

DIABETES: LOW BLOOD SUGAR LEVELS ARE DANGEROUS, TOO

Diabetes is a condition that is caused by high blood sugar levels. Over time it can damage the heart, eye, kidney, and other organs. The number of complications and the cost associated with diabetes continues to rise. Controlling blood sugar levels has been shown to reduce the diabetes complications and the cost of health care.

Sometimes the blood sugar level goes too low. This is also dangerous. Low blood sugar is called hypoglycemia. If the blood sugar level is really low, a person needs to be hospitalized. Although hypoglycemia is a common complication of diabetes, we do not know much about how often people go to the hospital for hypoglycemia. In our study, we looked at the hospital admissions due to hypoglycemia in diabetics

from 1990–1993 and 1997–2000 in the State of California.

We found most of the hospitalizations related to hypoglycemia occurred between 1997–2000. The percentage of hospitalizations due to hypoglycemia increased over time. Over the two study time-periods, we found an increase in the total number of diabetic hospitalizations. There was also an increase in the number and percentage of hospitalizations due to hypoglycemia. The hospitalizations due to hypoglycemia vary across sex, age, race/ethnicity, and insurance status.

The biggest change in diabetic hospitalizations due to hypoglycemia was found among patients who were 65 years of age or older, Asians or of other races, females, African American

patients, and those with Medicare/Medical health insurance.

While aggressive diabetes care remains important, the risk of severe hypoglycemia should not be ignored. We recommend: patient education regarding diet; self-monitoring of blood sugar levels; recognizing the symptoms of hypoglycemia; and learning how to treat hypoglycemia symptoms early. All of these steps can help to minimize the hospitalizations due to hypoglycemia.

Source: Increase in Hypoglycemic Admissions: California Hospital Discharge Data

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UNDERSTANDING HOW BLOOD CLOTTING MAY BE LINKED TO GENETICS

Arterial thrombosis, or arterial blood clotting, results in the loss of blood flow to organs and is one of the key steps in the development of cardiovascular disease. Part of the risk of thrombosis is related to your family medical history (genetic). Knowing the specific genetic factors that affect thrombosis can help physicians identify patients who are more likely to develop disease. In our research, we conducted a study designed to help identify the genes linked to arterial thrombosis in a population in Ghana, West Africa.

Some factors that can make a person more likely to have thrombosis are two substances. One substance helps to break up the blood clot and is called tissue plasminogen activator or t-PA. Another substance does not allow the t-PA to do its job and is called plasminogen activator inhibitor or PAI-1.

Our study collected information on how body measures that affect how these two substances are balanced. From our study volunteers, we recorded their body mass index (BMI, a measure of obesity), age and sex. We also measured the level of both t-PA and PAI-1 in their blood and collected DNA to find out how genes affect these substances.

We chose to study a group in Ghana because it is less mixed than African American populations and this can make identifying genes easier. Also, Ghana was one of the primary sources of slaves who were taken to the United States. This means that results from Ghana should translate well to African Americans.

In our report, we present data on the first 1000 study participants. Our results

demonstrate that males and females differ in many variables that can affect thrombosis risk, such as PAI-1, BMI and lipid profiles. For example, we found that females had a wider range of t-PA levels. This may mean that, even though t-PA does differ between men and women, there are more women with extremely low or extremely high t-PA. These type of findings can help researchers unravel the genetic basis of thrombosis risk factors.

Source: A Population-Based Study in Ghana to Investigate Inter-Individual Variation in Plasma t-PA and PAI-1

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AVOIDING A LATINO/HISPANIC CARDIOVASCULAR DISEASE HEALTH CRISIS

The Latino/Hispanic population is one of the largest and fastest growing ethnic minorities in the United States. Cardiovascular (heart and blood vessel) disease is a leading cause of death among this group. Diabetes also has a large impact on the Latino/Hispanic population. Major risk factors for cardiovascular disease include diabetes, obesity, and high blood pressure, with all of these risk factors on the rise among Latinos/Hispanics. Since limited healthcare resources, screening, and prevention tools are available to these individuals, it is important that we address this growing crisis and find solutions to deal with it.

Little information on cardiovascular disease in the Latino/Hispanic population is available. Few clinical studies on cardiovascular disease have included this patient population.

Latino/Hispanic patients have a more difficult time than non-Hispanic

Whites becoming integrated into the US healthcare system. For example, many Latino/Hispanic patients do not have health insurance. As a result, uninsured individuals do not seek medical care, thus risking the development of complications that could be avoided with early detection and treatment. Language and educational levels also play a role in Latino/Hispanic health care. A patient's lack of understanding of their illness and treatment can be a barrier to receiving high-quality health care. Some Latinos/Hispanics may also feel as if they are treated unjustly at physician visits because of their race or ethnicity, being unable to speak English, or being unable to pay for the visit.

To provide better health care for Latinos/Hispanics, we must develop culturally sensitive screening methods to find out if a person has cardiovascular disease or any of its risk factors. We must find a way to include ethnic

customs, language, and preferences to reach this at-risk population. Studies are needed that target the Latino/Hispanic population as a single ethnic group. We must call for greater action by governmental agencies, pharmaceutical companies, institutions of higher learning, and professional and community organizations to help stop this increasing healthcare situation.

Source: Avoiding the Looming Latino/Hispanic Cardiovascular Health Crisis: A Call to Action

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WALK! IT'S GOOD FOR LOWERING BLOOD PRESSURE

This study wanted to find out if it made a difference on blood pressure levels when doctors encouraged their patients to walk. The patients in the study had high blood pressure, were African American, and lived in the Chicago area.

High blood pressure can lead to heart attacks, heart failure, strokes or kidney diseases when it is not treated. The first step in treating high blood pressure is to change to a healthier lifestyle. This includes losing weight if you weigh more than you should, increasing exercise, even if you are not overweight, and eating less salt.

Some studies have shown that walking, bicycling, and jogging help patients with high blood pressure. Of these exercises, walking seems to be the easiest and safest and it can be done almost any time, anywhere, and without special equipment. Few, if any, studies have shown the effect of walking in African American patients with high blood pressure.

Our study examined the effect of encouraging walking among 18 recruited African American adult patients who were just found to have high blood pressure. We split these patients into two groups and encouraged one group to walk an extra 30 minutes a day while

the other group was not given this encouragement. Both groups were followed by the doctors. After six months of the study, we found that there was no dramatic difference in the blood pressure change between these two groups.

However, for the group who was encouraged to walk an extra 30 minutes a day, most days of the week, we found that, by the end of the study period, blood pressure was lower by about 13 mm Hg (or 9%) in systolic blood pressure and 7 mm Hg (or 7%) in diastolic blood pressure.

Since walking seems to be an easy physical activity for almost any one, it should be encouraged for those who

have high blood pressure among African American adults together with other lifestyle changes.

Source: Impact of Exercise (Walking) on Blood Pressure Levels in African American Adults with Newly Diagnosed Hypertension

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UNDERSTANDING AFRICAN AMERICAN CULTURE FOR SUCCESSFUL WEIGHT-LOSS PROGRAMS

Does African American culture have an impact on the amount of weight loss? To answer this question, 31 African American men and women participated in one of five focus group discussions

Through the focus group discussions, we found nine themes related to African American culture: 1) religion is a powerful force (God is number one); 2) family structure (mother and grandmother are key figures); 3) integration hurt the African American family (better off separate but equal); 4) African Americans don't trust Whites (Tuskegee syphilis study); 5) African Americans are not valued or respected as a people (must work twice as hard to receive unequal pay); 6) limited income meant

limited ability to make lifestyle changes (rely on "old folks" remedies); 7) preserving ethnic identity (fat back, pig feet, collard greens and corn bread); 8) education is the key to succeed as an African American (athletics won't last, education will); and 9) communication skills are vital (non-verbal gestures; make eye contact only; speak Ebonics and slang language because it's cool; wear hair braided).

Understanding these nine cultural items found in this study and the role they may play in promoting or preventing new lifestyles may be helpful for those planning future health promotion programs. Programs guided by these cultural items may help improve the

outcomes of African Americans seeking to change unhealthy ways of living, and establish healthier ones. Programs that ask for individuals to make lifestyle changes must be sensitive to each population and must start at the planning phase and continue throughout the study.

Source: Cultural Characteristics of African Americans: Implications for the Design of Trials that Target Behavior and Health Promotion Programs

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DOES RACE PLAY A ROLE IN DOCTORS' TREATMENT DECISIONS?

Our study wanted to find out what role race had in doctors' decisions to refer patients for invasive cardiac procedures. We considered physician bias (treating patients unfairly because of prejudices) to occur when Black patients were referred less often to an invasive procedure compared to Whites.

Our study took place at a teaching hospital in southeastern Louisiana. Most of this hospital's patients are both Black and poor. For this reason, we expected that doctors would refer Blacks and Whites to invasive procedures at an equal rate. We did not expect physician bias to occur.

To conduct the study, we reviewed medical records to find out which patients were candidates for an invasive procedure and if they were then referred for the procedure by a doctor. In all, 177 patients were found to be eligible. After analyzing the data, we found that physicians' referral patterns for cardiac procedures were similar for both Blacks and Whites. Physician bias did not occur.

There are two reasons why this research had different results than previous studies that found Blacks to be referred less often. First, teaching hospitals tend to provide better care because they run more tests on patients. Secondly, referral differences between

Blacks and Whites may not occur at facilities that treat a majority of Blacks.

These results are encouraging to many Americans because the patient/doctor interaction at these facilities may hold the key to lessening or eliminating healthcare inequalities. At the least, Americans should note that healthcare disparities do not occur in every facility.

Source: Physician Bias: Does It Occur at Teaching Hospitals that Serve a Majority of African American Patients?

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COMMUNITY-ACQUIRED PNEUMONIA AMONG ARAB BEDOUIN AND JEWISH POPULATIONS

Community-acquired pneumonia (CAP) is an infectious disease that affects many people around the world. Treatment of CAP is a challenge and the costs of the disease are high for national health systems.

Environmental and other differences are found between ethnic groups and these differences affect the risk and course of the disease. Identifying risk factors for CAP in different ethnic groups could help us develop strategies for reducing getting this infection. This study compared the characteristics of CAP in two groups, Jews and Bedouin Arabs, living in the Negev region of Israel.

The two groups are very different in their socioeconomic status, culture and way of living. The Bedouins are moving from being desert nomads to becoming settled. Their Jewish neighbors live in modern cities and villages. Bedouins have both lower levels of education and greater financial disadvantage. Although the two groups share a common health system and live near each other, our research has found major differences in the number of people, their ages, and rates of being hospitalized because of CAP between these two groups.

For each age group Bedouins were found to have a higher chance of being hospitalized due to CAP as compared to Jews. Bedouin patients smoked more often and had chronic lung diseases more often than Jews. We also found that the two groups used primary care services differently. Bedouins were less likely to be vaccinated against the disease than Jews. However, once patients were admitted to the hospital, we did not find any differences between the two groups for the seriousness of illness, the length of stay in the hospital, complications experienced, or death rates.

We think the reasons for these differences may be a combination of environmental and cultural factors. For example, we know that smoking and lung diseases place a person at greater risk for respiratory infections like CAP. Bedouins have these risk factors and are more likely to contract CAP than Jews.

To prevent CAP, vaccinations and pre-hospital antibiotic treatment must be made available to all populations. Bedouins have lower rates of vaccination for influenza and pneumococcal pneumonia than Jews and are less protected from CAP. Jews and Bed-

ouins in the Negev share a common health care system; yet, poor accessibility and lower level of education could have contributed to the underutilization of primary health care services among Bedouins.

The findings presented in this study should urge health administrators in the region to develop new strategies for reducing CAP rates in the Bedouin population. Large scale vaccination campaigns at gathering places could prove to be an effective measure for reaching this goal. Educational campaigns on the hazards of cigarette smoking among Bedouin youth should become available. Finally, Arab speaking health workers traveling in mobile health units could help reach areas where permanent health facilities are not present.

Source: Differences Between Bedouin and Jewish Populations in Incidence and Characteristics of Patients Hospitalized with Community-Acquired Pneumonia

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