., 2011). Healthy People 2020 defined low health literacy as "the degree to which individuals have the capacity to obtain, process and understand basic health information and services for appropriate health decisions." Other studies have also stated that low health literacy is associated with poorer health status, decreased use of preventative services, decreased awareness of chronic disease management, increased hospitalizations, and an increased mortality rate among minority groups (Sentell and Braun, 2012; Lora et al., 2011).

Since health literacy is already a barrier among Hispanic/Latinos, limited English exacerbates having low health literary. Due to a language barrier, Hispanics/Latinos are unable to obtain, process and understand basic health information being provided to them, as well as accessing preventative health care services (Sentell and Braun, 2012). To address this problem, many researchers have used different types of health communication methods to help educate, which have been successfully received among the Hispanic/Latino community (Lora et al., 2011). Some intervention methods being used are pictorial aids, group educational sessions, automated phone call reminders, audiovisuals, and fotonovelas (Lora et al., 2011). For example, fotonovelas, which are photographs with simple to understand text bubbles that deliver essential information, has successfully provided education regarding tuberculosis, nutrition, and depression among the Hispanic/Latino community (Lora et al., 2011). Fotonovela's have been a great educational tool in terms of addressing health literacy, that that the National Kidney Foundation has begun using fotonovelas to help educate patients who need dialysis treatment (Lora et al., 2011).

Since entertainment medias such as print media, television, and radio play a large role in delivering information to broad audiences, researchers in Southern California used entertainment-education interventions that follow a model known as the social learning theory (Forster et al., 2016). The theory suggests that people's behaviors are developed and influenced by the observation of others (Forster et al., 2016). Entertainment based educational interventions are very likely to be accepted by individuals with low literacy levels instead of complex written material that may be hard to understand. As mentioned by Forster el al. (2016), entertainment based educational interventions have begun to spread rapidly over the last decade to help deliver vital health information and promote behavior change.

Latin American soap operas known as "Telenovelas" are being used to help deliver important health information to Hispanic/Latinos. According to Forster el al. (2016) Telenovela based interventions have proven success in the reduction of alcohol use in teenagers, increased HIV education, and improved awareness of cancer screening services available. To help improve CKD awareness in Spanish speaking Hispanics, researchers used a Telenovela called "Fixing Paco" because it is accessible to people with low literacy levels (Forster et al., 2016). In the 10 episode Telenovela, viewers see how the health of a hard-working handyman declines due to kidney disease and ultimately leads him to needing a kidney transplant. After viewing the Telenovela, participants reported an increase awareness of CKD as well as the complications associated with the disease (Forster et al., 2016).

The success of different health education intervention methods used in the Hispanic/Latino community suggests that the effect of poor health literacy and how it relates to poor health outcomes can be modifiable in this population. As well, any future CKD

interventions will not only need to address literacy, but address cultural needs, and language barriers (Spanish) (Lora et al., 2011).

Furthermore, San Francisco, California, one of the US most cosmopolitan cities and known as the cultural and financial center of the western US., has been home to many Hispanic/Latinos (Encyclopedia Britannica, 2020). As of today, more than one in every two San Franciscans is nonwhite, and the Hispanic/Latino population (15.3%) make up the second largest ethnic minority group in the city residing mostly in the Mission District (Kaiser Permanente, 2019; Encyclopedia Britannica, 2020). According to the City and County of SF (Office of Civic Engagement and Immigration Affairs), 22, 779 people living in the Mission District speak Spanish. However, 19,456 people living in this district have limited English proficiency.

As mentioned before, having limited English proficiency and having poor health literacy can impact a person's health and increase the risk for hospitalizations/mortality. In 2016, San Francisco Community Health Needs Assessment concluded that the Hispanic/Latino community was second in hospitalizations due to diabetes complications (a known CKD contributor). As well, the Community Health Needs Assessment stated that "Latinos are hospitalized at rates significantly higher than rates for total population of San Francisco or California." In terms of high blood pressure complications (also a CKD contributor), the assessment concluded that from 2012-2014, the Hispanic/Latino community had the second highest rate of hospitalizations in San Francisco (San Francisco Community Health Needs Assessment., 2016).

Many of these hospitalizations and complications may have been prevented with increasing individual awareness. Healthypeople.gov (2020) mentions that community-based educational programs play a vital role in preventing diseases, enhancing the quality of life, and

improving overall health. These programs help educate communities on important topics, such as kidney disease awareness and prevention, and will continue to play a vital role in improving health outcomes in the US (Healthypeople.gov, 2020). Implementing a community-based approach to increasing awareness on the Hispanic/Latino community living in the Mission District in San Francisco could be a step to decrease the burden of disease and rate of further hospitalizations in this community. This project aims to start a CKD campaign in the San Francisco Mission District with a hope to play a vital role in bringing disease awareness to the Hispanic/Latino community residing in this District.

Scope of the project

Health education and health care screenings are needed in the Hispanic/Latino community. By organizing a campaign to provide health education in Spanish, the Hispanic/Latino community will become more aware of CKD, understand the health complications associated with the disease, and learn preventative measures as well as screening tools used to detect CKD. A free health care screening (blood pressure check, blood sugar check, and urine test for the detection of Albumin) with Spanish interpreters aiding healthcare professionals will encourage the Hispanic/Latino community to check and understand their risk factors for CKD. This CKD campaign will be created and organized at the Community Health Resource Center (CHRC), which is a non-profit organization that has been serving the San Francisco Bay area community for over 30 years. With their mission, “Improving lives, one person at a time,” and with the assistance of grants and generous donations from the community, the organization has provided counseling and resource support in four areas of service: medical

nutrition counseling, behavioral health services, health education, and health screenings (CHRC, n.d.).

Moreover, CHRC offers a variety of health services free of charge to the community, at a reduced cost, or on a sliding scale based on income. Their services are: educational lectures (free of charge to anyone), employee/group wellness presentations (paid by employers), support groups, social work counseling, community health screenings (free of charge in the Mission District, Mission YMCA, Chinatown, and Russian Hill), and nutrition guidance (CHRC, n.d.). Like many other organizations, CHRC has a board of directors as well as their general staff. Most of the staff consists of the administrative team which are registered dieticians and licensed clinal social workers (CHRC, n.d.). My campaign will be supervised by my preceptor, who is also the program coordinator at CHRC. My preceptor is responsible for organizing group events, health screenings/education, obtaining grant funding, coordinating educational lectures, and maintaining the organization's mission and goal.

With the guidance and supervision of my preceptor, I was responsible for creating and organizing a CKD educational campaign in Spanish, which targets the Mission District in San Francisco due to the vast amount of Hispanic/Latinos that reside in that district. My project's goal was to provide CKD awareness with health education, resources, and guidance that is easy to understand by my target population—Hispanic/Latinos. By doing so, the CKD campaign will empower my target group with the knowledge to better care for their kidney health and the health of their community.

Project goal:

To provide CKD awareness in the Hispanic/Latino community through 3 virtual educational workshops that target main health problems that cause kidney disease in this population—high blood pressure and diabetes.

- SMART Objective 1: By the end of the CKD campaign (post-3 course lectures), all participants who attended will have basic understanding of the two contributors to CKD
- SMART Objective 2: By the end of the CKD campaign (post-3 course lecture), all participants who attended will have basic understanding of two kidney disease screening tools.
- SMART Objective 3: By the end of the CKD campaign (post-3 course lectures), 75% of participants who attended will get screened for CKD.

Stakeholders:

Since CHRC already provides free health screenings at the Mission Neighborhood Centers (MNC) SF Capp St. Senior center location and the organization primarily serves the Hispanic/Latino community in the Mission District, the CKD campaign targets the population served at this location. As mentioned on their website, MNC is a "A non-profit organization that delivers culturally sensitive, multi-generational, community-based services focused on low-income families" (MNC, 2018). The organization also promotes leadership skills that empower community members to build stronger families and healthy high-spirited neighborhoods (MNC, 2018).

Another potential organization collaboration with the CKD campaign was the Kidney Disease Screening and Awareness Program (KDSAP). KDSAP is provided by the University of

Berkeley as an undergraduate student-run organization (KDSAP, n.d.). The organization focuses on providing free of charge kidney disease screenings in underserved communities across the San Francisco Bay area (KDSAP, n.d.). At their health screening events, members of the community don't require documentation, interpreters are provided, and a free consultation with a Medical Doctor is provided. Moreover, by doing so, the organization improves kidney health in the community as well as promote health equity (KDSAP, n.d.).

Ecological Model:

Specific models and theories help us promote and plan public health programs that improve public health. In terms of changing attitudes and behaviors, the CKD campaign will focus on the Ecological Model by creating change at the individual level. By providing knowledge, changing attitudes, and behaviors for each member of the community about kidney health, the campaign will bring awareness of the dangers of kidney disease and promote healthier living style, early detection and follow ups.

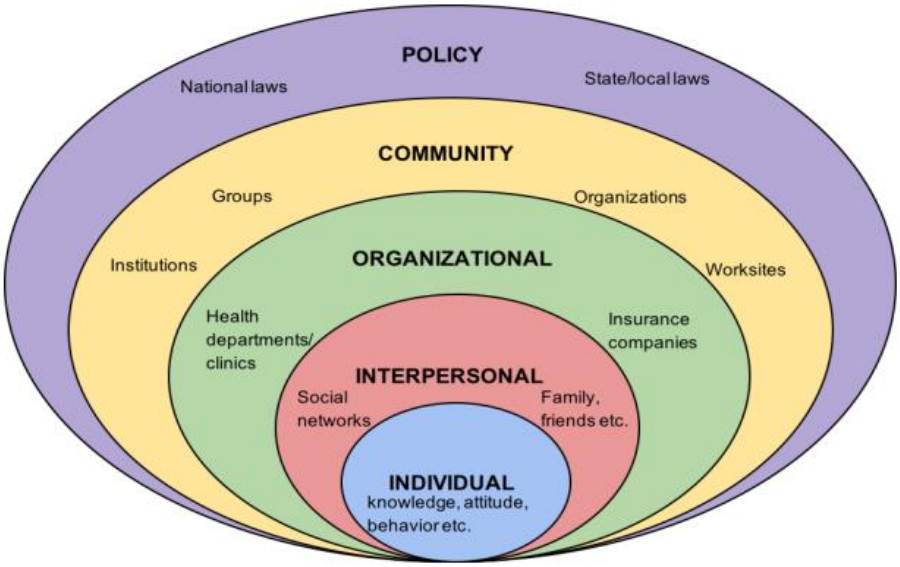

Figure 1: Ecological Model (Balasubramanian et al., 2017)

Role:

Overall, my role at CHRC was to gather information from the CDC, the National Kidney Foundation, the American Heart Association, the American Diabetes Association, and other evidenced-based resources to create a CKD campaign. Thanks to my current health tittles (MPH candidate, BSN, RN) and experience working as a Registered Nurse, I was able to create educational lectures to educate the community. Routine, day-to-day activities during my internship at CHRC included attending weekly admin meetings every Tuesdays, as well as weekly staff meetings. During these meetings, staff members discuss current issues within the organization (CHRC), future events planned, and updates in current events. Since the COVID-19 pandemic put a halt to my CKD campaign and the potential partnership with KDSAP, I assisted my preceptor in other projects within CHRC. Two big projects were writing grants for lung and breast cancer. With the grants, CHRC will be able to provide free educational lung and breast cancer lectures and bring awareness to the SF bay community. Not only will grant writing aid CHRC, but it will also help me understand and learn the process of writing grants for future health programs.

As of now, the breast cancer grant is still under review; however, the lung cancer grant that I wrote for my preceptor was approved. Thanks to the grant, CHRC will be receiving funding so the organization can provide a free lung cancer awareness educational lecture scheduled for later this year.

Method:

Initially, my campaign was a five-course educational lecture, one hour each, scheduled for Thursdays from March through April. During these five courses, participants were going to

participate in multiple hand-on activities to encourage learning and participation. However, since the pandemic closed many organizations/buildings, prevented large group gatherings, and created many uncertainties, my campaign was brought to a halt. During the halt of my campaign, I assisted my preceptor in doing research and writing two grants (listed above) for future CHRC events. After a few weeks of pondering and assisting with side projects at CHRC, I was given the green light to continue my educational lectures via Zoom since MNC switched many of their activities to video platforms. After that, CKD lectures were conducted virtually via Zoom (20 members per session) for a total of three one hour lectures scheduled in July.

Organization leaders at MNC provided advertisement for the CKD campaign (via poster), which was a success. Participants at MNC (mostly Hispanic/Latinos) were very interested in my free educational workshop that the sign-up sheet quickly filled up (max of 15 participants). Due to the high demand, a waiting list was created for any potential future open spots to attend. As seen from the waiting list, there was a high interest to participate in educational workshops, which shows that there is a need for more educational health workshops within the community.

Quantitative methods:

Pre-CKD course, an anonymous questionnaire was conducted to assess the needs of the community and to understand what the educational needs were. Questionnaire was provided in both English and Spanish (see Appendix 1 and 2); however, all participants attending completed the Spanish questionnaire. As well, as stated by MNC staff, some participants needed assistance filling out the questionnaire due to the inability to read or write.

Questions asked

Race/Ethnicity
Gender and age
Preferred language
Are you diabetic?
If yes, do you take medications to control your blood sugar?
Do you have high blood pressure?
If yes, do you take medications to control your blood pressure?
Have you received information about chronic kidney disease from your doctor before?
Have you received screening for chronic kidney disease (blood work, urine test, etc.)?
List the common foods you consume at home:

Post three course Zoom lecture: A Zoom poll was conducted to assess what participants learned and to assess how affective was the course. The course can then be updated to meet the needs of other populations at risk for CKD or to be used for larger CKD campaign events.

Public Health Impact

Quantitative methods results:

Questions asked	
Race/Ethnicity	All participants are Hispanic/Latino
Gender and age	Most of the participants are Female and the average age of participants is 67 years old.

Preferred language	All participants who completed the pre-CDK questionnaire stated Spanish was their preferred language.
Are you diabetic?	Mixed response was obtained. Some participants stated that they were diabetic, and some stated that they did not know if they were diabetic.
If yes, do you take medications to control your blood sugar?	Mixed response was obtained. Some participants stated that they are diabetic, but don't take medications to control their blood sugar. Some participants stated that they don't know.
Do you have high blood pressure?	Mixed response was obtained. Some participants stated that they do have high blood pressure, and some stated that they didn't know.
If yes, do you take medications to control your blood pressure?	Mixed response was obtained. Some stated that they didn't know if they take high blood pressure medications.

Have you received information about chronic kidney disease from your doctor before?	Mixed responses were obtained.
Have you received screening for chronic kidney disease (blood work, urine test, etc.)?	Mixed responses were obtained.
List the common foods you consume at home:	Mixed responses were obtained.

Results:

All three Zoom classes were scheduled on Thursdays at 4:00 pm on June 9, 16, and 23. Participants attending were provided with tablets, curtesy of MNC, so they can have access to Zoom at home, or in a location where they could maintain social distance and still have Wi-Fi access. To prevent confusion and trouble logging into or using Zoom, MNC's Zoom link ID was used because participants were familiar with MNC's Zoom ID number. Although CHRC's Zoom account was not used, I was given co-host access to MNC's Zoom account and was able to control the Zoom learning environment.

In the first class, there were around 25 participants, with a few of the participants being MNC staff administrators, my preceptor, and a CHRC dietician. Once all participants were logged in and obtained note-taking materials, the first course began titled "La Enfermedad Renal Crónica" (Chronic Kidney Disease) (See Appendix 3). The lesson started with explaining the course objectives and asking participants general kidney-related questions to encourage group participation. For example, a question asked was ¿Cuantos rinones ocupamos para sobrevivir? (How many kidneys do we need to survive). Although the answer to the question may look simple, a lot of participants verbally stated that we needed two kidneys to survive, which in fact, a healthy human can live a normal life with just one kidney.

After general questions were asked to assess participants' knowledge on the topic, the course continued with general CKD facts and statistics that were simplified so participants can grasp the information. For example, instead of using numbers and graphs on a PowerPoint, pictures were used to explain our kidneys' anatomy, what our kidneys do in our body and the importance of healthy kidneys in our body. As well, the health complications associated with CKD and the two contributors to CKD—diabetes and high blood pressure.

Furthermore, in between each topic, I asked general questions and participants opinions to facts/statistics to encourage group participation, since many hands-on learning activities were modified or excluded due to Zoom virtual learning. At the end of the first course a group test was conducted to assess what participants have learned, and to answer any further questions that participants might have or if more clarification was needed.

Lesson two, titled “La Enfermedad Renal Crónica Parte 2: El diabetes y la presión alta” (CKD Part 2: Diabetes and High Blood Pressure) (see Appendix 4), continued as planned. The lesson started with the introduction and learning objectives. As in lesson one, lesson two also included general questions to assess participants knowledge of the topic. For example, a question asked was “¿Que es una presión saludable?” (What is considered a healthy blood pressure?). Once general questions were asked, the lesson continued with pertinent information gathered from the CDC, the National Kidney Foundation, the American Heart Association, and the American Diabetes Association to explain why blood sugar control and blood pressure control are essential for kidney health.

The last lesson, titled “La Enfermedad Renal Crónica Parte 3: Nutrición y diálisis” (CKD Part 3: Nutrition and Dialysis) (see Appendix 5), focused on the importance of nutrition to help control diabetes and blood pressure. In this lesson, participants learned the complications

associated with ignoring kidney health, which is dialysis. Like the previous lessons, general questions were asked to assess nutrition knowledge, such as understanding how to read a nutrition food label and its portion sizes. Post lecture, a group quiz was conducted to assess what participants learned throughout the three CKD courses, to clarify any information that needs more clarification, and to answer last-minute questions. After last-minute questions were asked, a Zoom poll questionnaire was conducted to assess what participants learned and assess how effective were all three courses.

Limitations:

Off course, no project is perfect and there were some limitations. The campaign had some adjustments and setbacks due to the COVID-19 pandemic, but participants were still willing to participate and learn. Originally, the campaign was planned for five in-person lectures with hand-on learning group activities to encourage participation. As well, prices were going to be presented to encourage attendance, but as stated before, once the pandemic hit San Francisco, everything in the city was halted, and group gatherings were not allowed.

Another limitation to the campaign was technology. Not all participants had access to a computer or tablet, thus some participants were not able to attend the Zoom classes. Since the campaign took the virtual route, Zoom learning was a new learning format that many participants were not familiar with. At first, some participants did struggle with using Zoom, as seen/heard from background noise participants asking family members for help, or asking MNC staff and myself questions. Though it took some time for participants to adjust to Zooms features, camera on/off, mute on/off, chat box, etc., after the first Zoom session, participants became more familiar to virtual learning.

Last limitation to the campaign was that due to the pandemic, and scheduling conflicts, our potential partnership with UC Berkeley KDSAP did not occur. KDSAP is an undergraduate student-run organization that focuses on providing free of charge kidney disease screenings. Additionally, the organization provides free medical advice from a kidney specialist doctor (Nephrologist) in underserved communities across the San Francisco Bay area with the help of interpreters (KDSAP, n.d.). Post CKD campaign, a free kidney health screening was going to be conducted, at MNC or CHRC so that participants can be aware of their overall kidney health. The campaign's goal was to test for kidney disease in at least 75% of participants; however, as mentioned, the pandemic and timing did now allow for this essential collaboration.

Although the CKD campaign was only a small pilot program, the results of the campaign concluded great results. As seen from the Zoom poll results (see Appendix 6-10), participants enjoyed the free culturally and linguistically appropriate educational workshop. In fact, a few participants verbally stated that they wished more courses were provided on different health topics. As stated by one person: “We need more courses like this to teach us about nutrition, our liver, our heart, everything, to help us stay healthy.” Overall, participants mentioned that they learned valuable information, thus wished more health information was provided in the same format that the CKD campaign was designed.

Next Steps:

As mention, more than one in every two San Franciscan is nonwhite, and the Hispanic/Latino population (15.3%) make up the second-largest ethnic minority group in the city residing mostly in the Mission District (Kaiser Permanente, 2019; Encyclopedia Britannica, 2020). Although 15.3% may be a low number in comparison to other ethnic groups residing in

San Francisco, CKD continues to affect the Hispanic/Latino community the most. However, change is possible. When Hispanic/Latinos are presented with educational material that is easy to understand and in Spanish, they become more receptive to learning, asking questions, and being proactive in managing their health, as seen from my RN experience and current evidence-based research.

Not only is a Spanish CKD campaign necessary to bring awareness to the Mission District, but it is also highly needed. Current data shows that 19,456 people living in this district have limited English proficiency (City and County of San Francisco, n.d.), and as research shows, having poor health literacy can impact a person's health and increase the risk for hospitalizations/mortality. Thus a Spanish CKD campaign could have a positive public health impact in the SF Mission District.

As seen from my CKD campaign's results, when the Hispanic/Latino population is presented with a health educational workshop, in Spanish, they do attend. This campaign presents evidence that more Spanish health educational workshops are needed in Hispanic/Latino communities to prevent other health-related complications. Many organizations that currently serve the Hispanic/Latino community can partner with other organizations such as KDSAP, healthcare organizations, etc., to improve the overall health of Hispanic/Latinos. Although this pandemic has caused some challenges, and altered the way we learn and communicate, many health organizations can continue to serve the community by using Tele-Health, Apps to monitor health status, and continue to offer free educational resources via video platforms such as Zoom.

As mentioned before, many researchers have suggested that we use different types of health communication methods to help educate and deliver important health information to populations in need. By using pictorial aids, group educational sessions (via Zoom), automated

phone call reminders, audiovisuals, and fotonovelas, we can help the Hispanic/Latino community live healthier lives (Lora et al., 2011).

Conclusion

Chronic kidney disease (CKD) will continue to affect the largest minority group in the US, Hispanic/Latinos, if no interventions are implemented. The National Kidney Foundation (2020), even states that Hispanic/Latinos are often diagnosed with CKD during the late stages of the disease, which is often too late to reverse or stop the disease from progressing into kidney failure.

As seen from this project and the current literature, there is still a huge need for free culturally and linguistically appropriate educational workshops and health screenings; however, more grants and funding are needed to fund these future public health events. When the community is presented with educational workshops, they are receptive to the information they receive. One member who attended the Campaign said, "We need more courses like this to teach us about nutrition, our liver, our heart, everything, to help us stay healthy." The Campaign's results are promising, but the future of the COVID-19 pandemic and future barrier events will continue to bring many challenges to how health information is delivered. The CKD campaign showed promising evidence that virtual Zoom classes are receptive within the community, which can be a valuable tool to provide future health information.

Moreover, low health literacy and low English proficiency will continue to be a barrier unless we address the issue. As shown by current data, San Francisco has many Spanish-speaking adults living in the Mission District who have limited English proficiency. Still, limited English proficiency is not only a San Francisco issue, it's a nationwide problem. Public health

professionals will need to tailor many educational workshops to meet the needs of the community. As mentioned by Healthypeople.gov, community-based educational programs play a vital role in preventing diseases and bringing awareness to many health conditions that continue to affect many communities nationwide. Although the CKD campaign saw promising results as a small pilot program, we still need more educational campaigns nationwide to help the Hispanic/Latino community live healthier lives.

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Appendices

Community Health Resource Center (CHRC) va a facilitar una serie de clases de salud para el conocimiento sobre la enfermedad de los riñones (la enfermedad renal crónica). Este cuestionario nos ayudara a planear las clases para involucrar mejor a nuestros participantes. Este cuestionario es anónimo.

Raza/Etnicida::

☐ Hispano/Latino ☐ Asiatico ☐ Otro/a
☐ Negro/Africano ☐ Blanco/Caucasico/a

☐ Hombre ☐ Mujer Edad:

Idioma Preferido

☐ Español ☐ Ingles ☐ Otro:

¿Eres diabético/a? (Diagnosticado/a por el doctor/a)	☐ Si	☐ No	☐ No lo sé
Si la respuesta es si, ¿Esta tomando medicamentos para controlar el azúcar en la sangre?	☐ Si	☐ No	☐ No lo sé
¿Tiene alta presíon?	☐ Si	☐ No	☐ No lo sé
Si la respuesta es si, ¿Esta tomando medicamentos para controlar la presíon alta?	☐ Si	☐ No	☐ No lo sé
¿Te ha hablado tu doctor/a sobre la enfermedad de los riñones?	☐ Si	☐ No	☐ No lo sé
¿Ha recibido pruebas de sangre o orina para detectar problemas de los riñones?	☐ Si	☐ No	☐ No lo sé
¿Que frequentemente visita a su docto/a cada año?	☐ 1-5 veses	☐ 5-10 veses	☐ ≥ 10 veses

¿Cuáles de las siguientes son sus 3 mayores bebidas diarias?

☐ agua ☐ jugo de fruta ☐ licor
☐ té (sin azúcar) ☐ café (con azúcar) ☐ otro:_____
☐ café (negro) ☐ té (con azúcar) ☐ otro:_____
☐ leche ☐ soda (refrescos) ☐ otro:_____
☐ bebidas energéticas ☐ cerveza

¿Quales 3 alimentos consume con mas frequencia cada semana?:

2100 Webster Street, Suite 100, San Francisco, CA 94115 • Tel: (415) 923-3155 • Fax: (415) 441-5128
www.chrcsf.org

Appendix 1

COMMUNITY HEALTH RESOURCE CENTER
An Affiliate of California Pacific Medical Center

Community Health Resource Center (CHRC) will be facilitating a series of health education classes to spread awareness about chronic kidney disease. This questionnaire helps us tailor our curriculum to best engage our participants. This questionnaire is anonymous.

Race/Ethnicity:

- ☐ Hispanic/Latino
- ☐ Asian
- ☐ Other
- ☐ Black/African-American
- ☐ White/Caucasian

- ☐ Male
- ☐ Female

Age:

Preferred language

- ☐ English
- ☐ Spanish
- ☐ Other:

Are you diabetic? (diagnosed by doctor)	☐ Yes	☐ No	☐ I don't know
If yes, are you taking medication to control your blood sugar?	☐ Yes	☐ No	☐ I don't know
Do you have high blood pressure?	☐ Yes	☐ No	☐ I don't know
If yes, are you taking medication to control your blood pressure?	☐ Yes	☐ No	☐ I don't know
Have you received information about chronic kidney disease from your doctor before?	☐ Yes	☐ No	☐ I don't know
Have you received screening for chronic kidney disease? (Blood work, urine test, etc.)	☐ Yes	☐ No	☐ I don't know

How often do you visit your doctor a year? ☐ 1-5 times ☐ 5-10 times ☐ ≥10 times

Which of the following are your top 3 daily drinks?

- ☐ water
- ☐ tea (unsweetened)
- ☐ coffee (black)
- ☐ milk
- ☐ energy drinks
- ☐ fruit juice
- ☐ coffee (sugar)
- ☐ tea (sweetened)
- ☐ soda
- ☐ beer
- ☐ liquor
- ☐ other:_____
- ☐ other:_____
- ☐ other:_____

List 3 top foods you eat every week:

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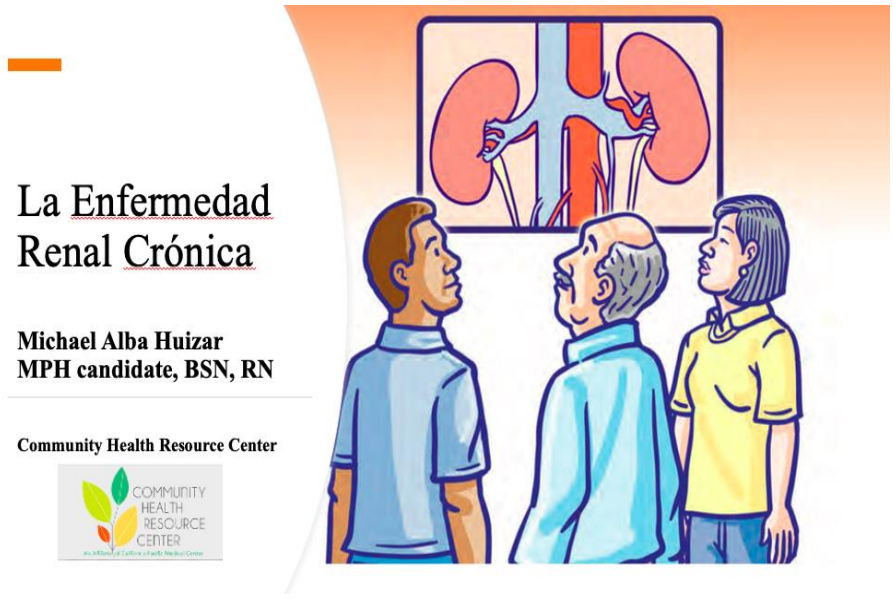
Appendix 2



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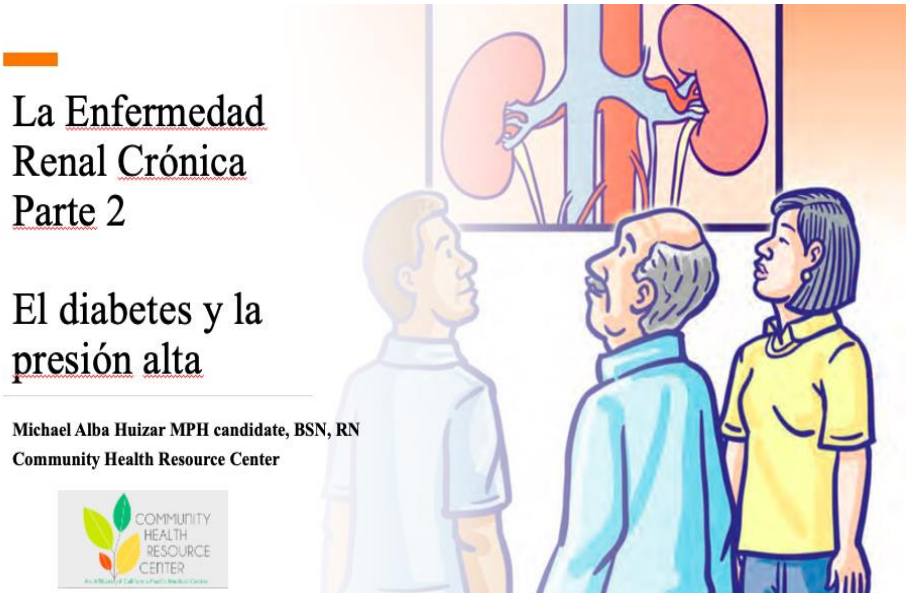

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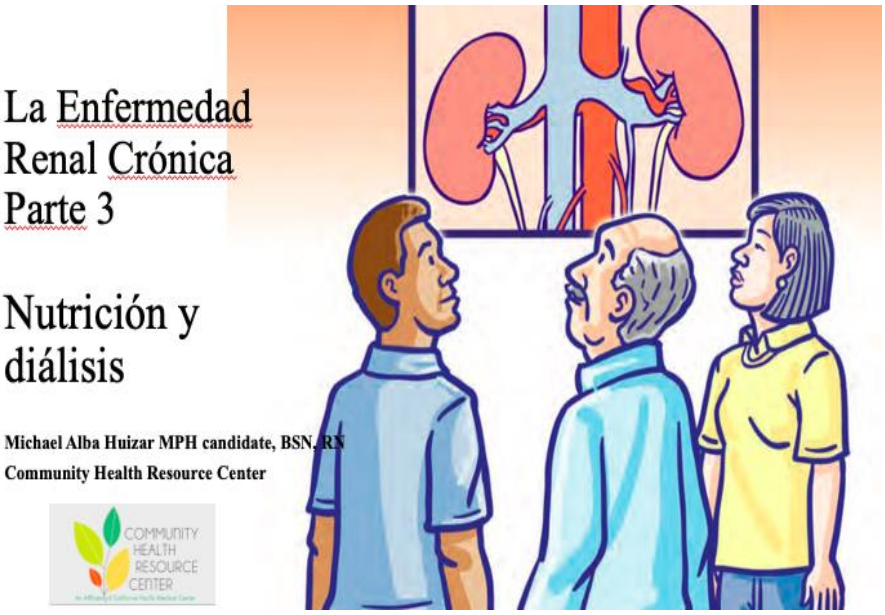

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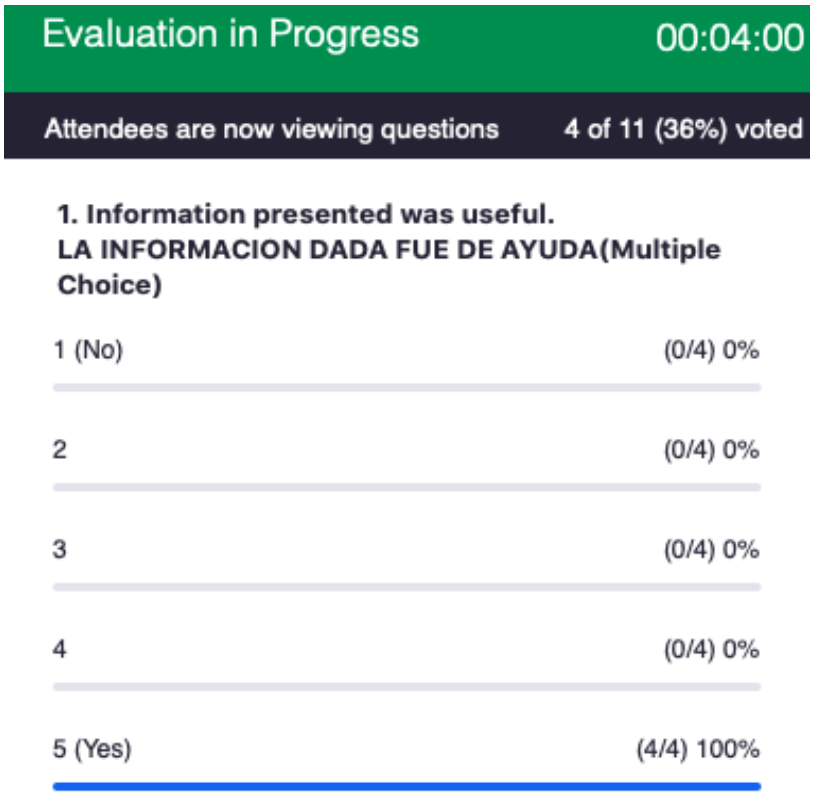

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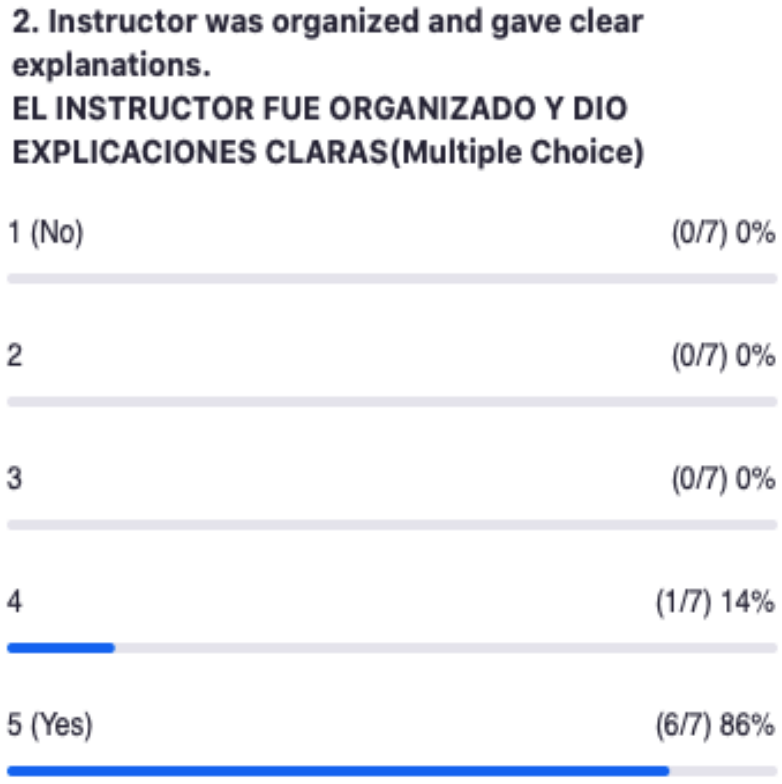
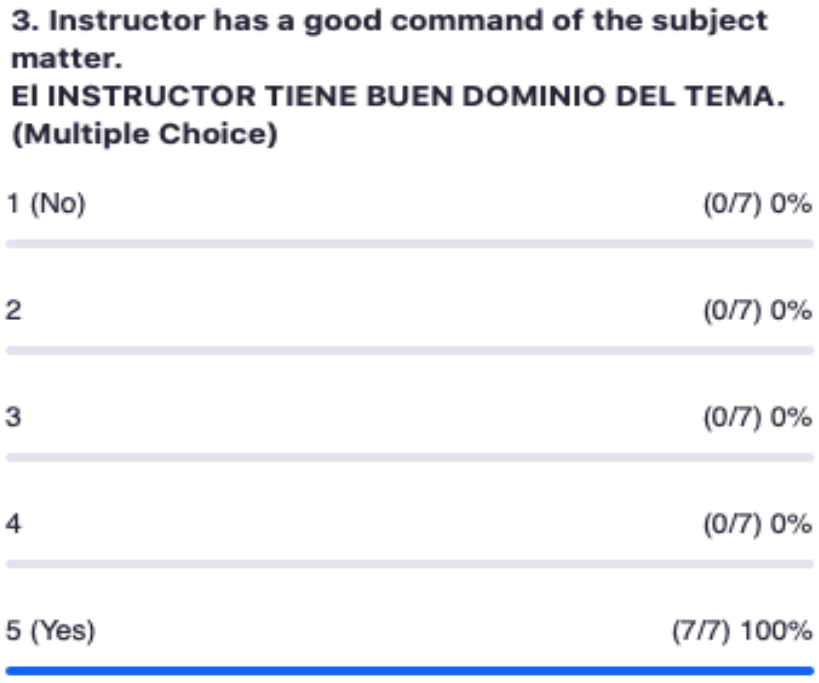
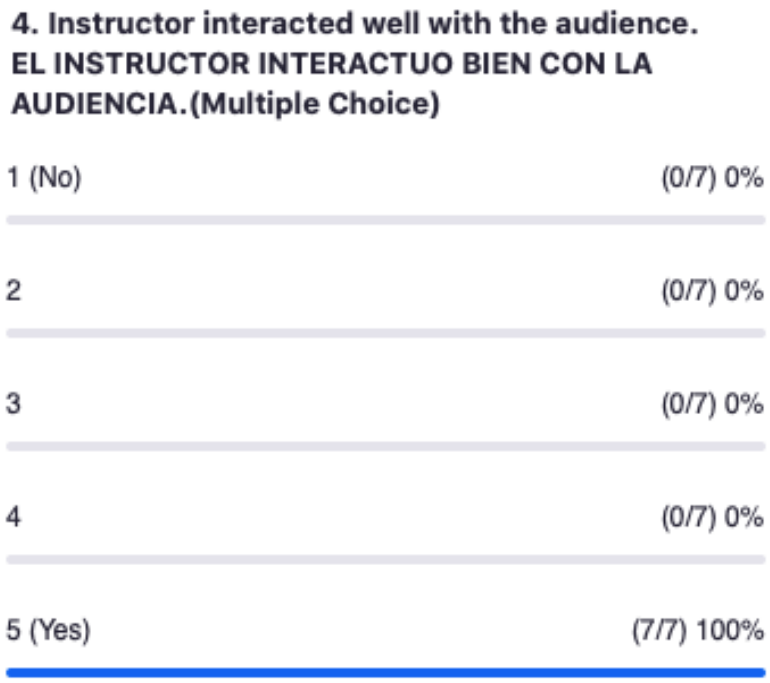

2. Instructor was organized and gave clear explanations.
EL INSTRUCTOR FUE ORGANIZADO Y DIO EXPLICACIONES CLARAS(Multiple Choice)
1 (No) (0/7) 0%
2 (0/7) 0%
3 (0/7) 0%
4 (1/7) 14%
5 (Yes) (6/7) 86%

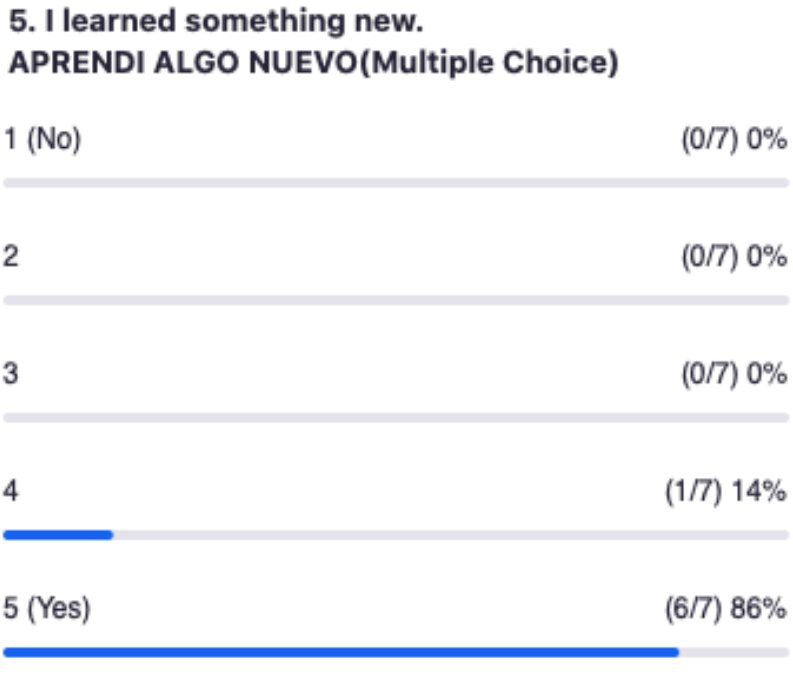
Appendix 7


3. Instructor has a good command of the subject matter.
El INSTRUCTOR TIENE BUEN DOMINIO DEL TEMA. (Multiple Choice)
1 (No) (0/7) 0%
2 (0/7) 0%
3 (0/7) 0%
4 (0/7) 0%
5 (Yes) (7/7) 100%

Appendix 8



Appendix 9



Appendix 10