

FOR THE PATIENT

DISPARITIES IN STATIN TRIALS FOR CHILDREN

Research shows that not all people receive equal types of health care. Other research has shown that African Americans are more likely to have diseases of the heart and blood vessels. Differences in the health care a person receives may be due to difficulty in accessing care or to the way health care is delivered to different people.

These differences in health care for different groups are known as disparities. Many medical and public health associations are working to get rid of health disparities.

There is little information about differences in the care of children with heart disease and high cholesterol. An important way of learning about some of these disparities is to look at whether or not groups are enrolled in research studies. The idea is that if health conditions like high cholesterol and heart disease are studied in African American children, then disparities in these groups can be studied and hopefully removed.

In our study, we examined children with HeFH, a serious condition in which blood cholesterol levels are very high and eventually lead to heart attacks in young adulthood. This condition is common and affects people of all

ethnicities worldwide. We looked at the ethnic background of children enrolled in research studies to see if a cholesterol drug known as a statin was useful in children with this condition.

The first goal of this study was to see if children of different ethnic backgrounds were equally included in these studies. The second goal of this study was to see if something known as a 'founder effect' may contribute to having one ethnic group more likely to be studied or not. Founder effects occur when a small group of people with a disease move to a new area. As their population grows over time in the new area, there is a chance that the disease may become more common. If this happened it might be easier for people from this group to be included in research studies.

The third goal of this study was to see if the current medical guidelines on who to test, or screen, for high cholesterol levels may work against children of minority ethnicity groups. The current guidelines use a family history of heart attack or high cholesterol to determine which children to test for high cholesterol. Since minority ethnic groups may be disadvantaged and come from single-parent families,

among other reasons, there is a chance that children from these groups may be "missed."

The study found the following results. First, most of the children in these studies from around the world (92% of 885 children) were Caucasian. This occurred even in studies from countries where there was a large population of non-Caucasian children. Secondly, we found that many of the studies did come from countries where founder effects were known to exist. Thirdly, there was evidence that the family history-based guidelines may lead to health care disparities for minority and/or disadvantaged children.

The authors conclude that non-Caucasian children with this condition are under-represented in these research studies. More efforts should be made to include minority children for study so that health professionals learn how to best take care of them.

Source: Underrepresentation of Non-White Children in Trials of Statins in Children with Heterozygous Familial Hypercholesterolemia

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WARNING SIGNS AND RISK FACTORS FOR STROKE AND HEART ATTACK: DO MICHIGAN RESIDENTS KNOW THE FACTS?

In our research, we wanted to find out if White and African American adults in Michigan knew the risk factors and warning signs for stroke and heart attack. To do so, we wrote two questions about stroke and heart attack and had

them included on the 2004 Michigan Behavioral Risk Factor Survey.

For both stroke and heart attack, correct risk factors were high blood pressure, smoking, diet, overweight, physical inactivity, high cholesterol,

cardiovascular disease, diabetes, family history, age, race, and sex. For stroke, correct warning signs were sudden numbness or weakness; sudden confusion, trouble speaking or understanding speech; sudden trouble seeing; sudden

trouble walking, dizziness, or loss of balance; and sudden severe headache. For heart attack, correct warning signs were pain or discomfort in the chest, pain or discomfort in other areas of the upper body, shortness of breath, nausea, lightheadedness, and sweating.

We examined the responses by ethnic group for each risk factor and warning sign, the number of correct responses, and how often an individual had three correct risk factors or warning signs.

The stroke risk factor that appeared to be best known among both Whites and African Americans was high blood pressure, with one in three in each group reporting this correctly. For heart attack, Whites most frequently reported

obesity as a risk factor (42.0%), while African Americans most frequently reported diet (42.8%). More African Americans reported no correct risk factors compared to Whites and fewer reported three correct risk factors compared to Whites.

The most-often reported stroke warning sign for both Whites and African Americans was any weakness or numbness and the most-often reported warning sign for heart attack by both Whites and African Americans was pain or discomfort in the chest.

After accounting for all other demographic variables, Whites were 2–3 times more likely to report enough knowledge of stroke and heart attack

risk factors and warning signs when compared with African Americans.

In summary, Michigan, like other US states, is in need of public education programs for stroke and heart attack that focus on increasing the knowledge of the entire population, as well as providing additional assistance to certain high-risk groups.

Source: Racial Disparities in Knowledge of Stroke and Heart Attack Risk Factors and Warning Signs among Michigan Adults

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FIT BODY AND SOUL: A DIABETES PREVENTION PROGRAM IN AFRICAN AMERICAN CHURCHES

Type 2 diabetes is quickly becoming one of the most common chronic diseases worldwide. In the United States, more than 7% of adults have diabetes, with one million new cases found each year. Nearly 200,000 people in the United States die from diabetes complications each year. It is more common in the elderly and in some minority populations. Although diabetes is on the rise generally, the greatest increase has occurred among African Americans: about 2.7 million African Americans aged 20 years or older (11.4%) have diabetes, with rates reaching 25% among African Americans aged 65–74.

Faith-based programs for lifestyle change show promise in helping to promote healthy behaviors in African American communities. By developing lifestyle intervention programs within a faith-based community, not only can we reach those in need of lifestyle change,

but also, we can offer continued contact and support to maintain these healthy behaviors as individuals and their families continue to attend church.

The Fit Body and Soul (FBS) faith-based diabetes prevention program was developed and modified from the Diabetes Prevention Program, which was a successful program of the National Institutes of Health. With the help of church leaders, a community advisor board, and other experts, 16 sessions of the NIH program were modified into 12 sessions as the Fit Body and Soul program, which was formed within a spiritual framework. Sessions on three themes of the intervention –weight loss, increased PA, and behavioral change – were delivered by the church health ministers (called Church health advisors-CHAs) after receiving two-days training. The Fit Body and Soul program has been tested in one African American church.

The Fit Body and Soul program is a culturally relevant, faith-based, behavioral lifestyle program, which can be conducted and promoted by church members in African American churches with the support of experts and church pastors. We suggest church groups use expert-led CHAs team to provide the intervention. Our next steps will be to demonstrate additional proof that a faith-based, healthy lifestyle program designed to empower individuals and their families within the faith community can establish and maintain positive health related behavioral changes.

Fit Body and Soul: A Church-based Behavioral Lifestyle Program for Diabetes Prevention in African Americans

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HOW COPING WITH STRESS MAY BE RELATED TO DIABETES

Insulin resistance, which is a term used when your body does not respond to normal insulin levels, is more common in obese than normal weight individuals, and in African Americans than Whites. This racial difference in insulin resistance may reflect biological differences between these two groups, but it may also result from things that happen in your life. One possibility is stress, since stress can interfere with insulin action; African Americans are reported to have more stress than Whites.

In our study, we examined how health factors and the experience of chronic stress affected insulin resistance in young, healthy African Americans and Whites. We found that African Americans and Whites had similar blood sugar levels after eating the same meal, but blood insulin levels were much higher in African Americans compared to Whites. This indicates that African Americans have an over-pro-

duction of insulin by the pancreas. In other words, the body is not effectively responding to insulin's action, which is to lower the blood sugar level.

We also found that low physical fitness contributed to being insulin resistant regardless of ethnicity. When stress levels and stress responses were examined, African Americans did not report more chronic stress than Whites, but African Americans reported using a stress coping strategy called "positive appraisal" more frequently than Whites. Positive appraisal is when a person uses supportive and encouraging self-talk to cope with a challenging situation. Individuals who use positive appraisal are often able to generate favorable outcomes. In our study, this positive appraisal coping style predicted less insulin resistance. Also, negative appraisal, which is self-blame, criticism, or catastrophic thinking, was associated with greater insulin resistance. This shows how important coping strategies

and other behaviors may be in affecting insulin resistance.

There is no cure for diabetes. Early identification and treatment of insulin resistance to prevent the progression to diabetes is the best treatment available. Our study shows that adaptive stress coping strategies, such as positive appraisal, may be important complements to a well-managed exercise and nutrition program for reducing insulin resistance and its related negative health outcomes, such as diabetes. Existing intervention programs that only emphasize exercise and nutrition may not be as effective in reducing insulin resistance.

Source: Psychological and Physiological Correlates of Insulin Resistance at Fasting and in Response to a Meal in African Americans and Whites

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WHO IS MORE LIKELY TO LEAVE THE HOSPITAL AGAINST DOCTOR'S ADVICE?

The relationship between race/ethnicity, hospital quality, and discharges against medical advice has not been examined. The objective of this study was to examine the dual impact of race/ethnicity and hospital quality on discharges against medical advice. We studied patient hospital discharge records from a six-year period and hospital surveys that demonstrate hospital effectiveness.

Among high-quality hospitals, non-White patients were more likely than

White patients to self-discharge against medical advice. Among medium/low-quality hospitals, non-White patients were less likely than White patients to self-discharge against medical advice. A discharge against medical advice was less likely at a high-quality hospital, regardless of race/ethnicity. As shown by other studies, we found that male, single, or younger patients are more likely to leave against medical advice.

Our results suggest that patient- and system-level factors related to

hospital quality and the hospital experience are important for understanding self-discharges against medical advice.

Source: Ethnic Disparities, Hospital Quality, and Discharges Against Medical Advice among Patients with Cardiovascular Disease

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REDUCING HEART DISEASE DISPARITIES AMONG AFRICAN AMERICANS

Some populations, like the poor and many ethnic minorities, experience higher rates of certain diseases and suffer from more complications and deaths from those diseases. This higher rate and complications of disease is referred to as health disparities. Our objective was to find and evaluate studies that focus on eliminating these disparities. We focused on studies that looked at heart disease and its risk factors in African Americans – a population that suffers higher rates of heart disease and the factors that cause heart disease.

We performed a comprehensive literature review of articles published during 1996–2006 that focused on heart disease and included African Americans. We found that relatively few papers were actually focused on reducing health disparities. Studies that we felt had the most impact were those that set up clinics within the community and used community members as workers or volunteers to deliver care. We outline types of interventions that were used and problems that were encountered by research groups. It is important that more of this type of

research is performed and that the results of these studies be disseminated so that we know what works and what does not.

A Review of Interventions to Reduce Health Disparities in Cardiovascular Disease in African Americans

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MINORITY VETERANS ARE AT INCREASED RISK OF DEATH AFTER STROKE

Each year almost 800,000 Americans have a stroke, which is caused by an interruption of the blood flow to the brain. About every 40 seconds someone has a stroke and more than 2% of the total US population has had a stroke. People who have strokes tend to have other health problems such as high blood pressure, high cholesterol or heart disease.

Unfortunately, every three to four minutes someone dies of a stroke. Stroke is the third leading cause of death in the United States, after diseases of the heart and cancer. It is not always clear who will die after a stroke. Racial/ethnic minorities (African Americans, Asian Americans, Native Americans, Pacific Islanders, and Hispanics) are more likely to die after a stroke than White Americans. For example African Americans are almost twice as likely to die after a stroke compared to White Americans.

To better understand why death rates are higher in ethnic minorities after a stroke, it is important to examine

the different factors that increase the risk of dying after a stroke. A very important factor is not having access to good medical care. People who do not have access to good medical care are more likely to die compared to those with access to good health care.

In our study, we examined data on 4114 veterans who had a stroke and received care from a Veterans Administration facility in the southeastern United States to see if there were racial/ethnic differences in risk of death. We followed a group of veterans over an average period of 3.5 years and found that Black veterans were more likely to die after a stroke than White veterans or veterans who classified themselves as “Other.” This implies that access to care is not the only reason why there are differences by race/ethnicity in the risk of death after a stroke.

We need to do more studies to better understand the factors that increase the risk of death after a stroke in ethnic minorities. As we await the

results of these studies, it is important for ethnic minority patients to recognize that they are not only at increased risk of having a stroke; but they are also at an increased risk of dying from a stroke. Therefore, patients need to get screened for stroke risk factors such as hypertension, high cholesterol, and diabetes; improve lifestyle by eating healthy and increasing physical activity levels; and avoid or stop high risk behaviors such as smoking. For those who already have these risk factors, it is critical to work with a health care provider to keep hypertension, high cholesterol, and diabetes under good control by taking medications as prescribed. In addition, all adults who are 40 years or older should take a “baby” aspirin (81 mg) daily for stroke prevention unless there is a medical reason not to.

Source: Racial/Ethnic Differences in Stroke Mortality in Veterans

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