AU-PCTE Research Policy Brief

I. Title: A Systematic Review of Medical Education Efforts to Reduce Implicit Bias towards LGBTQ Patients

II. Executive Summary

Background. Over the last three decades, there has been a growing recognition that biased attitudes and beliefs of health care providers towards LGBTQ patients in the healthcare system contribute to disparities through its impact on healthcare access and quality of clinical care[1,2]

Methods. We conducted a systematic review of the literature using the 2009 PRISMA guidelines[3] to identify original studies that focused on how medical schools are training students to address implicit bias towards LGBTQ persons. 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 prior to February 2017.

Results. Effective programs designed to increase student or provider knowledge of the LGBTQ community and LGBTQ-relevant health care issues utilized lectures, readings, videos, interviews and presentations by LGBTQ individuals, and group discussion. Significant knowledge gains were observed for students attending single-session[4-6] and for students and providers attending more time-intensive program formats[7,8]. The only study assessing knowledge retention found that knowledge gains for medical students were maintained three months after the training program[9]. Other programs designed to reduce LGBTQ-related bias in non-providers showed that: 1) educational components can be effective at increasing knowledge about the LGBTQ community; 2) contact with LGBTQ individuals is effective at promoting positive attitudes; 3) the combination of education and intergroup contact is effective at changing attitudes and behavioral intentions; and 4) providing information regarding social norms is effective at changing behavior[10].

Recommendations. A curricular framework for reducing implicit biases towards LGBTQ persons and other vulnerable populations among medical students is needed and has the potential of transforming medical school education. Bias awareness strategies are more effective when practiced in a supportive and individualized learning environment such as a patient simulation that provides students with opportunities to receive direct feedback out perceived implicit biases while minimizing student defensiveness[11].

Key stakeholders - Key stakeholders include but are not limited to academic medical institutions, medical education accreditation bodies, health care providers, advocacy groups, public health officials, policymakers, health professions associations, and populations at risk.

III. Issue

Research has found that with less time and limited information gathered from the electronic health record (EMR), physician's behavior becomes increasingly governed by stereotypes and implicit biases[12,13]. Vulnerable populations, such as LGBTQ individuals often experience higher rates of health disparities, which in part, are driven, by lack of cultural awareness, personal discomfort and/or explicit and implicit bias encountered and exhibited in the health care environment. Little is known about how medical students are trained to identify, confront, and reduce personal bias towards LGBTQ persons and other vulnerable populations. The aim of this study was to conduct a systematic review of how US medical schools are training students to identify and address personal implicit biases towards LGBTQ persons. The research question was shaped by our Community of Practice.

IV. Background

LGBTQ patients have higher rates of anal cancer[14], asthma, cardiovascular disease[15-18], obesity[16], substance abuse[12,18,19], cigarette smoking[20], and suicide[13]. Sexual minority women report fewer lifetime Pap tests[21]; transgender youth have less access to physical and mental health care[22]; and LGBTQ individuals are more likely to delay or avoid necessary medical care, compared to heterosexual individuals. These disparities have been attributed, in part, to lower health care utilization by LGBTQ individuals[23,24].

Perceived discrimination from physicians and denial of health care altogether are common experiences among LGBTQ patients and have been identified as contributing to disparities[25,26]. Implicit biases among health care providers towards LGBTQ persons have been linked to lower quality of care[27-29], are rarely assessed[30], and can be resistant to change. Previous studies that addressed bias towards patients from racial/ethnic minority groups have found that implicit bias continues to persist despite an absence of negative explicit attitudes[31]. Even when providers make an explicit commitment to equitable care, implicit biases operating outside of their conscious awareness may undermine that commitment.

The disparities in access to care and health outcomes often are compounded by vulnerabilities linked to gender, racial identity[32-34] and geographic location[35].The percentage of the LGBTQ population lacking a regular primary care provider is significantly higher than among heterosexuals (30% versus 10%, respectively)[24,36]. One survey of health care providers found that over half expressed discomfort caring for LGBTQ patients[37].

The importance of physician implicit bias as a contributor to the health disparities that confront LGBTQ individuals is highlighted in professional competency objectives generated by the Association of American Medical Colleges Advisory Committee on Sexual Orientation, Gender Identity, and Sex Development [38]. These competencies

include the need for understanding that implicit LGBTQ-related bias may negatively impact interactions with patients and for including strategies to mitigate implicit bias in health care settings[38]. Training medical students to be aware of and address their own implicit biases towards LGBTQ persons and other vulnerable populations provides a critical opportunity for promoting equal access to quality health care and, ultimately, for eliminating health disparities.

V. Methods

We conducted a systematic review of the literature using the 2009 PRISMA guidelines[39] to identify original studies that focused on reducing medical student or health care provider bias towards LGBTQ persons. 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 prior to February 2017. The search strategy cross-referenced keywords for LGBTQ populations (lesbian, gay, bisexual, transgender, questioning, homosexual, MSM, WSW, sexual minority) with keywords for health care professions students or providers (medical student, medical resident, provider, physician, doctor, nurse, health personnel, practitioner, fellow, social worker) and keywords for bias (implicit bias, explicit bias, de-biasing, cultural competence, cultural competency, discrimination, prejudice, health disparity).

To be included in this systematic review, a study had to: 1) assess LGBTQ-related bias; 2) include dental, nursing or medical students or practicing medical professionals; 3) include a training program designed to promote culturally-competent care for LGBTQ individuals; 4) be written in English; and 5) be published prior to February 2017. We did not exclude qualitative studies nor did we exclude studies conducted outside of North America.

VI. Limitations

Findings of the systematic review were limited as none addressed the impact of implicit bias training on changing students' behavior or on patient outcomes. Hence, we could only draw from the extant literature on implicit racial/ethnic bias reduction to generate recommendations for training to address implicit bias towards LGBTQ persons and other vulnerable populations[3, 39, 40].

VII. Results/Key Findings

The systematic literature search yielded nine studies that assessed training programs to reduce LGBTQ-related bias in health care professions students and four studies that focused on health care providers. Studies ranged from small sample size (n = 13) to large (n = 848) and represented a wide range of health professions training programs including medicine (n = 6), nursing (n = 2) and dentistry (n = 1), as well as health care providers (n = 4).

The programs 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). Programs designed to increase student or provider knowledge of the LGBTQ community and LGBTQ-relevant health care issues utilized lectures, readings, videos, interviews or presentations by LGBTQ individuals, and group discussion. Significant knowledge gains in knowledge were observed for students attending single-session[41-44] and for students and providers attending more time-intensive program formats[45, 46]. One found that knowledge gains for medical students were maintained three months after the training program[46].

Programs designed to promote more positive student attitudes toward LGBTQ patients utilized perspective-taking exercises, videos of LGBTQ patients describing discrimination in health care settings, individual presentations, lectures, and LGBTQ patient panels. Strategies that reduce biases in students and providers are likely to increase access to care and reduce health disparities among vulnerable populations.

VIII. Discussion

The present review provides direction for researchers and educators seeking to reduce implicit bias among medical students toward LGBTQ patients and other vulnerable populations and provides a blueprint that can be used to train students how to become aware of and address personal biases. While research on programs to reduce bias among medical students is limited, research with health professionals may shed light on the key ingredients of effective programs. This review found that comfort level regarding LGBTQ health care was increased through experiential learning, which is consistent with prior results found in health professions samples[47].

Once implicit biases have been identified, medical students can be taught strategies to reduce their potential impact on patient care[39]. Some of these strategies, such as perspective-taking and intergroup contact, were identified in the present review as effective components of programs seeking to promote more positive explicit attitudes and greater comfort working with LGBTQ patients. Strategies that have received support for reducing implicit bias in other populations include: 1) the use of mindfulness meditation to promote nonjudgmental awareness[48,49] 2) individuation training to encourage providers to focus on individual attributes rather than group membership[50]; and 3) training in emotion regulation skills to reduce stress levels and negative emotions[1,51]. Although changes in implicit bias were not assessed using quantitative measures, anecdotal evidence from two studies found that an increase in awareness of implicit bias can be achieved among students[41, 52].

Future studies and medical school training programs should examine the influence of training on implicit LGBTQ-related bias.

IX. Recommendations/Next Steps

A curricular framework for reducing implicit biases among medical students towards LGBTQ persons and other vulnerable populations is needed and offers the potential for

transforming medical school education in addressing the needs of vulnerable populations. Training activities and modalities that reduce bias towards LGBTQ persons and other vulnerable populations through increases in knowledge, explicit attitudes, and comfort level are supported by the present review.

Results suggest that bias awareness strategies should be practiced in a supportive and individualized learning environment such as patient simulation that provides students with opportunities to receive direct feedback about perceived implicit biases while minimizing student defensiveness[39]. Towards this end, curricula should emphasize that implicit biases – whether negative or positive – are universal psychological phenomena[51]. While the Association of American Medical Colleges Advisory Committee on Sexual Orientation, Gender Identity, and Sex Development has generated professional competency objectives, they currently are only advisory. Further review of incorporating professional competency objectives of the needs of LGBTQ and other vulnerable populations into accreditation standards of the Liaison Committee on Medical Education (LCME) should be considered.

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