STROKE DEATH RATES HIGHER AMONG AFRICAN AMERICANS THAN WHITES IN APPALACHIA

The summary below is from the full report titled Stroke Mortality Disparities in the Population of the Appalachian Mountain Region.

What is the problem and what is known about it?

Stroke is the fourth leading cause of death in the United States and worldwide. It is a major public health, health care, and social problem. Previous studies have shown that differences in stroke death rates (stroke mortality) exist not only between different geographic regions, but also within residents of the same geographic region. This prompted us to investigate whether racial disparities in stroke mortality exist within the Appalachian Mountain region where most people are rural and White (91% Caucasians, 7.7% African Americans, 1% Asians, and 0.3% Native Americans).

Where was the study done?
The study was conducted by Alexander Sergeev, MD, PhD, MPH from the Ohio University Department of Social and Public Health. Dr. Sergeev used data collected by the Centers for Disease Control and Prevention.

What did the researchers find?
Stroke death rates among adults 25 years and older in the Appalachian region (96.7 per 100,000 population) was higher than for adults of the same age living outside Appalachia (80.3 per 100,000 population). We found that differences in stroke death rates do exist within the Appalachian Mountain region where stroke death rates were the highest in African Americans as compared to other racial groups: 1.4 times higher than in Caucasians, 2.8 times higher than in Asians, and 3.6 times higher than in Native Americans.

What does this study tell us?
This study tells us that differences in stroke death rates exist even within the same Appalachian Mountain region. While most Appalachian people are White, African Americans of the region have much higher stroke death rates than other racial groups in the same region. Public health and health policy interventions are warranted to reduce stroke death rates and eliminate stroke mortality disparities in Appalachia.

GENETIC CHANGES CAUSED BY DIET LINKED TO HEART DISEASE

The summary below is from the full report titled, MTHFR C677T Polymorphism among Meiteis of Manipur (India).

What is the problem and what is known about it?

Researchers have found that one gene located at position 677 in the body’s genetic coding system changes over time, especially if it is lacking nutrients such as folic acid and vitamin B12. As the enzyme, MTHFR, works on changing this genetic code, a person may be more prone to complex diseases such as thrombosis, hypertension, stroke, and heart disease.

Why did the researchers do this study?
The Meitei population generally follow a non-vegetarian diet, which contain high levels of vitamin B12, and also consume good amounts of vegetables, known for high levels of folic acid. The researchers studied Meitei patients to find out levels of the MTHFR enzyme that would cause gene changes to determine proper counselling and
treatment programs for this population.

Where was the study done?
The study was conducted among the Meitei population who live in four valley districts of Manipur, India. Blood samples and laboratory analysis were done in the Department of Anthropology at the University of Delhi in India.

Who was studied?
The Meitei population is a major ethnic group of Manipur and makes up almost 60% of the total population. Their language is the Tibeto-Burman language of northeast India.

What did the researchers find?
Around 30% of individuals were found to carry the changed C677 gene, which is lower than European populations but higher than others have found among some Indian and Mongoloid populations.

What does this study tell us?
This study gives us more information on possible causes of complex diseases among the Meiteis. Health educators and professionals should use the information to develop health programming to encourage a diet richer in foods with vitamin B12 and folic acid for those at-risk.

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**Church Activities Attended More Often by Overweight African American Men**


**What is the problem and what is known about it?**
African Americans are more likely to be overweight than White Americans. Overweight people are more likely to have diabetes (high blood sugars), heart problems, and some types of cancers.

**Why did the researchers do this study?**
African American churches have already shown that church programs can help people lead healthier lives. We hope that the more that is known about unhealthy weight, more African American churches will be better able to help people lose weight.

**Where was the study done?**
Throughout the United States.

**Who was studied?**
African American adults.

**What did the researchers find?**
African American men who went to church activities (not including going to church services) were more likely to be overweight. This was not true for African American women. Just going to church services did not make these men and women more likely to be overweight.

**What are the limitations of this study?**
We used survey information at one point in time and did not look at people over time. So, we do not know if African American men were overweight first and then started going to church activities or if African American men went to church activities first and then became overweight. It may be that one does not cause the other at all and that some other factor is causing African American men to be overweight and to go to church activities.

**What does this study tell us?**
The study tells us that a lot of African Americans, especially African American men, who go to church activities are overweight. The study tells us that a lot of African Americans, especially African American men, who go to church activities are overweight. We used statistics to make sure factors like being rich, being married, being old, being educated, and smoking did not affect our study results. Finally, a study with more people may show that church activities are linked to being overweight in African American women too.

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**Racial Differences in the Thickness of Fat around the Heart**

*The summary below is from the full report titled, Race and Epicardial Fat: The Impact of Anthropometric Measurements, Percent Body Fat and Sex.*

**What is the problem and what is known about it?**
The layer of fat around the heart, known as epicardial fat, has been shown to be linked with various heart diseases.

**Why did the researchers do this study?**
We wanted to find out how the thickness of this fat varies by race and how its relationship to race is affected by age, sex, weight, size of waist, and the percentage of total fat in our bodies.
Where was the study done?
This study was done in the state of Michigan during the years of 2009 and 2010.

Who was studied?
A total of 150 patients (102 Blacks and 48 Whites) were included in the study. The patients were older than 18 and came to our hospital complaining of chest pain. All patients in the study were given a stress test with an echocardiogram.

What did the researchers find?
We found that Whites were more likely to have more epicardial fat than Blacks regardless of age, sex, weight, size of waist, or the percentage of total body fat.

What are the limitations of this study?
We used an echocardiogram to measure the thickness of the epicardial fat but it is not the most reliable tool for this measurement. Also, this study does not answer the question of how this difference in the thickness of epicardial fat by race relates to the development of disease in the heart or blood vessels.

What does this study tell us?
This study tells us that there is a racial difference in the thickness of epicardial fat, with Whites having more epicardial fat than Blacks. It also tells us that this racial difference is not linked to how old people are, their sex, weight, size of waist and the percentage of total fat.

LINKS TO CHILDHOOD OBESITY IN ISRAEL

The summary below is from the full report titled, Factors Associated with Childhood Overweight and Obesity among Acculturated and New Immigrants.

Where was the study done?
The study was done in Beer-Sheva, in southern Israel.

Who was studied?
Two hundred fifty-eight preschool children, and their mothers, took part in the study. The children were between 4 and 7 years of age and attended one of the 12 preschools in low-income areas of Beer-Sheva. Families who had lived in Israel 10 years or more before the study were considered acculturated immigrants; those living in Israel 9 years or less were considered new immigrants.

What did the researchers find?
In this low-income child population, children who were more likely to be overweight or obese were in the acculturated immigrant group, or had a mother who underestimated the child’s weight or a mother who smoked.

What are the limitations of this study?
This study describes the association between a mother’s lack of knowledge of her child’s weight and childhood obesity but does not answer the question about what causes childhood obesity among second generation immigrants’ children.

What does this study tell us?
National policy on obesity prevention could target efforts to address a mother’s understanding of her child’s weight as well as smoking habits to deliver programs to acculturated second generation immigrants.

DIFFERENCES IN CANCER RATES BETWEEN HISPANICS AND WHITES IN THE UNITED STATES

The summary below is from the full report titled, Differences in Incidence Rates and Early Detection of Cancer among Non-Hispanic and Hispanic Whites in the United States.

What is the problem and what is known about it?
Because many cancers are related to lifestyle choices, differences in cancer rates between ethnic groups are largely due to differences in lifestyle behaviors such as smoking and diet. Previous research has shown that while cigarette smoking in Hispanics increases as they migrate to the United States, smoking among Hispanics remains lower than that of Whites. Because of this, Hispanics have lower rates of several tobacco-related cancers (lung and bronchus, oral cavity and pharynx, urinary bladder, and pancreatic...
as). It has also been shown that Hispanics tend to consume more fruit and vegetables each day than Whites, which can help explain their lower rates of colon cancer.

Why did the researchers do this study?

We wanted to find out if efforts in recent years had been successful in reducing ethnic disparities in early cancer detection among Hispanics.

How was the study done?

This study compared cancer incidence rates between Hispanics and non-Hispanic Whites in the United States from 1992 through 2009. It also compared the stage of cancer between the two groups.

What did the researchers find?

Whites tended to have higher cancer rates than Hispanics (40% higher for males and 34% higher for females). However, Whites were diagnosed with cancer at an earlier stage than Hispanics. Between 1992 and 2009, the difference in cancer rates increased for many types of cancer, such as melanoma, thyroid cancer, oral cavity and pharynx cancer, lymphoma, urinary bladder cancer. However, for a few types of cancer, the difference in rates narrowed between the two groups (for example, colon and rectal cancer and corpus and uterus cancer). To understand why there was a widening or narrowing gap in specific cancers over time requires further study of cancer risk behaviors of both groups.

For most types of cancers, Whites were more likely to be at an earlier stage at diagnosis than were Hispanics. This would tell us that screening and access to care are likely better for Whites. Other research shows that Hispanics use cancer screening test less often than Whites.

What does this study tell us?

The difference in rates of many types of cancer between Hispanics and Whites in the United States has grown wider over the study period. The poorer screening practices among Hispanic Whites continue and may be part of the reason for this gap.