Multilevel pathways of colorectal cancer screening among low-income Vietnamese Americans: A structural equation modeling analysis. Lin Zhu, Timmy R. Lin, Phuong Do, Yin Tan, Grace X. Ma. Center for Asian Health, Lewis Katz School of Medicine, Temple University, Philadelphia, PA.

Background: Colorectal cancer (CRC) disproportionately affects Vietnamese Americans, especially those of low economic standing and those who were born outside of the US. CRC screening tests are crucial for CRC prevention and early detection. Fecal immunochemical test (FIT) is non-invasive and easier to be done for low-resource settings. Yet screening rates in Vietnamese Americans were suboptimal. The purpose of this community-based study was to evaluate a heuristic model identifying the individual-, interpersonal, and community-level factors contributing to CRC screening among low-income Vietnamese Americans. Methods: This study uses the theoretical framework of the Sociocultural Health Behavior Model (SCHBM), a research-based model that suggests six factors associated with decision-making with health-seeking behaviors that result in health care utilization. For data collection, using the community-based participatory approach, we recruited a total of 801 Vietnamese men and women age 50 or older from community-based organizations. We conducted an assessment among all participants to collect information on their socio-demographic characteristics and health-related factors, as well as CRC screening related factors. We used structural equation modeling to identify direct and indirect predictors of lifetime CRC screening. Results: Bivariate analysis revealed that Vietnamese respondents who were never screened for CRC were significantly more likely to have limited English proficiency, fewer number of years US residency, and lower self-efficacy related to CRC screening. The final SEM model identified self-efficacy (coefficient= 0.092, z=3.00, p<.01) as the only direct predictor of lifetime CRC screening. Educational attainment (coefficient=0.13, z=2.76, p<.01) and health beliefs (coefficient=0.040, z=3.20, p<.001) had a modest significant positive relationship with self-efficacy. Health belief (coefficient=0.13, z= 7.68, p<.001) and educational attainment (coefficient=0.16, z=2.59, p<.01) had significant positive relationships with CRC knowledge. Furthermore, educational attainment (coefficient= .13, z = 2.34, p <.01) had a significant positive relationship with the enabling factor, insurance coverage. Conclusions: The tested theoretical model shows promise in predicting lifetime CRC testing among low-income Vietnamese Americans. To increase CRC screening uptake in this medically underserved population, public health intervention should aim to increase community members’ confidence in their abilities to screen for CRC and handling the testing related protocols (preparation, discussion with doctor and handling emotional complications). Culturally sensitive and linguistically competent intervention materials are needed. Implementing community-based strategies like partnering...
with relevant community-based organizations are important for meeting CRC policy targets.