## The 2nd Annual Hybrid Symposium on Action for Sexual and Gender Minority Health

DORNSIFE SCHOOL OF PUBLIC HEALTH THURSDAY, APRIL 11, 2024 NESBITT 132 & ZOOM 11:45 AM - 12:45 PM EST

**PANEL 1** 

Dr. Nathaniel Tran (they/he), Department of Health Policy, Vanderbilt University

"Aging In Isolation: Sexual Orientation Differences in Navigating Cognitive Decline"

Introduction: Subjective cognitive decline is a self-reported measure of worsening memory and day-to-day decision making. Cognitive decline may impair an individual's ability to complete instrumental activities of daily living (IADL) such as preparing meals or taking medication, ultimately limiting one's ability to live independently. People with IADL impairments typically rely on informal care from spouses or children. Policies that restrict access to marriage and adoption for sexual minority (lesbian, gay, bisexual, and other queer identified) populations may contribute to disparities in cognitive decline and informal care outcomes.

**Objective:** Estimate differences in prevalence, severity, and receipt of social support for subjective cognitive decline stratified by sex and sexual minority status.

**Methods**: Cross-sectional study design using a probability sample (n=172,047) from the Behavioral Risk Factor Surveillance System 2015-2019. Prevalence estimates and multivariable Poisson regression models were used to compare outcomes by sex and sexual identity.

**Results:** Compared to heterosexual peers, sexual minority men and women were more likely to experience cognitive decline (15% of sexual minority men, 11% of heterosexual men, 17% of sexual minority women, 11% of heterosexual women). In adjusted models, sexual minority women were 22% more likely (95%CI:3% to 44%, p<0.05) to report IADL impairments due to cognitive decline but were 17% less likely (95%CI:1% to 31%, p<0.05) to receive any social support with IADL impairments compared to heterosexual women. In adjusted models, sexual minority men were 25% more likely (95%CI: 0% to 56%, p<0.05) to report IADL impairments due to cognitive decline but reported no significant difference in receiving social support with IADL impairments compared to heterosexual men.

**Discussion:** We identified significant unmet need for social supports for IADL impairments, with highest unmet need among sexual minority women. Comprehensive strategies are needed to ensure equity in receipt of long-term supports and services for sexual minority populations.



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Dr. Ado Rivera (he/him/his), Postdoctoral Research Fellow, Kaiser Permanente

"Exploring the Weathering Hypothesis in Sexual Minority Adults: An Analysis of the Genetic Epidemiology Research on Aging Cohort"

The weathering hypothesis proposes that marginalized people experience faster biologic aging due to cumulative stress which translates to chronic disease disparities. We assessed telomere length differences by sexual orientation (bisexual, gay/lesbian, straight) among 102,258 individuals enrolled in the Resource for Genetic Epidemiology Research on Aging Cohort during 2008 through 2011 (mean age of 60.6 years, 58% female, and 7.6% bisexual/gay/lesbian). We used linear models to estimate differences in telomere length, stratified by sex/gender and adjusted for age (at salivary sample) and socio-demographic variables and Kitagawa-Blinder-Oaxaca decomposition to quantify contributions of patient factors on differences. Among females, there was no significant difference in age-adjusted telomere length by sexual orientation after adjustment for sociodemographics (ref: straight; bisexual 0.007, 95%Cl: -0.03 to 0.04; lesbian: 0.005, 95%Cl: -0.02 to 0.03). Among males, only gay (-0.04, 95%CI: -0.06 to -0.02) but not bisexual (- 0.01, 95%CI: -0.05 to -0.03) men had significantly shorter age-adjusted telomere length compared to straight men after adjusting for socio-demographic variables. Decomposition analysis identified ever smoking and marital status as significant drivers of the gay-straight disparity. Studies confirming our findings are needed and the implications of shorter telomeres on gay men's health requires further investigation.

