Inequalities in Children's Health: Untangling Ethnicity, Social Class, and Lifestyle Effects on the Vietnamese, Other Asians, Hispanics, and Whites

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ABSTRACT

While much has been written on ethnic disparities in health, little research has been done on how the Vietnamese population in America compares to other groups in terms of health status, and even less has been done on Vietnamese-American children. This study evaluates parent-rated health for Vietnamese American children using data collected in the 2007 Orange County Health Needs Assessment (OCHNA) Survey, which includes an oversample of Vietnamese children living in the ethnic enclave of Little Saigon. We compare the health of Vietnamese, Other Asian, Hispanic, and non-Hispanic White children on a measure of health as rated by the child's parent or guardian, adjusting for demographics, social class, and lifestyle variables. Our previous research suggests that Vietnamese adults and elderly Vietnamese report much poorer self-rated health than do Other Asians, Hispanics, and particularly Whites. While differences in socioeconomic status explain much of Vietnamese adults' greater likelihood of reporting poor health, it does not explain their lower likelihood of reporting excellent health. While little is known about the health of Vietnamese adults, even less is known about the health of Vietnamese children in the United States. A preliminary analysis of OCHNA 2007 data suggests that few children of any ethnicity are reported to be in poor health. However, parents of Vietnamese American children are substantially less likely to report that their child is in excellent or very good health. We examine the hypothesis that Vietnamese American children report poorer health than Other Asians, Hispanics, and Whites in large part as the result of stratification. We also examine the role of demographic and lifestyle characteristics on reports of children's health.

BACKGROUND AND PRIOR RESEARCH

Although Asian Americans have the lowest age-adjusted mortality of any group in the United States (Rogers et al., 1996), the Vietnamese do not share this good health. National samples seldom disaggregate Asians into ethnic groups, but epidemiological studies indicate that the Vietnamese suffer higher rates of tuberculosis, hepatitis B, and certain cancers (Centers for Disease Control and Prevention, 2007; Nelson et al., 1997; Miller et al., 1996; McPhee and Nguyen, 2000; Walsh et al., 2010). In addition, the Vietnamese have widespread depression (Lin et al., 1985) and signs of post-traumatic stress disorder (Abe et al., 1994; Kim, 2006; Kinzie et al., 1990; Uehara et al., 1994; Ying, 2001). Not surprisingly, the Vietnamese do not score well

on self-rated health (Ihara, 2009; Sorkin et al., 2008; Walsh, Torr, and Bui 2010) and are more likely than Whites and Other Asians, with the exception of Koreans, to report their health status as fair or poor (Kuo and Porter, 1998). Vietnamese children are less likely than children in other ethnic groups to have health insurance and utilize health services (Yuu et al. 2010).

There is a clear relationship between demographic and social class variables and various measures of health status. Although part of the relationship between social class and health results from access to resources and care, another component of the relationship may be ethnic group beliefs and lifestyle behaviors that are correlated with social class (Yen and Syme, 1999). We adopt Weber's understanding of social class (Gilbert, 2010) that, in addition to economic dimensions, class includes social dimensions that influence lifestyle choices. Unequal life chances are at the root of stratification studies and differential life chances come into clear focus in the examination of health of different groups. This paper will examine the effect of demographic, social class, and lifestyle variables on children's health status for four groups in Southern California: the Vietnamese, Other Asians, Hispanics, and non-Hispanic Whites.

This paper will contribute to understanding of inequality in three important ways. First, we substantially add to the knowledge about Vietnamese health in the United States. Prior to the start of our research on this topic, what little that was known about the relationship between Vietnamese health and stratification was based on two studies of the Vietnamese using the California Health Interview Survey (CHIS): Sorkin et al. (2008) focused on Vietnamese elderly, while Ihara (2009) compared the effects of education and income on health for Whites and three Asian ethnic groups, including Vietnamese. Using OCHNA 2007 we examined self-rated health for Vietnamese adults compared to Whites, Hispanics, and Other Asians using the (Walsh, Torr, and Bui 2010). We are currently undertaking a similar analysis comparing elderly Vietnamese

and Whites. All additional knowledge about Vietnamese health derives from epidemiological studies that do not measure stratification. Almost nothing is known about the health of Vietnamese children except that they are less likely to utilize health care services (Yuu et al. 2010).

Outside of Vietnam, the largest concentration of Vietnamese resides in Orange County, California, in three cities known as "Little Saigon." Thus, knowledge about the health challenges that these children face are important to help local and statewide health care providers and policy makers with the information they need to better serve this community. While there is some limited knowledge about the health of Vietnamese adults, little is known about the health of Vietnamese-American children. Furthermore, the context in which these children are growing up, their experience of being part of immigrant families and communities, and their experience as ethnic minorities is totally different from their parents' experience. Thus, it would be unwise to generalize about these children's health from what we know about Vietnamese adults.

Second, the large sample allows us to compare across four racial/ethnic groups. We can compare the subjective health rating of Vietnamese and Hispanic children—two of the fastest-growing immigrant groups in the United States. We can also compare Vietnamese with Whites and also with Other Asians, which is important because earlier studies note that the Asian category blurs heterogeneity, which may impact health (Ihara, 2009). Our prior analyses underscore the importance of caution in using the pan-ethnic "Asian" category, as it masks important differences in pre-immigration attributes, economic resources, and government assistance at the time of reception (or parent's reception).

Third, through the logistic regression models we are able to determine whether the previous findings of poor Vietnamese health apply to children and if so, if they are explained by

differences in demographic factors, social class variables, or lifestyle variables. In order to begin to untangle the effects of demographic and social class characteristics controlling for lifestyle choices, we consider the predictor variables in four stages: ethnicity, demographic characteristics, social class dimensions, and lifestyle choices. Our goal is to determine whether the poor parent-rated health of Vietnamese children is the result of stratification. If we cannot explain the differential in parent-rated health with these variables, perhaps the residual effects are a result of ethnicity. However, we cannot definitively determine whether any residual effects of ethnicity are the result of differences in cultural beliefs influencing health and help-seeking behavior, or of unmeasured aspects of stratification.

We test three hypotheses:

> H_1—Vietnamese parents will rate their children's health more poorly than the three other ethnic groups.
>
> H_2—The difference between parent ratings of Vietnamese children's health and that of the other three ethnic groups is largely explained by differences in social class position.
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> H_3—Any residual difference between parent ratings of Vietnamese children's health and that of the other three ethnic groups is explained by lifestyle variables.

DATA AND METHOD

Data.

The data for this study come from the Orange County Health Needs Assessment (OCHNA), conducted in 2007 by the non-profit organization of the same name. The questionnaire includes a broad array of demographic and socioeconomic indicators and detailed coverage of physical and mental health, replicating items from both CHIS and the Center for Disease Control and Prevention's (CDC) Behavioral Risk Factor Surveillance Survey (BRFSS). OCHNA developed two surveys, one focusing on adult health and one on children's health. The

surveys were designed and administered in English, Spanish, or Vietnamese. Data for children were collected through the use of telephone surveys with the parent or guardian of the randomly selected child in randomly selected, telephone-equipped Orange County households.

OCHNA oversampled the adult Vietnamese population, seniors (individuals age 55 and older), and households with children under the age of six. The Vietnamese oversample was obtained through a combination of randomly selected households and a list of likely Vietnamese households (obtained using last names). Weights, using estimates provided by the State of California Department of Finance, allow estimation to Orange County population.

The major benefit of the 2007 OCHNA for our analysis is the oversample of Vietnamese children. Our analytic sample includes data for 371 Vietnamese children, along with 154 Other Asian children, 281 Hispanic children, and 1151 White children. Thus the sample is large enough to allow comparison of the Vietnamese to Other Asians, Hispanics, and Whites on variables known to influence health.

Analytic Approach and Measures.

Although the 2007 OCHNA survey provides numerous measures of health and health-related behaviors, our analysis focuses on one holistic measure, overall rating of health status. Numerous studies have shown that self-rated health is as reliable and valid a measure of health as physician examinations (Fayers and Sprangers, 2002; Idler and Benyamini, 1997; Lopez, 2004; Mirowsky, 1999) and an excellent predictor of both morbidity (Ferraro and Farmer, 1999) and mortality (DeSalvo et al., 2006; Idler et al., 2004; McGee et al., 1999). Some speculate that its robust quality as a measure of health lies in its simplicity, its ability to signify a phenomenological sense of well-being, and its meaning as an indicator of functioning that stretches beyond narrow biomedical definitions (DeSalvo et al., 2006). For children, the

measure is not self-rated; rather the parent or guardian who answered the survey for the child also rates their overall health. Although this measure is slightly different than self-rated health it still encompasses the holistic sense of health, and coresident parents are likely to be knowledgeable about their child's health.

Initial descriptive analyses suggest that few children of any ethnicity are reported to be in poor health. As a result, we collapse the original five-category scale into a three-category dependent variable that compares those reporting (a) "excellent" health, and (b) "very good" health, to those reporting (c) "good" health, defined as those reporting good, fair or poor health.

Although few children are reported as being in fair health, there are significant differences in the proportion reported as in excellent health by ethnicity. Just 19% of Vietnamese children were reported to be in excellent health, compared to over 40% of Hispanic children and over 60% of White and Other Asian children.

We plan to investigate these disparities further utilizing an ordered logit approach to examine the effect of ethnicity on parent-rated health, net of other independent variables. Model 1 examines the effect of only ethnicity on self-rated health. Model 2 adds controls for demographics. Model 3 adds controls for social class characteristics. Finally, Model 4 adds controls for lifestyle characteristics. This will allow us to assess the extent to which ethnic differences in children's health are explained by differences in demographics, socioeconomic status and lifestyle characteristics.

REFERENCES

Abe, Jennifer, Nolan Zane, and Kevin Chun. 1994. Differential responses to trauma: Migration-related discriminants of post-traumatic stress disorder among Southeast Asian refugees. *Journal of Community Psychology*, 22(2): 121–135.

Bell, S. E. 2000. *Experiences of illness and narrative understanding. Perspectives in Medical Sociology*. P. Brown. Prospects Heights, Illinois, Waveland Press, Inc. 3: 130-145.

Bzostek, Sharon, Noreen Goldman, and Anne Pebley. 2007. Why do Hispanics in the USA report poor health? *Social Science and Medicine*, 65 (5): 990–1003.

Centers for Disease Control and Prevention. 2007. *REACHing Across the Divide: Finding Solutions to Health Disparities.* Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.

Cohen, Barney (Ed.), *Critical Perspectives on Racial and Ethnic Differences in Health in Late* Life, (pp. 227–266). Washington, DC: The National Academies Press.

DeSalvo, Karen B., Nicole Bloser, Kristi Reynolds, Jiang He, and Paul Muntner. 2006. Mortality prediction with a single general self-rated health question: A meta-analysis. *Journal of General Internal Medicine*, 21(3): 267–275.

Fayers, Peter. M., and Mirjam A. Sprangers. 2002. Understanding self-rated health. *The Lancet,* 359: 187–188.

Ferraro, Kenneth P., and Melissa M. Farmer. 1999. Utility of health data from social surveys: Is there a gold standard for measuring morbidity*? American Sociological Review*, 64: 303–315.

Gilbert, Dennis. 2010. *The American Class Structure in an Age of Growing Inequality* (8th ed.). Thousand Oaks, CA: Pine Forge Press.

Hayes-Bautista, David E. 2002. The Latino health research agenda for the twenty-first century. In Marcelo M. Suarez-Orozco and Mariela M. Paez (eds.), *Latinos: Remaking America* (pp. 215–235). Berkeley, CA: University of California Press.

Idler, Ellen and Yael Benyamini. 1997. Self-rated health and mortality: a review of twenty-seven community studies*. Journal of Health and Social Behavior*, 38: 21–37.

Idler, Ellen, Howard Leventhal, Julie McLaughlin, and Elaine Leventhal. 2004. In sickness but not in health: Self-ratings, identity, and mortality. *Journal of Health and Social Behavior*, 45(3): 336–356.

Ihara, Emily S. 2009. Ethnicity matters: Socioeconomic gradient in health among Asian-Americans. *Journal of Sociology and Social Welfare*, 36(2): 125–144.

Jasso, Guillermina, Douglas S. Massey, Mark R. Rosenzweig, and James P. Smith. 2004. Immigrant health: Selectivity and acculturation. In Norman B. Anderson, Randy A. Bulatao,

Kim, Wooksoo. 2006. Diversity among Southeast Asian ethnic groups: A study of mental health disorders among Cambodians, Laotians, Miens and Vietnamese. *Journal of Ethnic and Cultural Diversity in Social Work*, 15(3/4): 83–100.

Kinzie J. David, James K. Boehnlein, Paul K. Leung, Laurie J. Moore, Crystal Riley, and Debra Smith. 1990. The prevalence of posttraumatic stress disorder and its clinical significance among Southeast Asian refugees. *American Journal of Psychiatry,* 147(7): 913–917.

Kuo, JoAnn, and Kathryn Porter. 1998. *Health status of Asian Americans: United States*, 1992–94. Advance Data, 298.

Lin, Elizabeth Hiok-Boon, Loren J. Ihle, and Laurie Tazuma. 1985. Depression among Vietnamese refugees in a primary care clinic. *The American Journal of Medicine,* 78(1): 41–44.

Lopez, Russ. 2004. Income inequality and self-rated health in US metropolitan areas: A multi-level analysis. *Social Science & Medicine*, 59(12): 2409–2419.

McGee, Daniel L., Youlian Liao, Guichan Cao, and Richard S. Cooper. 1999. Self-reported health status and mortality in a multiethnic US cohort. *American Journal of Epidemiology*, 149(1): 41–46.

McPhee, Stephen J., and Tung T. Nguyen. 2000. Cancer, cancer risk factors, and community-based cancer control trials in Vietnamese Americans. *Asian American Pacific Islander Journal of Health,* 8(1): 18–31.

Mirowsky, John. 1999. Subjective life expectancy in the U.S.: Correspondence to actuarial estimates by age, sex and race. *Social Science and Medicine*, 49(7): 967–979.

Mulatu, Mesfin Samuel, and Carmi Schooler. 2002. Causal connections between socio-economic status and health: Reciprocal effects and mediating mechanisms. *Journal of Health and Social Behavior*, 43(1): 22–41.

Nelson, Karen R., Hoan Bui, and Jeffrey H. Samet. 1997. Screening in special populations: A ‘‘case study’’ of recent Vietnamese immigrants. *The American Journal of Medicine*, 102(5): 435–440.

Rogers, Richard G., Robert A. Hummer, Charles B. Nam, and Kimberley Peters. 1996. Demographic, socioeconomic, and behavioral factors affecting ethnic mortality by cause. *Social Forces,* 74(4): 1419–1438.

Sorkin, Dara, Angela L. Tan, Ron D. Hays, Carol M. Mangione, and Quyen Ngo-Metzger. 2008. Self-reported health status of Vietnamese and non-Hispanic white older adults in California. *Journal of the American Geriatric Society*, 56(8): 1543–1548.

Torr, Berna M. and Eileen T. Walsh. Health and Active Life Inequality between Older Vietnamese Americans and Whites." (in progress).

Uehara, Edwina S., David T. Takeuchi, and Michael Smukler. 1994. Effects of combining disparate groups in the analysis of ethnic differences: Variations among Asian American mental health service consumers in level of community functioning. *American Journal of Community Psychology*, 22(1): 83–99.

Walsh, Judith M. E., Rene Salazar, Tung T. Nguyen, Celia Kaplan, Lamkieu Nguyen, Jimmy Hwang, Stephen J. McPhee, and Rena J. Pasick. 2010. Healthy colon, healthy life: A novel colorectal cancer screening intervention. *American Journal of Preventive Medicine,* 39(1): 1–14.

Walsh, Eileen T., Berna M. Torr, and Bonnie Ha Bui. 2010. "Inequalities in Self-Rated Health: Untangling Ethnicity, Social Class, and Lifestyle Effects on Vietnamese, Other Asians, Hispanics, and Whites." *International Review of Modern Sociology*, 36(2):195-220.

Yen, Irene H., and S. Leonard Syme. 1999. The social environment and health: A discussion of the epidemiologic literature. *Annual Review of Public Health*, 20: 287–308.

Ying, Yu-Wen. 2001. Psychotherapy with traumatized Southeast Asian refugees. *Clinical Social Work Journal*, 29(1): 65–78.

Yuu, Stella, Zhihuan Jennifer Huang, and Gopal K. Singh. 2010. Health Status and Health Services Access and Utilization Among Chinese, Filipino, Japanese, Korean, South Asian, and Vietnamese Children in California. *American Journal of Public Health*, 100(5): 823-830.