Promotion of Tobacco Use Cessation for Lesbian, Gay, Bisexual, and Transgender People

A Systematic Review

Joseph G.L. Lee, MPH, Alicia K. Matthews, PhD, Cramer A. McCullen, BA, Cathy L. Melvin, PhD, MPH

Context: Lesbian, gay, bisexual, and transgender (LGBT) people are at increased risk for the adverse effects of tobacco use, given their high prevalence of use, especially smoking. Evidence regarding cessation is limited. To determine if efficacious interventions are available and to aid the development of interventions, a systematic review was conducted of grey and peer-reviewed literature describing clinical, community, and policy interventions, as well as knowledge, attitudes, and behaviors regarding tobacco use cessation among LGBT people.

Evidence acquisition: Eight databases for articles from 1987 to April 23, 2014, were searched. In February—November 2013, authors and researchers were contacted to identify grey literature.

Evidence synthesis: The search identified 57 records, of which 51 were included and 22 were from the grey literature; these were abstracted into evidence tables, and a narrative synthesis was conducted in October 2013—May 2014. Group cessation curricula tailored for LGBT populations were found feasible to implement and show evidence of effectiveness. Community interventions have been implemented by and for LGBT communities, although these interventions showed feasibility, no rigorous outcome evaluations exist. Clinical interventions show little difference between LGBT and heterosexual people. Focus groups suggest that care is needed in selecting the messaging used in media campaigns.

Conclusions: LGBT-serving organizations should implement existing evidence-based tobacco-dependence treatment and clinical systems to support treatment of tobacco use. A clear commitment from government and funders is needed to investigate whether sexual orientation and gender identity moderate the impacts of policy interventions, media campaigns, and clinical interventions.
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Introduction

Tobacco use among lesbian, gay, bisexual, and transgender (LGBT) people constitutes a major health inequality.[1,2] Findings confirming this large and persistent disparity span study design, sampling method, geographic location, and population subgroups.[1] In the U.S., LGBT adult smoking prevalence is 68% higher than that of heterosexuals.[2] Although data are limited globally, similar disparities appear to be present in population-based sampling in other countries (e.g., England,[3] Mexico[4]). Although reasons for these disparities remain unclear,[5] researchers have proposed several explanations, including historic exposure to community spaces[6,7] and media[8–10] where smoking was normative; targeted marketing by the tobacco industry[11–13]; pro-tobacco community norms[14,15]; and the impacts of stigma, discrimination, and stress.[5,16]

Researchers have also noted potential barriers to cessation services for LGBT populations[17] and preferences for LGBT-specific cessation services.[18] Targeted cessation services may be needed, as some stressors are unique to LGBT lives (e.g., accepting one's LGBT identity, prejudice against LGBT people), some cues to smoke may be unique to LGBT lives (e.g., not being accepted by family), and tobacco use may be used to rebel against or promote particular gender identities.[5,19,20]

From the Department of Health Behavior (Lee), Gillings School of Global Public Health, School of Medicine (McCullen), The University of North Carolina at Chapel Hill, Chapel Hill, North Carolina; Department of Health Systems Science (Matthews), College of Nursing, University of Illinois at Chicago, Chicago, Illinois; and the Department of Public Health Sciences (Melvin), College of Medicine, Medical University of South Carolina, Charleston, South Carolina

Address correspondence to: Joseph G. L. Lee, MPH, Department of Health Behavior, Gillings School of Global Public Health, University of North Carolina at Chapel Hill, 135 Dauer Drive, CB 7440, Chapel Hill NC 27599-7440. E-mail: jose.lee@unc.edu.

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At the population level, the strength of state tobacco programs may play a role in LGBT tobacco cessation,[21] and there is worrisome evidence that certain evidence-based tobacco interventions may even exacerbate disparities for vulnerable populations.[22–25] In fact, a recent systematic review found that only interventions that increase the unit cost of cigarettes had a pro-equity effect, and nontargeted cessation campaigns increased disparities.[23] Too little evidence addresses the impact of policy-based interventions on vulnerable populations.[26,27]

The need for interventions to reduce this disparity and its health consequences is compelling, yet little is known about the need for tailored interventions for LGBT people or about the efficacy, reach, and effectiveness of existing individual, group, or policy interventions in promoting tobacco use cessation among LGBT people. Synthesis of such information can accelerate and improve intervention research, and lessons learned from community-based efforts can inform research design and intervention innovations.[28] No RCTs of LGBT-specific cessation interventions were identified in the 2008 Public Health Service Clinical Update,[29] and the IOM report on LGBT health[30] was largely silent on this disparity and interventions to address it.[31] A review of interventions among special populations from 2000 to 2005 identified only one study addressing cessation among LGBT people.[32] Nonetheless, a systematic screening and assessment of LGBT community-based tobacco-related interventions indicates that LGBT-targeted tobacco interventions do exist, albeit often without peer-reviewed, published evaluations.[33]

This study aimed to review the literature regarding: (1) clinical treatment of tobacco dependence among LGBT populations; (2) strategies used to increase the number of LGBT tobacco users who attempt to quit and improve the success rate of LGBT tobacco users attempting to quit (e.g., community, policy, and media interventions); and (3) LGBT populations' knowledge, attitudes, and behaviors related to tobacco cessation.

Methods

Search Strategy

Search terms were iteratively developed in PubMed until no relevant new results were identified,[a] and then the controlled vocabulary (i.e., medical subject headings [MeSH] terms) was translated into the controlled vocabulary of other databases providing this feature. This search was implemented on April 23, 2014, in the following electronic databases: Cochrane Central Register of Controlled Trials via Wiley Online Library; Cumulative Index to Nursing and Allied Health Literature (CINAHL), Global Health, PsycINFO, and Social Work Abstracts via EBSCO; Embase; PubMed; and Scopus. In Embase and EBSCO databases, MEDLINE records were excluded, as they are included in PubMed. The search was not restricted by date, language, or geography. Full search strings for each database and a review protocol are available from the first author.

As publication bias can result in unsuccessful interventions not being published,[34] the authors decided to search for unpublished reports relating to the study aims. Program innovations are often created by practitioners ("practice-based evidence"), and documentation of these innovations can contribute to the design of interventions that are more feasible to implement in real-world settings.[28,35] Thus, from January to November 2013, the first author sent e-mails to corresponding authors (n=19) of included studies and individuals (n=38) known to have an interest in LGBT tobacco treatment by the authors of this review or suggested by the researchers that were contacted. Unpublished manuscripts, manuscripts in press, conference papers, conference posters, evaluation reports, and grant close-out reports related to the key study aims were requested. Manuscripts in progress and pending submission or currently in the peer-review process were not eligible.

Inclusion Coding

Interventions were defined to include pharmacotherapy, clinical approaches, behavioral counseling, media campaigns, public policy, and combinations thereof. Studies not available in English or published before 1987 were excluded. Interventions focused on people living with HIV/AIDS were included if reporting specific results for men who have sex with men (MSM) or with gay or bisexual men. Survey research and qualitative research were included if they were relevant to study aims. Each title, abstract, and, as necessary, full-text article were independently reviewed to code for inclusion and exclusion. Coding differences were resolved through discussion.

Data Abstraction

From October 2013 to May 2014, the following data were abstracted from each study into evidence tables in Microsoft Word, which were then reviewed for accuracy. Study characteristics included study design, population, dates, intervention description, number of participants, attrition, outcome(s), and funding source. Where possible, both intent to treat and treatment of the treated quit rates at the intervention endpoint and at the longest follow-up period are reported. General estimates of efficacy

[a]Example search from PubMed: (homosexuality[MeSH Terms] OR homosexuality[tiab] OR homosexual[tiab] OR gay[tiab] OR LGBT[tiab] OR GLBT[tiab] OR LGB[tiab] OR "sexual minority"[tiab] OR "sexual minorities"[tiab] OR lesbian[tiab] OR bisexuality[MeSH Terms] OR bisexuality[tiab] OR bisexual[tiab] OR transsexualism[MeSH Terms] OR transsexualism[tiab] OR transgender[tiab] OR transsexual[tiab] OR transsexuality[tiab] OR msm[tiab] OR queer[tiab] OR "sexual orientation"[tiab] OR "men who have sex with men"[tiab] OR WSW[tiab] OR "women loving women"[tiab] OR "women who have sex with women"[tiab] OR lesbianism[tiab]) **AND** (Tobacco Use Disorder[MeSH Terms] OR "Tobacco Use Disorder"[tiab] OR smoking cessation[MeSH Terms] OR cessation[tiab] OR tobacco use cessation products[MeSH Terms] OR tobacco use cessation[MeSH Terms] OR quitline[tiab] OR "quit line"[tiab] OR quitting[tiab] OR quit[tiab] OR "stop smoking"[tiab] OR Smoking/prevention and control[MeSH Terms] OR Smoking/therapy[MeSH Terms] OR "tobacco dependence"[tiab] OR "tobacco treatment"[tiab] OR "smoking decline"[tiab] OR "smoking reduction"[tiab] OR "smoking decrease"[tiab])