Director’s Report

by Kola Okuyemi, M.D., M.P.H.

This past October has been quite busy for the Program. Earlier in the month we hosted a poster session and awards banquet for our third annual 2009 Planning Grants in Health Disparities Research Program. Similar to previous years, we have a wide range of research topics with the current community and University collaborations – ranging from violence in the African American and Hmong communities, colorectal cancer screening in the Vietnamese population, nutrition and physical activity among Latino youth, and STD prevention among Somali women. I was also very impressed to see the progress of prior grantees and other Program members from their poster presentations, and witness the tangible work they are doing in our communities. I’d like to specially thank the University sponsors that helped make this event possible and free for community members: the Dean of the Medical School, Dean of the School of Nursing, and the Dean of the School of Public Health.

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Metabolic Syndrome in Latino Children

By Michael Golden, M.P.H., Medical School

The metabolic syndrome is defined as having three or more of the following cardiovascular risk factors: abdominal obesity, raised triglycerides, low HDL cholesterol, elevated blood pressure, and elevated fasting glucose. According to the American Heart Association, people with the metabolic syndrome are at increased risk for coronary heart disease, stroke, peripheral vascular disease, and type 2 diabetes. It is estimated that 47 million people in the United States meet the criteria for the metabolic syndrome.

According to results of the National Health and Nutrition Examination Survey III, Latino American adults have the highest prevalence (31.9 percent) of the metabolic syndrome in the U.S. Latinos currently represent over 14 percent of the U.S. population and have a projected growth to approximately 25 percent of the total population by 2050.

In the February 2009 Journal of the American Dietetic Association, Casazza and colleagues observed diet, physical activity, body composition, and other markers in 202 healthy children aged 7 to 12 years to examine the contribution of diet and physical activity to the metabolic syndrome and its components in children. The prevalence of the metabolic syndrome in the total group of children was 8.4 percent, and when analyzed according to race, the prevalence was highest among Latinos with 20 percent of the children meeting the criteria, followed by whites at 5.9 percent, and African Americans at 2.5 percent. Further, Latinos accounted for the greatest percentage of children with each of the components of the metabolic syndrome, except for high blood pressure. Diet composition was found to be closely related to the components of the metabolic syndrome, with carbohydrate intake (with a large percentage of simple carbohydrates) being adversely related to waist circumference, triglyceride levels, and glucose levels.

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On October 6, 2009 we hosted a poster session and awards dinner for the 2009 Planning Grants in Health Disparities Research Program. In addition to presentations on research proposals by the newly awarded research teams, poster presentations featuring research findings from PHDR members and 2007 and 2008 planning grant awardees were made available for viewing, questions, and feedback for the researchers.

The Community – University research teams that are recipients of the 2009 Planning Grants in Health Disparities Research are:

- Jeannette Raymond, Family and Children’s Services, and Dr. Cari Clark, Department of Medicine
  *A Community-University Partnership to Examine Family Violence in the African American Community of North Minneapolis*

- Marie Tran, Vietnamese Social Services of Minnesota and Dr. Mark Yeazel, Family Medicine and Community Health, and Dr. Hee Lee, School of Social Work
  *Motivating Underserved Vietnamese Americans to Obtain Colorectal Cancer Screening: A Culturally Tailored Video-Based Intervention*

- Thomas Yang, Association for the Advancement of Hmong Women in Minnesota, and Dr. Tai Mendenhall, Family Medicine and Community Health
  *Intimate Partner Violence (IPV) in the Hmong Community: Tackling an Old Problem in a New Way*

- Rosa de la Torre and Maria Navas, La Clinica, and Dr. Jamie Stang, Division of Epidemiology and Community Health
  *Improving Nutrition and Physical Activity among Latino Youth*

- Fatima Jama and Amira Ahmed, Midwest Community Development, and Dr. Bean Robinson, Family Medicine and Community Health
  *Opening Pandora’s Box: Somali Women, Sexuality, and HIV/STD Prevention*

This grant program is made possible by funding partners: University of Minnesota Masonic Cancer Center, Office for Business & Community Economic Development, *The Community Health Initiative (w/ Medica)*, and the Medical School’s Program in Health Disparities Research. The poster session and awards dinner were made possible by the University of Minnesota’s: Medical School, School of Nursing, and School of Public Health. <<<
Environmental Justice

by Eduardo Miguel Medina, Medical School, School of Public Health

Acknowledging the impact of environmental abuse on medically underserved communities is fundamental towards understanding health disparities. It is widely acknowledged that communities that suffer health disparities are at a higher risk for living in environments that are conducive to poor health. But beyond the lack of access to healthy foods and safer streets, is the nefarious phenomenon of environmental racism.

As defined by the Environmental Protection Agency, environmental justice is the “fair treatment and meaningful involvement of all people regardless of race, ethnicity, income, national origin or educational level with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no population, due to policy or economic disempowerment, is forced to bear a disproportionate burden of the negative human health or environmental impacts of pollution or other environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local and tribal programs and policies.” The violation of these principles in many instances has come to be known as environmental racism, because race was found to be the most potent variable in predicting where commercial hazardous waste facilities were located in the U.S. - more powerful than household income, home value, and the estimated amount of hazardous waste generated by industry (Toxic Wastes and Race in the United States, 1987).

Unfortunately, the unequal burden of environmental hazards on communities of color is pervasive. According to the report Toxic Wastes and Race at Twenty 1987—2007, in 2007 more than nine million people were estimated to live in neighborhoods within 3 kilometers of the nation’s 413 commercial hazardous waste facilities. More than 5.1 million people of color, including 2.5 million Hispanics or Latinos, 1.8 million African Americans, 616,000 Asians/Pacific Islanders and 62,000 Native Americans lived in neighborhoods with one or more commercial hazardous waste facility.

From toxic wells in Dickson, Tennessee, contaminated soil in Vieques, Puerto Rico, to uranium mining on Native American land, episodes of environmental racism often coincide with resistance by communities who refuse to accept an unfair share of environmental hazards.

It is incumbent on both environmentalists and health care professionals to address environmental injustice and racism as part and parcel of a strategy for eliminating health disparities.
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In the December 2005 issue of *Pediatric Research*, Butte and colleagues determined metabolic syndrome in 1,030 Latino children aged 4 to 19 years from 319 families in a study designed to genetically map childhood obesity in the Latino population. The metabolic syndrome was present in 20 percent of the 521 overweight children, some as young as 4 - 5 years old, using the conventional syndrome components, and in 28 percent if abnormal liver function was included in the definition of the metabolic syndrome. By design, this study focused on children with genes and behaviors related to obesity (with a higher percentage obese than in the general U.S. Latino population), and is therefore informative on the metabolic consequences associated with childhood obesity instead of the prevalence within the population.

Rates of heart disease, stroke, peripheral vascular disease, and type 2 diabetes all are increased in people with metabolic syndrome. Though these diseases typically present in adulthood, concern is growing that they will be observed at younger ages in part because of the growing prevalence of metabolic syndrome observed in young people. We currently are identifying both risks of obesity-related diseases in young Latinos, among other underserved groups, and opportunities for improving current youth fitness initiatives aimed at these populations.