

Cardiovascular Disease and Healthcare Disparities within the Hispanic Population

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Submitted in partial fulfillment of the requirements for the degree of Master of Science in

Nursing in the Graduate College of:

Fresno Pacific University, School of Natural Sciences

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December of 2018

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ACKNOWLEDGMENT

This Master's level thesis project would not have been made possible if it was not for the faith of my lord and family support all around me. I would like to thank those whom have kept up my drive to stay dedicated, and to accomplish all that I have today through words of encouragement, support, and positive attitudes. I would like to thank God for giving me the faith and hope that sometimes could have been lost, but through prayer, helped me regain focus to push forward. I would like to thank my project chair for her guidance and time to help get me through the last leap of my educational goal. I would also like to thank my dad Tony Jimenez whom is no longer here physically, but here in spirit, for his words of wisdom and believing in me in that I can accomplish anything I wanted in life. Lastly, regarding my education thus far, and the success of this project, I aim to dedicate my life and utilize my current knowledgebase towards my commitment of healing others, as well as continue on to learn and stay up to date with current practice trends for that best possible outcome of care for my patients.

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I. ABSTRACT

Cardiovascular heart disease (CVD) has been drastically increasing statistically and targeting the healthcare industry in such a way that healthcare professionals hold a dilemma on how to resolve the issue. This number one cause of mortality chronic silent deadly illness has been shown to place hardships and burdens among those who are diagnosed or even undiagnosed with some type of CVD, causing patient complications and healthcare issues today. Further issues can be, but not limited to: a selected patient of a certain demographic can be at an increased risk, increase healthcare costs, increase hospitalizations, hardships and burdens for the patient and family all around, up to even death. There has unfortunately been an association with healthcare disparities that the Hispanic population faces, thus putting one at an even higher risk for CVD. As mentioned, this can incorporate a cultural tie in that the Hispanic population is more prone to this disease, specifically to what healthcare professionals believe could be of contributing factors, such as: Healthcare disparities, genetics, culture and lifestyle. With nursing research and assessment protocols, the outcomes of care could change in a positive way, thus meeting the target goal of decreasing the prevalence of CVD and healthcare disparities within the Hispanic population group. Through awareness, primary care prevention (i.e. education), and appropriate assessments and research, one can implement new policies and nursing practice by building upon one's current knowledgebase to decrease the horrible burden of CVD being placed upon patients and the community at large.

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II. INTRODUCTION

a. The Problem Description

Cardiovascular or heart disease can range from an array of heart conditions that acquire gradually throughout one's lifespan. This can happen at any age, however, is more prominent while one increases in age, as well as more prominent in certain cultural backgrounds, such as in the Hispanic population. This can reflect several reasons that are associated with healthcare disparities, such as: cultural environment, socioeconomic status, financial status, educational level, communication barriers, as well as even genetic factors. Cardiovascular disease (CVD) is the leading cause of death within the United States; however, current statistics show a higher prevalence within the Hispanic population as for the reasons mentioned previously. This is a serious issue statistically, that needs to be dealt with due to the disease being one of the most top silent killers within the USA. In fact, according to the Center for Disease Control (CDC), "Heart disease is the leading cause of death for both men and women which statistically, about 610,000 people die of heart disease in the United States every year." (CDC, 2015) This accounts for 1 in every 4 people, thus raises a major concern and why its an issue that need to be looked at. Looking into the specifics, cardiovascular disease can initiate simply from how one lives their life, which represents one's lifestyle habits, or simply because of cultural habits, ergo the Hispanic culture in this instance. Simply not being aware of this process is truly what makes this chronic disease such a major problem, as well as a silent and deadly killer. Another means is childhood obesity and diabetes, which could most definitely initiate the start of heart disease within the younger population by way of contracting high levels of triglycerides/ cholesterol, and/or sugar within one's

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vascular system. This is the same for adults, for which your average adult person has been living a particular lifestyle with a certain diet for quite sometime because it is already apart of their day to day activity which they are accustomed to. Within the vascular system, these high levels within the blood as mentioned previously can start pathological conditions such as high blood pressure and atherosclerosis. As CVD is the number one cause of death within the USA, this issue should be a priority concern when it comes to what needs attention first in the healthcare industry. Implementing such culturally competent care and interventions for the Hispanic population means this could be the potential step necessary to keeping loved ones around, as well as to decrease the prevalence of CVD within the Hispanic population. Again, one cannot stress enough that heart disease is much bigger and broader than one could imagine, and causes great hardships on the individual, family, and even the community. CVD can lead to other medical conditions aside from those previously described, such as but not limited to: heart failure, heart arrhythmias, cardiomyopathy, etc. These issues dramatically rise healthcare costs, hospital visits/stays, the healthcare patient population, surgical interventions and follow ups, as well as the pain and suffering that accompanies the heart disease. While a vast majority of this patient population is indeed Hispanics, we need to get to the root cause analysis as to why, in order to better the numbers and overturn these horrible health outcomes associated within CVD. According to the Department of Health and Human Services,

“There is a need to tailor and develop culturally relevant strategies to engage Hispanics in cardiovascular health promotion and cultivate a larger workforce of healthcare providers, researchers, and allies with the focused goal of improving

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cardiovascular health and reducing CVD among the US Hispanic population.”

(DHHS, 2014)

It has been researched that there is a link between health behavior, as well as outcomes of health in association with the lifestyle and culture by certain ethnicities. Having awareness of such research conducted, one can come to a starting point and take initiative as to strategize for interventions and change healthcare for better outcomes. So, the question here is. Based on the focused issue at hand, one must be familiar with what are some of the disparities and problems that specifically relate to the Hispanic community, and how can we address them adequately. Does assessing for cultural risk factors, creating awareness, and providing primary prevention methods (i.e. education) lower the prevalence of cardiovascular disease and healthcare disparities within the Hispanic population

b. The Implementation Plan

These are some of the basic, yet complex conditions of CVD that can be prevented all through education, self-awareness, and primary care. As primary care providers, one should be very much aware of this dilemma, thus warranting intervention. Interventions such as bringing on more awareness of the barrier's healthcare professionals face (i.e. communication barrier's) within the patient population, as well as the patient barriers already placed on the table. The proposed solution is to implement change by a number of factors that include, but not limited to, policy change, new assessment tools (See Appendix B), and plans for implementing any type of care for the heart risk patient.

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Other interventions can include, but not limited to: providing culturally competent care, patient teaching at the individual, as well as at the community level, medical management, and assessment of healthcare disparities (See Appendix B). Strict importance of education, as well as prevention of heart disease in all patients is of utmost importance. This is one area a Nurse Practitioner can be utilized in, as they provide overall holistic care with a major part of encompassing education as part of the medical treatment plan. Risk factor screening by providers should also be implemented to catch the disease process as a primary means. This is one of the reasons as to why primary care medicine is the number one key holder as a means to prevent or decrease such a dilemma that continues to increase each year.

c. The Evaluation Plan

There is a process that must be upheld to ensure accuracy or validity of project and client outcomes. Looking at healthcare issues today, CVD is among one of the top priorities today that affects millions of clients, whether diagnosed or undiagnosed. This calls for attention to the healthcare industry as current statistical data shows a great impact for: client quality of life, client outcomes, business outcomes, financial issues, etc. This causes a need to implement a project change, thereby planning and implementing the plan based upon evidential data. This is a necessity, however, determining project efficacy is the big question, as there should be an evaluation plan along with the continuous monitoring. This can be done through several factors, such as but not limited to: methods, variables, tool sets, evidence-based practice, etc. Obtain charts and statistical data related to the amount of heart patients, emergency room visits, as well as

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complications that arise both inpatient and outpatient in one's specific geographical location. Other tools for evaluation can also consist of, client monitoring and use of new assessment protocols as mentioned previously. Establishing a baseline of care and evaluating one's own patients can be a start, as well as creating a data collection of how many patients were found to be at risk, or have some type of healthcare disparity that needed to be looked at should suffice for evaluation purposes.

III. REVIEW OF LITERATURE SOURCES

Clinical manifestations of CVD start in the initiative process from as early as the 'middle age' and onward. Recent studies show that the atherosclerotic process (plaque buildup) begins to develop in as early as childhood. In this case, Hispanic culture and the food preparations in this culture can increase this process even further due to the food content. Fatty streaks (precursors of atherosclerotic plaques) can appear in the inner layer of the aorta in the toddler stages, and in the coronary arteries during adolescence. CVD originates in the presence and/or grouping of risk factors inherent in the individual (general, behavioral, and biological), or in the community he/she is apart of (socioeconomic, environmental, cultural, and urban conditions). Detecting cardiovascular risk factors in adolescents is fundamental in the prevention of CVD and future complications. Systemic arterial hypertension is a powerful cardiovascular risk factor that is closely associated with obesity and has increased in adolescents. The nutritional status during adolescence can be a determining factor of an adults' nutritional status, as well as being overweight during adolescence is related with higher prevalence rates of dyslipidemias later in adult life. Obesity originates from inappropriate diets, and lifestyle

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choices. With that being said, the specific targeted culture has some cultural food choices that can contribute to this process. This targeted culture also has a great deal of healthcare disparities, such as their knowledgebase and awareness of such diseases and outcomes of lifestyle choices being continued on an almost daily basis. The access to healthcare and communication barriers can be quite frustrating, even cause some providers to not want to give full education to aid the patient, thus, limiting awareness and increasing disease initiation. Through nursing consultations, the cardiovascular risk factors and their complications can be identified. A study conducted within the adolescent community proves that regardless of gender and age, risk factors play a vital role in the development of chronic conditions, specifically cardiovascular disease. The teens whom were more at risk were the participants whom were overweight/ obese, and made different choices in lifestyle habits. It addresses the focus on prevention and health promotion in that providers should utilize education to engage awareness. The article indicates,

“Changes in the students' diet patterns, calorie intake, physical exercise, smoking and living habits in general; tracking and forwarding of children identified as at risk of CVD and establishment of links with the community resources and infrastructure necessary” (Ligia D..., 2015)

This article shows how the disease process can start at any age and affect one's quality of life through the entire lifespan. The heart conditions for the most part are chronic, however, management could also warrant another issue as to the barriers that arise. Increasing cultural awareness and risk-factor associations is a great start by focusing on the education component for these patients. Parents would then have a different perspective of their child's lifestyle and dietary habits.

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Cardiovascular disease is the leading cause of death among Latino females (31.5%). Lack of knowledge and misconceptions about women's CVD can lead to delays in seeking treatment and can bring upon an increase in risk of sudden death. Despite efforts to promote public health outreach programs, surveys still show that minority populations still lack knowledge about heart disease and prevention strategies. Presumably, factors of sedentary lifestyles (such as culture, obesity, high rates of diabetes, metabolic syndrome, chronic conditions such as hypertension and hypercholesterolemia, etc.) may contribute to the risk of CVD. Racial/ethnic minority gaps continue to exist in awareness of CVD among women. According to the Framingham Risk Survey, Hispanics have a lower awareness of leading cause of death and are less likely to know heart attack symptoms for example. Data from surveys show evidence of improving CVD knowledge among women; however, ethnic/racial disparities continue to exist. Knowledge also is examined in relation to dietary habits and physical activity. Heart-healthy dietary behaviors associated with salt and sodium consumption, cholesterol and fat intake, and weight management practices were evaluated. One barrier when it comes to cardiovascular disease is in correlation with healthcare disparities; access to culturally competent healthcare. Within this article, it is tailored towards Latina women and being unaware of such a lifestyle habits that bring upon unwarranted health conditions. The study showed that as little as providing the education through the proper language (communication barrier) could improve statistically the prevalence of heart disease. Per the article,

“Community-based prevention efforts are needed to reach many immigrant Latinas, particularly those who are disenfranchised from the mainstream health

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care system and those lacking English-language literacy” (Koniak-Griffin, D..., 2015)

We can see how there really is more barriers than we have though In healthcare, affecting all populations, ages, ethnicities, etc., that the general population need to be aware of.

Based upon the cohort appraisal tool, the study of choice is valid to the overall PICO question and contributes to the project as evidence to further back up the issue of barriers and awareness. Valid by way of targeting the Latino communities and specific factors of self-awareness, and cultural related communication barriers within this specific study.

The American Heart Association provides statistical research and goals as to decrease the prevalence of cardiovascular disease. A wide majority of the population includes the Hispanic population so the AHA is attempting to target this specific population to decrease the prevalence. The study includes risk factors as to why this might be. Culturally competent care plays a role into this matter, as there can be specific risk factors in Hispanics. The socioeconomic and cultural backgrounds incorporate a different type of lifestyle that hinders optimal care and increase prevalence of cardiovascular disease. Lack of education, awareness, and status makes it difficult for such patients to achieve maximal health. With having such knowledge and awareness as primary care providers, one can now partake in specific interventions that can be utilized to decrease not only CVD incidence, but as well as disparities within the Hispanic culture. Use of assessment protocols, and access to healthcare by means of governmental assistance programs, social work worker consults, etc. is only the start for optimal healthcare. Language appropriate education is a key intervention within this specific

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study for CVD risk factors and being self-aware to be able to participate and take control of ones own health status.

The research study that convers the challenges in Preventing Heart Disease in Hispanic populations entails pertinent and crucial data as it highlights the reasons as to why the Hispanic population is at such a high risk, as well as highlights potential interventions necessary for corrective actions. With such knowledge and awareness, certain persons must be aware of such cultures and risk factors of such disease states. Who needs to be alert of the situation, are the medical providers, lawmakers, public health officials, Hispanic populations, etc. Education on how to decrease the CVD risk factors and burdens that are placed upon the Hispanic population are a necessary means. The validity of the study show truthfulness and accuracy that can be placed into current healthcare practice as it includes: expertise within the study conducted, Hispanic population subjects, as well as research methods to test if such interventions correct the issue at hand. By having such statistical data and proof, one can begin more effective and appropriate interventions to decrease such risk factors as discussed for this targeted cultural group.

Increased research studies not necessarily focusing on Hispanic women but the healthcare disparities one faces. It shows that underserved communities can have a decrease prevalence with healthcare disparities based up collaboration with such communities. Lifestyle interventions, dietary interventions, physical activity, blood pressure, lipid control, and knowledge of heart disease should all be incorporated into the plan of care. The lifestyle behavior intervention, which was tested in this study, ended up

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with a positive results by utilizing a community prevention model, thus supporting the intervention within this population subgroup. According to D. Koniak-Griffin et al “A community-based participatory research conceptual framework was applied based upon recognition that collaboration is a key strategy in effectively reducing health disparities in underserved communities.” A high retention rate of selected candidates showing positive outcomes, such as with dietary habits, lifestyle, waist circumference, etc. This simply consists of community-based interventions that are culturally tailored. As the study suggests, collaboration is a key factor for the potential interventions. Collaboration can bring upon many effective interventions, such as effective education, increased provider to patient rapport, as well as among the community itself.

A study conducted to help incorporate interventions to decrease the prevalence of cardiovascular disease among Hispanic woman within the USA. This is the leading cause of mortality among this group, and funding by the CDC has been approved to enhance or initiate this study in Illinois. According to the article,

“Among Hispanic women, lower rates of physical activity may be influenced by traditional gender roles that encourage women to place domestic duties as first priority, leaving little personal time for physical activity.”

This on top of a number of co factors such as the uninsured/ under-insured, socioeconomic factors, etc. play a vital role as in the barriers to leading in a increase of CVD. Hispanics also have a decrease fiber source, lack of fruits and vegetables, increase in sodium levels, lack of awareness, etc. A 12 week lifestyle interventional change was conducted as part of the research study. The study proved to be moderately effective in

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reducing some risk factors within CVD for Spanish-speaking immigrant woman. Positive changes were seen in this group such as better BMI scores, knowledge barriers, fruits and vegetable intake, etc. Social-cognitive theory was utilized as well as evidence-based nutrition and physical activity curricula. This proves to be evident as to contribute in the decrease in prevalence of CVD as to target this population and link it to culturally tailored interventions. Having defined risk-factor assessments, and making one culturally aware by means of education can be a great start to decreasing such risks.

Research conducted as to prove more healthcare disparities among minorities, specifically female minority group. Society has a generalized idea of what cardiovascular disease and its risks or impact on one's life, however, being in certain socio-economic groups, one can lack this basic knowledge, thus putting this group at a higher risk of CVD. For example, most female that are overweight don't necessarily link it with complications, specifically cardiovascular complications. This is another study conducted as to show more evidence with similar methods as to selected candidates being in the hundreds and testing these theories. Questionnaires and surveys, along with behavioral interventions seem to be pretty prevalent among interventions and evaluations to inquire on the minority group assessments. Hispanic women were compared to non-Hispanic as to have awareness and knowledge gaps related to cardiovascular health. The minority group lacks more in education and awareness of such health, thus increasing their risk of CVD. Body size, education, CVD knowledge, awareness, BMI, perception of self-weight, language, etc. all seem to play a role in such a risks for heart disease per the study. Looking upon all these studies and per the article, "sustained educational messages are needed for Hispanic women, such as those in this cohort, to achieve awareness equal

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to that of NHW women.” (E. V. Giardina...) with that being said, great assessment of all minority group are vital to ensure a better outcome of heart health, specifically Hispanic culture patients.

Hispanics have a variation in dietary habits that is reflective of their cultural, heritage, and county of origin. Identifying these differences in their dietary habits is paramount toward findings that nutrition contributes heavily to the weight of preventable diseases and early deaths in the Hispanic population within the United States. Overall, Cubans had higher intakes of total energy, macronutrients, and alcohol over the other groups. Mexicans had higher intake of Vitamin C, calcium, and fiber. Lowest intakes of total energy, macronutrients, folate, iron, and calcium were reported by Dominicans, whereas Puerto Ricans had lowest intakes of Vitamin C and fiber. These variations may help explain diet-related differences in health outcomes observed in Hispanics and Latinos.

Health issues among the adult population reflect lifestyle behaviors and that of cultural behaviors as well. Adolescence and childhood upbringing could very well play a part in a health diagnosis due to its initiation during ones youth and becoming a chronic and silent killer. This Hispanic population among children is rapidly increasing this affecting statically rates and changes among health studies. According to the article,

“Addressing the health of Latino youth is of particular relevance, since the wealth of research indicates that the health status of children and adolescents influences health during adulthood (Braveman & Barclay, 2009).

With that being said, being a Hispanic culture, diet and lifestyle play an important role as this leads to risks of obesity and cardiovascular health issues. The study has been linked

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to several risk factors, such as having an increase consumption of sugary drinks, having less engagement in physical play, as well as having an increase in fast foods. This can be related to financial issues, lack of knowledge, as well as unhealthy cultural foods within the Hispanic culture. As mentioned prior, parenting choices of foods and lifestyle choices they children participate in, all influence health and disease progression states.

According to a study by (Rodriguez, C. J., Cai, J., Swett...) the study they conducted assessed high cholesterol (HC) awareness, treatment, and control rates among US Hispanic/Latino adults in which describe factors associated with HC awareness and management. Their assessment resulted in findings that among Hispanic/Latino adults with HC, almost half (49.3%) were not aware of their condition and only 29.5% were receiving treatment. Men had a higher prevalence of HC than women (44.0% versus 40.5%) but a lower rate of treatment (28.1% versus 30.6%). Those with hypertension, diabetes, and high socioeconomic position were more likely to be HC aware.

Understanding gaps in HC awareness, treatment, and control in among US/Hispanic Latino adults can help inform physicians and policymakers to improve disease management and patient education programs. Simply by a means of collaboration/ education, this particular risk factor of CVD and within this culture can be decreased and help contribute to the decrease in the prevalence of CVD in the Hispanic culture.

Major cardiovascular diseases (CVDs) are leading causes of mortality among US Hispanic and Latino individuals. This study aims to describe the prevalence of major CVD risk factors and coronary heart disease and stroke among US Hispanic/Latino individuals of different backgrounds and socioeconomic status. The results found that age-standardized prevalence of CVD risk factors varied by Hispanic/Latino background;

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obesity and current smoking rates were highest among Puerto Rican participants; hypercholesterolemia prevalence was highest among Central American men and Puerto Rican women. According to Daviglius, M. L., Talavera, G. A... “the report expands the literature on Hispanic/Latino health by describing the prevalence of 5 major, readily measured biomedical CVD risk factors (high serum cholesterol and blood pressure levels, obesity, hyperglycemia/diabetes, cigarette smoking.)” The research also concluded that Hispanics culture continues to rise as the largest minority group, this also has the highest mortality rates related to CVD. By having just the basic knowledge of this and the associated cultural risk factors and barriers, one can target such a large societal group in attempt to decrease the prevalence. Nurse Practitioner or primary care methods can definitely assist in this process by recognition of risk factors, providing culturally competent care in association with targeted population risk factor assessment protocols.

The research study looks upon a specific population group, however, still incorporates a statistic of CVD knowledge in a societal group. It covers and asks participants about their current views of it, their current knowledgebase, lifestyle, and even their demographics. Studies showed that there is a lack of knowledge or awareness of CVD thus creating a barrier to one’s health in terms of cardiovascular health. There can be reason as the study did prove to have better outcomes of knowledge related to certain factors. The study had research findings of increased cardiovascular knowledge or awareness in selected candidates that were non-smokers, lived in higher socioeconomic groups, held higher degrees, paid attention to their diet/weights, etc. With that being said, the Hispanic populations typically live in lower socioeconomic groups, as well as hold lower or no degrees. Cultural foods can also play a role into diet and weight awareness.

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According to Mukattash, T. L., Shara, M... "The findings of the present study, along with others reported in the literature, highlight the need to develop new, more tailored strategies to tackle CVD." It suggest how other literature reviews suggest evidence of lack of knowledge in other countries as well, hence could be a global issue at hand, as CVD is the number one cause of death up to date. Again one can only stress the importance of such a disease, healthcare factors, and healthcare disparities that all contribute to the initiation of such a silent killer. Providers can help put a stop to this by bring about some self-awareness and performing risk factor screens, all by incorporating culturally competent care.

A study by Willey, J. Z., Rodriguez, C. J., Moon..., aims to examine whether the Hispanic ethnicity was associated with a lower risk of nonfatal myocardial infarction (MI) coronary death (CD) and vascular death. Despite a higher burden of risk factors, prior studies have reported that Hispanics have lower cardiovascular disease mortality. Higher studies have identified a consistently high prevalence of vascular disease risk factors among Hispanics, including hypertension, diabetes, physical inactivity, obesity, and metabolic syndrome. Despite these risk factors, Hispanics have been observed to have a lower risk of coronary death. The results found that Hispanics were more likely to have hypertension and diabetes, and were less likely to perform physical activity. Through this survey, the conclusion found a "Hispanic paradox" for coronary and vascular deaths, but nonfatal myocardial infarction. That being said, there is still high disease states and co-morbidities that can complicate a lot of other carious situations and

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disease states. Primary providers again have a duty to prevent such unfortunate events by interventional means.

This study includes information related to the Hispanic population having increase risk factors for cardiovascular disease prevalence, however, have a decrease prevalence in actual mortality rates as compared to non-Hispanics. Informational background consists of reference from the American Heart Association publishing an article to have more culturally tailored interventions towards the Hispanics populations to decrease risk factors or actual heart disease. Possible linked factors can include diet, sociocultural factors, health behaviors, etc... Based on the article,

“In recognition of these issues recent large scale studies... have been initiated to examine this heterogeneity among the Hispanic/Latino population with respect to heart disease risk disease (Daviglius et al., 2012).”

With that being said, there are still many different variations that lack knowledge or studies to prove as to what makes the risks factors higher, however, the mortality rate lower. The Hispanic paradox is continuously being studied and with increase finding of similarity, one can utilize so knowledge or evidence-based into practice within the general public both for Hispanic, and non-Hispanic.

According to Hurley, L. P., Dickinson, L. M., Estacio..., Risk factors for cardiovascular disease (CVD) derived from the Framingham study are widely used to guide preventative efforts. This study compared calibration and discrimination for the three-racial/ethnic models and plotted a 10-year CVD prediction mortality by age for

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three racial/ethnic groups while holding other risk factors constant. This study found that the strength of the association between individual risk factors and CVD mortality differs by race and ethnicity. Minority individuals are at a higher risk of CVD mortality at younger ages than most non-Hispanic whites. With that being said, we have already seen extensive evidence-based research that produce the same conclusions as to the risk factors, and what primary care providers need to be doing when it comes to treating patients, specifically when treating the minority groups. As providers, one should know such risk factor and confirm such disease states as to be able to treat and educate on in the appropriate direction to go within ones own health. Always assess for healthcare disparities and other barriers, and treat current active conditions that may further lead to cardiovascular complications.

The study inquires about having hope and faith for healthy prompting heart health in that education alone is not enough. What else can be done besides providing just education is the question all healthcare providers should ask themselves. Providing for follow up care, social services involvement, and being there for patients is a crucial component to cardiovascular health, along with any type of barrier or disparity. Nurse Practitioners greatly fit this role and responsibility, as they provide holistic care and also having a nursing model background to help capture all aspects of care surrounds the initial diagnosis of CVD. They not only focus on education, but also what led up to the condition, including disparities, and living situations, etc. One can do this by setting up goals, thereby prompting healthy behaviors base upon target measures being met. Collaboration about hope and health knowledge has shown to increase healthier behaviors when it comes to dietary intake and the importance of exercise. One can even

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assess spirituality and culture to help meet halfway when it comes to goals and treatment plans based up assessment of risk factors, etc. Multiple subgroups were examined with similar results, however differed in different categories. Having positive feedback and goals should always be implemented as part of ones plan of care, ensuring that there is hope and positive encouragement with interventions. According to Feldman, D. B., & Sills, J. R.,

“hope should interact with perceived importance of changing one’s diet and exercise habits in predicting increases in health-promoting behaviors at follow-up and, hope is hypothesized to interact with CVD knowledge in predicting changes in health-promoting behaviors at follow-up.” That being said, Nurse Practitioners based upon nursing models, heal through spirituality, hope and faith, culture, that all help encompass that holistic care aspect. This all entails that with Hope and rapport from the FNP, one is more likely to have a different perspective and take on more reasonability for ones own health, thus optimizing outcomes of care.

It has been shown that Hispanics are indeed a vulnerable population, which is again is directed in the article. The article suggests this vulnerable population has increased in the prevalence of cardiovascular disease since this particular group makes up a great deal of the overall population. Evidence shows also that the Hispanic group has dramatic rates that are linked with metabolic syndrome, which can consist risk factors like obesity, diabetes, and high cholesterol/ fats within the body. There are some studies that link this with the cultural dynamic makeup, which can consist of genetics, daily routines, dietary habits, knowledge gaps, as well as geographical location. Other studies have linked it with financial situations, access to healthcare, educational status, lack of

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awareness and education provided, thus incorporating your healthcare disparities that one must assess for. This article also addresses and highlights these risk factors within the Hispanic population associated with heart failure. It has been established how these factors correlate with true barriers that place the burden on one's health, thus giving a primary care provider more of an advantage of how to tackle on this serious disease within this population subgroup.

The article highlights over some of the really important barriers that the Hispanic population faces to contracting cardiovascular disease. The knowledge that was studied within the study is strictly related to preventive behaviors that are linked to cardiovascular disease. Lack of knowledge contributes to the risks for contracting such a disease. Other healthcare disparities are discussed that correlate to the risk factors, such as lack of insurance, confidence, and education that are believed to contribute to the knowledgebase of heart disease. For example, being aware about blood pressure and/or cholesterol levels and their association to heart disease. For example, according to Mochari, H., Ferris, A., Adigopula, S..., "A similar analysis conducted by the Centers for Disease Control and Prevention on racial/ethnic disparities in awareness of high blood cholesterol found 46% of black and 58.2% of Mexican American participants were unaware that their cholesterol level was abnormal." That being said, education and awareness based up risk factor assessment and protocols, can help initiate preventative measures for this particular subgroup and associating oneself away from CVD. Another great factor that was studied was the adherence to medications in which again lack of knowledge, educations, and awareness could contribute to such an issue. The study suggested that an educational intervention could change the statistical data related to such

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issues being accomplished by nurse practitioners and other primary providers. According to the study, “Poor adherence has been associated with substantial worsening of disease and death...” With that being said, it would seem a simple fix would be to gear interventions towards knowledge, medication adherence, and barriers so to speak, however, healthcare disparities still exist as a larger issue, thus preventing this. This could however, change the future for the better by hitting all the target areas to decrease the prevalence of the overall presence of cardiovascular disease and/or the progression of, as well as to decrease the overall essence of healthcare disparities.

Lastly, but not least, one major component that must be addressed to individualize care for this patient subject on combination with CVD is the healthcare disparities we face in society that continues to grow and places burdens on patients, families, and providers. According to research, the disparities among the minorities (Hispanics) continue to rise, alongside them being in a vulnerable state as it is with co-morbidities already being placed upon this subgroup. One illness as we know only exacerbates another or increases the chances of other disease states to come into play, thus even making one more vulnerable and needing more access to healthcare. This, plus all other issues within the social determinants, access to care, finances, etc. According to Vanderbilt, A. A., Isringhausen, K..., “to address the complex needs of these patient populations, healthcare practitioners must understand social determinants of health and utilize a comprehensive health definition, including biological, social, and psychological dimensions.” Once this has been understood for the most part, we can start acting upon and taking the initiative to change this data for the better. Practitioners will now not only understand the issue at hand, but will also understand and to tackle this situation and be

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better able to address all care area needs, therefore, halting disease progression and halting or decreasing healthcare disparities as best as possible. It goes on and even studies this topic with possible solutions that have been deemed affective in care, such as those of care teams through effective collaboration among all healthcare team members in order to achieve the best possible outcomes of care for the patient. This helps ensure that all components and aspect of care can be addressed as best as possible by multiple minds of field expert opinions, and best evidence-based practice solutions offered upon the table. The primary care practitioner can now better manage the overall health management and care of the patient with the best evidence out there in all fields of medicine.

a. Matrix

(See Appendix A)

IV. METHODOLOGY

a. Design of the Study

The proposed study ties into an integrative literature review in order to assess multiple pieces of evidence through professional research journals. This gathers a great deal of evidence as it focuses on a copious amount of research studied and portrayed onto society, thus creating what is known as best evidence-based practice. A theoretical framework will guide the integrative literature reviews, which can include, but not limited to a non-experimental, observational, meta-analysis, practice applications, or theory approach. Multiple studies would be dissected and analyzed to the core, which in turn allows for increased evidence, thus allowing for some type of hypothesis to be formed and portrayed into society. Included within the studies that have been analyzed

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include many methods, such as: Inductive methods, which allow for observations and theories or patterns of observations and leading to the development of theories/ideas. Descriptive data is also seen within some studies for which describes characteristics of the group or population. Qualitative research which is exploratory in nature versus quantitative which focuses on statistics and numbers which can include the Hispanic population statistical data. Surveys and questionnaires will also be seen in multiple research studies.

b. Setting

Not applicable. Multiple pieces of research with a focus the Hispanic population within the United States.

c. People Involved and Resources Needed

People to be utilized for the research to be conducted as to facilitate guidance, provide mentorships, as well as to seek field expert medical opinion. Such people consist of the project committee, which includes the advisor/chair, mentor, as well as your field expert person. Resources needed are access to library reviews, comprehensive literature reviews, professional peer reviewed medical journals, etc. Finance would consist of purchasing additional library resources, printing of articles, editorial help, etc. College campus provides resources necessary to ensure a complete And thorough research project.

d. Sample

The sample will consist of the Hispanic population with both genders being included, as well as all age gaps being included. The geographical location will be limited to the United States. Healthcare disparities will be looked upon as the majority of the

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population consists of unwanted socioeconomic factors, knowledge gaps, and barriers.

Sample size will depend up the study being analyzed and depicted. Hundreds of selected candidates seems to be of average based upon assessed research studies.

e. Ethical Approvals

Not applicable. No new experiments or studies will be conducted that warrants ethical dilemmas.

f. Data Collection:

Data collection will be conducted based upon an integrative literature review, which will be condensed into a matrix sheet in order to assess variations. The matrix guide also allows the data to be compared and contrasted, as well as allows for a quick references guide. These would be the literature or evidenced research to be analyzed.

g. Instruments

Consists of Library reviews, appraisal tools, databank research access would all be necessary to conduct a research study. Critically assessed for the validity of such research plays a vital role in evidence-based practice.

h. Rigor

How strong the research is will be ensured through multiple works of research and ensuring validity.

i. Timeline

5/17/17: Will have current idea in mind with the associated problem in society

5/24/17: Establish PICO question and research question.

5/31/17: Type of theoretical framework.

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6/7/17: Complete introduction to project

6/14/17: Complete a matrix grid for peer reviewed articles.

6/21/17: Complete Methods of project.

6/28/17: Have committee members selected.

7/5/17: Completed literate review.

Ch. 1-3 complete.

11/23/18: Completed Ch. 4

11/25/18: Completed Ch. 5

V. RESULTS AND CONCLUSION

CVD is a problem that greatly needs to be dealt with due to the fact that it is the number one cause of mortality within the United States. It is why and how this specific culture fits into this category, as well as why Hispanics should be a focus as it is related to the high prevalence and statistical rates within this population. As we have seen from all the literature reviews and case studies, we can see that CVD is a pretty major issues today in healthcare, as well as why the Hispanic culture is also a target. Implementing interventions that target the Hispanic culture can greatly decrease the overall prevalence of CVD, as well as create in increase in awareness for this and other populations. We have seen results that the patient population lacks awareness, education, or currently faces some type of healthcare disparity as is. We have also seen other results that CVD can initiates as early as childhood which can be tragic if a loved one knew they could have been contributing to this disease process. All it takes is appropriate awareness, educations, and assessing for risk factors within this population sub-group, as well as

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targeting the community at large to get the word out there. Nurse practitioners, as well as all other primary care providers hold a great deal of responsibility when it comes to taking the initiative of decreasing such rates by several means. A solution must start somewhere, and primary care providers are a great start to implementing one, thereby making them an asset to be utilized in such an issue. Targeting the cultural specifics would be a great start in taking the initiative, as medical management and care would be not only more individualized, but more culturally competent. Death is an extremely terrifying event that happens at some point in life and happens to us all, but when it affects one's family or affects how one must live for the rest of their life, it can create lifelong hardships and hurdles one must overcome.

Primary care providers can target specific interventions within this patient population by utilizing case mix literature reviews, and up to date evidence-based research. Some examples which have been mentioned previously, but not limited to: making society aware, assessing for cultural risk (see appendix B) factors and barriers, as well as providing a great deal of education and follow up care.

The results did have some barriers to the research, however, we have an understanding that the current evidence is enough to know that this is indeed an issue, as well as know enough to target specific interventions. On the downside, no evidence was presented on genomes and genetics, as well as more research can be looked at only with this Hispanic group specifically being targeted.

VI. DISCUSSION

With all the evidence and end results thus far, we have established and not some key points thus far, however, still require further research and data collection to hit on this healthcare dilemma. We have established that CVD is in deed an issue that cause high mortality rates, being the number one cause of death. We have also established that certain cultural heritages, such as the Hispanic culture, are more prone to developing CVD for various reasons, some of which have been confirmed through literature reviews. That being said, not all answers have been answered for the most part, but the general question has been answered to mote of a yes that the prevalence of CVD and disparities can be decreased or prevented. Recommendations for further research can include, but not limited to: Utilizing appropriate assessment tools for those with certain cultures, as well as those with potential healthcare disparities and be able to utilize this data and save it for research purposes. As mentioned from the barriers, further research can incorporate a more target specific (Hispanics) rather than the whole minority group at large. Assessment protocols can be given on a survey type basis for all groups (non-minority and minority groups) to be able to compare and contrast for further research purposes. Lastly for genetic purposes, more evidence and studies can be geared towards genomes for the purpose of genetic connections be tied into the mix from all other risk factors incorporated. That being said, we have enough answers to our questions and know enough thus far to be able to start making a difference to decrease the overall prevalence of CVD through primary care means and awareness for not only providers, but for the community at large.

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VII. REFERENCES

- Balfour, P. C., Ruiz, J. M., Talavera, G. A., Allison, M. A., & Rodriguez, C. J. (2016). Cardiovascular disease in Hispanics/Latinos in the United States. *Journal of Latina/o Psychology*,4(2), 98-113. doi:10.1037/lat0000056
- Centers for Disease Control and Prevention . (2015, August 10). Heart Disease Facts. Retrieved June 21, 2017, from <https://www.cdc.gov/heartdisease/facts.htm>
- Daviglus, M. L., Talavera, G. A., Avilés-Santa, M. L., Allison, M., Cai, J., Criqui, M. H., . . . Stamler, J. (2012). Prevalence of Major Cardiovascular Risk Factors and Cardiovascular Diseases Among Hispanic/Latino Individuals of Diverse Backgrounds in the United States. *Jama*,308(17), 1775. doi:10.1001/jama.2012.14517
- Feldman, D. B., & Sills, J. R. (2013). Hope and cardiovascular health-promoting behavior: Education alone is not enough. *Psychology & Health*,28(7), 727-745. doi:10.1080/08870446.2012.754025
- Giardina, E. V., Sciacca, R. R., Flink, L. E., Bier, M. L., Paul, T. K., & Moise, N. (2013). Cardiovascular Disease Knowledge and Weight Perception Among Hispanic and Non-Hispanic White Women. *Journal of Womens Health*,22(12), 1009-1015. doi:10.1089/jwh.2013.4440
- Hurley, L. P., Dickinson, L. M., Estacio, R. O., Steiner, J. F., & Havranek, E. P. (2010). Prediction of Cardiovascular Death in Racial/Ethnic Minorities Using Framingham Risk Factors. *Circulation: Cardiovascular Quality and Outcomes*,3(2), 181-187. doi:10.1161/circoutcomes.108.831073

CARDIOVASCULAR DISEASE IN THE HISPANIC POPULATION

- Isasi, C. R., Rastogi, D., & Molina, K. (2016). Health issues in Hispanic/Latino youth. *Journal of Latina/o Psychology*, 4(2), 67-82. doi:10.1037/lat0000054
- Khare, M. M., Cursio, J. F., Locklin, C. A., Bates, N. J., & Loo, R. K. (2014). Lifestyle Intervention and Cardiovascular Disease Risk Reduction in Low-Income Hispanic Immigrant Women Participating in the Illinois WISEWOMAN Program. *Journal of Community Health*, 39(4), 737-746. doi:10.1007/s10900-014-9820-3
- Koniak-Griffin, D., & Brecht, M. (2015, September). Awareness of Cardiovascular Disease and Preventive Behaviors among Overweight Immigrant Latinas. Retrieved May 24, 2017, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4312257/>
- Koniak-Griffin, D., Brecht, M., Takayanagi, S., Villegas, J., Melendrez, M., & Balcázar, H. (2014). A community health worker-led lifestyle behavior intervention for Latina (Hispanic) women: Feasibility and outcomes of a randomized controlled trial. *International Journal of Nursing Studies*, 52(1), 75-87. doi:10.1016/j.ijnurstu.2014.09.005
- Lígia, D. A., Helena, D. O., Carvalho, E. D., Valentina, D. S., Frota, K. D., Venícios, D. O., & Araújo, R. O. (2015, August). Risk factors for cardiovascular diseases in adolescents. Retrieved May 24, 2017, from http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S0120-53072015000200014&lng=en&nrm=iso&tlng=en
- Mochari, H., Ferris, A., Adigopula, S., Henry, G., & Mosca, L. (2007). Cardiovascular Disease Knowledge, Medication Adherence, and Barriers to Preventive Action in

CARDIOVASCULAR DISEASE IN THE HISPANIC POPULATION

- a Minority Population. *Preventive Cardiology*,10(4), 190-195.
doi:10.1111/j.1520-037x.2007.06619.x
- Mukattash, T. L., Shara, M., Jarab, A. S., Al-Azzam, S. I., Almaaytah, A., & Hamarneh, Y. N. (2012). Public knowledge and awareness of cardiovascular disease and its risk factors: a cross-sectional study of 1000 Jordanians. *International Journal of Pharmacy Practice*,20(6), 367-376. doi:10.1111/j.2042-7174.2012.00208.x
- Rodriguez, C. J., Allison, M., Daviglius, M. L., Isasi, C. R., Keller, C., Leira, E. C., . . . Sims, M. (2014, August 12). Status of Cardiovascular Disease and Stroke in Hispanics/Latinos in the United States: A Science Advisory From the American Heart Association. Retrieved June 07, 2017, from [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4577282/Schneiderman, N., Chirinos, D. A., Avilés-Santa, M. L., & Heiss, G. \(2014\).](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4577282/Schneiderman, N., Chirinos, D. A., Avilés-Santa, M. L., & Heiss, G. (2014).)
- Rodriguez, C. J., Cai, J., Swett, K., González, H. M., Talavera, G. A., Wruck, L. M., . . . Daviglius, M. L. (2015). High Cholesterol Awareness, Treatment, and Control Among Hispanic/Latinos: Results From the Hispanic Community Health Study/Study of Latinos. *Journal of the American Heart Association*,4(7).
doi:10.1161/jaha.115.001867
- Schneiderman, N., Chirinos, D. A., Avilés-Santa, M. L., & Heiss, G. (2014). Challenges in Preventing Heart Disease in Hispanics: Early Lessons Learned from the Hispanic Community Health Study/Study of Latinos (HCHS/SOL). *Progress in Cardiovascular Diseases*,57(3), 253-261. doi:10.1016/j.pcad.2014.08.004

CARDIOVASCULAR DISEASE IN THE HISPANIC POPULATION

- Siega-Riz, A. M., Sotres-Alvarez, D., Ayala, G. X., Ginsberg, M., Himes, J. H., Liu, K., . . . Horn, L. V. (2014). Food-group and nutrient-density intakes by Hispanic and Latino backgrounds in the Hispanic Community Health Study/Study of Latinos. *American Journal of Clinical Nutrition*, *99*(6), 1487-1498. doi:10.3945/ajcn.113.082685
- Vanderbilt, A. A., Isringhausen, K. T., Vanderwielen, L. M., Wright, M. S., Slashcheva, L. D., & Madden, M. A. (2013). Health disparities among highly vulnerable populations in the United States: A call to action for medical and oral health care. *Medical Education Online*, *18*(1), 20644. doi:10.3402/meo.v18i0.20644
- Vivo, R. P., Krim, S. R., Cevik, C., & Witteles, R. M. (2009). Heart Failure in Hispanics. *Journal of the American College of Cardiology*, *53*(14), 1167-1175. doi:10.1016/j.jacc.2008.12.037
- Willey, J. Z., Rodriguez, C. J., Moon, Y. P., Paik, M. C., Tullio, M. R., Homma, S., . . . Elkind, M. S. (2012). Coronary Death and Myocardial Infarction among Hispanics in the Northern Manhattan Study: Exploring the Hispanic Paradox. *Annals of Epidemiology*, *22*(5), 303-309. doi:10.1016/j.annepidem.2012.02.014

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VIII. APPENDIX A

• Author • Year Published Country	Study Design	Sample Size	Sample Characteristics	Methods	Results	Conclusions and limitations
Balfour, P. C., Ruiz, J. M., Talavera, G. A., Allison, M. A., & Rodriguez, C. J. (2016).	Comprehensive literature review		Hispanics and Minorities	Multiple databanks and resources		Variations can be seen, but further studies still needed. Genetic factors and cultural background still plays a major role.
Schneiderman, N., Chirinos, D. A., Avilés-Santa, M. L., & Heiss, G	Review some of the HCHS/SOL findings		Concerning cardiometabolic and other CVD risk factors.	Need for increase access to healthcare and lifestyle interventions.		Understand and communicate about the diversity within this population in terms of environmental exposures, health behaviors, socio-cultural experiences and genetics to heart disease.
Willey, J. Z., Rodriguez, C. J., Moon, Y. P., Paik, M. C., Tullio, M. R., Homma, S., . . .		2671	Hispanic Population	Survey	Hispanics were more likely to have hypertension and diabetes, and were less likely to perform physical activity.	Higher studies have identified a consistently high prevalence of vascular disease risk factors among Hispanics, including hypertension, diabetes, physical inactivity, obesity,

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El kind, M. S. (2012)						and metabolic syndrome.
Daviglus, M. L., Talavera, G. A., Avilés-Santa, M. L., Allison, M., Cai, J., Criqui, M. H., . . . Stamler, J. (2012)	Multicenter , prospective	15,079	Hispanic Community		Age-standardized prevalence of CVD risk factors varied by Hispanic/Latino background; obesity and current smoking rates were highest among Puerto Rican participants;	Major cardiovascular diseases (CVDs) are leading causes of mortality among US Hispanic and Latino individuals.
Feldman, D. B., & Sills, J. R. (2013).		425	large health fair at a Northern California			It is believed that certain types of behaviors is what changes risk factors and hope can be one indicator to implement change.
Giardina, E. V., Sciacca, R. R., Flink, L. E., Bier, M. L., Paul, T. K., & Moise, N. (2013).		382 Hispanics and 301 NHW	382 Hispanics and 301 NHW	Analyzed from a structured behavioral risk factor surveillance system (BRFSS) questionnaire	Hispanics (27%) were less likely than NHW (88%) to correctly identify the leading cause of death among women,	In order for prevention methods to be effective, interventions needs to target heart disease awareness and knowledge.
Hurley, L. P., Dickinson, L. M., Estacio,	Literature Review		Data from the National Health and Nutrition Examination Survey III			study found that the strength of the association between individual risk factors and CVD

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R. O., Steiner, J. F., & Havranek, E. P. (2010).						mortality differs by race and ethnicity. Minority individuals are at a higher risk of CVD mortality at younger ages than most non-Hispanic whites.
Isasi, C. R., Rastogi, D., & Molina, K. (2016)	Literature Review		Hispanic youth age 6-11.	Hispanic children 6–11 years old is twice as high as the prevalence for non-Hispanic White children of the same age,		Being overweight and having ones blood levels abnormal greatly impede ones health. Heart disease is definitely prevalent when it comes to this. Education and awareness is key. Healthcare disparities should be greatly looked at.
Khare, M. M., Cursio, J. F., Locklin, C. A., Bates, N. J., & Loo, R. K. (2014).	Randomized two-group design		woman aged 40–64 years	effectiveness of the 12-week lifestyle change intervention in reducing CVD risk in underinsured or uninsured		Proved to be moderately effective at improving some risk factors for CVD in Spanish speaking immigrant women.
Koniak-Griffin, D., & Brecht, M. (2015, September).	Randomized controlled trial (RCT)	90+21	Two adjacent communities with similar sociodemographic profiles. Eligible women were self-reported Latina, 35-64 years of age, Spanish-	Conducting a health needs assessment and subsequently testing a heart health promotion outreach	Many women possessed limited knowledge in relation to selected facts about heart disease and prevention	Community-based heart health programs for vulnerable populations are usually administered by providers. This would be a great intervention.

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			and/or English-speaking, and had a BMI ≥ 25 . Low income, Mexican decent.	program utilizing lay health advisors which has oversight by boards. Parent education centers, churches, laundromats, and organizations providing services to children and families (e.g., English-as-a-Second-Language classes, job training).	strategies.	Culturally tailored heart prevention interventions for Latinas, delivered by promotoras in participants' preferred language, can make a difference in improving awareness of heart disease and prevention methods.
Koniak-Griffin, D., Brecht, M., Takayana gi, S., Villegas, J., Melendrez, M., & Balcázar, H. (2014).	Community-based participatory research conceptual framework	288+233	communities of Los Angeles with large populations of sociodemographically similar Latinas. self-identified Latina, 35–64 years of age, Spanish- and/or English-speaking, and overweight (BMI 25).		Lifestyle behaviors showed significantly better rates associated with lifestyle habits	Positive effects of a community-based intervention on dietary habits, physical activity, and other cardiovascular disease risk factors among immigrant Latinas.

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Lígia, D. A., Helena, D. O., Carvalho, E. D., Valentina, D. S., Frota, K. D., Venícios, D. O., & Araújo, R. O. (2015, August).	Descriptive cross-sectional study,	320	20 adolescents 10-19 years.	Risk factors for heart diseases were looked at in the youthful population in the city of Picos. was undertaken in 41 public primary and secondary schools.	60% were female, 15,3% had altered blood pressure, 15.6% were overweight, 5.3% obese. Familial history. Education.	It was shown that there was a dramatic correlation to such risk factors of heart disease such as education, diet, weight, knowledge that relate to the youthful population... Nursing intervention can help improve this issue.
Vivo, R. P., Krim, S. R., Cevik, C., & Witteles, R. M. (2009)	Literature review of epidemiology	45.5 million Hispanic s- U.S. Census	Minorities/ Hispanics	Statistical data related to heart disease, its risk factors, barriers.	Verified the findings of the linkage between Hispanics and heart disease risk factors.	Hispanics suffer from a great deal of risk factors related to healthcare disparities, thus creating that heart disease burden. This can be Socio-economic status, cultural factors, etc.
Mochari, H., Ferris, A., Adigopula, S., Henry, G., & Mosca, L. (2007).	cross-sectional study	214 racial/ ethnic minorities	(71% women; 63% black; 29% Hispanic	Participants were 18 years and older and invited to receive a free onsite CVD risk factor screening and education on CVD prevention	Mean avg. age was 48.8. 59% were unaware of heart disease. 34% stated they were never informed by a PCP of their high blood pressure., or abnormal blood levels (Ex, lipid level). Statements of not enough	Proves that if there is a lack of education, awareness, that it could contribute to medication adherence and prevalence of heart disease.

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					stores with healthy foods, not close enough, not enough time, etc.	
Vanderbilt, A. A., Isringhausen, K. T., Vanderwielen, L. M., Wright, M. S., Slashcheva, L. D., & Madden, M. A. (2013).		Minorities with the USA.	Includes all Minorities groups		Results are limited but still favored that minorities have a high rate of healthcare associated Disparities.	Healthcare Disparities continues to be an issues for the USA, and its understanding why this issues come about. Becoming aware and looking for these risk factors can help change the prevalence of this statistic. Minorities are prone to this for various reasons.
Mukattash, T. L., Shara, M., Jarab, A. S., Al-Azzam, S. I., Almaaytah, A., & Hamarneh, Y. N. (2012).	General framework	1,000		Interview-administered questionnaire		Limited public knowledge and awareness of CVD
Rodriguez, C. J., Allison, M., Daviglius, M. L., Isasi, C.	General framework outlined by the committee chair to produce a		Only English-language studies were reviewed, with PubMed/MEDLINE as our primary resource,	Systematic Review	Status of knowledge regarding CVD among Hispanics and the sociocultural	Healthcare providers should seriously consider providing care with cultural competence as the systematic review highlights the

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R., Keller, C., Leira, E. C., . . . Sims, M. (2014, August 12).	comprehensive literature review		as well as the Cochrane Library Reviews, Centers for Disease Control and Prevention, and the US Census data as secondary resources		issues that impact all subgroups of Hispanics with regard to cardiovascular health.	reasons why. The impact it had within the minority group. Behavior and health outcome impacts.
Rodriguez, C. J., Cai, J., Swett, K., González, H. M., Talavera, G. A., Wruck, L. M., . . . Daviglius, M. L. (2015).	Multicenter epidemiologic study	9835 woman, 6580 men.	Multisite probability sample of Hispanic/Latino adults	Participants were examined.		HC is highly prevalent among US Hispanic/Latino adults
Siegariz, A. M., Sotres-Alvarez, D., Ayala, G. X., Ginsberg, M., Himes, J. H., Liu, K., . . . Horn, L. V. (2014)	Cohort study		18–74 y of age from 4 US cities in 2008–2011 (Miami, Bronx, Chicago, and San Diego)			There has been seen variations among minority groups, cultural backgrounds when it comes to dietary habits.

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IX. APPENDIX B

411 on CVD and Healthcare Disparities- Educational Screen

1. Do you have a more sedentary lifestyle as compared to a more active type of lifestyle?
2. Do you have a certain cultural background other than the American culture?
3. Knowledge of food products such as carbs, fiber, sugar, fats are an important part of you need to know for the day?
5. Are you of any part of Mexican or Hispanic decent?
6. Would you say you are overweight at all?
7. Seeing the Provider/Dr. is not necessary because I am young, or because I feel well and there is no need to go?
8. High blood pressure or cholesterol levels do not not really matter because we have medication to treat them?
9. Cardiovascular or Heart disease is very uncommon and hard to get?
10. Eating my cultural foods on a routine basis is okay because there is no risks involved and/or because I feel fine?
11. Genetics do not play a factor into my own Health or because I am younger, I do not need to worry about genetics at this point?
12. I do not have access to healthcare or do not have insurance?
13. I do not have very many resources available for my well-being or for transportation?
14. I cannot afford healthy foods?

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15. I see provider at least annually?
16. Some foods can cause a rise in blood pressure or cholesterol levels?
17. Long term blood pressure or high cholesterol levels can cause serious health issues, up to even death?
18. Knowledge about foods, fruits and vegetables, and water, is not that important as long as I am eating?

Cardiovascular Disease and Healthcare Disparities within the Hispanic Population

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Abstract

Cardiovascular heart disease (CVD) has been drastically increasing statistically and targeting the healthcare industry in such a way that healthcare professionals hold a dilemma on how to resolve the issue. This number one cause of mortality, this chronic silent deadly illness has been shown to place hardships and burdens among those who are diagnosed or even undiagnosed with some type of CVD, causing patient complications and healthcare issues today. Further issues can be, but not limited to: a selected patient of a certain demographic can be at an increased risk, increase healthcare costs, increase hospitalizations, hardships and burdens for the patient and family all around, up to even death. There has unfortunately been an association with healthcare disparities that the Hispanic population faces, thus putting one at an even higher risk for CVD. As mentioned, this can incorporate a cultural tie in that the Hispanic population is more prone to this disease, specifically to what healthcare professionals believe could be of contributing factors, such as: Healthcare disparities, genetics, culture and lifestyle. With nursing research and assessment protocols, the outcomes of care could change in a positive way, thus meeting the target goal of decreasing the prevalence of CVD and healthcare disparities within the Hispanic population group. Through awareness, primary care prevention (i.e. education), and appropriate assessments and research, one can implement new policies and nursing practice by building upon one's current knowledgebase to decrease the horrible burden of CVD being placed upon patients and the community at large.

Introduction

The Problem Description

Cardiovascular or heart disease can range from an array of heart conditions that acquire gradually throughout one's lifespan. This can happen at any age, however, is more prominent while one increases in age, as well as more prominent in certain cultural backgrounds. (CVD) is the leading cause of death within the United States. (1 in 4 people)

The Implementation Plan

These are some of the basic, yet complex conditions of CVD that can be prevented all through education, self-awareness, and primary care. The proposed solution is to implement change by a number of factors that include, but not limited to, policy change, new assessment tools (See Appendix B), and plans for implementing any type of care for the heart risk patient.

Other interventions can include, but not limited to: providing culturally competent care, patient teaching at the individual, as well as at the community level, medical management, and assessment of healthcare disparities (See Appendix B). Strict importance of education, as well as prevention of heart disease in all patients is of utmost importance.

The Evaluation Plan

There is a process that must be upheld to ensure accuracy or validity of project and client outcomes. Establishing a baseline of care and evaluating one's own patients can be a start, as well as creating a data collection of how many patients were found to be at risk, or have some type of healthcare disparity that needed to be looked at should suffice for evaluation purposes.

This can also be done through several factors, such as but not limited to: methods, variables, tool sets, evidence-based practice, etc. Obtain charts and statistical data related to the amount of heart patients, emergency room visits, etc...



Methodology

Design of the Study

The proposed study ties into an integrative literature review in order to assess multiple pieces of evidence through professional research journals. This gathers a great deal of evidence as it focuses on a copious amount of research studied and portrayed onto society, thus creating what is known as best evidence-based practice. A theoretical framework will guide the integrative literature reviews, which can include, but not limited to a non-experimental, observational, meta-analysis, practice applications, or theory approach. Multiple studies would be dissected and analyzed to the core, which in turn allows for increased evidence, thus allowing for some type of hypothesis to be formed and portrayed into society.

Sample

The sample will consist of the Hispanic population with both genders being included, as well as all age gaps being included. The geographical location will be limited to the United States. Healthcare disparities will be looked upon

Instruments

Consists of Library reviews, appraisal tools, databank research access would all be necessary to conduct a research study. Critically assessed for the validity of such research plays a vital role in evidence-based practice.

Results

With the literature reviews and case studies that were analyzed, we can see that CVD is a major issue today in healthcare, as well as why the Hispanic culture is also a target. Implementing interventions that target the Hispanic culture can greatly decrease the overall prevalence of CVD, as well as create an increase in awareness for this and other populations. We have seen results that the patient population lacks awareness, education, or currently faces some type of healthcare disparity as is. We have also seen other results that CVD can initiate as early as childhood which can be tragic if a loved one knew they could have been contributing to this disease process.

The results did have some barriers to the research, however, we have an understanding that the current evidence is enough to know that this is indeed an issue, as well as know enough to target specific interventions. On the downside, no evidence was presented on genomes and genetics, as well as more research can be looked at only with this Hispanic group specifically being targeted.

APPENDIX B

411 on CVD and Healthcare Disparities- Educational Screen

1. Do you have a more sedentary lifestyle as compared to a more active type of lifestyle?
2. Do you have a certain cultural background other than the American culture?
3. Knowledge of food products such as carbs, fiber, sugar, fats are an important part of you need to know for the day?
5. Are you of any part of Mexican or Hispanic decent?
6. Would you say you are overweight at all?
7. Seeing the Provider/Dr. is not necessary because I am young, or because I feel well and there is no need to go?
8. High blood pressure or cholesterol levels do not really matter because we have medication to treat them?
9. Cardiovascular or Heart disease is very uncommon and hard to get?
10. Eating my cultural foods on a routine basis is okay because there is no risks involved and/or because I feel fine?
11. Genetics do not play a factor into my own Health or because I am younger, I do not need to worry about genetics at this point?
12. I do not have access to healthcare or do not have insurance?
13. I do not have very many resources available for my well-being or for transportation?
14. I cannot afford healthy foods?
15. I see provider at least annually?
16. Some foods can cause a rise in blood pressure or cholesterol levels?
17. Long term blood pressure or high cholesterol levels can cause serious health issues, up to even death?
18. Knowledge about foods, fruits and vegetables, and water, is not that important as long as I am eating?

Conclusion

CVD is a problem that greatly needs to be dealt with since it is the number one cause of mortality within the United States. It is why and how this specific culture fits into this category, as well as why Hispanics should be a focus as it is related to the high prevalence and statistical rates within this population. All it takes is appropriate awareness, educations, and assessing for risk factors within this population sub-group, as well as targeting the community at large to get the word out there. Nurse practitioners, as well as all other primary care providers hold a great deal of responsibility when it comes to taking the initiative of decreasing such rates by several means. A solution must start somewhere, and primary care providers are a great start to implementing one, thereby making them an asset to be utilized in such an issue. Targeting the cultural specifics would be a great start in taking the initiative, as medical management and care would be not only more individualized, but more culturally competent.

Recommendations

Primary care providers can target specific interventions within this patient population by utilizing case mix literature reviews, and up to date evidence-based research. Some examples which have been mentioned previously, but not limited to: making society aware, assessing for cultural risk (see appendix B) factors and barriers, as well as providing a great deal of education and follow up care.

Follow Implementation plan (refer to intro)

Acknowledgements

This Master's level thesis project would not have been made possible if it was not for the faith of my lord and family support all around me. I would like to thank those whom have kept up my drive to stay dedicated, and to accomplish all that I have today through words of encouragement, support, and positive attitudes. I would like to thank God for giving me the faith and hope that sometimes could have been lost, but through prayer, helped me regain focus to push forward. I would like to thank my project chair for her guidance and time to help get me through the last leap of my educational goal. I would also like to thank my dad Tony Jimenez whom is no longer here physically, but here in spirit, for his words of wisdom and believing in me in that I can accomplish anything I wanted in life. Lastly, regarding my education thus far, and the success of this project, I aim to dedicate my life and utilize my current knowledgebase towards my commitment of healing others, as well as continue on to learn and stay up to date with current practice trends for that best possible outcome of care for my patients.