Title: Disparities in Self-Rated Health Among Chinese Immigrants: Exploring Inequality Identities

Lisa L. Lommel, PhD, MPH

Family Health Care Nursing, University of California, San Francisco, San Francisco, CA, USA

Session Title: Global Research and International Collaborations in the Pacific Rim Slot: D 10: Friday, 28 July 2017: 10:45 AM-12:00 PM Scheduled Time: 11:25 AM

Keywords:

Chinese immigrant, Intersectionality and Self-rated health

References:

Bowleg, L. (2012). The problem with the phrase women and minorities: Intersectionality-an important theoretical framework for public health. *American Journal of Public Health*, *10*2(7), 1267-1273.

Gong, F., Xu, J., & Takeuchi, D. T. (2012). Beyond conventional socioeconomic status: Examining subjective and objective social status with self-reported health among Asian immigrants. *Journal of Behavioral Medicine*, *35*(4), 407-419.

John, D. A., De Castro, A., Martin, D. P., Duran, B., & Takeuchi, D. T. (2012). Does an immigrant health paradox exist among Asian Americans? Associations of nativity and occupational class with self-rated health and mental disorders. *Social Science & Medicine*, *75*(12), 2085-2098.

Kimbro, R. T., Gorman, B. K., & Schachter, A. (2012). Acculturation and self-rated health among Latino and Asian immigrants to the United States. *Social Problems, 59*(3), 341-363.

Maty, S. C., Leung, H., Lau, C., & Kim, G. (2011). Factors that influence self-reported general health status among different Asian ethnic groups: Evidence from the roadmap to the new horizon: Linking Asians to improved health and wellness study. *Journal of Immigrant and Minority Health*, *13*(3), 555-567.

Molina, K. M., Alegría, M., & Mahalingam, R. (2013). A multiple-group path analysis of the role of everyday discrimination on self-rated physical health among Latina/os in the USA. *Annals of Behavioral Medicine*, *45*(1), 33-44.

Sentell, T., & Braun, K. L. (2012). Low health literacy, limited English proficiency, and health status in Asians, Latinos, and other racial/ethnic groups in California. *Journal of Health Communication, for 17*(Suppl 3), 82-99.

Seo, S., Chung, S., & Shumway, M. (2014). How good is "very good"? translation effect in the racial/ethnic variation in self-rated health status. *Quality of Life Research*, 23(2), 593-600.

Abstract Summary:

This study investigated the degree to which self-rated health varies by gender, age, socioeconomic status, acculturation, stress and discrimination, and social position among U.S. Chinese immigrants. Results revealed Chinese immigrant women and those with lower social positions and levels of education are at greater risk of experiencing health disparities.

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
The learner will be better able to identify factors associated with poor health outcomes among U.S. Chinese immigrants.	1. Factors shown to negatively impact SRH in immigrants include: female gender, increasing age, lower levels of education (as a proxy for socioeconomic status), limited English proficiency (as a proxy for acculturation), lower self-perceived social status, acculturative stress, discrimination stress. 2. Chinese immigrant women and those with lower social positions and levels of education were at greater risk of experiencing health disparities.
The learner will be able to incorporate an intersectionality framework into the design of future studies examining health disparities.	1. An intersectionality framework has the potential to reveal and explain previously unknown health disparities. An intersectionality approach does not attribute adverse health consequences to individual inequality identities (e.g. age, ethnicity) (additive approach), but rather focuses on how inequality identities interact at the micro level of individual experience and intersect at the macro level of poverty, sexism and racism (multiplicative approach). 2. For an intersectionality framework, first individual main effects regression models are calculated followed by an additive regression model. Multiplicatively is demonstrated by testing two-way interactions between inequality identities. R-squared values are used to assess the magnitude of contributions in explaining SRH beyond the contributions of the main effects.

Learning Activity:

Abstract Text:

Purpose: The purpose of this study is to investigate the degree to which self-rated health (SRH) varies by the intersection of inequality identities including gender, age, socioeconomic status, acculturation, stress and discrimination, and social position among Chinese immigrants.

Health disparities are increasing, especially among United States (U.S.) minority populations. Among one such group, Asian immigrants, studies have shown that disparities in SRH vary across Asian subpopulations, with Chinese subgroups reporting worse SRH compared to non-Hispanic whites (Seo, Chum & Shumway, 2014). The variation in health outcomes among Asian communities, including SRH, indicates that different risk factors may be at work. Therefore, it is imperative to examine potential sources of racial/ethnic disparity in SRH among the Chinese immigrant population. An intersectionality framework guided this study because of its potential to reveal and explain previously unknown health disparities. An intersectionality approach does not attribute adverse health consequences to individual inequality identities (e.g. age, ethnicity) (additive approach), but rather focuses on how inequality identities interact at the micro level of individual experience and intersect at the macro level of poverty, sexism and racism (multiplicative approach) (Bowleg, 2012). Factors shown to negatively impact SRH in Asian immigrants include female gender and increasing age, (Sentell & Braun, 2012), lower levels of education (as a proxy for socioeconomic status) (John, De Castro, Martin, Duran, & Takeuchi, 2012), limited English proficiency (as a proxy for acculturation) (Maty, Leung, Lau, & Kim, 2011), lower selfperceived social status (Gong et al., 2012), and an increase in acculturative stress (Kimbro, Gorman, & Schachter, 2012). Although not studied in Asian immigrants, Molina, Alegría, & Mahalingam (2013) found an association between discrimination stress and worse SRH in Hispanics. Although previous studies have investigated SRH in Asian immigrants, the complex interaction between these inequality identities and SRH in Chinese immigrants has not yet been investigated.

Methods: This cross-sectional study used data from the 2002-2003 National Latino and Asian American Study. Participants were foreign-born Chinese 18 years and older (n=473). Inequality identities include: 1) gender, 2) age, 3) education, 4) language preference and co-ethnic ties, 5) acculturative stress and discrimination experiences, and 6) social position. The outcome variable, SRH, was assessed by the question: *How do you rate your current health status?* Choice of responses included: *excellent, very good, good, fair or poor.* Using an intersectionality framework, individual main effect regression models were calculated followed by an additive regression model. Multiplicatively was demonstrated by testing 15 two-way interactions between the six inequality identities. R-squared values were used to assess the magnitude of contributions in explaining SRH beyond the contributions of the main effects.

Results: In the main effects model, male gender, language preference, and higher social position were significantly associated with better SRH. Higher acculturative stress was significantly associated with poor SRH. Comparisons of R²values indicate that language preference (R²=.09), followed by social position (R²=.07), and education (R²=.06) were the strongest predictors of SRH. The multiplicative model showed five significant interactions: age and language preference, b = .004, 90% *CI* [.001, .01], social position and discrimination, b = .07, 90% *CI* [.01, .14], and gender, b = .05, 90% *CI* [-.10, -.004], acculturative stress, b = -.03, 90% *CI* [-.05, -.01] and social position, b = .01, 90% *CI* [.001, .03], and education. Significant interactions contributed 7-11% of predicted variability in SRH beyond the additive model.

Conclusion: This study contributes to a deeper understanding of the factors associated with disparities in health among Chinese immigrants as each of the six inequality identities interacted significantly with at least one other. Women and those with lower social positions and levels of education were at greater risk of experiencing health disparities. The results of this study will help to inform interventions addressing health disparities among Chinese immigrants in the U.S.