

I have dedicated my past 5 years to behavioral research in public health, particularly related to substance use prevention and control. My academic and research experience to date has motivated my devotion to a research career in behavioral science addressing the range of socio-structural determinants of substance use, leveraging health education and health communication as key strategies, with the goal of prevention and control, especially among youth.

My master's training in health education and health communication at Johns Hopkins University established my foundation for a research career and solidified my interest in this area, particularly with regard to tobacco industry marketing and its impact on youth. For example, I contributed and/or led studies investigating the features of tobacco product labeling and advertising, as well as tobacco marketing exposure and related perceptions among Chinese high school students. Our findings have informed educational and regulatory efforts to protect youth from tobacco-related hazards. As a master's student, I also became a Certified Health Education Specialist (CHES, per the National Commission for Health Education, ID# 37161, exp: 03/31/27).

I chose George Washington University for my PhD training in social and behavioral sciences to build upon this prior research by expanding my methodological, theoretical, and content area expertise. I work with Dr. Carla Berg who has a portfolio of research that includes domestic and international research on tobacco and cannabis use and related policies and industry influences, using various approaches including naturalistic observations, cohort studies, mixed methods designs, intervention studies, and dissemination and implementation science. I have been involved in several studies with Dr. Berg's team, particularly as they relate to youth and disproportionately-impacted populations (e.g., racial/ethnic minorities, sexual/gender minorities).

My goal is to ensure that my research guides policy and practice, and I have been fortunate to work with research teams that have strategically aligned with key stakeholders. For example, I play a key role on one NIH-funded study focused on cannabis regulation and marketing in the US and includes a stakeholder board of departments of health and cannabis licensing boards. Our published research has documented youth-targeted marketing (e.g., via ads and product packaging), unsubstantiated health claims (including use for pregnancy-related nausea), gaps in social media policies and enforcement regarding cannabis promotion, and various other concerns. Our engagement of our stakeholder advisory board has catalyzed dissemination to inform regulatory, enforcement, and prevention efforts. Notably, my dissertation proposal (*Messaging to Reduce Cannabis Use among US Young Adults*), which is funded by the National Science Foundation (#2415890), leverages opportunities from this larger study. Specifically, it focuses on the impacts of cannabis advertising and health warning messages, which have been understudied and are crucial to reduce adverse population-level impacts of cannabis.

I also have facilitated collaborations globally, specifically in Israel, Armenia, and Georgia. One NIH-funded study focused on a newer product (IQOS, a heated tobacco product) and its regulation and marketing in the US and Israel. Our published work documented similarly concerning marketing strategies, including those targeting youth (e.g., via "pop culture" media channels, retailers clustered near schools) and various health benefit claims, despite the industry's claims that it exclusively targets adult cigarette users and FDA prohibiting certain health claims. These findings have been crucial in advancing the evidence base informing the US FDA's tobacco regulatory efforts. Using data from this study, I led a paper on a separate but related topic – theoretical predictors of cannabis use among US and Israeli adults – in order to facilitate future collaborations on this topic. I am also involved in an NIH-funded study to disseminate and implement an evidence-based smoke-free home intervention in Armenia and Georgia, two middle-income countries where over 50% of men currently smoke. Through leveraging their national

quitlines and establishing local coalitions to deliver this intervention, the goal is to reduce secondhand smoke exposure and shift social norms to ultimately protect youth. Our prior research, working with the local coalitions and community members, has yielded culturally adapted versions of the intervention, and has positioned us to scale up and sustain intervention delivery, if found to be effective. These research collaborations strategically involve researchers at academic and national health institutions, practitioners in local communities, community members, and policymakers in order to ensure practical application and cultural and policy relevance.

As evidence of my commitment, I have 32 peer-reviewed publications (7 first-authored; additional 2 articles under review with one of which first-authored) and have presented study findings via 13 abstracts at scientific conferences (e.g., Society for Behavioral Medicine and Tobacco, Research Society on Marijuana). I am actively involved in these national organizations and scientific centers in my home institution (e.g., GW Cancer Center) to ensure that I stay abreast of the state of the science and contribute to research translation to optimize impact. In the past years, I've served as peer reviewers for 17 journal articles and/or conferences abstracts invited by key journals (e.g., BMC Public Health, Drug and Alcohol Dependence, Journal of Medical Internet Research, and Substance Use and Misuse) and organizations (e.g., Society for Nicotine and Tobacco Research, SRNT), all of which are related to substance use and prevention, particularly in the field of health communication, education, and promotion. I've also served as peer mentors to the Master of Public Health students in health education and behavioral sciences in my department, helping in conducting research, including their coursework and thesis. With the experiences and skills I gained through my training – and support from FAHE, I will devote my career to conducting cutting-edge public health research to inform effective substance use prevention and control practices, including policies as well as health education and communication programs to prevent youth substance use.