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# Effects of Perceived Discrimination and Trust on Breast Cancer Screening among Korean American Women

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A B S T R A C T

*Objective:* Korean American (KA) women continue to have lower breast cancer screening rates than other racial groups. Perceived discrimination and trust have been associated with breast cancer screening adherence, but little is known about the associations in KA women.
*Methods:* Surveys were completed by 196 KA women in the Chicago metropolitan area. Multiple and Firth logistic regression analyses were performed to identify factors (perceived discrimination, trust, acculturation, cultural beliefs, health care access) influencing breast cancer screening adherence (mammogram). In addition, SPSS macro PROCESS was used to examine the mediating role of trust between perceived discrimination and breast cancer screening adherence.
*Results:* Ninety-three percent of the women surveyed had health insurance and 54% reported having a mammogram in past 2 years. Predictors of having a mammogram were knowing where to go for a mammogram, having a regular doctor or usual place for health care, greater trust in health care providers, and lower distrust in the health care system. Perceived discrimination had an indirect effect on breast cancer screening through trust.
*Conclusions:* The breast cancer screening rate among KA women is low. Perceived discrimination in health care, trust in health care providers, and distrust in the health care system directly or indirectly influenced breast cancer screening adherence in KA women. Trust is a factor that can be strengthened with educational interventions.


The stage of breast cancer at diagnosis is a critically important determinant of health outcomes and survival rate, and regular mammography is the only known effective method to detect breast cancer (Siu & U.S. Preventive Services Task Force [USPSTF], 2016). Among Korean American (KA) women, breast cancer is the most commonly diagnosed cancer, and incidence rates steadily increased from 53.5 per 100,000 individuals in 1998 to 2002 (Miller, Chu, Hankey, & Ries, 2008) to 68.0 per 100,000 individuals in 2006 to 2010 (Torre et al., 2016). However, the level of guideline-concordant breast cancer screening (mammography in the past 2 years) did not rise above 65% in the 1998 to 2014 time period (Choi et al., 2010; Juon, Choi, & Kim, 2000; Juon, Kim, Shankar, & Han, 2004; Juon, Seo, & Kim, 2002; Lee, Strange, & Ahluwalia, 2014; Maxwell, Bastani, & Warda, 2000; Wismer et al., 1998; Yu, Hong, & Seetoo, 2003). These screening rates are below the level of guideline-concordant breast cancer screening for Asian American women (68%) and well below the Healthy People 2020 goal of 81.1%; these screening rates place KA women at risk for detecting breast cancer in later stages (Lee et al., 2016). Previously, studies were conducted to identify factors influencing breast cancer screening among KA women such as sociodemographic characteristics, acculturation, health care access, and health beliefs, yet the findings are inconsistent and do not entirely explain why KA women underuse cancer screening services. There is a growing body of literature identifying that patients' perceptions of the patient–provider interaction, perceived discrimination, and trust are associated with cancer screening in the general population and minorities (Gonzales, Harding, Lambert, Fu, & Henderson, 2013; Hausmann, Jeong, Bost, & Ibrahim, 2008; Kressin, Raymond, & Manze, 2008; Musa, Schulz, Harris, Silverman, & Thomas, 2009; O'Malley, Sheppard, Schwartz, &

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Mandelbblatt, 2004; Shavers et al., 2012). Among KAs, perceived discrimination and trust based on the patient–provider interaction and their influence on breast cancer screening is an understudied area that may be able to explain some of the low use of breast cancer screening among KA women.

Perceived discrimination in health care is the belief that one has experienced unfair treatment in health care settings based on her or his race/ethnicity or socioeconomic status (Gonzales et al., 2013; Kressin et al., 2008). In a report on unequal treatment in American health care from the Institute of Medicine (Smedley, Stith, & Nelson, 2003), racial and ethnic discrimination were identified as having major causal roles in health care disparities, and have been a consistent factor negatively affecting both mental and physical health. Perceived discrimination can be differentiated by an individual's experience of major lifetime discrimination, which might have happened many years ago, versus an individual's experience of everyday discrimination, which refers to more recent events that might have happened more frequently than major lifetime discrimination (Ayalon & Gum, 2011; Bird & Bogart, 2001; Kessler, Mickelson, & Williams, 1999). According to Bird and Bogart (2001), perceived discriminatory acts from health care providers on a day-to-day basis are associated with lower health care use and poorer health outcomes. For example, Crawley, Ahn, and Winkleby (2008) examined the relationship between perceived discrimination in health care and screening rates for colorectal and breast cancers in African American, American Indian, Asian, and Latino adults and identified that women who perceived discrimination had lower breast screening compared with women who did not perceive discrimination. Furthermore, Haywood et al. (2014) evaluated the association between perceived discrimination, nonadherence to physician recommendations, and the role of patient trust in 235 participants with sickle cell anemia, and found that participants with higher levels of perceived discrimination from health care providers were more likely to report being nonadherent to physician recommendations. Also, the results showed that trust in health care providers mediated the discrimination and nonadherence relationship. However, several other studies also reported that perceived discrimination was not associated with participation in breast cancer screening (Dailey, Kasl, Holford, & Jones, 2007; Shariff-Marco, Klassen, & Bowie, 2010; Trivedi & Ayanian, 2006), showing that this relationship is not always straightforward.

Trust is "the willingness of a party to be vulnerable to the actions of another party" (Mayer, Davis, & Schoorman, 1995, p.712). In health care, trust has been distinguished or categorized by the object of trust such as trust in the physician (interpersonal trust) and/or trust in the health care system (social trust), which is characterized by one's attitude toward the collective health care–related organization (Goold, 2002; Hall, Dugan, Zheng, & Mishra, 2001; Mechanic, 1998; Rose, Peters, Shea, & Armstrong, 2004). Studies have shown that minorities seem to have lower levels of trust in their health care providers and the health care system (Halbert, Armstrong, Gandy, & Shaker, 2006; Kaiser et al., 2011; Talcott et al., 2007), and these lower levels of trust adversely influence heath service use and preventive screening. For example, a patient's trust in their health care provider and the health care system were found to be strong predictors for breast cancer screening even when socioeconomic variables such as insurance, age, marital status, and education were controlled (Musa et al., 2009; O'Malley et al., 2004; Thompson, Valdimarsdottir, Winkel, Jandorf, & Redd, 2004; Yang, Matthews, & Hillemeier, 2011).

Perceived discrimination is a significant predictor of trust (Armstrong et al., 2013; Cuffee et al., 2013; Hammond, 2010; Jacobs et al., 2011; Ngo-Metzger, Legedza, & Phillips, 2004). Jacobs et al. (2011) found that African American and Hispanic participants reported expectations of discrimination as determinants of distrust in the health care system, whereas White participants did not. Armstrong et al. (2013) and Hammond (2010) reported that prior experience of racial discrimination was a strong determinant of distrust in the health care system in African Americans. Asian Americans displayed lower levels of trust when reporting that a family member or friend had been treated unfairly when seeking medical care or that the doctors did not treat them with respect (Ngo-Metzger et al., 2004). Moreover, Cuffee et al. (2013) identified that, in African Americans with hypertension, perceived discrimination was associated with medication nonadherence and that this association was partially mediated by trust in the physician.

Several socioeconomic and cultural predictors for breast cancer screening among KA women have been identified in earlier studies. KA women who were older, married, employed, and who had insurance, a usual source of care, a higher household income, and higher education levels were more likely to report breast cancer screening within the last 2 years (Juon et al., 2000; Juon et al., 2004; Lee, Ju, Vang, & Lunquist, 2010; Lew et al., 2003; Ryu, Crespi, & Maxwell, 2013; Wismer et al., 1998). KA women who resided in the United States longer and had better English language proficiency, indicating higher acculturation, were more likely to report breast cancer screening in the last 2 years (Juon et al., 2000; Juon et al., 2004; Juon et al., 2002; Maxwell et al., 2000; Yu et al., 2003). KA women with Korean physicians were less likely to have breast cancer screening than those with non-Korean physicians (Juon et al., 2004; Lew et al., 2003), although patient–physician concordance was a significant predictor of breast cancer screening in Latinos and other Asian Americans (Eamranond, Davis, Phillips, & Wee, 2011; Thompson et al., 2014). Cultural beliefs are important factors; KA women are predominantly first-generation immigrants (Gryn & Gambino, 2012; Lee et al., 2016), and these beliefs directly influence health behaviors (Pasick, D'Onofrio, & Otero-Sabogal, 1996). However, cultural beliefs were not measured in most previous studies, and were inconsistent in influencing breast cancer screening among KA women in the two studies where they were measured (Suh, 2008; Lee, Kim, & Han, 2009). In this study, cultural beliefs specific to breast cancer were included.

Perceived discrimination and trust in health care providers and their relationships to breast cancer screening have not been studied in the KA population. The aim of this study was to identify factors, including perceived discrimination and trust in health care, that influence breast cancer screening adherence among KA women. The premise of the study is based on Betancourt's integrative model of culture (perceived discrimination), psychological processes (trust in health care providers and health care system), and behavior (breast cancer screening) (Betancourt & Flynn, 2009), and a thorough literature review on breast cancer screening adherence among KA women. Previous researchers have focused on specific elements, such as the effect of either social, structural, cultural, or psychological factors as determinants of breast cancer screening adherence, and have shown mixed findings of their relationship to adherence. One explanation for these mixed findings could be that the previous studies did not consider the possible interrelationships among factors associated with breast cancer adherence and the effect of patient–provider interaction. Betancourt's integrative model of