



Kellogg Health Scholars

Connecting Academe, Community, and Policy

M E E T T H E K E L L O G G H E A L T H S C H O L A R S

D. Phuong (Phoenix) Do, Ph.D., M.Phil.

From the Peace Corps to the halls of academe, Phoenix Do has worked to better the lives of those in difficult circumstances. And, like many other participants in the Kellogg Health Scholars program, her background includes a major career shift to achieve her goal.

She received her undergraduate degree in civil engineering from UCLA and then spent the next two years in Mali, West Africa as a water and sanitation volunteer. On her return to the U.S. she worked in an aerospace firm. But when engineering proved unsatisfying, she returned to school, this time to study policy analysis. “I gravitated to health, in part because of my Peace Corps experience,” Do explains, “and I wanted to use my quantitative skills to study the reasons behind health disparities -- in particular, racial disparities.” After receiving masters and doctoral degrees from the RAND Graduate School, she spent the next two years as a Kellogg postdoctoral scholar at the University of Michigan, where she examined how neighborhood characteristics influence the health of different groups.

Do is currently assistant professor in the Department of Health Services Policy and Management at the University of South Carolina, and part of a multidisciplinary research group aimed at studying and reducing social and health disparities. She continues to take aim at the twin evils of residential segregation and the concentration of neighborhood poverty.

Research and Results

The relationship between individual traits such as poverty, race and low educational attainment, on the one hand, and poorer health status, on the other, has become an accepted part of the public health literature. But the idea that the social and structural characteristics of whole neighborhoods exert a separate effect on health has been more difficult to prove. For one thing, it takes complex multi-level research techniques, many of them only recently applied, to disentangle the impacts of personal and contextual factors.

Do has been working in this growing area for the past several years, producing numerous articles in peer-reviewed scientific journals and advancing the field. A common thread of her research is the extent to

which the concentration of neighborhood poverty contributes to black/white health disparities and whether there are differential impacts of neighborhood characteristics across race and ethnicity. She has tested her theories using data from different national health surveys and outcome measures including obesity, self-rated health and cumulative wear and tear on organ systems.

She is also studying the cumulative effects of these health determinants over time. “If you measure the relationship between neighborhood characteristics and health at a single point, it tends to be weaker because you mix long term residents with short term residents,” she explains. “But a major difference between poor whites and poor blacks is that blacks tend to be exposed to problem neighborhoods longer, and consequently the problems exert a greater impact on their health.”

Policy Implications

Suppose that some neighborhoods and communities did exert a toxic effect on their residents, as research is beginning to suggest. What would that mean for public policy?

First, Do says, “Policies which have traditionally been targeted at the individual level with little regard for neighborhood context should begin to consider constraints as well as opportunities in the residential environment.” That might mean that in addition to expanding health insurance, making services more widely available and educating individuals about health risks, there would be efforts at the community level to increase social capital and empowerment, promote economic development, and address issues that also influence health, such as environmental problems, housing, public safety and availability of nutritious food. Rather than increasing health risk, poor minority neighborhoods might offer advantages in the presence of strong relationships and institutions.

Supporting this view is the recognition that the “urban health penalty” is a legacy of racial segregation and is in part attributable to earlier federal policies of “redlining” and refusal to support Black home ownership. This may help justify increased resources to help inner city communities.

To learn more about D. Phuong (Phoenix) Do, Ph.D., and her work, contact her at dphuongdo@sc.edu and/or consult the following publications:

Do, D. Phuong. 2009. The Dynamics of Income and Neighborhood Context for Population Health: Do Long Term Measures of Socioeconomic Status Explain More of the Black/White Health Disparity than Single-Point-In-Time Measures? 2009. In Press: *Social Science and Medicine*.

Finch, Brian K., **Do, D. Phuong**, and Frank, Reanne. 2009. Could 'Acculturation' Effects be Explained by Latent Health Disadvantages among Mexican Immigrants? Forthcoming: *International Migration Review*.

Do, D. Phuong and Finch, Brian K. 2008. Neighborhood Poverty and Health: Context or Composition? *Am. J. Epidemiol.* 168(6):611-619.

Do, D. Phuong, Finch, Brian K., Basurto-Davila, Ricardo, Bird, Chloe, Lurie, Nicole, and Escarce, Jose. 2008. Does Place Explain Racial Health Disparities? Quantifying the Contribution of Residential Context to the Black/White Health Gap in the United States. *Social Science and Medicine.* 67(8):1258-1268.

Elliott, Marc, Finch, Brian, Klein, David, Ma, Sai, **Do, D. Phuong**, Beckett, Megan, Orr, Nathan, and Lurie, Nicole. 2008. Sample Designs for Measuring the Health of Small Racial/Ethnic Subgroups. *Stat Med.* 27(20): 4016-4029.

Do, D. Phuong, Dubowitz, Tamara, Bird, Chloe, Lurie, Nicole, Escarce, Jose, and Finch, Brian K. 2007. Neighborhood Context and Ethnicity Differences in Body Mass Index: A Multilevel Analysis Using the NHANES III Survey (1988-1994). *Economics and Human Biology.* 5(2): 179-203.

To learn more about the Kellogg Health Scholars Program, contact Barbara Krimgold of the Center for the Advancement of Health at bkrimgold@cfah.org or visit www.kellogghealthscholars.org.