

Assessing Comfortability and Knowledge of LGBTQ Health in Family Medicine Residency Program

Jessica O'Brien, MD¹; Steve Wipijewski, DO²

Family Medicine Residency Program, Aurora St. Luke's Medical Center, Advocate Aurora Health

Abstract

The LGBTQ community experiences health disparities, including higher mental health concerns and lower likelihood to receive recommended preventative care. A contributing factor to these disparities is lack of physician comfort and education on LGBTQ health. The purpose of this study was to assess primary care residents and attendings' medical knowledge and comfort of LGBTQ health issues before and after formal education. A pre-test survey was emailed to residents and faculty at the Aurora Family Medicine residency program. Questions included: self-reported knowledge and comfort of taking care of LGBTQ patients, terminology, CDC and USPSTF screening guidelines, and gender-affirming treatment options. After completion of the pre-test, two 15 minute lectures were provided during resident-faculty meetings. After completion of the second lecture, a post-test survey was emailed to residents and faculty. Pre-test (n=34) and post-test (n=20) responses were compared using Chi-Square tests and Fisher's Exact test for categorical variables, and T-tests for continuous variables. While respondents reported improvement in knowledge (pre-test 43.4%, post-test 53.1%) and comfort (pre-test 52.0%, post-test 62.0%) after the lecture series, results were not statistically significant (p=0.161; p=0.191). There were no statistically significant differences between pre-test and post-test scores on LGBTQ health questions. While self-reported knowledge and comfort scores improved after receiving lectures on LGBTQ health, results were not statistically significant. Interpretation of the data was limited due to fewer respondents on the post-test, as well as having different respondents when comparing pre-test and post-test identifiers. Addressing barriers to physician attendance and completion of surveys could improve the study.

Introduction

Do primary care physicians have the proper knowledge and comfortability to take care of the lesbian, gay, bisexual, transgender, queer (LGBTQ) individual? A recent survey conducted by Gallup in 2016 concluded that 4.1% of 1.6 million Americans identified as LGBT, and the National Institute of Health recently released a statement identifying sexual and gender minorities as a health disparity population. These populations are at an increased risk of discrimination and stigma from different perspectives. LGBT individuals have a higher incidence of suicide, mental health concerns, and substance abuse secondary to social stigma and stressors in comparison to their heterosexual, cisgender counterparts. Transgender individuals were reported as less likely to receive healthcare if their physician was not knowledgeable on transgender healthcare. Lesbians and bisexual women also were less likely to receive cervical cancer screening.

A portion of this discrimination stems from the education that physicians receive on LGBTQ health concerns. Medical schools with greater implicit bias toward the gay and lesbian population was associated with witnessed discriminatory behavior from medical school faculty; on the other hand, lower implicit bias was associated with positive experiences. Medical school curricula was also surveyed, reporting a mean of 5 hours of LGBTQ education, with 6.8% of schools reporting no LGBTQ education and 33.3% reporting no education in clinical years. A panel of emergency medicine residents were assessed on their comfortability of taking care of LGBTQ patients; it was concluded that residents were overestimating comfortability taking care of LGBTQ individuals. Several studies on internal medicine residents showed a lack of comfortability on providing care to transgender individuals, and another showed lack of knowledge on preventative care affecting sexual gender minority patients. Finally, primary care physicians were surveyed on their willingness to care for transgender patients; results indicated that willingness declined with increasing age of the physician, and that willingness to provide healthcare was higher among those who met a transgender individual and those with lower transphobia.

So how can physicians improve their knowledge and comfortability taking care of LGBTQ patients? One study reported an increase in LGBT health concerns knowledge after a lecture on sexual orientation and gender identity when comparing pre- and post-test scores. Some schools have implemented LGBTQ panels to meet with students, showing improved levels of comfortability and knowledge. As research is lacking in regards to improving education from a residency perspective, particularly primary care/family medicine, our study aimed to assess current knowledge and comfortability with LGBTQ health concerns.

Materials and Methods

Specific Aim:

Do primary care residents and attendings have sufficient medical knowledge and comfortability for LGBTQ health issues?

Primary Objective:

To assess Milwaukee family medicine resident and attending physician knowledge and comfortability in regards to LGBTQ healthcare (terminology, screening guidelines, medical management) in primary care before and after online presentations given at resident-faculty meetings.

Study Population/Sample Size:

Aurora Family Medicine Residency faculty and residents (either MD or DO) at FPC and FCC locations. NPs, Pas, medical students, RNs, Mas, and clinic staff were not included in the study. There was a total of approximately 30 residents and 15 attending physicians surveyed for a total of 45 participants.

Study Design:

An online pre-survey designed as a pre-test to better understand current knowledge and comfortability was emailed to residents and faculty two weeks before the first online presentation. Residents and faculty were asked to voluntarily complete the survey prior to the first presentation, at which time it was then closed. The survey included Likert-scale questions asking the participants to subjectively rate their knowledge levels and comfortability taking care of an LGBTQ patient, followed by multiple choice questions on terminology, and case vignettes with multiple correct and incorrect answers.

Upon completion of the survey, two presentations were held over the span of two months discussing LGBTQ health topics (first presentation on gay, lesbian, and bisexual health, and second presentation on transgender and genderqueer health). These were presented at resident-faculty meetings for approximately 10-15 minutes per presentation with time for questions after the presentations. After finishing the second presentation, the participants were emailed a post-survey identical to the pre-survey to complete within three weeks. All residents, faculty, and NPs were emailed the presentations after the resident-faculty meetings as well.

Data Collection/Statistical Plan:

Pre-surveys were collected for two weeks in November 2020. Presentations were held in December 2020 and January 2021, with the post-survey collected and analyzed in February 2021. Categorical variables were analyzed using Chi-Square tests, and continuous variables were analyzed using T-tests.

Results

Pre-test (n=34) and post-test (n=20) responses were compared using Chi-Square tests, and continuous variables were analyzed using T-tests. While respondents reported improvement in knowledge (pre-test 43.4%, post-test 53.1%) and comfort (pre-test 52.0%, post-test 62.0%) after the lecture series, results were not statistically significant (p=0.161; p=0.191). Majority of multiple choice terminology questions received 100% correct between pre- and post-tests, with clinical vignettes responses were scattered in regards to number of correct responses. There were no statistically significant differences between pre-test and post-test scores on LGBTQ health questions.

Conclusion and Recommendations

While self-reported knowledge and comfort scores improved after receiving lectures on LGBTQ health, results were not statistically significant. Interpretation of the data was limited due to fewer respondents on the post-test (n=34 for pre-test and n=20 for post-test), as well as having different respondents when comparing pre-test and post-test identifiers. It is unclear what percentage of residents and attendings were able to attend either or both lecture series. It is also unclear whether more or longer educational sessions would have increased medical knowledge and comfort further. Finally, there is also the possibility that residents and attendings may have overestimated their knowledge and comfort in the pre-test surveys. Addressing barriers to physician attendance and completion of surveys could improve the study. Investigating the comparison of programs with incorporation of LGBTQ health didactics versus those with little or none could also provide further identification on differences in knowledge and comfortability.

References

1. Pérez-Stable, E., 2016. *Director's Message For October 6, 2016*. [online] NIMHD. Available at: <https://www.nimhd.nih.gov/about/directors-corner/messages/message_10-06-16.html> [Accessed 1 November 2020].
2. Hatzenbuehler ML, Pachankis JE. Stigma and Minority Stress as Social Determinants of Health Among Lesbian, Gay, Bisexual, and Transgender Youth: Research Evidence and Clinical Implications. *Pediatr Clin North Am*. 2016 Dec;63(6):985-997. doi: 10.1016/j.pcl.2016.07.003. Epub 2016 Oct 12. PMID: 27865340.
3. Jaffee KD, Shires DA, Stroumsa D. Discrimination and Delayed Health Care Among Transgender Women and Men: Implications for Improving Medical Education and Health Care Delivery. *Med Care*. 2016;54(11):1010-1016. doi:10.1097/MLR.0000000000000583
4. Dimant OE, Cook TE, Greene RE, Radix AE. Experiences of Transgender and Gender Nonbinary Medical Students and Physicians. *Transgend Health*. 2019;4(1):209-216. Published 2019 Sep 23. doi:10.1089/trgh.2019.0021
5. Phelan SM, Burke SE, Hardeman RR, et al. Medical School Factors Associated with Changes in Implicit and Explicit Bias Against Gay and Lesbian People among 3492 Graduating Medical Students [published correction appears in *J Gen Intern Med*. 2018 Apr 17;]. *J Gen Intern Med*. 2017;32(11):1193-1201. doi:10.1007/s11606-017-4127-6
6. Dubin SN, Nolan IT, Streed CG Jr, Greene RE, Radix AE, Morrison SD. Transgender health care: improving medical students' and residents' training and awareness. *Adv Med Educ Pract*. 2018;9:377-391. Published 2018 May 21. doi:10.2147/AMEP.S147183
7. Moll J, Krieger P, Heron SL, Joyce C, Moreno-Walton L. Attitudes, Behavior, and Comfort of Emergency Medicine Residents in Caring for LGBT Patients: What Do We Know?. *AEM Educ Train*. 2019;3(2):129-135. Published 2019 Jan 21. doi:10.1002/aet2.10318
8. Johnston CD, Shearer LS. Internal Medicine Resident Attitudes, Prior Education, Comfort, and Knowledge Regarding Delivering Comprehensive Primary Care to Transgender Patients. *Transgend Health*. 2017;2(1):91-95. Published 2017 Jul 1. doi:10.1089/trgh.2017.0007
9. Streed CG Jr, Hedian HF, Bertram A, Sisson SD. Assessment of Internal Medicine Resident Preparedness to Care for Lesbian, Gay, Bisexual, Transgender, and Queer/Questioning Patients. *J Gen Intern Med*. 2019;34(6):893-898. doi:10.1007/s11606-019-04855-5
10. Leech AA, Christiansen CL, Linas BP, Jacobsen DM, Morin I, Drainoni ML. Healthcare practitioner experiences and willingness to prescribe pre-exposure prophylaxis in the US. *PLoS One*. 2020;15(9):e0238375. Published 2020 Sep 3. doi:10.1371/journal.pone.0238375
11. Shires DA, Stroumsa D, Jaffee KD, Woodford MR. Primary Care Clinicians' Willingness to Care for Transgender Patients. *Ann Fam Med*. 2018;16(6):555-558. doi:10.1370/afm.2298
12. Wähnen R, Bize R, Wang J, Merglen A, Ambresin AE. Medical students' knowledge of and attitudes towards LGBT people and their health care needs: Impact of a lecture on LGBT health. *PLoS One*. 2020;15(7):e0234743. Published 2020 Jul 1. doi:10.1371/journal.pone.0234743
13. Morris M, Cooper RL, Ramesh A, et al. Training to reduce LGBTQ-related bias among medical, nursing, and dental students and providers: a systematic review. *BMC Med Educ*. 2019;19(1):325. Published 2019 Aug 30. doi:10.1186/s12909-019-1727-3
14. Sekoni AO, Gale NK, Manga-Atangana B, Bhadhuri A, Jolly K. The effects of educational curricula and training on LGBT-specific health issues for healthcare students and professionals: a mixed-method systematic review. *J Int AIDS Soc*. 2017;20(1):21624. doi:10.7448/IAS.20.1.21624
15. LGBTQIA+ Glossary of Terms for Health Care Teams. National LGBTQIA+ Health Education Center. <https://www.lgbtqihealtheducation.org/wp-content/uploads/2020/10/Glossary-2020.08.30.pdf>. Published February 3, 2020. Accessed October 10, 2020.
16. McNamara MC, Ng H. Best practices in LGBT care: A guide for primary care physicians. *Cleveland Clinic Journal of Medicine*. 2016;83(7):531-541. doi:10.3949/cjcm.83a.15148