

**April 6, 2016, Penn Medicine Health Equity Symposium and Poster Session**

*Theme:* Health Equity Research, Quality Improvement, and Medical Innovation Projects

*Location:* Smilow Auditorium, Perelman Center for Advanced Medicine, Philadelphia, PA

**Title of Abstract:** Impact of Race on Attrition of Women Faculty at a Research-oriented Medical School

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**ABSTRACT**

**Background:** Among senior academic faculty and those in leadership positions, the representation of women falls short of their male counterparts. It is valuable to understand not only the differences between men and women, but also the differences among women.

**Method and Analyses:** As part of a larger NIH-RO1 funded study on the careers of women in academic medicine, a cohort of women assistant professors was tracked over a three-year period at the University of Pennsylvania Perelman School of Medicine. At entry into the study, participants provided information on their racial/ethnic identification and other personal and professional characteristics via a web-based survey. Race was coded as White, Asian, or URM (Black/African American, Hispanic/Latina, or Pacific Islander). Three years later at the conclusion of the study, participants reported whether or not they were still employed at the institution.

Statistical analyses were conducted to identify factors associated with attrition, including racial differences. A multivariable model was employed to estimate the risk of attrition using generalized estimating equations to account for clustering by departments/divisions. Analyses also controlled for years in rank which was a confounding variable. Marital status and core self-evaluation (CSE) were included as predictors of attrition in the final model. CSE is a global personality trait that shows meta-analytic correlations with job commitment and intention to quit. Analyses were conducted using Stata version 14 (STATA Corp LP, College Station, Texas).

**Key Results:** 134 women (of 178 eligible; 75.3%) from 27 departments/divisions completed the baseline survey. The racial composition of the entire cohort was 15 URM (11.5%), 37 Asian (28.2%), and 79 White/Caucasian (60.3%). Of the URM faculty, two-thirds (10/15) were African American. One participant withdrew from the study. Of the remaining 133 participants, 131 (98.5%) provided information about whether they were still employed at the institution 3 years later. There were 21 participants (16%) who departed from the institution during the three-year time period. Over the course of the study, 40.0% of URM women left the institution while only 11.4% of white women departed. URM women faculty were 3 times more likely to depart than white women during the study time period (RR=3.30, 95% CI: 1.38 – 7.91, p = 0.007). Attrition rates did not differ, however, between Asian and white women faculty (RR=1.67, 95% CI: 0.75, 3.74, p=0.210). Unmarried women were 3

times more likely to leave the institution than married women (RR=3.03, 95% CI: 1.24 – 7.37, p = 0.015). Women with higher core self-evaluations were significantly less likely to leave the institution (p = 0.017). Participant age, parental status, and work hours were not significantly associated with risk of departure.

**Discussion:** Our longitudinal study found that URM women were three times more likely to leave their faculty positions at a research-oriented medical school compared to white women over a 3-year period. While unmarried women and those with less positive core self-evaluation were also more likely to leave the institution, these results were independent of the race effects. Understanding the intersection between gender and race on the retention and advancement of women faculty in academic medicine is a critical next step to developing, implementing, and evaluating strategies to increase diversity.