

Spatial Epidemiology of LGBT Health Disparities: Methods and Challenges

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Talk Description

A large body of research in epidemiology and population health has investigated connections between neighborhood characteristics and a myriad of health outcomes (e.g., HIV risk, substance use, and mental health). Few spatial epidemiologic investigations have focused on lesbian, gay, bisexual and transgender (LGBT) populations. This talk will overview the existing research on connecting neighborhoods and LGBT health disparities, including highlighting major limitations in the literature such as not considering the issue of spatial misclassification (i.e. incorrectly characterizing a neighborhood-level exposure). Real-time geospatial methods, including the use of Global Positioning System (GPS) technology, are the cutting-edge, best-suited method to overcome this limitation because they better capture neighborhood contexts corresponding to individual lived experiences (known as “activity space neighborhoods”). The talk will highlight the feasibility of GPS methods to determine “activity space” neighborhoods for LGBT populations, especially gay, bisexual and other men who have sex with men (MSM) in different geographies. The talk will end by overviewing future research, challenges and implications.

Suggested Reading

Duncan DT, Kawachi I, Subramanian SV, Aldstadt J, Melly SJ, Williams DR. Examination of how neighborhood definition influences measurements of youths' access to tobacco retailers: a methodological note on spatial misclassification. *Am J Epidemiol.* 2014 Feb 1;179(3):373-81.

Duncan DT, Kapadia F, Halkitis PN. Examination of spatial polygamy among young gay, bisexual, and other men who have sex with men in New York City: the P18 cohort study. *Int J Environ Res Public Health.* 2014 Aug 28;11(9):8962-83.

Biography

Dustin T. Duncan, ScD is an Assistant Professor in the Department of Population Health at the New York University (NYU) School of Medicine, where he directs NYU's Spatial Epidemiology Lab. At NYU, he is also a Faculty Affiliate at NYU Abu Dhabi, the College of Global Public Health, the Population Center, the Center for Data Science, the Center for Health, Identity, Behavior, and Prevention Studies, and the Center for Drug Use and HIV Research. Dr. Duncan is a Social and Spatial Epidemiologist, studying how specific neighborhood characteristics influence population health and health disparities. His research has a strong domestic (U.S.) focus, but recent work is beginning to span across the globe (including studies in Paris, London, Shanghai and Abu Dhabi). Methodologically, his research utilizes a geospatial lens to apply spatially explicit approaches such as computer-based geographic information systems (GIS), web-based geospatial technologies, real-time geospatial technologies, and geospatial modeling techniques. For instance, his work applies emerging geospatial technologies such as Global Positioning System (GPS) devices and smartphones to, in part, examine mobility and social networks in neighborhoods. Dr. Duncan's research appears in leading public health, medical, geography, criminology, and demography journals. He has over 75 publications and book chapters, and his research has appeared in major media outlets including the *US News and World Report*, *The Washington Post* and *The New York Times*. His work also extends out of the research world and into classrooms through invited talks, multiple guest lectures across institutions, and his courses including “Connecting Neighborhoods and Health: An Introduction to Spatial Epidemiology”—offered at NYU Abu Dhabi, and “Assessing Neighborhoods in Epidemiology”—offered at Columbia University Mailman School of Public Health's Epidemiology and Population Health Summer Institute. Dr. Duncan's recent work has been funded by the National Institutes of Health (NIH), Centers for Disease Control and Prevention (CDC), Robert Wood Johnson Foundation, Verizon Foundation, Aetna Foundation and HIV Prevention Trials Network (HPTN). He is an Associate Editor of *Behavioral Medicine* and is on the Editorial Board of *Spatial Demography*, *Geospatial Health*, and the *American Journal of Health Promotion*. Dr. Duncan completed his doctorate and the Alonzo Smythe Yerby Postdoctoral Fellowship, both in Social Epidemiology, at Harvard University T.H. Chan School of Public Health.