FOR THE PATIENT

EFFECTS OF DIET IN LOWERING HOMOCYSTEINE LEVELS AND CARDIOVASCULAR DISEASE

Homocysteine is an amino acid (building block of protein) naturally produced by the body. High homocysteine levels have been reported to increase the risk of diseases, such as heart attack and stroke, in much the same way as smoking. Breakdown of this amino acid in the body depends on three vitamins (folic acid or folate, B12, and B6). Blood levels of homocysteine are significantly affected by using these three vitamins, especially folate, which is found in foods such as whole grains, leafy vegetables (spinach, mustard greens, turnip greens), broccoli, okra, peas, beets, and cauliflower.

The New Mexico Elder Health Survey is a study of 883 people older than 65 years of age, with nearly equal numbers of Hispanic and non-Hispanic White men and women. Their average age was 74.

Men had higher homocysteine and lower folate levels than women. Hispanic participants had higher homocysteine and lower folate levels than their non-Hispanic counterparts. After adjusting for lower folate levels in Hispanics, however, there no longer was any difference in homocysteine levels between Hispanics and non-Hispanics.

High homocysteine was not linked with a patient's having had a heart attack or coronary bypass graft in men, but it was in women, especially Hispanic women. Hispanic women with high homocysteine levels were four times more likely to have heart disease than women with normal levels.

This study is important because increasing folate is an effective way to lower serum homocysteine levels. In fact, in 1998, the United States Food and Drug Administration published a regulation that all enriched grain products be fortified with folic acid. At least 2 published studies since have shown striking increases in folate and decreases in homocysteine levels in the general population. It will be interesting to see if this action has an even greater effect of further lowering the prevalence of heart diseases.

Source: Serum Homocysteine Concentrations and their Relation to Serum Folate and Vitamin B12 Concentrations and Coronary Artery Prevalence in an Urban, Bi-Ethnic Community
Robert D. Lindeman, MD; Linda J. Romero, MD; C. Lillian Yau, MS; Kathleen M. Koehler, PhD; Richard N. Baumgartner, PhD; Philip J. Garry, PhD

THE NATURE AND NURTURE OF BLOOD PRESSURE IN AFRICAN AMERICANS

Recently, we have heard a lot about how genes influence health and illness. For conditions like high blood pressure, the influence of both genes (nature) and environments (nurture) must be understood for treatment and prevention. It is the combination of genes and environments that makes each person different.

High blood pressure affects 1 out of 3 adult African Americans. Studying identical and fraternal twins allows scientists to examine how much each of these factors accounts for the differences we see in blood pressure across people.

By studying twins, three kinds of influences can be identified: genetic, shared environmental, and non-shared environmental. Genetic influences are the impact of genes, while shared environmental influences come from having lived in the same household as children, and non-shared influences come from outside the family.

In our study, we used information from the Carolina African-American Twins Study of Aging to study blood pressure among Black twins. The participants were 143 pairs of same-sex twins with 71 being identical and 72 fraternal. The people we interviewed were between 25–89 years old.

Since age can make a large difference in blood pressure, we looked at both the entire sample and two age groups of participants. The younger age group consisted of twins between 25–49 years old, and the older group was 50 years old or older.

The systolic (high number) and diastolic (low number) of the blood pressure was measured in each person. We also calculated the pulse pressure. The pulse pressure is the difference between the systolic and diastolic blood pressure. This is a good measure of blood vessel stiffness.

We compared blood pressure and pulse pressure measurements for identical twins. The more alike the identical twins are compared to the fraternal twins, the greater role genes play in blood pressure. For our comparisons of all the twins, we found that almost half the difference in systolic blood pressure was due to genes. For diastolic blood pressure, genes accounted for one third of the difference; and for pulse pressure, it was about one sixth. Genes appeared to be more important for blood pressure difference in the older twins.

These findings suggest that while genes do affect our blood pressure, the environment plays an even larger role, particularly...
for pulse pressure. We also found that shared environmental influences affected pulse pressure but not systolic or diastolic blood pressure. Our findings also indicate that environmental factors play a larger role in determining difference in blood pressure, as people grow older.

Source: Genetic and Environmental Influences on Blood Pressure and Pulse Pressure Among Adult African Americans
Dwayne T. Brandon, MA; Keith E. Whitfield, PhD; John J. Sellers III, PhD; Sebrina A. Wiggins, BA; Sheila G. West, PhD; George P. Vogler, PhD; Gerald E. McClearn, PhD; Julian F. Thayer, PhD

Mammography Can Detect Breast Cancer Early and Save Women’s Lives

Breast cancer is the most commonly diagnosed cancer and the second leading cause of cancer death in women today. In order to detect breast cancer early, the American Cancer Society recommends that women 40 years of age and older should have a mammogram and a breast examination by a health care professional once a year. Women should also perform monthly breast self-examination. Although mammography is the most effective method of detecting breast cancer at an early, treatable stage, many women do not have mammograms routinely.

This 1999 survey was conducted among 192 Asian women (121 Chinese and 71 Korean) residing in an urban county of Michigan. It reports that only 56% received mammograms in the past two years, about 21% lower than the overall Michigan population.

Prevention is an important concept for maintaining good health in the Asian community. However, the term “prevention” is understood as regular exercise, maintaining a balanced diet, and sleeping well. For Asian women who feel healthy, “prevention” does not traditionally include annual check-ups or cancer screening. The authors hope that this report may increase women’s awareness of breast cancer risks and the importance of regular mammography screening. Actually breast cancer is the most frequently diagnosed cancer among Asian-American women, including Chinese and Koreans. Breast cancer may happen to any woman and 80 percent of breast cancer patients have no family history of the disease.

This survey found that Asian women who did not get mammograms tended to speak less English, had less access to health insurance, and knew less about mammography. Many Asians, especially new immigrants, were particularly challenged by cultural, language, and economic barriers to health care.

The good news is that with funding from the Centers for Disease Control and Prevention (CDC) and many states, the Breast and Cervical Cancer Control Program (BCCCP) has been available since the 1990s. The BCCCP is designed to help medically under-served women obtain free breast cancer screening. If you are uninsured or under-insured, please call the American Cancer Institute (800-227-2345), National Cancer Institute (800-422-6237), or your local health department for more information about free or low-cost mammogram.

Please remember to have breast cancer screening regularly and pass the information to other family members or your friends. You may save the lives of your loved ones. Take care of yourself and help others!

The authors of this article are staff members of the Healthy Asian Americans Project (HAAP) at the University of Michigan School of Nursing (UM SON). With support from Michigan Department of Community Health and the UM SON, the HAAP started BCCCP promotion in November 1999. The HAAP provides breast health education and personalized assistance to Asian women who face cultural, language, and economic barriers to breast health care. To know more about the HAAP and its BCCCP promotion, please visit our website http://www.nursing.umich.edu/haap/ or call toll free 877-625-4683. For those who would like to use a native Asian language to make a telephone call, please use our multilingual voice mail (800-936-8903) and leave a message, one of our project coordinators who can speak the native language will return the call.

Mei-yu Yu, PhD, MD; Oi-Saeng Hong, PhD, RN; Amy D. Sexton, AM, MLS, MBA

Survival Rates of Prostate Cancer: Black vs White Patients

In this study, we tried to answer the question, “Are African Americans at greater risk of death after being diagnosed with later-stage prostate cancer than non-Hispanic Whites who receive the same diagnosis?” We looked at records for 20,058 non-Hispanic White and 3,213 Black patients diagnosed with prostate cancer that had spread beyond the prostate. The records were from the National Cancer Institute’s cancer registries.

We found that the chance of dying from prostate cancer was only slightly higher for Black patients compared to White patients. The study took into account various clinical characteristics of the patients. Also, there was no difference between

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Blacks and Whites surviving for 5 or 10 years after being diagnosed with prostate cancer.

These results suggest that being African American does not increase the chance of dying for men with later-stage prostate cancer, if everything else is even. To continue to understand the effect of cancer on various groups, we encourage more research on Black-White survival rates. Such studies should consider income and educational levels of patients.

Source: Black-White Differences in Survival from Late-Stage Prostate Cancer
Anthony P. Polednak, PhD

A FURTHER STUDY OF LIFE EXPECTANCY BY SOCIOECONOMIC FACTORS IN THE NATIONAL LONGITUDINAL MORTALITY STUDY

Life expectancy is thought of as the average remaining years of life for a group of individuals with similar characteristics who have been selected for research study. Experiences of life, such as living an unhealthy lifestyle, exposure to diseases, access to medical services, dangerous occupation, would all influence the survival of members of the group and would be reflected in the life expectancy estimate for the group.

In this article, we reviewed data of the National Longitudinal Mortality Study to find out how socioeconomic factors affected different groups of people. A previous study based on the same data found that a shorter average life expectancy was estimated for the poor, the less educated, and the unemployed. In this paper, we used data to make estimates of life expectancy for White, Black and Hispanic populations of various economic and social characteristics.

Our findings showed that women, generally, had longer life expectancy than men. At age 25, White women lived 6.6 years longer than White men and Black women lived 7.0 years longer than Black men. The Hispanic White group had the longest life expectancy, followed by the non-Hispanic White group, with the non-Hispanic Black group having the shortest life expectancy. At age 25, Hispanic White men lived on average 2.9 years longer than non-Hispanic White men and non-Hispanic White men lived on average 4.4 years longer than non-Hispanic Black men.

Individuals with more than a high school education had longer life expectancy than those with less than a high school education. At age 25, members of groups with more than a high school education were estimated to live longer than members in groups with less education: an additional 5.4 years for non-Hispanic White men, 2.8 years for non-Hispanic White women, 6.7 years for non-Hispanic Black men and 5.9 years for non-Hispanic Black women. Also, at age 25, among individuals with less than a high school education, Hispanic White men lived, on average, 5.2 years more than the corresponding non-Hispanic White men.

With a few exceptions, individuals with incomes of $25,000 and over had much longer life expectancy than corresponding groups with income below $10,000. Those with greater incomes at age 25, were estimated to live more years than the lower-income group members as follows: 7.9 years for non-Hispanic White men, 3.3 years for non-Hispanic White women, 8.6 years for non-Hispanic Black men, 5.0 years for non-Hispanic Black women and 5.1 years for Hispanic White men. Also, at age 25, among individuals with income less than $25,000, Hispanic White men lived, on average, about 4 to 5 years more than non-Hispanic White men.

Employed individuals also had a longer life expectancy than those not working. Especially large differences were observed for men. Working men and women were estimated to live longer than non-working men and women in all categories: 11.4 additional years for non-Hispanic White men, 3.9 years for non-Hispanic White women, 14.0 years for non-Hispanic Black men, 8.9 years for non-Hispanic Black women, and 14.0 years for Hispanic White men.

Married persons were generally observed to live longer than non-married persons. At age 25, the difference in estimates of life expectancy between the married and previously married groups was 5.2 years for non-Hispanic White men, 2.7 years for non-Hispanic White women, 4.9 years for non-Hispanic Black men, 2.6 years for non-Hispanic Black women and 6.8 years for Hispanic White men.

Across the various ethnic-race-sex groups, a longer life expectancy was estimated for groups of individuals having more education and a higher income, being married, and being employed. Differences in life expectancy between levels of the socioeconomic characteristics were more often observed to be larger in groups of men compared to groups of women. Also, differences were found to be larger for the non-Hispanic Black groups than for non-Hispanic White groups. Hispanic White men exhibited patterns similar to non-Hispanic White and Black men.

Source: A Further Study of Life Expectancy by Socioeconomic Factors in the National Longitudinal Mortality Study
Charles C. Lin, PhD; Eugene Rogot, MA; Norman J. Johnson, PhD; Paul D. Sorlie, PhD; Elizabeth Arias, PhD

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**THE IMPACT OF HEALTH KNOWLEDGE AND COMMUNICATION ON WOMEN’S HEALTH**

There are a variety of factors that contribute to an individual’s health. Some of these factors are genetic, because the genes that we inherit from our parents determine how much and in what ways we will be like them in illness and in health. Some factors are environmental, such as the air, water, and food that we consume, and the pace, demands, and overall quality of our daily lives. And, some factors are social influences like economic status and literacy level.

Literacy is the result of both our formal education (schooling) and informal education (exposure to information from family, friends, community members and the media). It is an important factor in our ability to get and use information for our health and the health of other individuals with whom we share life.

This report presents a review of 106 articles from medical documents published between 1990 and 2000. The articles include facts about ways that literacy (knowledge) has influenced women’s health around the world. This summary describes the types of articles and topics relating to women’s health, as well as descriptions of articles by similar categories of information. Each section shows which topics or health conditions were discussed most frequently.

The common women’s health conditions studied, from highest to lowest, were: contraception, breast and other cancers, abortion, maternal child health, pregnancy, childbirth, diet, smoking, hypertension, cardiovascular conditions, AIDS/HIV, mortality, genetic diseases, anesthesia, Pap smears, malaria, Down’s syndrome, lead poisoning, hormone therapy, diabetes, and domestic violence. Aspects of women’s lives that are related to their health, such as their ethnicity, age, formal education, cultural beliefs about health, ability to access healthcare information and services, and the extent to which various health conditions are present or absent in their different communities, are also detailed.

For example, studies indicate that, although urban women in Pakistan had twice the level of formal education compared to rural women, contraception use by both was, on average, low due to beliefs about having sufficient numbers of living children. Sahenian women of Northern Ghana were considered to be property and their corporate family kinship and community dictated when they could become pregnant. In Tanzania, women had a lack of knowledge about when she becomes capable of becoming pregnant; and, a US study on breast and cervical cancer found that even women with reasonable education had limited knowledge, as well as wrong information, about survival rates.

The report also reviews studies about women as mothers and these mothers’ understanding, opinions, attitudes, and values about their role as caretaker for their children’s health. The most prevalent conditions for children’s health status and practices affecting their health were: infant mortality, diarrhea, malaria, fevers, bottle-feeding, and oral health. As examples of the importance of literacy, studies show that among women in Nicaragua, a 30-year decline in fertility and infant mortality was due to an increase in the level of education and interventions targeting disadvantaged women. Also, a study about Zimbabwean women, with and without formal education, found that the women held inaccurate beliefs about diarrhea, therefore resisting help and losing children’s lives.

This report looks at the ways in which the education, opinions, attitudes, and values of doctors and nurses affect treatment choices and delivery of healthcare information to women. Interestingly, it is noted that, in Oranmiyan, Nigeria, Vietnam, and Eastern Nepal, the traditional (non-physician) practitioner was many women’s preferred healthcare provider regardless of practitioner level of literacy or training. In central New Jersey, those who thought births to be risky were more likely to select obstetricians while those who thought birthing was normal were more likely to select midwives.

Model programs are cited that have had success in improving the level of women’s health literacy and women’s action to improve personal, family, or community health. In Texas, for example, women were tested for understanding pilltaking instructions and practicing contraceptive compliance; they were given additional instruction, if needed. In Erie County, New York, older African-American women were encouraged to participate in community-based breast screening in a mobile education vehicle, and an Eastern Nepal program helped women obtain, share, analyze, plan, and act on knowledge.

Finally, the author provides a summary of recommendations for improving patient and practitioner health literacy. Based on the review of the 106 articles, the author emphasizes the importance of effective planning, assessment of patients’ understanding, special training of all practitioners and quality training for students, alliances with community traditionalists, recruitment of minorities and the disadvantaged, and combined screening and education in areas of scarcity. These activities are critical considerations in a more equitable and appropriate delivery of health care and sharing of health literacy.

*Source: Patient and Practitioner Literacy and Women’s Health: A Global View of the Closing Decade 1990–2000*

Louise M. Tomlinson, PhD
Studies in the past have found that some patients want primary care doctors who are like them in some way. For example, some women would like to be cared for by a female doctor, and some individuals would like to have a doctor from their own racial or ethnic background. These patients seem to be more satisfied with the care that doctors who have backgrounds similar to theirs provide, and this care may be more appropriately suited to the patients’ needs.

Our study hoped to learn more about patients’ preferences for age, gender, and racial/ethnic background of their primary care doctors. We also wanted to see if these preferences were linked to the quality of care patients said they received.

We studied forty-nine adults (African Americans, Caucasians, and Latinos) who received medical care in Northern California. Focus group interviews were led by a trained group leader who was the same gender and ethnicity of the patients and who spoke the same language (English or Spanish). The patients were asked questions to figure out what they look for in choosing and staying with a primary care doctor. They were also encouraged to give examples and to discuss issues about age difference, language, gender, and race of their doctors.

Many patients felt that they could not choose their own doctors in the university health system and reported difficulties in seeing the same doctor over time. Most patients put up with these drawbacks because they believed that the university center, with its medical advances, gave them better care.

Patients had different views about the importance of having a doctor of similar age. Women who spoke English said having a female doctor was important. All Spanish-speaking patients preferred Spanish-speaking doctors. African-American patients and Spanish-speaking Latino men felt that doctors from the same race/ethnic background would care more. These patients were concerned that there were not enough doctors of their background at the medical center.

This survey of the attitudes and beliefs only tells the opinions of a small number of patients. Readers should understand that there are two important limitations: (1) the opinions told in the focus groups may not be the way the patients actually act and behave; and (2) the results may not apply to other groups of patients.

Our study shows that some patients clearly want to have doctors of the same sex and from the same ethnic group. Their preferences are largely based on the notion that they would receive better health care from doctors who are like them rather than from doctors who had nothing in common with them.

Source: Patient Preferences for Physician Characteristics in University-Based Primary Care Clinics

Jorge A. Garcia, MD MS; Debora A. Paterniti, PhD; Patrick S. Romano, MD MPH; Richard L. Kravitz, MD, MSPH

FOCUS GROUP INFORMATION HELPS RESEARCHERS DEVELOP STRATEGIES TO KEEP WOMEN IN CLINICAL TRIALS

The federal government strongly recommends that researchers include poor and minority women in clinical trials. Clinical trials look at different ways to prevent or treat a disease, such as heart disease or cancer. It is not always easy for women from poor communities to stay in a clinical trial even when they want to participate. This paper addresses the many reasons why women from poor communities may have trouble staying in a clinical trial (retention) or doing everything that they are asked to do in a clinical trial (compliance).

The four-year Community Retention Intervention Study (CRIS) was funded by the National Cancer Institute. The purpose was to assess whether lay and community health advisors could improve under-served women's retention and compliance in cancer prevention trials. Phase I of this program used focus groups. For a focus group, about 10 volunteers got together in a meeting place and discuss questions from the study team. The questions asked about the community women's attitudes, health beliefs, and knowledge about clinical research. Six focus groups were conducted: three were age-based and three involved participants of the Women's Health Initiative clinical trial component in Birmingham, Alabama.

Sixty-two women between 18 and 87 years of age participated in the sessions: 79% were African American and 52% made less than $20,000/yr. Women were interested in research that provided information to improve their health, prevent disease, and help future generations. Complications and unwanted side effects of treatments were identified as main causes of non-compliance. Additionally, findings suggested that investigators were improving their image within the community and educating women about the need for research.

In summary, the focus group identified the following strategies. When attempting to retain young women in cancer studies, researchers should consider including parents/significant others in discussions and should provide honest information about all possible risks with the study. Incentives like gift certificates, child care, or transportation should be offered to
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young women to improve their retention and compliance with study protocol.

For middle-aged and older women, researchers should focus on how they interact with participants and with each other. In addition, although researchers do explain the potential study risks to participants, the women felt they needed more detailed information in language they could understand. Researchers, therefore, need to help study participants have a better understanding of how taking part in a study may improve their health or that of other family members.

Focus group sessions helped investigators address participants’ concerns and were helpful in improving retention and compliance strategies for the CRIS Project. These findings suggested ways that under-served women could be part of clinical trials. There is still much work to be done if we are to be successful in clinical trials. To be successful, clinical trials must retain the participants that are recruited. This will be more likely to occur if the trials are more sensitive to the people it is designed to help.

Source: Retention of Under-Served Women in Clinical Trials: A Focus Group Study Rhoda E. Johnson, PhD; Roma D. Williams, PhD; M. Christine Nagy, PhD; Mona N. Foud, MD, MPH