

Health Status of African Americans in the Tennessee First Congressional District

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RURAL APPALACHIAN CANCER DEMONSTRATION PROGRAM

ABSTRACT

African Americans in northeast Tennessee, like other residents of the region, are concerned about their health status. Perceptions of community members and health care providers would suggest that many health outcomes in the local African American population are poor. The community challenged East Tennessee State University to find data that can help explore their concerns. The Rural Appalachian Cancer Demonstration Program (RACDP) at East Tennessee State University is a CDC funded grant to explore and identify health disparities in rural Appalachia. This is a preliminary report by the RACDP to identify data on the health status of African Americans in Tennessee's First Congressional District (FCD). Also, focus groups were conducted to gain community perspectives regarding African-American health disparities in the region. Both qualitative and quantitative data is presented.

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MORTALITY DISPARITIES

One of the best available data sources for assessing the health status of this region is national mortality statistics¹. These data show how many people have died from various diseases. Table 1 shows mortality rates from all causes for people in the Tennessee (FCD), compared to state and national rates. Rates are also broken out for the white and African American populations² locally, statewide, and nationally.

Table 1: Age Adjusted Mortality Rates Per 100,000 from All Causes, 1990-2001

	FCD	TN	US
Black	1234.8	1283.1	1182.3
White	967	952.4	869.4
Total	970.4	992.6	894.4

Table 1 shows the widely recognized national health disparity for African Americans – US all causes mortality rates for African Americans exceed rates for whites by 35%. In the state of Tennessee, both African American and white populations experience mortality at 8-10% higher rates than their national counterparts. This pattern of generally poorer health outcomes is typical of that seen in many southern states.

Table 1 also shows that for all causes mortality, African Americans in the First Congressional District have mortality rates that fall in between state and national rates for African Americans. Rates for whites in the FCD are slightly higher than rates at the state and national levels, but remain much lower than rates for the local African American population.

Therefore, when looking at all causes of death, it appears that African Americans in the FCD share the excessive mortality of African Americans nationally, but living in the FCD does not appear to pose an additional mortality burden.

Tables 2, 3, and 4 show the same rate comparisons for mortality from three of the most widespread diseases – heart disease, cancer, and diabetes. Heart disease and cancer mortality show similar patterns to all causes mortality for African Americans in the FCD, with local rates falling between state and national rates. Diabetes, however, is a very different story.

Table 2: Age Adjusted Mortality Rates Per 100,000 from Heart Disease, 1990-2001

¹ Source for all mortality data is the National Center for Health Statistics (NCHS), accessed through the SeerSTAT program, <http://seer.cancer.gov/seerstat/>

² All mortality data shown for African Americans in the FCD should be interpreted with extreme caution. Overall number of deaths are low, because of the small population size. As a result, rates are highly unstable, and may fluctuate significantly over time. Data are presented here in an effort to encourage discussion and further investigation, not to provide conclusive evidence relating to health disparities.

	FCD	TN	US
Black	371.4	397.6	355.7
White	305.6	304.5	280.5
Total	306.4	314.8	285.2

Table 3: Age Adjusted Mortality Rates Per 100,000 from Cancer, 1990-2001

	FCD	TN	US
Black	276	287.8	264.1
White	211.9	210.4	203.2
Total	212.7	218.9	206.7

Table 4: Age Adjusted Mortality Rates Per 100,000 from Diabetes, 1990-2001

	FCD	TN	US
Black	60.4	48.7	46.4
White	22.6	20.8	20.9
Total	23.3	24	23.1

Nationally, African American diabetes mortality is more than double white mortality, so it is already a very significant health disparities issue at state and national levels. Locally however, there is evidence of an even greater problem. Although the data is not very stable (see footnote 2), diabetes mortality rates for African Americans in the FCD are 25-30% higher than state and national rates for African Americans.

Previous research has shown that for many health disparities, the burden does not fall equally on all ages and genders. Focusing on diabetes in the FCD African American population, it is important to understand where risk is highest, to be able to target interventions most appropriately. Table 5 compares diabetes mortality rates for certain segments of the local African American population to rates for African Americans statewide, to see which groups show the greatest excess mortality.

Table 5: Excess diabetes mortality of African Americans in FCD, compared to African Americans in Tennessee, 1990-2001

Women ages 40-64	+ 38%
women ages 65+	+ 29%
men ages 40-64	+ 22%
men ages 65+	+6%

Table 5 shows that the local African American diabetes mortality disparity is stronger among women and people under 65, and strongest of all for women under 65.

PREMATURE MORTALITY

The evidence of more excessive deaths from diabetes in the younger African American population locally parallels other data from this region that shows disturbing levels of premature mortality. Death from diseases like heart disease, cancer, and diabetes for people under 65 is defined as premature mortality because in many cases, with appropriate risk reduction, detection, and treatment, these deaths could be prevented. Figure 1 shows data from the Tri-Cities region (northeast Tennessee and southwest Virginia) comparing local mortality rates to national mortality rates.

Figure 1: Premature mortality for people 40-64 and 65+ in the Tri-Cities region, compared to their age group peers nationally

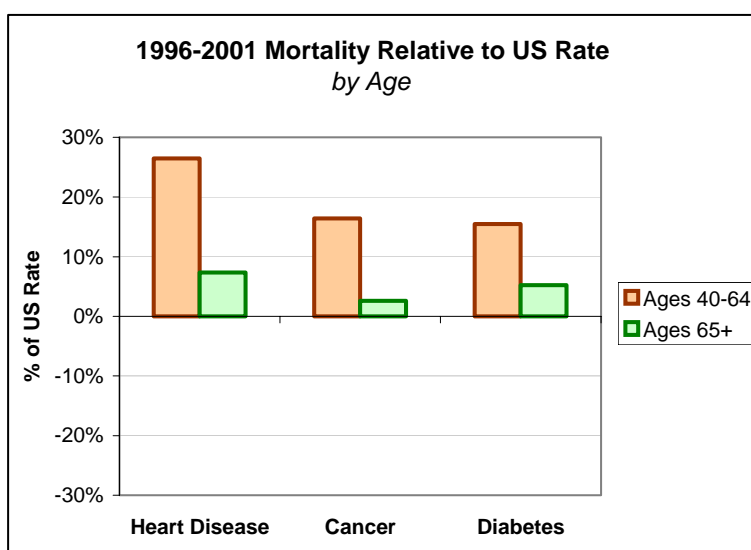


Figure 1 shows that 40-64 year olds in this area are 28% more likely to die from heart disease, 17% more likely to die from cancer, and 15% more likely to die from diabetes than their peers nationally. Therefore, because of this, the higher risk of diabetes mortality in the FCD African American population under 65 fits into a wider local pattern of excessive premature mortality.

Prevalence of Diabetes & Obesity

The disturbingly high rate of diabetes mortality for FCD African Americans prompts obvious questions about how many people in this population have diabetes or diabetes risk factors. There is no publicly available data that can answer those questions, but there is data available at the state level.³

Table 6: Percentage of 2002-2003 Tennessee Population Reporting Obesity & Diabetes

³ Obesity and diabetes prevalence are sourced from the publicly available Behavioral Risk Factor Surveillance System (BRFSS) survey, accessed through www.cdc.gov/brfss

	Black	White
% Obese	36.6	22.4
% Diabetic	14.4	8.4

Table 6 shows that an African American in Tennessee is 60% more likely than a white person to be obese and 70% more likely to have diabetes. However, recalling back to Table 4, an African American in Tennessee is 130% more likely to die from diabetes. That points to two different contributors to the rate of African American diabetes mortality in the state – more African Americans are obese, and therefore higher risk for getting diabetes, and more African American diabetics die from their disease.

Another pattern evident in the state level diabetes data is the influence of poverty on diabetes prevalence. Table 7 shows how many people in Tennessee report being obese, and how many report being diabetic, for different levels of annual household income.

Table 7: Percentage of Tennessee Population Reporting Obesity & Diabetes, by Annual Household Income (1999 Data)

	<\$15,000	\$15-24,000	\$25-34,000	\$35-49,000	\$50,000+
% Obese	27.0	29.3	22.2	21.1	24.5
% Diabetic	17.8	12.0	8.9	8.1	6.0

Table 7 clearly shows that while obesity is only moderately affected by income, the likelihood that someone has diabetes is very different for people of different income levels. A person in a very poor Tennessee household (annual income of less than \$15,000) is 20% more likely to be obese than a person in a household with an annual income exceeding \$50,000. That same person from a poor household is 200% more likely (or three times as likely) to have diabetes.

While obesity is a clear and well understood risk factor for diabetes, poverty also seems strongly linked to diabetes prevalence. Table 8 shows the % of FCD African American and white households in each of the income brackets⁴ defined in Table 7.

Table 8: Percentage of FCD Households in Each Annual Household Income Bracket (1999 Income)

	<\$15,000	\$15-24,000	\$25-34,000	\$35-49,000	\$50,000+
Black	32.1	17.9	15.7	16.6	17.8
White	22.4	16.9	15.6	18.3	26.8

⁴ Income data taken from 2000 US Census, accessed at www.factfinder.census.gov

Clearly there are significantly more FCD African Americans living at income levels that correspond with much higher occurrence of diabetes.

FURTHER QUESTIONS

The data presented in this report do not fully answer the questions raised by the local African American community about their health status. If anything, more questions are raised. For example, concerning diabetes:

- 1) What kind of education, support, and primary care do local African American diabetics receive?
- 2) Why are obese poor people far more likely to get diabetes?

We clearly need to better understand the patterns of care and behavior that related to diabetes prevention and treatment. Local community members, diabetics, diabetes educators, and care providers will likely have some rich insights, as would healthcare claims data (particularly for low income Tennesseans, such as those enrolled in TennCare). Answering these kinds of questions will involve a continued partnership of data analysis and community guidance. We need the answers in order work together to improve health outcomes in the local African American community.

QUALITATIVE RESEARCH

Prompted by questions from the community, focus groups were held in order to gather qualitative data regarding the health of African-Americans in northeast Tennessee. This study was apart of a larger research project that aimed to identify, explore, and describe cancer disparities in Appalachia. Do to earlier findings on the pre-mature mortality of African-Americans in the region, RACDP sought to seek answers in the community. Three groups were held in the course of one month in the spring of 2006 at a church in the community. The participants (N= 25) were collected through convenience sampling by phone or mail and given a reminder letter. The participants consisted of a mixture of male and female African-Americans from northeastern Tennessee. The participants were asked a series of questions:

- When you hear the word “cancer”, what thoughts come to mind?
- What role does race and economics play in the care one receives?
- Where do you get you healthcare information, i.e., media, social networks, healthcare system?
- Share a story about someone or yourself with cancer.

Each participant was given an opportunity to answer these questions as well as to offer more information and insight into the subject of African-American disparities in the area. Findings from the interviews were informative and gave a better understanding of the factors associated with African-American health disparities in the region.

FINDINGS

First Group

The first group consisted of three participants and they were all members of a local church in the community. They were given the informed consent forms and IRB procedure was explained. When asked what they thought about when they heard the word “cancer”, all of the participants immediately thought of death. There was no mention of a cure or hope in this group. When asked if race or economic factors influenced their healthcare, the participants gave mixed results. The male of the group stated that he thought that he received proper healthcare from his physician, however, the women in the group disagreed.

One participant even compared a former female African-American doctor to her current female Caucasian doctor and felt that the race of the physician and the patient played a large role in her experience. The participants stated that most of their healthcare information came from their physicians and social networks. When the participants were asked to share a story with the group about cancer, most were negative stories about cancer and death, but some participants shared survival stories about their own battle with cancer or a loved ones battle. It is interesting to note that even though some of the participants knew cancer survivors, most also thought that cancer was a death sentence.

Second Group

The second group consisted of six women, who were members of the Thankful Baptist Church. This group echoed the feelings of the first group regarding cancer; however, “cure” and “family” were two new concepts that had not been mentioned in the previous group. The next question, regarding the role of race and economics in quality of care, elicited positive stories about the participants’ healthcare. However, other problems arose about today’s healthcare system’s “revolving door” reputation. The participants said that they get a lot of their medical information from media channels such as websites and books as well as their social networks.

The participants stated that they believed that race and economic factors play a large role in the quality of care that they receive. For example, one participant stated that she dressed well to go to the doctor because she felt that she received better quality treatment and service. Many of the stories told by the participants of focus group 2 were negative stories about the failure of the healthcare system. In this group, the stories consisted of wrongdoing on the part of the healthcare system. It was clear from the content of these stories that there was distrust of the healthcare system.

Third Group

The third group consisted of 15 senior citizens all contacted through the Johnson City Senior Citizens Center. Although some of the answers echoed the previous groups

thoughts, the insight from some of the cancer survivors were more positive than the other groups. Many thought about cancer as a death sentence, however, positive thinking was mentioned as key to survival from one of the participants.

Although they remained positive, when discussing stories about cancer, negative feelings about the healthcare system arose. One participant told a story regarding her niece being diagnosed with cancer and she would be alive today if she would have received proper medical care. Another told a story about having cancer and that she felt that she was alone, the healthcare system did not prepare her for the emotional toll that the illness took on her.

DISCUSSION

The participants, for the most part, thought of death when thinking of cancer. Also, the participants thought that race and economic status played a large role in the quality of healthcare that they received in this region. Some of the participants stated that the lack of African-American healthcare providers made it difficult to get the care that they wanted. Most of the participants got their health information from either healthcare providers or their own social networks. Although most of the stories about their loved ones with cancer were negative, cancer survivors' stories were more about the emotional trials that comes along with having cancer and having a positive attitude to beat it. There was also mention of being proactive about ones healthcare and there was a strong sense of distrust from the community participants toward the healthcare system as a whole. Many felt that there was a lack of community programs about the health of the African- American community. The participants were also concerned about the environment and noted that the environment could be a potential cause of cancer in the area. The participants felt that the disparity between Caucasian and African-American mortality rates was due to the fact that African-Americans do not go to the doctor if they are asymptomatic. Maintaining uncertainty was also a reason given by the group for the lack of treatment received by the African-American community.

Themes

There were also themes that emerged from the focus groups.

- African Americans feel that they are at higher risk:
 - They live in unsafe neighborhoods from a health stand point
 - Many African Americans refuse to seek regular health care for checkups
 - Many African Americans stated they did not want to know if they have cancer
- Many African-Americans perceive that they receive different health care
 - Insurance companies having a major role in the health care one receives
 - Not receiving the same health care services that whites receive (attention from doctors and services doctors give African-Americans)
 - African Americans feel they have bad information about cancer: the community does not know the truth about the disease

Questions	Findings		
	FG1	FG2	FG3
When you hear the word cancer what thoughts come to mind?"	"death", "fear", "why me"	"death", "fear", "family", "why me", and "cure"	"death", "fear" and "positive thinking"
"What role do you think economics and race play in the care one receives?"	"Race plays a large role", no role with some doctors	No. One must be proactive in their healthcare "Revolving door" reputation	Somewhat a role in care. If you can't afford it.
Where do you get you healthcare information, i.e., media, social networks, healthcare system?	Social networks, healthcare providers	Media channels (books and websites), healthcare providers	Social networks, doctors
Share a story about someone or yourself with cancer.	<ul style="list-style-type: none"> received good treatment because she is a nurse emotional stress of the disease was something the healthcare industry can not prepare one for. grandmother and father both died of cancer. mother had breast cancer and survived and he felt she received some of the best care in the area. 	<ul style="list-style-type: none"> Uncle took treatments and still died Healthcare system failed to catch the tumor felt that a friend died of cancer because TennCare refused to pay for the screening 	<ul style="list-style-type: none"> the healthcare system was no comfort staying positive is key to recovery have to go to doctor and you have to get checked