How The Issues of Quality of Life Directly Affects the Health Disparities of Native Americans in North Carolina

Honors Project

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INTRODUCTION

The issue concerning the quality of life of Native Americans in North Carolina has been a serious issue for quite some time now. Along with factors that include the quality of life, health issues that affect North Carolina Native Americans has also been a prevalent topic of discussion. Therefore, this study will present the relevance of how these issues of quality of life for Native Americans living in North Carolina are directly related to the health disparities that Native Americans encounter.

The methodology that supports the project is based upon a major in business management and on having personal interests with the health disparities among the native culture. The issues of pertaining to the quality of life will incorporate some business issues along with those pertaining to health.

The issues of quality of life that will be examined in Native Americans in North Carolina include socio-cultural, educational, and economical factors. Even though these issues are similarly related and coincide, they all have specific details that may differ.

These issues will be researched, analyzed, and then placed into context with the relevance of health issues that are related to Native Americans in North Carolina.

Socio-cultural issues have a more direct relationship with economical factors. Some social factors may include the lack of access to health care facilities, lack of access to physical fitness centers, or the overall traditions and behaviors that Native Americans are accustomed to. Even though this issue is sometimes difficult to denote with a statistical figure, it is obvious that the social well being of Native Americans is significantly lower than those compared to Whites.

The relationship of quality of life issues continues with the issues pertaining to educational factors in the NC Native American population. In 2003-2004, Native American students, grades 3-8 scoring a level III or better on the end-of-grade tests was 73.6%. This is 7.7% less than the state average. The state dropout rate for NC Native Americans is almost double compared to that of Whites. The alarming statistics found throughout the issues pertaining to Native American education in NC undoubtedly is a topic of concern that must be considered when discussing quality of life. Education is the foundation for many economical and social factors that will be determined.

Economical factors that deal with income, poverty, and lacking healthcare insurance will be reviewed. The Native Americans' income ratio in recent years has been approximately 0.7 compared to those of Whites. Poverty levels have recently ranged around 20%. Health insurance has not been adequately used by NC Native Americans due to economical problems and lack of financial aid. The problems associated with social-cultural and educational issues clearly determine many of the economic obstacles that these Native Americans face.

BACKGROUND AND INTEREST

The state of North Carolina is made up of eight organized Indian tribes. They are: Coharie, Eastern Band of Cherokee, Haliwa-Saponi, Waccamaw-Siouan, Meherrin Indian, Occaneechi, Sappony tribes, and the largest in all of NC – the Lumbee Indians. The Lumbee Indians of NC make up about 47% of the state's Indian population while the Eastern Band of Cherokee occupy the next largest percentage with 13%. Among the 60% made up by the Cherokee and Lumbee, they are mainly located throughout only six counties. The Eastern Band of Cherokee Indians is found mainly in Swain, Jackson, and Graham counties while the Lumbee tribe occupies most of Robeson, Hoke, and Scotland counties.

A 2002 report showed that there were 111,255 residents reporting their race as Native American, which signifies that NC has one of highest Native American populations east of the Mississippi River. There seems to be a younger average age for Native Americans in NC, according to reports from the 2000 Census that show the population of Whites having had a median age of 37.6 year as compared to Native Americans median age of 29.8 years. Native Americans make up about 1.2% of the North Carolina population.

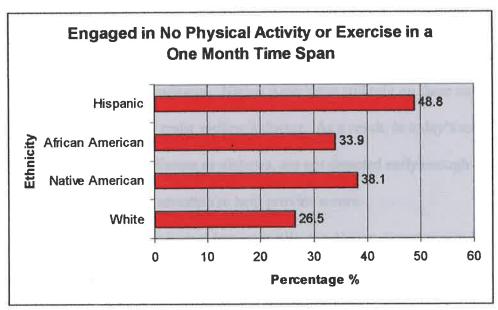
From the personal perspective of being a Lumbee Indian, living in Robeson County, NC, the relevance of identifying the issues of quality of life and how they directly affect the outcome of health disparities influences my interest in developing this thesis.

QUALITY OF LIFE

There have been many definitions considered when discussing the issue of "quality of life" or the overall well being of someone. Phoenix5, a website for men with prostate cancer, simply defines quality of life as the overall enjoyment of life. In another website, a more complex view of the phrase defined by an online glossary site at www.findmehere.com states: "...all of the characteristics of a location's living conditions, including housing, education, transportation infrastructure, leisure-time offerings, climate, spousal employment opportunities, medical and healthcare infrastructure and environmental qualities." The quality of life has claimed to be a difficult measure; however, statistics will show the proven differences in the issues of quality of life between Native Americans and those others living in NC.

SOCIO-CULTURAL

The term "socio-cultural" deals with factors that involve both social and cultural influences. Sometimes, it is difficult to place a determining measure on these types of factors. We cannot justifiably measure why a person acts or behaves the way he/she does. For instance, there is no numeric measure for why a person chooses not to designate time out of their schedule to participate in some type of physical activity. We can only offer theory. However, we can measure statistics on how many of those people have engaged in physical activities or exercise in the past month. This chart below will show figures for the lack of physical activity among ethnicities in NC over a month's time span.



(State Center for Health Statistics and Office of Minority Health and Health Disparities)

We can determine that Native Americans have the second highest percentage of non-participation in physical activity or exercise. There are many factors we might associate with the causes for physical inactivity lifestyles of Native Americans. Some theoretical solutions would be the lack of funding to purchase access to a physical

workout facility or having feelings of self-doubt or lack of confidence to participate in physical exercise outside the traditional cultural family. Reasons for non-participation in physical activity are as varied as the subjects and cannot be accurately determined. However, the behavior of Native Americans determines many of their socio-cultural factors.

Native Americans for centuries have relied on natural remedies for their healthcare needs. This dependence on natural remedies and cures has become part of their culture and traditions. For instance, according to Bernd Wollschlaeger, M.D., medical director of the Aventura Family Health Center, the Cherokee use a plant called, "Goldenseal" to heal wounds and abrasions. Natural medicines have existed for many centuries for the Lumbee people. Even though these remedies are not as widely or frequently relied upon in today's society, they still have an impact on Native Americans' cultural teachings and traditions. Native Americans still rely on these natural remedies for health problems and resist visiting a doctor. As a result, in today's society many diseases, such as heart disease or diabetes, are not detected early enough and need immediate professional attention to help provide a cure.

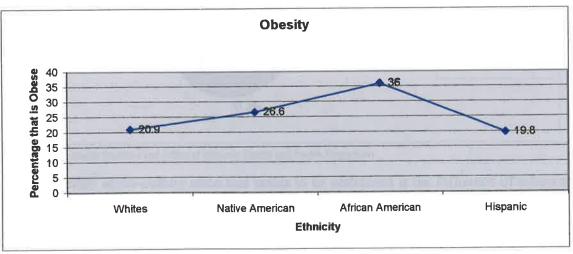
One other psychological impact instilled in Native Americans in North Carolina is the opposing nature of seeing a doctor, especially in Pembroke NC, where the Lumbee tribe make-up a mass majority of Robeson County's population. Elderly people have the attitude; "I will try natural remedies suffer, or just hope that the condition will improve before going to a doctor's office." This attitude comes from tradition and the way they have been raised by their parents and their parents' parents, etc. When these elderly people are asked why they dislike visiting the doctor, they have many reasons. But out of

those who resist seeking early medical attention, most have in common this negative perspective of visiting a doctor. In 2000-2002, 10.6% of Native Americans did not visit a doctor for a routine check-up. Now, there may have been other reasons for them not receiving a check-up, such as financial issues, but we do have to consider this behavioral issue of the uncomfortable traditional attitude of visiting a doctor.

Native Americans in North Carolina have another socio-culture issue that pertains to their diets. Traditional southern home cooked foods are prevalent throughout Native American communities in NC. These foods are highly saturated with fats and cholesterol, creating unhealthy problems for one's body. The common foods Native Americans in NC are accustomed to include fried chicken, pork, and rich desserts, just to mention a few. Along with the lack of exercise and physical activity displayed by Native Americans, these unhealthy diets only contribute to the many health problems they encounter.

The official obesity level is determined by a body mass index that is greater or equal to 30. More than 1 out of every 4 Native Americans in NC is considered obese.

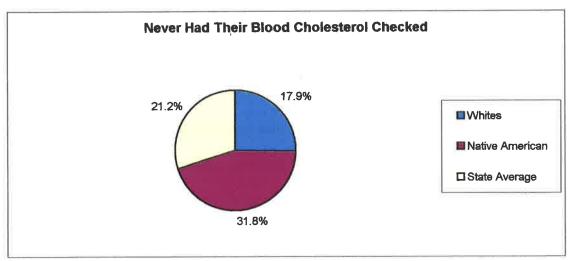
This chart will show the obesity levels of ethnicities throughout NC.



State Center for Health Statistics and Office of Minority Health and Health Disparities)

It is easy is obvious from this chart above, why Native Americans are afflicted by numerous health concerns. The two main health problems among Native Americans include heart disease and diabetes. These two diseases are very prominent among the Native American population and as a result, many Native Americans in NC die each year due to these diseases. Eating unhealthy foods causes high blood pressure, which leads to heart disease. Diabetes may sometimes be genetic, but it can also be related to our diets as well. It is obvious, within the Native American population, that high cholesterol is a problem made greater because of their resistance to seek immediate professional medical attention.

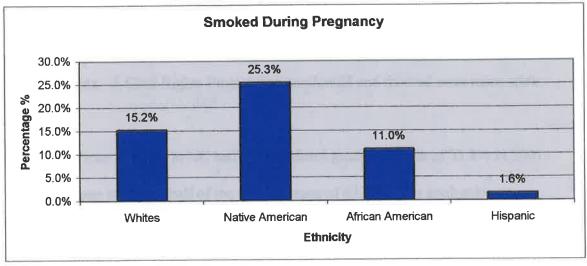
Notice in this chart the differences of those who have had their blood cholesterol checked between Whites, Native Americans and the State Average. It is disturbing to discover that Native Americans account for almost twice the amount of Whites' state averages that do not get regular cholesterol screenings.



(State Center for Health Statistics and Office of Minority Health and Health Disparities)

Another socio-culture issue that needs to be addressed is the influence of tobacco among Native Americans in NC. These statistics will show an alarming fact about how Native Americans use tobacco. There are 36% of Native Americans who are current

smokers, which is the highest in the state compared to the state's average of 25.7%. This chart from the Department of Health and Human Services will show the percentage of all live births from 1998-2002 in which the mother smoked during pregnancy.



(State Center for Health Statistics and Office of Minority Health and Health Disparities)

The Lumbee Indians and the Eastern Band of Cherokee make-up 60% of the state's Native American population. When considering this, we can take a closer examination of how women in these tribes use tobacco. One study on Lumbee women showed that their use of smoke-less tobacco was much, much higher than the rate for all NC women. Lumbee women have a current smokeless tobacco usage rate of 20.6% while other women in NC have a usage rate of 1.3%. Women of NC have a smoking rate of 25% while it is much more prevalent with women from the Eastern Band of Cherokee which have a smoking rate of 39%. Tobacco can cause problems relating to cancer, heart trouble, and other health concerns. It is very important that these issues of socio-culture behavior from Native Americans in NC are made aware of and addressed.

EDUCATIONAL

"Our Voice, Your Voice, One Voice-Nurturing American Indian Families for School Success..." This is the theme for the State Advisory Council on Indian Education in North Carolina. The council realizes the need for education among Native Americans in the state and they identify issues that affect the academic achievement of American Indian students. A Civil Rights Project was conducted and showed even more stark statistics.

Native American students in NC had a high school graduation rate of 33.8% in 2001. This percentage is almost half of the state average of 63.5%. The graduation gap between American Indian students and White students is even more alarming. This gap was at 35.4%, in which the gap itself is larger than the actual graduation rate of American Indians (33.8%).

Many theoretical questions have been asked about why Native Americans struggle with education in NC. Some questions that have derived include, "Is education being instilled in the households of these children?" "Do American Indian ninth grade students express a strong interest in an education past high school?" "If Native Americans attend college, are they studying in fields that will benefit them in the future?"

It is obvious by analyzing the statistics and figures of Native American student performance that they are below the state average. By taking a closer look at the performance data from grade school through high school, it is apparent that disparities do exist.

These two charts shown below demonstrate the trends of American Indian Students performing at of above grade level for grades 3-8.

| Grades | 2001 | | 2 | 002 | 2003 | |
|--------|------|-------|------|-------|------|-------|
| | AI | State | Al | State | Al | State |
| 3 | 69.4 | 76.4 | 71.6 | 79.8 | 75.6 | 82.6 |
| 4 | 64.6 | 74.6 | 67.6 | 77.1 | 76.7 | 83.7 |
| 5 | 71.5 | 82.7 | 70.7 | 84.5 | 79.6 | 88.7 |
| 6 | 58.8 | 70.6 | 62.1 | 74.1 | 72.4 | 81.5 |
| 7 | 62.2 | 75.3 | 65.8 | 76.6 | 79.5 | 85.3 |
| 8 | 74.4 | 83.3 | 75.5 | 85.2 | 81.7 | 87.7 |

| Grades | 2001 | | 2 | 002 | 2003 | |
|--------|------|-------|------|-------|------|-------|
| | Al | State | Al | State | Al | State |
| 3 | 68.8 | 73.6 | 68 | 77.3 | 83.6 | 88.9 |
| 4 | 78.9 | 86.8 | 83.8 | 88.9 | 91.5 | 94.7 |
| 5 | 77.8 | 86.7 | 78.7 | 88.4 | 86.5 | 92.6 |
| 6 | 75.2 | 82,9 | 79.3 | 86.4 | 82.6 | 90 |
| 7 | 73.3 | 81.2 | 76.9 | 83.3 | 79.9 | 83.8 |
| 8 | 72.5 | 79.5 | 76 | 82.3 | 79.4 | 84.2 |

(State Advisory Council on Indian Education)

From years 2001-2003, American Indian students have trailed the state average in every grade. The percentage gap of students from grades 3-8 at or above grade level on both EOG Reading and Math showed a nine-point gap in 2003 compared to that of all students in NC. This gap has decreased over the previous ten years where it showed a 22-point gap. Nevertheless, it still trails behind the state average by an obvious measure. This nine-point gap is irrelevant when considering the gap between Native Americans and Whites, which in 2003 was at a dismal 17-point hiatus.

This same trend continues throughout their high school years as this chart analyzes performance levels from different end-of-course tests.

| | 2001 | | 2002 | | 2003 | |
|--------------|------|-------|------|-------|------|-------|
| Subject | AI | State | Al | State | Al | State |
| Algebra I | 67.6 | 76 | 69.5 | 78.9 | 72.1 | 78.6 |
| Biology | 46.3 | 61 | 58.5 | 69.3 | 47.5 | 61 |
| English I | 50.8 | 68.3 | 50.5 | 69.6 | 67.1 | 81.6 |
| US History | 34.7 | 50.5 | 38 | 50.1 | 43.7 | 54.9 |
| Algebra II | 55.6 | 73 | 69.8 | 76.9 | 70 | 78.8 |
| Chemistry | 46.3 | 74.4 | 67.6 | 84.4 | 69.7 | 83.4 |
| Geometry | 44.6 | 65.5 | 60.1 | 70.6 | 66.6 | 74.2 |
| Physics | 45.4 | 63.9 | 51 | 66.3 | 57.9 | 69.5 |
| Phy. Science | 40.5 | 59.9 | 51.4 | 61.5 | 53.9 | 64 |

(State Advisory Council on Indian Education)

The Native American test scores have for the most part increased over the years, but the state's average has also been increasing. However, the increase in performance levels of American Indian students fails to indicate why Native American students decide to dropout of school.

The American Indian dropout rate, which was 2.85% in 2003, was much higher than the state's average of 1.66%. These American Indian students who drop out of school are not necessarily weak-minded or low performing students. Disturbingly, many of the students who dropped out of high school, excelled during their elementary years, and were considered bright and talented from their assessments. But, we find that when they reach middle or high school, these students get "off track" or lose their primary focus to perform well in school. These types of students invariably drop out of school because of consistently feeling disconnected to, ignored by, and/or feeling insignificant to their classmates or by adults that supervise them. Through personal experience with

fellow students, many come from homes where education is not supported, parents did not complete high school, and role models did not exist.

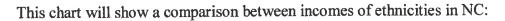
Education is very important in one's life because it can determine so many other aspects for quality of life, such as receiving a decent, well-paid job. In return, a good job will generate a quality income, health benefits, a retirement plan, etc. When Native Americans do succeed with their educational goals, they provide themselves with better opportunities for improved healthcare. They can then afford to visit a doctor, have health insurance to pay doctor bills, or have the funds to purchase a membership at a physical fitness center, which are all necessary components for quality of life.

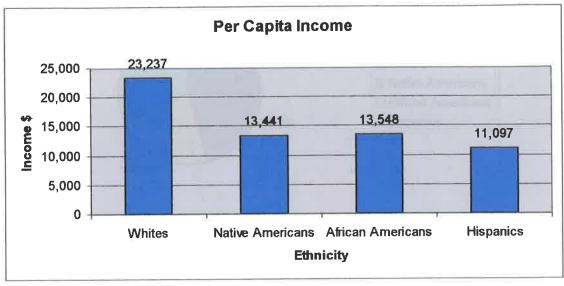
ECONOMICAL ISSUES

It is quite obvious that the economic well-being will determine many factors in a person's life. Some may obtain the pleasure and enjoyment from driving a \$50,000 brand new Mercedes, while watching others drive by in a 1977 Volkswagen Beetle. This would be one way to stereotype a person's level of income. However, assessing how much "healthcare" a person has may be a little harder to judge. It's easy to look at a person and say, "Whoa! He must be loaded with cash by driving that car and wearing a suit like that." But, can we actually say that that particular person is adequately medically insured? Of course we make the assumption that a Mercedes owner would obviously have healthcare insurance, but for the less fortunate person, it could remain a toss up as to whether he/she had health coverage. This determining factor is what has to be analyzed and figured out, in order to determine what factors cause those living in poverty, such as most Native Americans in North Carolina, and to not have the healthcare coverage they need to provide for their physical well-being.

A viable reason not to be able to provide healthcare for oneself would be inadequate income. According to the North Carolina Rural Economic Development Center, Native Americans in NC had a poverty rate of 21% in 2000, which is considerably higher than the states average of 12.3%. Poverty levels are usually determined by comparing them to the federal poverty rate, which is for a family of two is set at \$12, 490. There are only 8.1% of whites in NC who fall under this measure, which is lower than the state average and shockingly much lower than the Native American poverty rate of 21%. Native Americans in North Carolina have a per capita income of \$13,441, compared to 58% of Whites having an average of \$23,237, and second lowest in

the state next to Hispanics. Income can be determined by many sub-factors, such as the quality or specialization of job you may have or perhaps the number of jobs a person may work.



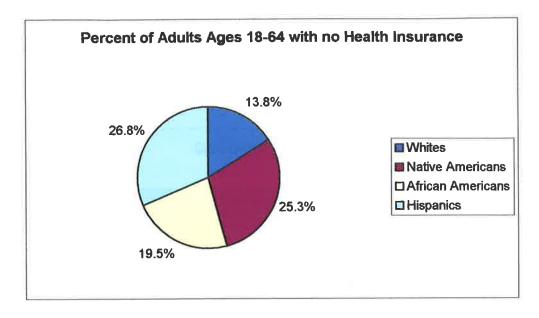


(North Carolina Rural Economic Development Center)

Another general indicator of poverty can be related to housing. The NC Center for Public Policy Research indicates that the definition of "affordable housing" is using 30% or less of annual income on housing. Native Americans spend around 41% of their income towards housing compared to 34% by Whites. So, what does all of this have to do with healthcare?

It is apparent that if these Native Americans are below the poverty line and they spend more on housing than they should; they definitely have fewer funds to buy health insurance or visit a doctor when professional care is needed. The Office of Minority Health and Health Disparities and State Center for Health Statistics evaluated some of these statistics dealing with health insurance, overall health, etc. Their studies show further proof of disparities among diversified groups.

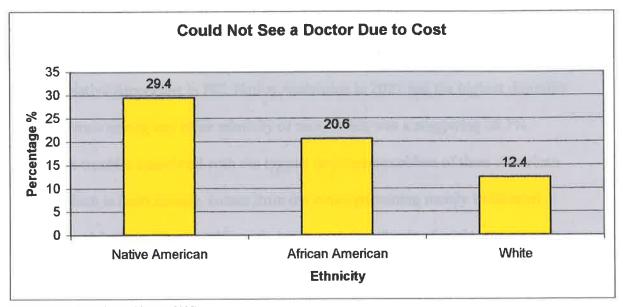
The following chart shows the percentage of adults with no health insurance in NC:



Big contributors to the low-income levels in North Carolina are directly related to the jobs that minorities are involved. For instance, North Carolina has historically been known as a state of manufacturing and farming. Especially in Robeson County. The jobs Native Americans as well as other minorities in Robeson County deal with are the rural industry economies of farming and manufacturing. An article published at the National Conference on Job Loss and recovery in Rural American by Dr. Leslie Hossfeld, showed that in the past 10 years, Robeson County has lost 10,000 jobs between the two industries that has accounted for a loss of \$115 million in wages. This has been the case for many of the rural counties in NC, and notably where most Native Americans reside. If Native Americans are losing jobs, they are losing incomes as well; income that might be used to visit a doctor when needed. The fact that over 40% of Native American income is going to housing does not support the cause either. This is why most funds distributed to Indian tribes by the state are allotted for housing

development. But, when considering the statistics for those Native Americans who can't afford to visit a doctor, perhaps more appropriated funds may need to be spent towards healthcare.

This bar graph will show the percentage of ethnicities that could not see a doctor due to cost.



(North Carolina Minority Health Facts 2005)

The factors associated with socio-culture and education can intercorrelate with those dealing with the economical issues affecting Native Americans healthcare. The socio-cultural and educational dimensions often times determine the economic aspects.

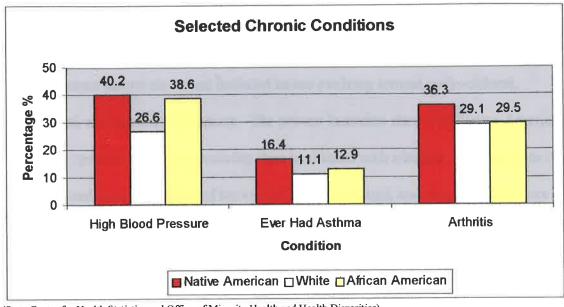
The essential dilemma that has to be realized with the economical status of American Indians in NC is that economics is a problematic issue that persistently plagues the Native American population. It affects their overall quality of life, especially the healthcare needs that they desperately desire and need.

RESULTS

The problems associated in the three issues discussed, socio-cultural, educational, and economical, result in many health disparities among American Indians in NC. The most prevalent of these health concerns come from diabetes, heart disease, and cancer. All of these health disparities mentioned are chronic conditions, meaning there is no absolute cure for them, just treatments. In 2003, according to the Department of Health and Human Services, heart disease, cancer, and diabetes accounted for 52.3% of total deaths of Native Americans in NC. Native Americans in 2003 had the highest disability rate in the state among any other ethnicity or race, which was a staggering 28.7%.

The troubles associated with the biggest healthcare problem of these American Indians, which is heart disease, comes from the issues pertaining mainly to those of socio-cultural factors. These problematic issues such as behavior decisions over one's diet, lack of exercise, and tobacco usage are determinants for the outcomes associated with heart disease. This is the also true of diabetes. The foods we decide to eat and the amount of physical activity that we engage in, play a major role, along with inheritance factor, for contracting and controlling diabetes. Cancer causes may be harder to identify. However, we do know that by smoking tobacco, one will have a higher risk to contract lung cancer, and to acquire mouth cancer for chewing tobacco. Heart disease, diabetes, and cancer are not the only chronic conditions that threaten NC Native Americans' health; studies prove they can be treated more effectively if they are detected early.

This chart will show leading figures in the state of three other chronic conditions.



(State Center for Health Statistics and Office of Minority Health and Health Disparities)

Problems associated with the socio-cultural characteristics of Native Americans can attest for the causes of selected chronic conditions. For instance, high blood pressure and arthritis can result from a lack of exercise. This same inadequate trend continues to elevate health disparities among NC American Indians. It is apparent the problems and causes they encounter share these disparities in this study of selected chronic conditions.

CONCLUSION

The alarming statistics that have been discovered gives evidence that problems with the issues of quality of life do exist. This study has brought into prospective the important issues that contribute to the quality of life for Native Americans in NC. These very important factors discussed included issues evolving around socio-cultural, educational, and economical aspects. The proven facts also show that Native Americans face many specific obstacles involving their healthcare with a higher rate than those of other nationalities. The issues of socio-cultural, educational, and economical factors have proven to be key contributors to many health outcomes for Native Americans. Whether dealing with behavioral issues such as diet or exercise, educational performance, or the cost of health coverage and healthcare, Native Americans struggle and limit themselves to their needs for better health. This study has taken an in-depth analysis of these issues that could determine many health outcomes for Native American people in NC. It is imperative that these Indian people are educated on these issues in order to help prevent the future occurrence of out-dated trends relating to the issues of quality of life from reoccurring. Therefore, increasing the quality of health throughout the Native American population in NC will in return, increase the overall quality of life.

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