

## **From the Editor-in-Chief: Section Previews**

### **Keith C. Norris, MD**

#### **Original Reports on Focus Area: Quality of Care: The Ecology of the Healthcare System**

##### **Perceived Discrimination in Health Care Among American Indians/Alaska Natives**

Johansson et al

In this report, Johansson et al compared the prevalence of perceived discrimination in health care among American Indians/Alaska Natives (AI/ANs) to African Americans, Asian Americans and Whites. They found that AI/ANs, and especially those who identify as AI/AN + White, were the most likely among all ethnic groups to report discrimination in health care. Readers can find reasons the authors found for this perceived discrimination.

##### **Measuring the Quality of Diabetes Care in Urban and Rural Indian Health Programs**

Moore et al

Is diabetes care delivered equitably to American Indians/Alaska Natives living in urban settings vs those living in rural settings? By reviewing data collected by the Indian Health Service, Moore et al examined healthcare records for 710 urban patients and 1420 rural patients being served by health clinics and programs. It seems that the urban patients were more likely to receive diabetes education but less likely to receive annual dental exams compared to their rural counterparts. Few differences in the quality of diabetes care were found between urban and rural Indian health sites and the study's findings may stand as a baseline for assessing ongoing interventions to improve quality of care.

##### **Perceptions of Cultural Competency Among Elderly African Americans**

Johnson et al

In this study of elderly African Americans, Johnson et al found that African Americans are concerned with traditional performance aspects of care. Study participants concurred that communication and respect were critical aspects of the process of care and that their doctors should know something about African American culture but in

the context of healthcare issues. The authors cite a need for additional research on cultural competence to elicit the full range of patient values: technical performance, general (culture-nonspecific) process of care, and cultural-specific preferences.

##### **Racial and Ethnic Differences in the Effects of Regular Providers and Self-Management Education on Diabetes Preventive Care**

Kurian and Borders

By reviewing results of the 2004 Behavioral Risk Factor Surveillance Survey, Kurian and Borders formulated conclusions as to the effects of diabetes self-management education (DSME) and of having a regular healthcare provider on diabetes care across all groups and by race/ethnicity. They found that those who had a regular provider and received DSME were more likely to receive other diabetes preventive care, eg, HbA1C test, foot exam, and dilated eye exam. Whites in this group most frequently received all three of these services; Blacks in this same group, however, were more likely to receive only the HbA1C test. The authors also provide details on the association of DSME and these preventive care services for White, Blacks, and Hispanics.

##### **Perception of Racism Explains the Difference between Blacks' and Whites' Level of Healthcare Trust**

Adegbembo et al

For low- to medium-income residents in a south Florida county, researchers of this study found that trust in the healthcare system was more often linked to personal experiences with health care than with race. To study their hypothesis, Adegbembo et al interviewed more than 1,000 Black and White residents. A structured questionnaire obtained information on the respondents' demographics, level of trust in health care, perception of racism, and access to care. This report analyzes respondents' opinions that led the researchers to conclude that, in the absence of racism in health care, Black and White respondents in this study would have had the same level of healthcare trust.

## **Disparities by Insurance Status in Quality of Care for Elderly Patients with Unstable Angina**

Pamboukian et al

In efforts to understand disparities that may be caused by insurance coverage or lack thereof, Pamboukian and colleagues reviewed medical charts for more than 3,000 African American or White patients older than 65 and hospitalized for unstable angina in 22 Alabama hospitals. The majority (80.3%) of the patients studied had Medicare plus private insurance and nearly 14% had Medicare plus Medicaid. Of this latter group, fewer patients were admitted to hospitals with cardiac catheterization capabilities, were less likely to see a cardiologist and receive anti-platelet therapy within 24 hours of admission, and, although suitable for the procedure, received coronary angiography less often than those in the other groups. Readers will want to explore some of the reasons this study found for these disparities.

## **Factors Associated with Adherence to Recommendations for Screening Mammography Among American Indian Women in Colorado**

Wampler et al

Do American Indian and White women in Colorado report for mammography screening as recommended by their doctors? To find out, Wampler et al reviewed screening patterns for 229 American Indian and more than 60,000 White women older than 40 years of age. American Indian women in the study were less likely than their White counterparts to adhere to recommendations for screening mammography, both annually and biennially. Additional research is needed to explore barriers that appear to prevent American Indian women from following doctor's orders for mammography.

## **Original Reports: Cardiovascular Disease and Related Risk Factors**

### **Geographic and Racial/Ethnic Differences in *HFE* Mutation Frequencies in the Hemochromatosis and Iron Overload Screening (HEIRS) Study**

Acton and the Hemochromatosis and Iron Overload Screening Study Research Investigators

C282Y and H63D, the most common mutations of the *HFE* gene on chromosome 6p, are associated with susceptibility to develop iron overload. The HEIRS Study investigators reviewed patient records to assess geographic differences in the frequencies of these mutations among six ethnic groups. In all, 97,551 patient records were examined. They found frequencies of C282Y and H63D greatest in Whites, lowest in Asians, and similar among Native Americans and Pacific Islanders. Blacks had the lowest H63D frequency and the highest frequency of the wild-type genotype. Across geographic regions, Hispanics had the greatest variation in *HFE* genotypes.

### **Hypertension, Type 2 Diabetes and Blood Groups in a Population of African Ancestry**

Nemesure et al

Nemesure et al wanted to evaluate the relationship of hypertension and diabetes with the ABO, Rhesus and Duffy blood groups, which are known markers of African ancestry. By studying a random sample of 1253 Barbados residents who were 40 years of age and older, they found that associations of diabetes and hypertension to these blood groups support possible genetic influences on both conditions in this and similar African-origin populations. Readers will be interested to study the details of these associations.

### **Metabolic Syndrome in Nondiabetic, Obese, First Degree Relatives of African American Patients with Type 2 Diabetes: African American Triglycerides-HDL-C and Insulin Resistance Paradox**

Boudoulas Meis et al

Despite the higher prevalent rate of obesity, type 2 diabetes and hypertension, African Americans have lower rates of metabolic syndrome (MetS) than Caucasians do. In research designed to discover the reason for this paradoxical situation, Boudoulas Meis and colleagues studied whether genetic inheritance predisposes African Americans to the greater cardiovascular risk and the associated morbidity and mortality. They examined the clinical and metabolic characteristics of 201 first degree African American relatives (159 females, 42 males; mean age  $41 \pm 8$  years; mean body mass index of  $32 \pm 8$ ). Among other findings, the researchers report that waist circumference, rather than metabolic parameters, was the

single most important parameter more likely to meet the MetS criteria in first-degree African American relatives.

### **Differences in Arterial Stiffness and Its Correlates in Tri-Ethnic Young Men and Women**

Hlaing et al

Arterial stiffness is associated with cardiovascular disease morbidity and mortality. Researchers of this study believed that early identification of an increase in arterial stiffness in young persons may improve cardiovascular health outcomes and evaluated the sex and ethnic differences in arterial stiffness levels among young adults. Nearly 500 college students in an urban setting participated in the study and had an average age of 21.2 years. Readers will find that the study demonstrated variations in arterial stiffness levels by sex among these young adults but that further exploration of cardiovascular risk is needed.

### **Dietary Sodium Restriction Alters Postprandial Ghrelin: Implications for Race Differences in Obesity**

Brownley et al

With the increase in the rates of obesity, as especially found among Black women, researchers across the country are seeking solutions to curb the epidemic and the ensuing problems caused by obesity. In this research, Brownley and colleagues discovered that salt sensitivity was related to ghrelin response in that postprandial ghrelin levels tended to increase among salt-sensitive subjects during salt restriction but decrease among salt-resistant subjects during salt restriction. The authors conclude that satiety hormone dysregulation may play a role in: 1) the heightened obesity-related morbidity among Black women, in particular; 2) adherence to sodium-restricted diets; and 3) race differences in behavioral weight-loss interventions that include sodium restriction.

### **Potentially Modifiable Metabolic Factors and the Risk of Cardiovascular Disease Hospitalizations in Urban African Americans With Diabetes**

Cook et al

In this study, Cook and colleagues analyzed data from an urban African American diabetes patient population to identify variables associated with CVD hospitalizations.

Of the 3,397 patients with diabetes, 24% were hospitalized primarily due to CVD. Those who were hospitalized were older, had diabetes longer, and fewer were women. In adjusted analyses, women had lower odds of experiencing a CVD hospitalization, but advancing age, diabetes duration, SBP, and LDL cholesterol were all associated with greater odds of being hospitalized. Additional studies will assist in determining whether management of metabolic risk factors in outpatient settings will translate into lower hospitalization rates due to CVD in this population.

### **Left Ventricular Hypertrophy in African Black Patients with Chronic Renal Failure at First Evaluation**

Ulasi et al

This study evaluates the prevalence of left ventricular hypertrophy (LVH) and factors affecting it in patients with chronic kidney disease (CKD) in Nigeria. All patients ( $N=88$ ) in this study group had advanced CKD belonging to either stage 4 or 5 of Kidney Disease Outcome Quality Initiative (KDOQI) classification. The predominant causes of CKD were chronic glomerulonephritis (43.2%), hypertension (25%), and diabetes mellitus (14.8%). LVH was found in 95.5% of the patients, with the prevalent type of LVH being eccentric hypertrophy in 54.6% and concentric seen in 40.9%. Hypertension was present in 85.2% of the patients. Having demonstrated a strong association for CKD and LVH, the authors call for more aggressive pursuit of early detection and treatment of causes of CKD at the primary prevention level for individuals in this region of the world.

### **Glycemic Control Predicts Diabetic Extrarenal Microvascular Complications But Not Renal Survival in Patients with Moderate to Severe Chronic Kidney Disease**

Crook and Patel

This retrospective chart review of patients with diabetes presenting at a nephrology clinic during 2001 and 2002 examines the effects of glycemic control on renal survival in a predominately African American population. It appears that glycemic control predicts extrarenal microvascular complications. Crook and Patel emphasize the importance of good metabolic control for patients with diabetes and renal disease.

### **Coronary Heart Disease and Risk Factors in Black South Africans—A Case-Control Study**

Loock et al

As has been found in other African nations, coronary heart disease (CHD) was uncommon in Black people living in South Africa before 1970. Since then, CHD risk factor levels have increased, while CHD rates have remained low. In their case-control study, Loock and researchers assessed the relationship between CHD and known risk factors in urban Black South Africans. Study participants were 89 cases with CHD and 356 control patients recruited between 1982 and 1986 and followed until 1994. Data from the study revealed that many more cases than controls had a family and personal medical history and risk factors related to CHD. A relationship between genetic factors and the development of CHD was also identified in this population group.

### **Poor Glycemic Control Increases Risk of Hospitalization in Urban African Americans with Diabetes**

Cook et al

African Americans are hospitalized with diabetes more frequently than other ethnic groups and Cook et al completed their study to find out why this occurs. By analyzing data from an urban African American patient population, they defined variables associated with hospitalizations due to diabetes. They concluded that poorer glycemic control increased the chances of hospitalization due to diabetes in this study population and suggest that continued efforts to aggressively control hyperglycemia could decrease the need for a diabetes hospitalization in this population.

### **Prevalence and Correlates of Cardiovascular Risk Factors in South Asians: Population-Based Data from Two California Surveys**

Ivey et al

Using data from two population-based surveys with South Asian participants in California, Ivey et al examined CVD risk for this population. CVD risks examined included smoking, hypertension, hypercholesterolemia, diabetes, myocardial infarction and angina. Approximately 35% of participants in each survey had any CVD risks. Those more likely to have CVD risk were male, older, had

higher BMI, lower level of education, and used alcohol. In one of the surveys reviewed, speaking English was associated with increased CVD risk.

### **The Changing Patterns of Hypertension in Ghana: A Study of Four Rural Communities in the Ga District**

Addo et al

As populations in Ghana become more Westernized, researchers in this study sought to measure the prevalence of cardiovascular disease in both rural and urban areas. They found that one in four residents in the four rural communities studied had hypertension (BP $\geq$ 140/90 mm Hg); only half were on treatment and a third did not know they had high blood pressure. The authors conclude that the high rate of hypertension can be associated with low levels of awareness, drug treatment, and blood pressure control.

### **Original Reports: Public Health**

#### **Racial/Ethnic Neighborhood Concentration and Self-Reported Health in New York City**

White and Borrell

Are poor health and neighborhood demographics linked? In this research, White and Borrell studied data from the 1999 and 2002 New York City Social Indicator Survey to find out the relationship of racial/ethnic neighborhood concentration to self-reported health and to determine whether this association varies by race/ethnicity and perception of neighborhood. They found that individuals living in neighborhoods with the highest concentration of Blacks were almost two times more likely to perceive their health as poor compared to their counterparts living in less concentrated neighborhoods. The authors cite a need for further study to better understand how racial/ethnic neighborhood concentration affects health.

#### **Exercise Participation Before and During Pregnancy Among Low Income, Urban, Black Women: The Baltimore Preterm Birth Study**

Orr et al

Knowing the physical activity levels of Black women at higher risk of chronic disease can help healthcare professionals determine approaches and programs that

may prevent disease among Black women as they age. Of the 922 women of this study, more than 75% reported some physical activity prior to pregnancy and about two-thirds exercised during pregnancy. Many of those who exercised had higher levels of John Henryism Active Coping and lower levels of depression. Other studies have found that Black women decrease exercise participation after pregnancy and as they age. The authors suggest that programs are needed to encourage Black women to continue an exercise program as they age to help prevent chronic diseases.

### **Attitudes Toward Life-Sustaining Interventions Among Ambulatory Black and White Patients**

Bayer et al

Do African Americans view life-sustaining interventions the same way as their White counterparts? After being presented eight scenarios featuring either mental or physical disabilities, participants in this study were asked to decide whether they would accept or decline life-sustaining interventions. The researchers also collected participant information on religious beliefs and practices, family integration, and experience with creating a health-care proxy. The results appear to indicate that Black patients aged 50 and older are more likely than White patients to prefer life-sustaining care. These results should be taken into consideration to offer African Americans end-of-life care consistent with cultural values.

### **The National Eye Health Education Program: Increasing Awareness of Diabetic Eye Disease Among American Indians and Alaska Natives**

Silver et al

In research designed to inform strategies for a national communications campaign on diabetic eye disease, Silver and colleagues at the National Eye Institute conducted formative and qualitative research to identify knowledge levels, approaches to managing eye disease, and ways to reduce disease prevalence among American Indians in five locations. The study found that, while diabetes ranked high on the list of community health issues, participants had only a basic level of diabetes-related knowledge. The findings emphasize the importance of culturally appropriate communication strategies.

### **The Relationships Among Acculturation, Biobehavioral Risk, Stress, Corticotropin-Releasing Hormone, and Poor Birth Outcomes in Hispanic Women**

Ruiz et al

Ruiz and colleagues designed their research to find out how acculturation might predict birth outcomes in pregnant Hispanic women. By reviewing gestational age, Apgar scores, length, weight, percentile size, and head circumference of the infant at birth, they found that English acculturation predicted stress, corticotropin-releasing hormone, biobehavioral risk, and decreased gestational age at birth.

### **Exercise and Pregnancy Outcome Among Urban, Low Income Black Women**

Orr et al

The analysis reported in this article examines the associations between exercise before and during pregnancy and pregnancy outcomes of preterm birth and low birth weight among a sample of urban, low-income Black women. Orr et al administered a questionnaire to 922 women, asking them about their exercise habits before and during pregnancy. Nearly two-thirds of the women reported participating in exercise during pregnancy; most women participated in nonstrenuous exercise (56%). The risks of both low birth weight (12.2%) and preterm birth (13.7%) were not significantly different whether women reported exercising or not. For high-risk women, analysis indicated no significant difference between those who exercised and those who did not for preterm birth or low birth weight. The authors concluded that this analysis failed to identify any association between exercise and pregnancy outcomes among low-income urban Black women.

### **Original Reports: Research Design**

#### **Recruitment of African American and White Postmenopausal Women into Clinical Trials: The Beneficial Effects of Soy Trial Experience**

Lindenstruth et al

Recruiting participants representing ethnic minority groups is a critical component to successful research on the needs, care, and health issues related to health disparities. Two articles in this issue discuss recruitment

strategies found to be effective with African American women. In their article, Lindenstruth et al describe the strategies and costs associated with recruiting both African American and White postmenopausal women into a randomized controlled trial. With a goal to have more than 80 African American and 80 White women complete the BEST (Beneficial Effects of Soy Trial) study, recruitment strategies included direct mailings, newspaper ads, and radio announcements. Readers will learn that the strategy most effective in reaching White women was the least effective in recruiting African American women. Findings from this study should be considered when preparing communication strategies for clinical trial recruitment.

### **Validation of Physical Activity Instruments: Black Women's Health Study**

Carter-Nolan et al

This study by Carter-Nolan and colleagues was designed to determine the validity of a self-administered physical activity questionnaire (PAQ) that was used in a large prospective study of African American women in the United States against an accelerometer (actigraph), an objective assessment of movement, and a seven-day activity diary. After finding significant correlations between the PAQ and the actigraph/diary, the researchers conclude that the PAQ is an accurate measure of physical activity and will be useful in prospective epidemiologic research.

### **Psychometric Characteristics of a Patient Satisfaction Instrument Tailored to the Concerns of African Americans**

Fongwa et al

Designing survey instruments must take into consideration factors of cultural relevance to the study population in order to elicit appropriate patient-reported outcome measures. In their work, Fongwa et al modified the Group Health Association of America survey to capture the healthcare concerns of African Americans from diverse socioeconomic backgrounds. Their newly designed 21-domain instrument was tested and found to be effective in evaluating care delivered to both African Americans and Whites.

### **Recruitment of Black Women with Type 2 Diabetes into a Self-Management Intervention Trial**

Newlin et al

In the study by Newlin and co-authors, the most successful recruitment strategies were community health fairs (77.8%), private practice referrals (75.0%), participant referrals (61.5%), community clinic referrals (44.6%), community advertising and marketing (40.9%), and chart review (40.4%). The researchers' results also confirm previous findings indicating that Black women respond more favorably to recruitment when traditional methods are enhanced with culturally sensitive methods.

### **Original Reports: Cancer**

#### **Dietary Intake to Reduce Cancer Risk Among African American Women in Public Housing: Do Sociodemographic Factors Make a Difference?**

Crump et al

Research has shown the connection between diet and disease and cancer risk is no exception. In their study, Crump et al investigate how the diet of African American women in public housing is related to cancer risk. They review sociodemographic factors that hinder healthy diets for this population. With their finding of overwhelmingly low rates of consumption of fruits and vegetables as well as low compliance with recommended daily nutritional intake, the researchers cite the need for strategies promoting healthy diets for women in public housing communities to reduce cancer morbidity and mortality.

#### **A Systematic Review of Culturally Sensitive Cancer Prevention Resources for Ethnic Minorities**

Hoffman-Goetz and Friedman

Reviewing 10 studies meeting inclusion criteria, Hoffman-Goetz and Friedman assessed the use of instruments or scales used to measure the cultural sensitivity (CS) of cancer information resources and explored how the term cultural sensitivity was defined and applied to cancer prevention education materials for ethnic minority groups. They found that only four studies defined the term CS and only three studies evaluated CS of printed cancer information resources. The authors call for the

establishment of best practice definitions and guidelines for culturally sensitive cancer prevention education.

### **Stress, Coping, Social Support, and Prostate Cancer Risk Among Older African American and Caucasian Men**

Coker et al

The purpose of this analysis was to investigate the association between stress, coping, social support, and risk of prostate cancer among older (age 65–79) men. To complete the study, Coker et al completed telephone interviews to determine demographic information (age, race, income, education, marital status, body mass index), medical and prostate cancer screening history, stress levels (Global Perceived Stress), coping (John Henryism Scale) ability, and social support for 400 study participants with prostate cancer. The authors concluded that higher John Henryism scores, which indicate high-effort coping, may be associated with an increase in prostate cancer risk.

### **Radical Prostatectomy and Quality of Life Among African Americans**

Ukoli et al

More sophisticated screening mechanisms and a higher rate of screenings have led to an increase in the number of men who present with prostate cancer. For these patients, treatment and quality-of-life issues are influenced by age

at diagnosis, tumor stage, and comorbidities. In this study, Ukoli and colleagues explored the effects of radical prostatectomy on quality of life for 100 African American men. The reader will find a detailed account of common problems and symptoms following prostatectomy as reported by the men and will draw conclusions about the importance of understanding a patient's short- and long-term expectations of treatment options.

### **Breast and Cervical Cancer Screening for Puerto Ricans, African Americans, and Non-Hispanic Whites Attending Inner City Family Practice Centers**

Finney et al

Research has found that disparities exist for breast and cervical screening practices among racial/ethnic groups and particularly among low-income women. For women in this study population, adherence to recommendations for mammography, Pap smears, and clinical breast exams (CBE) were assessed. While nearly half (48%) in each group (Puerto Ricans, African Americans, and Whites) were compliant with all three exams, the researchers found that Puerto Rican women were less compliant with CBEs than their African American and White counterparts (58%, 68.6% and 78.5%, respectively). The authors recommend a staging tool to identify and encourage women who would be most likely to be compliant with screening practices.