

Strategies to Reduce Physician Bias and Promote Culturally Competent Care for LGBT Patients: A Systematic Review of Interventions for Health Care Providers

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Abstract

•PURPOSE: Lesbian, gay, bisexual and transgendered (LGBT) individuals experience higher rates of negative health outcomes than their heterosexual counterparts, including anal cancer, substance abuse, cigarette smoking, and cardiovascular diseases. These LGBT health disparities are compounded by health care underutilization, which is driven, in part, by high levels of perceived anti-LGBT discrimination in the health care environment. In the current training regimens, little time is spent on training health care providers to provide culturally competent care to LGBT patients. Despite promising meta-analytic findings showing medium effects for interventions targeting LGBT bias in the general population, to our knowledge no systematic reviews have evaluated the impact of LGBT bias reduction interventions on health care providers. The purpose of the present review was to identify intervention components associated with reductions in physician bias that could be incorporated into medical school curricula.

•METHODS: To evaluate intervention studies focused on reducing anti-LGBT physician bias, articles were identified through searches of PubMed, Scopus, Ingenta, Science Direct, Google Scholar, PsycINFO and Web of Knowledge databases using a combination of major and minor MeSH terms, which included: LGBT curriculum, physician bias, implicit bias, explicit bias, attention bias, cognitive bias, physician bias education, transgender care, and cultural competence/standards.

•RESULTS: Out of a total of 200 publications screened, 143 studies were identified that included an intervention to reduce physician bias against LGBT patients. These interventions targeted knowledge, explicit attitudes, skills, and comfort level using a variety of formats, including lectures, perspective-taking exercises, small group discussion, training in sexual history-taking, and interactive theater. Overall, these interventions were successful at increasing knowledge regarding treatment of LGBT patients (quizzes), increasing comfort treating LGBT patients (self-report questionnaires), and improving attitudes toward LGBT patients (self-report questionnaires). However, none of the interventions assessed changes in implicit bias against LGBT individuals.

•DISCUSSION: Interventions targeting anti-LGBT bias were successful in increasing knowledge and comfort levels as well as improving LGBT-related explicit attitudes. Despite evidence that implicit biases impact clinical decision-making when health care providers lack time and sufficient cognitive resources, as well as a growing literature on reducing race-related implicit bias, this systematic review did not identify any existing interventions that addressed or assessed changes in anti-LGBT implicit bias. More research is needed to develop interventions targeting implicit bias against LGBT populations in health care providers. Additionally, there is a need to incorporate measures of implicit bias (i.e., Implicit Association Test; IAT) in order to gauge intervention effectiveness. One of the key strategies for reducing implicit bias is development of a curriculum that focuses not only on increasing awareness of implicit biases but also allows students to practice bias reduction skills before treating patients in primary care clinics.

Introduction

Lesbian, gay, bisexual, and transgendered (LGBT) individuals face significant physical and mental health disparities. Compared to their heterosexual counterparts, LGBT patients have higher rates of anal cancer, asthma, cardiovascular disease, obesity, substance abuse, cigarette smoking, and suicide (1-9). The percentage of the LGBT population lacking a regular health care provider is significantly higher than in the heterosexual population (30% versus 10%, respectively) (10). Additionally, these health disparities are compounded by vulnerabilities linked to racial identity and geographic location (11).

Discrimination in health care settings contributes to lower health care utilization in LGBT individuals. Training health care providers to render culturally competent care to LGBT individuals is critical for promoting equal access to quality health care and, ultimately, for eliminating health disparities.

Discrimination against LGBT patients in health care settings are categorized by social-cognitive models of explicit (i.e., conscious, controlled) and implicit (i.e., unconscious, automatic) provider bias. Studies of health care providers suggest that implicit bias against minority groups may persist despite an absence of negative explicit attitudes.

While the majority of interventions employed self-report measures of explicit bias, implicit bias measures have long been neglected. To our knowledge, no systematic reviews have assessed the impact of LGBT bias reduction interventions on health care providers. The present study sought to address this gap by: (1) evaluating the impact of interventions on health care provider knowledge, explicit attitudes, comfort level, and implicit bias toward LGBT patients; (2) determining the characteristics of successful interventions; and (3) translating key findings into recommendations for medical school training curricula.

Methods

An electronic search was conducted in MEDLINE/PubMed, PsycINFO, Web of Science, Scopus, Ingenta, Science Direct, and Google Scholar databases for articles in English published since February 2017. The search strategy cross-referenced keywords for LGBT populations (*lesbian, gay, bisexual, transgender, queer, homosexual, MSM, WSW, sexual minority*) with keywords for health care providers (*provider, physician, doctor, nurse, medical student, medical resident, health personnel, practitioner, fellow, social worker*) and keywords for bias (*implicit bias, explicit bias, debiasing, cultural competence, cultural competency, discrimination, prejudice, health disparity*).

To be included in this systematic review, a study had to (a) assess LGBT-related bias, (b) include health care providers, (c) include an intervention designed to promote culturally-competent care for LGBT individuals, and (d) be written in English. We did not exclude qualitative studies nor did we exclude studies conducted outside of North America. This systematic review was conducted according to PRISMA guidelines. A flow diagram of this literature search is presented in Figure 1.

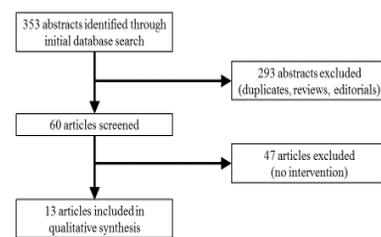


Figure 1. Flowchart of Study Selection.

The search process initially identified 353 abstracts. After duplicates, reviews, and editorials were removed, 60 articles were assessed for eligibility. Further scrutiny resulted in 13 articles included in qualitative synthesis.

Results

• Systematic literature search yielded 13 studies assessing interventions to reduce LGBT-related bias in health care providers. Descriptive information for these studies is provided in Table 1.

• Sample sizes for these studies ranged from small ($n = 13$) to large ($n = 848$).

• Samples included participants representing a wide range of health disciplines including medical, nursing and dental students.

• Interventions varied in their delivery format (e.g., lecture, small group discussion, interactive theater workshop), frequency (range: 1 to 6 sessions) and duration (range: 45 minute lecture to 4-week web-based course).

• Majority of interventions employed an experimental design involving pre- and post-tests administered to the same group of students ($n = 12$); one study included qualitative analysis of writing assignments.

• The interventions targeted knowledge ($n = 11$), attitudes ($n = 10$) and comfort level ($n = 5$) of health care providers. None of these interventions involved quantitative assessment of implicit LGBT-related bias.

Summary

Reduction of implicit bias among medical students requires building motivation for change through bias awareness strategies that can be achieved by:

- Providing information regarding disparities in health care and the role of provider bias
- Conducting exercises that encourage students to reflect on what they should do in hypothetical encounters with LGBT patients
- Including procedures such as the IAT to reveal implicit LGBT-related biases

Table 1. Description of Interventions Targeting LGBT-Related Provider Bias.

Study	Sample	Intervention Format	Intervention Target	Key Findings
Carabez et al. (2015)	Nursing students ($n = 112$)	Readings Lecture (1) Scripted interview exercise	Knowledge Comfort level	Increase in knowledge and awareness of LGBT health care needs. Increase in comfort level working with LGBT patients. Qualitative data suggest increase in awareness of unconscious biases.
Costa et al. (2016)	Healthcare providers ($n = 457$)	Web-based course (4 weeks) Perspective-taking Videos of LGBT individuals describing discrimination in health care settings LGBT needs assessment exercise Activity to improve LGBT health Tutors included LGBT activists Small group discussion Peer evaluation	Attitudes	Decrease in self-report prejudice toward LGBT individuals.
Dixon-Woods et al. (2002)	Medical students ($n = 130$)	3 sessions Lecture Presentation by LGBT individuals Small group discussion and exercises Problem-based case studies	Knowledge Comfort level Attitudes	Increase in knowledge and awareness of LGBT health care needs. Increase comfort level working with LGBT patients. Reduction in anxiety about sexual sexuality. Change in attitudes about human sexuality was not observed.
Eriksson & Safer (2016)	Medical students ($n = 121$)	Lecture (1) on gender identity and transgender medical care	Knowledge Attitudes	Increase in knowledge of gender identity. Change in attitude toward transgender medicine.
Hardacker et al. (2014)	Nurses and healthcare providers ($n = 848$)	Lectures (6) on LGBT issues and medical care	Knowledge Attitudes	Increases in knowledge of LGBT health care needs. Anecdotal evidence of change in attitudes toward LGBT patients.
Horenstein & Behar-Horenstein (2016)	Dental students ($n = 22$)	Interviews with LGBT individuals Writing exercise	Attitudes	Qualitative evidence of increase in awareness of sexual prejudice. Qualitative evidence of change in attitudes toward LGBT individuals.
Johnson et al. (2015)	Medical students ($n = 13$)	Sexual health curriculum (1 week)	Knowledge Attitudes	Descriptive statistics suggest increases in knowledge of sexual health issues post-intervention and at 3-month follow-up. Descriptive statistics suggest changes in attitudes toward sexual health post-intervention and at 3-month follow-up.
Kelley et al. (2008)	Medical students ($n = 75$)	LGBT health curriculum (3 sessions) Patient panel with LGBT individuals Small group discussion, led by LGBT individuals, focused on case studies	Knowledge Attitudes	Increase in knowledge and awareness of sexual medicine. Increase in comfort level with sexual history taking. Anecdotal evidence of change in attitudes toward sexual medicine.
Reygan & D'Alton (2013)	Healthcare providers ($n = 201$)	Group training module (50 min) involving lecture and discussion	Knowledge Comfort level	Increase in knowledge and awareness of LGBT health care needs. Increase in comfort level working with LGBT patients.
Rosen et al. (2006)	Medical residents ($n = 46$)	Workshop curriculum (half day) Lectures (5) Patient interviews Panel discussion Small group discussion	Knowledge Comfort level Attitudes	Increase in knowledge and awareness of sexual medicine. Increase in comfort level with sexual history taking. Anecdotal evidence of change in attitudes toward sexual medicine.
Strong & Folse (2015)	Nursing students ($n = 58$)	Lecture (45 min)	Knowledge Attitudes	Increase in knowledge and awareness of LGBT health care needs. Changes in attitudes toward LGBT patients.
Tarasoff et al. (2014)	Healthcare providers ($n = 28$)	Interactive theater workshop involving role-play and perspective-taking (90 min)	Knowledge Comfort level	Increase in knowledge and awareness of LGBT health care needs. No change in comfort level working with LGBT patients.
Thomas & Safer (2015)	Medical residents ($n = 46$)	Lecture (60 min) on gender identity and transgender medicine	Knowledge Attitudes	Increase in knowledge of transgender medicine. Changes in attitudes toward transgender patients.

Recommendations

Transforming curriculum in primary care training requires an evidence-based intervention approach that must incorporate:

- Cultural competence training for health care professionals who train and work in primary clinical care settings with LGBT populations. This approach promotes learning about one's own biases within the context of barriers faced by LGBT patients in urban, rural and inner-city primary care practices.
- Evidence-based training encourages the acquisition of awareness, knowledge, behaviors, and skills consistent with creating a LGBT-patient-centered medical home (PCMH).
- Having developing a comprehensive curriculum in LGBT health with a focus on integrated health and behavioral health provides the foundation for incorporating new emerging concepts.
- It generates sustainable and translational teaching/training techniques that will enable medical students and residents to establish and build therapeutic relationships with their patients on the first visit, while applying best practices to ensure positive health outcomes for LGBT patients.

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