

Research Brief: Project SPRING

Smoking Risk and Protective Factors among Transgender and Gender-Expansive Populations



SIGNIFICANCE OF THIS RESEARCH

Our study, called Project SPRING, examined cigarette smoking risks and protective factors for transgender and gender-expansive (TGE) individuals using real-world stories and examples from private Facebook and Instagram groups.

Health significance

- Cigarette smoking is the leading modifiable risk factor for more than 16 types of cancer, including lung, head and neck, stomach, liver, pancreas, colon and rectum, and bladder cancers.
- Despite the decrease in smoking rates nationally, the prevalence of smoking remains high among sexual and gender minorities: Around 35.5% of TGE adults smoke cigarettes, compared to 14.9% of straight cisgender adults.
- An estimated 1 million TGE adults live in the US, which means that ~350,000 are at risk of developing smoking-related cancers.

Knowledge gap

- There is a critical knowledge gap on smoking habits and effective, culturally responsive approaches to reduce smoking prevalence among TGE adults.
- There is limited research on the use of online social media platforms for tobacco-related research and smoking cessation interventions among TGE populations.
- Of 384 NIH-funded sexual and gender minority research studies in 2018, 20% focused on TGE health and only 1% focused on tobacco use and health.



KEY FINDINGS: WHAT IS PROTECTIVE AND WHAT PUTS TGE INDIVIDUALS AT RISK FOR SMOKING?

- One of the major risk factors for cigarette smoking was multilevel stress, including financial, social, housing, family, belonging, and other stressors that are often experienced by minority groups. Stress related to harassment, stigma, and discrimination was also highlighted by participants. Other stressors mentioned were related to work, school, daily routines or habits, and substance use.

- Protective factors to cigarette smoking included concern for the health of pets and animals, engaging in healthy behaviors like exercise and nutrition, and being distracted by other tasks. Also, concern for transition-related health was a major consideration and protective factor.
- Environmental factors, such as weather, and influence of family, friends, or peers were illustrated as both risk and protective factors, depending on the context.
- While general factors were frequently discussed, TGE-specific experiences were identified as important considerations for participants.

A FEW IMAGES SHARED BY PARTICIPANTS



It's Transgender Day of Visibility, but I've never felt more invisible in the world after my hate crime was closed. It's also my 2- year anniversary on T. I'm trying to find a way to celebrate. I'll probably smoke a whole pack today once I leave the house and finally buy some more, and I will try my best not to judge myself for it.

I got a new plant bb! I love my plant babes too much to smoke indoors and clog their leaf-pores (most of the time)



This pic represents all the economic issues, personal and larger, that stress me out. I know there are lots of healthier ways to deal with my financial anxieties... BUT Cigarettes are cheaper than therapy.

RESEARCH METHODS

Our research is informed by the minority stress model, resilience framework, and the socio-ecological model. We used a community-based participatory action research approach to include participants as co-creators of knowledge in several aspects of the study, from data collection, analysis, and interpretation, to informing future research and actions. We enrolled 47 TGE adults (ages 18+) in the US who are current cigarette smokers, using online advertising (Facebook,

Instagram, Craigslist), community outreach, print flyers, and snowball recruitment. Participants joined private groups on either Facebook (5 groups) or Instagram (3 groups) and were asked to take pictures and caption them. These pictures were aimed to show what participants were doing or what was happening that triggered them to smoke or not to smoke (i.e., risk and protective factors). We conducted baseline and follow-up surveys and focus group discussions for in-depth exploration and labelling of these factors in participants' own words.

NEXT STEPS

What we have learned from this research, including real-world examples, phrases, personal explanations of triggers and protective factors to smoking, and feasibility data, will serve as the foundation for designing culturally responsive messages to promote smoking cessation through social media among the TGE community.

STUDY TEAM AND PARTNERS

Our research team is diverse and brought together rich experiences and expertise needed for this study. [Dr. Suha Ballout](#) (University of Massachusetts, Boston [UMB]) is an experienced clinician and researcher who has worked with the TGE population. [Dr. Andy Tan](#) (University of Pennsylvania) is an expert in patient-centered communication, media effects, and tobacco-related health disparities among vulnerable populations, including LGBT adults. [Dr. Priscilla K Gazarian](#) (UMB) is an experienced researcher in the role of patient engagement and clinical decision-making in preventing patient harm. [Dr. Jennifer Potter](#) (The Fenway Institute, Beth Israel) is a national leader in clinical quality improvement and medical education initiatives to reduce health disparities among LGBT populations. Staff and trainees included Elaine Hanby, Dr. Sabreen Darwish, Noon El Hassan, Raquel Jones, Faith Koroma-Coker, Loubert Demosthene, Phedjina Jean, and Beth Farnham.

KEY DEFINITIONS

- **Transgender and gender expansive (TGE):** TGE persons are individuals who have a gender identity, behavior, or self-expression that is different from their biological sex at birth.
- **Minority stress:** Chronic and high levels of stress that is experienced by a stigmatized and minority group as a result of rejection, prejudice, and discrimination.
- **Resilience:** The process of emotionally or mentally coping with or adapting to situations of adversity, trauma, or chronic stress.
- **Participatory action research:** A research approach which emphasizes collaborative participation of trained researchers as well as local communities in producing knowledge directly relevant to the stakeholder community.

FUNDING AND CONTACT INFO

This work was funded by the National Cancer Institute (U54 CA156732, PIs Viswanath, Macoska, Colon-Carmona, Abel). More information about the Partnership is available at: www.umb.edu/u54. To learn more about this study, please contact us at andy.tan@asc.upenn.edu or Suha.Ballout@umb.edu.

Published: October 2020