Author’s response to reviews

Title: Training to reduce LGBTQ-related bias among medical, nursing, and dental students: A systematic review

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Version: 1 Date: 11 Oct 2018

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October 11, 2018

Anne de la Croix, PhD, MA, MEd
Editor, BMC Medical Education

Manuscript MEED-D-18-00443

Dear Dr. de la Croix,

We appreciate your consideration of the resubmission of Manuscript MEED-D-18-00443, now titled “Training to reduce LGBTQ-related bias among medical students: A systematic review.” We thank the reviewers for raising important issues and for their helpful suggestions. In response to these comments, we have made the following revisions to the manuscript and highlight additions/revisions to the manuscript.
Reviewer #1:

1. “It would be much effective if this review article also searched samples of medical school curricula to check how this topic is regularly addressed and assessed in the curriculum.”

We agree that understanding how medical school curricula are addressing this topic is critical. We are currently in the process of analyzing survey data collected from 71 medical schools in the United States on the types of training provided across all years of medical education relevant to LGBTQ patients. While we believe these findings are beyond the scope of the present review, we anticipate disseminating them at relevant national conferences and through peer-reviewed publication in the near future.

2. “In the discussion section Page 4, line 22 the statement of " mapping core competencies..." is not clear; do you mean: Mapping the curricular session level objectives that address this issue to course level objectives and up to the program level learning objectives and competencies to make this topic explicit enough and measurable?”

We have revised this section (pp. 12-13) as follows to enhance clarity:

“A blueprint for opportunities to introduce implicit bias reduction training into medical school curricula is presented in Table 2. Recommendations are made for connecting training activities to: 1) training targets (knowledge, explicit attitudes, comfort level, implicit attitudes); 2) training modalities (i.e., lecture, conferences or workshops, case- or problem-based learning, small group discussion, simulation/standardized patients, patient care experiences); and 3) medical education core competencies (e.g., patient care, knowledge for practice, practice-based learning and improvement, interpersonal and communication skills, professionalism, personal and professional development) [55].”

Reviewer #2:

Introduction:

3. “I am a bit puzzled about the homeless and migrant farmer groups in the study. I do understand how bias affects health care for these groups - in fact, bias affects all health care, and these are two vulnerable groups that are hardly ever addressed, and yes, they do require attention. The authors have a fair point here, and I applaud their attempt to address the gap in the literature. But it is still a bit confusing what these groups are doing in this paper - bias towards LGBTQ individuals is already a huge and understudied topic and still deserves a paper on its own, as do the other two vulnerable groups. But I just do not understand why they are also in this paper, and why these two groups, and not other ones - undocumented migrants for instance (rather than migrant farm workers - why farm workers...?), there is no clear explanation for the choice of groups out of all the overlooked vulnerable groups in US society? Or other societies for that matter? I would
much prefer a focus in the paper on LGBTQ, and I would love to see an advocacy paper from the authors about the other vulnerable groups, a paper calling out the research community for studying the usual suspects only, and forgetting about those who need our attention the most, and why on earth we do not do more to address the health needs of these groups in our curricula. Long overdue already. I just do not fully grasp the combination of these groups in this one paper.”

We agree with the reviewer and now focus this systematic review on LGBTQ patients. We have removed references to migrant farmworkers and persons experiencing homelessness throughout the manuscript and have changed the title to ‘Training to reduce LGBTQ-related bias among medical students: A systematic review’.

4. “I am obviously not a native speaker in English. So I am never really sure whether it should be subconscious or unconscious - I know unconscious is common language use, but also a bit weird in the medical field...”

We agree that there is potential for confusion regarding the term ‘unconscious’ in the medical field. Our use of this term as a descriptor for implicit bias is based on its frequent use in the literature on implicit social cognition (Greenwald & Banaji, 1995; Greenwald et al., 2002) as well as the literature on the Implicit Association Test (Greenwald et al., 1998). To minimize confusion for the reader we now define unconscious as “outside of conscious awareness” (p. 4).

5. “The authors refer is a lot to the IAT, which is a widely used and studied tool, but there are more scales to study stereotypes e.g. the Stereotype Content Model (Fiske and colleagues, for instance).”

We now refer the reader to other types of implicit bias measures (p. 14) and reference the work of Fiske and colleagues in our discussion of the limitations of the present study (p. 15).

6. “But I do miss a proper theoretical reflection on implicit bias, what it is and what it does, in medicine, and how it is studied in health care and from which perspectives”

“make a case for how bias is present in medical education and health care”

We have substantially revised the introduction to provide greater detail on the prevalence of explicit and implicit biases toward LGBTQ patients among medical students (p. 4). We now clarify that research on implicit and explicit bias draws from work in social-cognitive psychology on intergroup processes (p. 4). We have restructured this section to include one paragraph on definitions of explicit and implicit bias and their prevalence among medical students and providers (p. 4) and another paragraph on the effects of explicit and implicit biases on the behavior and judgments of medical students and providers (pp. 4-5).

7. “Next, the important step is to make the change - can implicit bias be changed, can we learn, can we overcome what we were trained to do for so long and in a context that is highly reinforcing implicit bias? That is the real question I guess, but the authors do not reflect on that issue. However, medical education in this case is about unlearning what we
have learned to do automatically... My excitement with the paper was that maybe, the authors were going to answer that question, but the introduction hardly mentions the unlearning/learning to be unbiased topic itself. And I would like to see the introduction build up to that question - what do medical educators do to teach students to unlearn stereotypes and bias and what can we learn from their experiences?? The introduction does not necessarily lead us to the study of the reduction of bias in medical education - the RQ comes kind of as a surprise.”

“use a theoretical framework for bias reduction and learning; how can we unlearn such deeply embedded ideas, when we are entrenched in them? As DiAngelo says: white people are swimming in the ocean of whiteness - how can we see the needs of LGBTQ patients in a heteronormative society?! Then, the RQ would make fully sense, and also, much needed!!”

“explore the possibilities for reducing/targeting bias and effects of interventions in medical education”

We have substantially revised the introduction to include a stronger theoretical framework for implicit bias reduction. This includes citing research on the ‘prejudice habit-breaking framework’, describing findings regarding long-term reduction of implicit racial bias, and highlighting key components of effective bias reduction programs (pp. 5-6). We also clarify the knowledge gap that the present study seeks to address (p. 6) in a manner that better anticipates our research questions.

Methods:

8. “I only missed the terms 'stereotype' and 'stigma' in the search terms, would that have made sense, to add?!”

We ran new searches cross-referencing “stereotype” and “stigma” with keywords for LGBTQ populations and health care professions students or providers. This process did not yield any abstracts that had not been previously identified. We now include these terms in the methods section (p. 8).

Discussion:

9. “I miss reflection about the hidden curriculum, the message conveyed in the 'rest of the curriculum', that patients are automatically assumed to be heterosexuals, the heteronormativity in the materials and delivery of education, a discussion of 'how' LGBT content is delivered, the climate in the schools etc.”

We now incorporate a discussion of how implicit bias reduction training in medical education may produce changes in the ‘hidden curriculum’ (p. 14).
10. “Furthermore, I would like to see some critical reflection on the findings. Does a lecture about LGBT health make our students better doctors, when the rest of the curriculum, the rest of medical education including the climate, and the rest of society is heteronormative, homo- and transphobic, when doctors themselves are not supposed to be gay?”

We now address the potential for implicit bias training to increase LGBTQ medical students’ comfort levels disclosing their own sexual orientation and gender identity to colleagues and how this openness, in turn, can augment bias awareness and reduction strategies by shifting the institutional climate (p. 14).

11. “What kind of education, from an SGM inclusive perspective, is really needed in medical education to avoid the reproduction of damaging stereotypes and bias, to foster health care for SGM patients? Is it possible that, if we do not take these issues seriously, our LGBT health lectures and patient cases do more damage than good?”

We outline specific strategies for LGBTQ bias awareness and reduction in medical education that have been supported by research. These include not only lectures on LGBTQ health disparities but also strategies to increase students’ awareness of their own biases, when they may arise, and how to manage these biases to ensure that they do not negatively influence decisions about patient care (pp. 5,6, 13,14). We highlight intergroup contact as a critical component for increasing comfort working with LGBTQ patients (p. 12) and LGBTQ colleagues (p. 14).

12. “Again, like in the introduction, the combination with homelessness and migrant farm workers does not really make sense. The authors could make a case for marginalized populations in general, including homeless and migrants and farm workers, and undocumented migrants, and sex workers, and all of us located on invisible intersections, and how would their findings ‘work’ for other groups too, and how would they not work?”

Please see our response to comment #3. We have focused the review on LGBTQ individuals and removed references to people experiencing homelessness and migrant farmworkers.

In summary, we have addressed each of the reviewers’ concerns and have modified the manuscript accordingly. These changes have improved the overall clarity, quality, and impact of the paper. We look forward to receiving your decision regarding the revised manuscript. Thank you very much for your consideration.