

An Observational Study on Hypertension and Access to Healthcare in Medically Isolated Individuals in the Robeson County Community

Abstract:

Hypertension has a large adverse effect on the general health of the population. On average, it is known that Native American communities are particularly plagued by this disease, among others that effect cardiovascular health. It is believed that this trend comes from the lack of medical care and medical education in these specific populations, as well as the low resources for healthy foods. This study was used as a preliminary project to gain insight into the Lumbee community in Robeson County. It interacted with a specific section of the tribe, the elders in Hoke, Scotland, and Robeson County, and guided a discussion with them on what they believed the problems and the needs of their people were. From the discussions of the three separate counties, I was able to gain an overview of the status of Lumbee health and ways to improve it; they believed that there was a huge lack in health and nutrition education in the school system in their areas and that is one of the reasons that people just do not realize the severity of hypertension and maintaining good cardiovascular health. The other issue that we discussed was the lack of trust of medical professionals that the Lumbees have; the disconnect between the doctor and the patient can cause the patient to not ask the important questions that could help save their life.

Background: This qualitative research project is meant to form the basis of further planned intervention programs in communities that can be described as located in medically underserved and rural areas. This study will specifically focus on the Lumbee Tribe, which is centrally located in Pembroke, North Carolina. This project will provide the groundwork for further work in the Robeson County population as well other counties that have poor health, specifically hypertension. It has allowed us to identify the target demographic, realize what the current socioeconomic, cultural, and geography barriers there are for the susceptible population, and uncover what the general thought and openness there is from the specific population in receiving intervention from an institution via community members in that specific area. There are social and economic disparities that prevent certain populations, such as that of rural Robeson County, to receive adequate healthcare for cardiovascular disease, one of the risk factors being hypertension.

With training community healthcare workers, or community paramedicine, there would be an opportunity of expanding the traditional emergency medical services and thus the ability to connect socially and geographically isolated individuals to better medical care in order to prevent the treatable diseases that are seen in minority and medically underserved populations. This study developed into qualitative data that will be the basis of planned intervention programs that will be able to effectively engage potential victims of sudden death in efficient and sustainable medical care. The area that we have selected to complete this study has been determined, by the United States Department of Health and Human Services, as a Health Professional Shortage Area (HPSA).

This population of predominantly Native Americans has not traditionally been studied as it relates to hypertension and understanding the barriers to healthcare that this population faces. Because of this fact, our objective was to implement this intervention on monitoring blood pressure using public campaigning through the main tribal office for the Lumbee Tribe in

Pembroke, attending public social events that most of the tribe would be in attendance at, and working with local businesses to allow us to place a table outside their establishment and enroll individuals in the study.

The amount of interest and response that we get to this study will also allow us to analyze and develop an understanding of how medically isolated communities see themselves as it relates to their healthcare and their interaction with healthcare workers. This data on health issues and disparities will be important in informing long-term preventative health and chronic disease management interventions that will be required to prevent premature death in hard-to-reach populations.

Aim: It has been determined that rural and minority populations tend to have a greater probability of having hypertension and other chronic illnesses. This study aims to seek out those individuals and observe the population of Lumbee Indians to determine where the best place to implement an intervention program is and what the disconnect of healthcare is for the population. We assessed the enthusiasm in individuals and potential sponsor for the program, learn if a sponsoring organization from the community is necessary and which type, what resources are needed to support the sponsor, and what characteristics might be best for a successful person to work with the sponsor in recruitment and retention of vulnerable individuals.

Methods: The original plan for this study was to implement a physical intervention study on blood pressure control. Our primary site for recruitment will be at the social and educational events that have been organized by the Lumbee Tribe of Pembroke, North Carolina. Through the connections of having a student working on the project, Meagan Watkins, who is an enrolled member of the tribe and who has family in the area, the tribe was open with us speaking to individuals about their health and their thoughts on healthcare at certain large Native American gatherings. The second place that we were permitted to observe and question was at the senior elders' meetings, which are gatherings that occur in Robeson, Hoke, and Scotland County of female senior citizens of the Lumbee Tribe. These meetings were invaluable in presenting information on current access to healthcare, the community environment that they live in, their own self-monitoring of their health, and their overall interest in this program and in preventative healthcare in general. This information will be valuable in understanding what the barrier to healthcare is for certain underserved populations. This will allow further studies on how to form a framework for an intervention that will prevent this isolation from occurring, by removing those barriers and thus allowing preventative healthcare to occur.

The end of this study should allow us to have qualitative data on how to implement and sustain a validated blood pressure control program in a vulnerable population. This will allow us to know for future long-term programs whether a sponsor from that specific community is needed and what type of person and group that needs to be. This will allow us to gauge what the enthusiasm, existing personnel, and training that is already in place and what more would be needed.

The next step for this bridge of relationship is to further allow the population to feel comfortable approaching healthcare professionals and to take away the sometimes daunting feeling of going to the doctor. This will be done by explaining to every group that we speak to, our tie to the hospital and the purpose of our visit.

Results: The beginning of our original study plan stated that we would enroll participants in the Check.Change.Control program that the AMA implemented. After traveling down to Robeson County and speaking with the community outreach of the Lumbee Tribe, we discovered that expecting participants to have access to a computer and to then comply with our requests was an unreasonable assumption for the population that we were studying. They believed that gauging interest in such a program would be more beneficial and that doing a more observational study would be more beneficial for the community and the place that they are at for healthcare disparities.

With this knowledge, we focused mainly on reaching out to organizations that could give us an idea of their perception of healthcare, specifically blood pressure. We contacted the leaders of the female elders group of the tribe for Robeson, Hoke, and Scotland County. These are the predominant counties for the Lumbee Tribe and each one has a specific meeting for the female senior citizens of that county that are in the tribe. At these meetings, they typically discuss status of the tribe, as well as participate in traditional Lumbee practices, such as quilting the Lumbee pinecone and beading Native American regalia. While at the meetings, I would ask general questions about the tribe and their opinions on the state of health for the Lumbee tribe. There was an overwhelming amount of elders that believed that health was a bigger problem for Native Americans as compared to the rest of the population and that they themselves were diagnosed with chronic diseases, with approximately 80% of each group being treated for hypertension. There were three major issues that I summarized from attending the meetings every week. The first was that there was not enough education on the silent problem of hypertension. Many of the women appeared to know that maintaining a normal blood pressure was important for their health, but they only knew that because their doctors' whom they only began seeing regularly when they realized they were having severe pain later in life, were constantly talking to them about taking medications to decrease their blood pressure. However, when I asked why it was important to keep their blood pressure normal, none of the three groups had an answer; their statement was that their doctor insisted on it, so it must be important.

That leads me to the next issue, there is still a disconnect between the physician and the patient. This is possibly seen throughout any population interacting with their doctor, but is particularly seen in minorities. The women put the doctors on a pedestal and believe every word and do not inquire about why they have to do certain things. On the opposite end, I believe that doctors are under a large time constraint and thus may not have the time to explain everything to everyone. I proposed to the groups that if there were regular health meetings held by their doctor or someone on their healthcare team, would they attend. And the answer was yes; I believe that there is not a lack of interest in knowing about their health, but rather the resource where they could learn this information is just not in place yet. I also believe that such a resource would be more beneficial coming from a doctor that is trusted in the Lumbee community, possibly someone that grew up in the area because the community is one that is closed off and not as trusting of outsiders.

The final issue that I gathered from the group is that they are concerned about the upcoming generations because they do realize that there is a problem, but are not sure of how to help. A few of the women suggested having school programs that specifically focused on maintaining a healthy lifestyle that students would participate in every other year starting in primary school. This way they are growing up with the information on health and it becomes a habit early instead of teaching them about it later in life. This healthy lifestyle class would also include information

and rationales on what would happen if a healthy lifestyle is not maintained. To further incentivize middle-aged generation of Lumbee Indians, it was suggested that employers should be recruited to implement the same health courses and possible food demonstrations for maintaining a healthy lifestyle. One example of this is IndigiKitchen that a student in Montana has started for the Black Feet tribe; she travels across the state to various schools, universities, and businesses to give food prep demonstrations of healthy indigenous food.

Discussion: The Lumbee Tribe is a matriarchal community and the elders are very important to the generations below them, by attending the elder meetings every week and gaining a level of trust with the population I was able to obtain opinions from the leaders of the community on what their needs are. This is instrumental for further research in Native American communities and specifically the Lumbee tribe. The information and suggestions they gave me on the resources that are available currently and what is still needed will help us to further develop programs and interventions on ways to best help the community.