

# Integration of High-Quality LGBTQ+ History and Physical Exam Skills in Physician Assistant Curriculum

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## ABSTRACT

**Objective:** The LGBTQ+ community faces disparities in healthcare. This study investigated short and long-term effects of an integrated LGBTQ+ workshop to determine the value of vertical and horizontal addition of an instructional activity to promote cultural humility and mitigate health disparities affecting the LGBTQ+ community.

**Methods:** The study was approved by the Institutional Review Board and voluntary and anonymous pre and post assessments were administered via Qualtrics. Data were obtained from PA students to measure confidence and proficiency in interview and physical examination of the LGBTQ+ patient. An existing didactic PA course was restructured to provide high-impact learning modules and assessments that refine care the LGBTQ+ community receive. A repeated t-test was used to determine change in survey results over 3 points in time.

**Results:** A One-Way Repeated ANOVA was used to measure changes over time. Student responses indicated knowledge was increased and sustained at 2 months and 4 months following the delivery of a longitudinal workshop.

**Conclusion:** Given the emphasis on diversity, equity, and inclusion in healthcare, it is essential for educators to integrate teaching modalities vertically and horizontally throughout the curriculum to maintain knowledge as a method of promoting culturally humility.

## PURPOSE

PA students are required to provide safe and comprehensive medical care to diverse communities. Competency may be challenging to measure, but confidence, knowledge, and skills can be refined through active learning. Despite an increase in the LGBTQ+ population, progress through educational interventions has been slow to address knowledge and skills related to gender-affirming health care concerns. Consequently, there remains significant “gaps in the health science curricula” with regards to the appropriate education needed to care for the LGBTQ+ population.<sup>1</sup> Educators must respond and develop curricula that help students recognize, assess, and confidently care for patients that span the gender spectrum and reduce healthcare disparities facing the LGBTQ+ population. This study investigated the short and long-term effects of an integrated LGBTQ+ workshop on confidence levels in history and physical examination skills. It is unclear if an integrated workshop is sufficient or if LGBTQ+ education requires horizontal and vertical integration throughout the physician assistant curriculum.

## INTRODUCTION

In 2015, the World Medical Association (WMA) adopted a statement calling for “the provision of appropriate expert training for physicians at all stages of their career to enable them to recognize and avoid discriminatory practices, and to provide appropriate and sensitive transgender healthcare.”<sup>1</sup> The fifth edition ARC-PA standards, released in September 2020, further affirms the importance of the WMA statement by stating that the Physician Assistant (PA) curriculum should be “An environment that fosters and promotes diversity which is considered essential to preparing PAs to provide service to others that is not exclusionary of any group, race, or culture.”<sup>2</sup> Despite an increase in the LGBTQ+ population, progress through educational interventions has been slow to address knowledge and skills related to gender-affirming health care concerns. Consequently, there remains significant “gaps in the health science curricula” with regards to the appropriate education needed to care for the transgender population.<sup>1</sup>

## METHODS

The study was approved by the Institutional Review Board and voluntary and anonymous pre and post assessments were administered via Qualtrics. Data were obtained from 1 cohort of PA students to measure confidence and proficiency in interview and physical examination of the LGBTQ+ community. An existing didactic PA course in Physical Examination and Diagnostic Modalities was restructured to provide high-impact learning modules and assessments that refine care the LGBTQ+ community receive. A repeated t-test was used to determine change in survey results over 3 points in time. Students were surveyed prior to the workshop (time 1) and at 2 months (time 2) and 4 months (time 3) following course activities. Instruction was delivered longitudinally throughout the course and encompassed small group activities, and problem-based learning facilitated by an LGBTQ+ panel comprised of individuals spanning the gender spectrum.

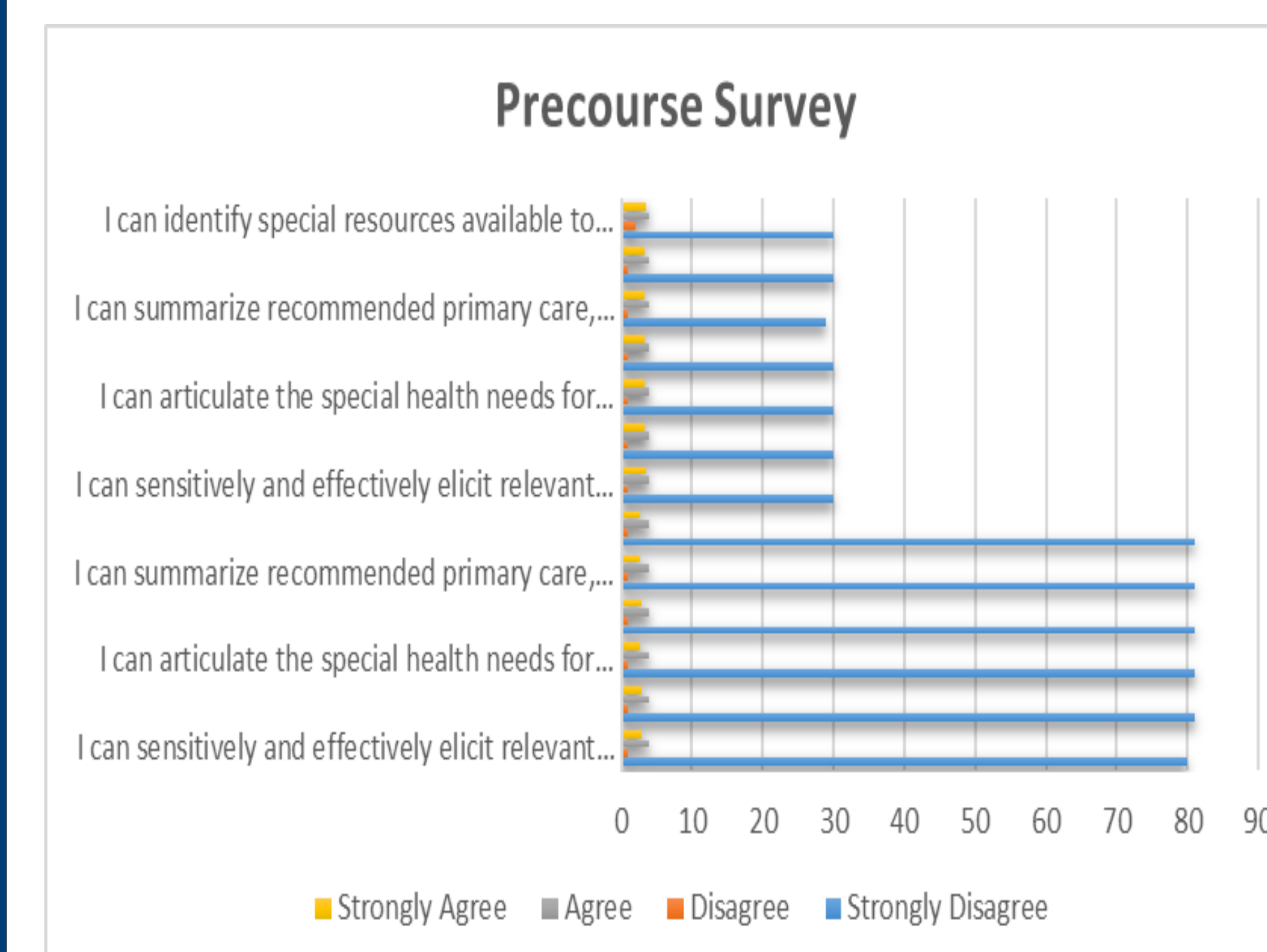
## RESULTS

53 students completed the initial pretest, followed by 29 students who finished the immediate post-test 2 months later and 19 students finished the post-test 4 months later.

A One-Way Repeated ANOVA was used to measure changes over time in the 19 students that completed the two post analyses. There was a significant change over time in questions 4, 5, 6 and 7. For question 4 “I can articulate the special health needs for transgender patients” There was a significant increase between time 1 and time 2 and, also between time 1 and time 3. For question 5 “I can summarize recommended primary care, anticipatory guidance, and health care maintenance for lesbian, gay, and bisexual patients” there was a significant increase between time 1 and time 2 and, also time 1 and time 3.

For question 6 “I can summarize recommended primary care, anticipatory guidance, and health care maintenance for transgender patients” there was a significant increase from time 1 to time 2 and, also between time 1 and time 3. For question 7 “I can identify special resources available to support the health and wellness of LGBT individuals” there was a significant increase from time 1 to time 3.

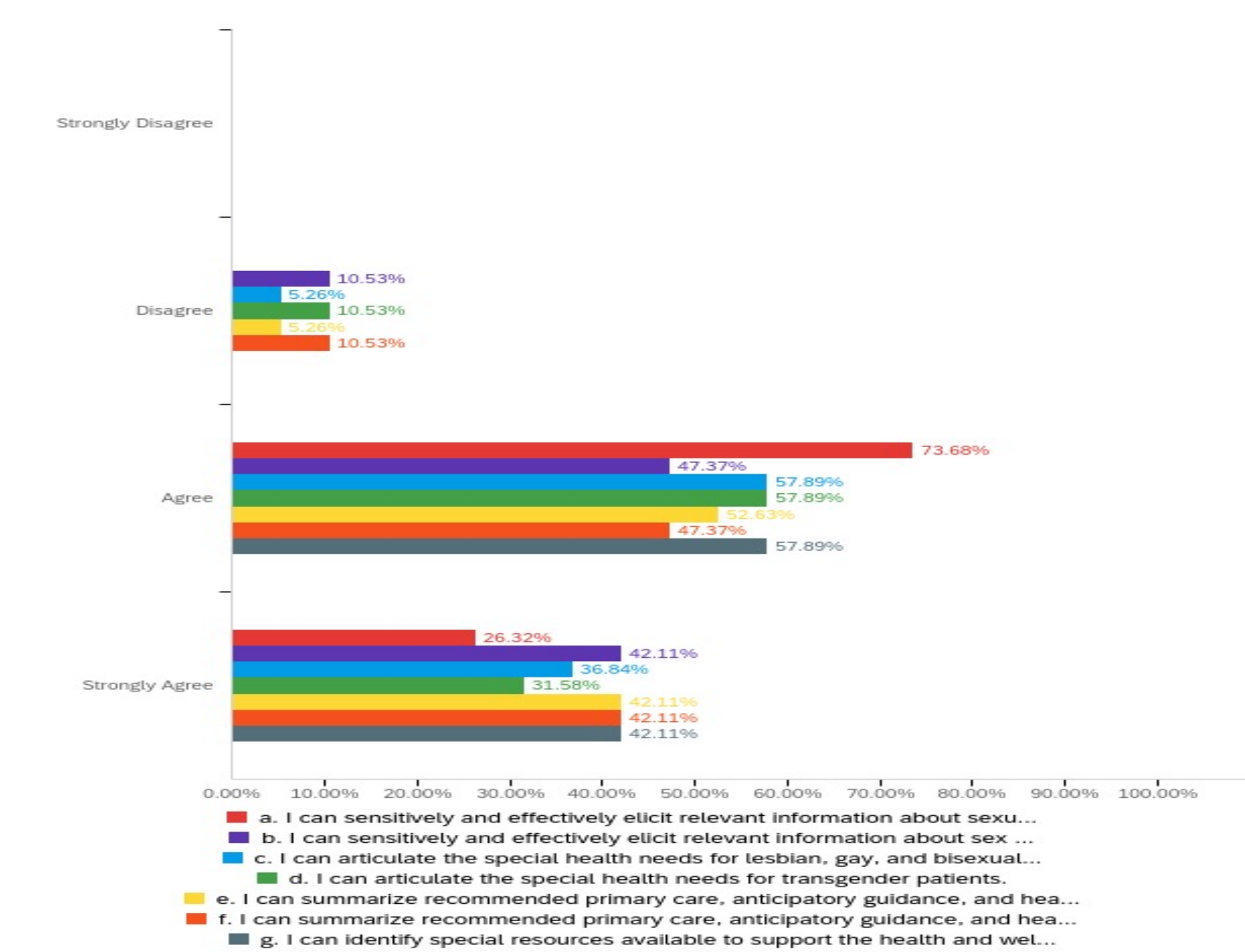
When analyzing the qualitative questions on the top three topics that are most important to students when treating the LGBTQ+ population the following themes were found: addressing patients appropriately so they do not feel uncomfortable, being able to provide the most evidence-based treatment for the transgender population and how to make the office environment comfortable for patients. While there was minimal significance over time, for all questions, knowledge on LGBTQ+ patients was increased.



## CONCLUSION

It is important to analyze the impact PA educators are having on students to promote cultural humility and equality. What is of interest is that students want to make sure they are providing evidence-based treatment strategies to patients and that LGBTQ+ patients feel comfortable when they seek out medical care.

This study demonstrated that initial knowledge along with knowledge over time on LGBTQ+ patients was increased and sustained. Information on patient care for the LGBTQ+ population should be integrated vertically and horizontally. To make a true practice change when PA students become practicing PAs, the knowledge they gain from lectures and workshops should be sustained over time. There was a steep drop-off of students after the first pre-test, which is a limitation to the generalization of the results. Given the emphasis on equity, diversity, and inclusion in the health care system, it is important to analyze the impact educators have on students to promote cultural humility and the results should be disseminated to the broader population.



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