



# Empathy in Action: LGBTQ+ Service-Learning and Medical Student Transformation

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## Background

According to the 2021 national Gallup survey, the percentage of US adults identifying as LGBTQ+ has increased to **7.1%**, doubling the percentage from 2012.<sup>1</sup> Despite these increases, undergraduate medical school curricula across the nation sits at a median of **five hours** when it comes to teaching LGBTQ-related content.<sup>2</sup>

Additionally, most providers feel they can competently care for LGBTQ+ individuals, but only about **half** inquire about sexual orientation and **less than a quarter** inquire about gender identity.<sup>3</sup>

Studies have shown that simple interventions, such as a one-hour lecture, are positively correlated with medical students' knowledge of LGBTQ+ healthcare. As it stands, there is **no known literature** assessing the direct impact of facilitated clinical exposure to LGBTQ+ patients on medical students.

## Objective

The goal of this study is to assess how clinical volunteering with LGBTQ+ patients will impact medical students' **knowledge, attitudes, self-efficacy, and behavioral intention.**

A linear and direct relationship was expected between number of hours volunteered and the aforementioned categories.

## Methods

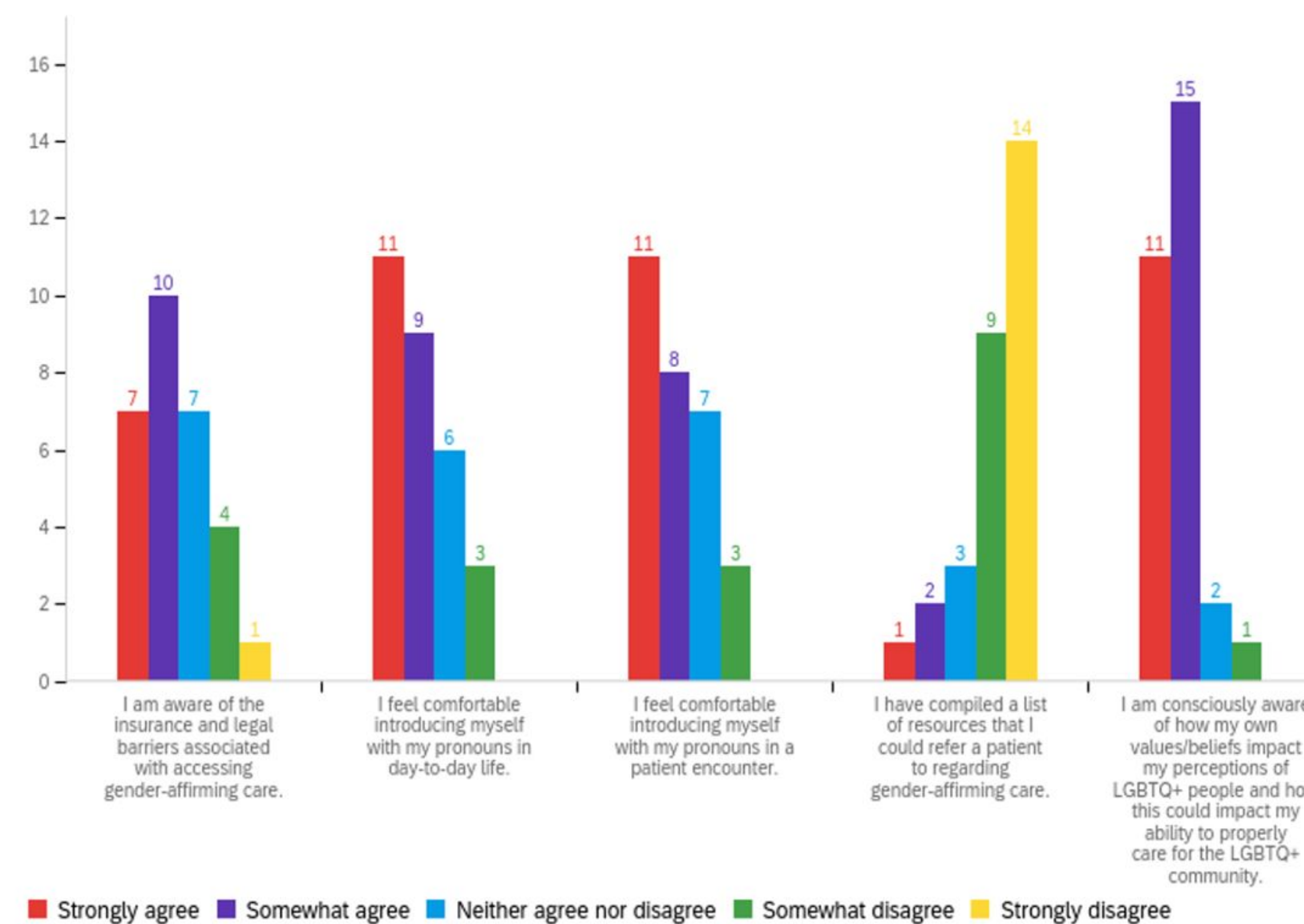
A cohort of medical students within the class of 2025 at the University of Arizona College of Medicine – Phoenix were evaluated with a home-grown **KASI inventory** (knowledge, attitudes, self-efficacy, behavioral intention) as recommended by the *National LGBT Cancer Network* pre- and post- intervention.<sup>4</sup>

Following pre-survey completion, students were able to take histories and perform physical examinations on LGBTQ+ patients under provider supervision.

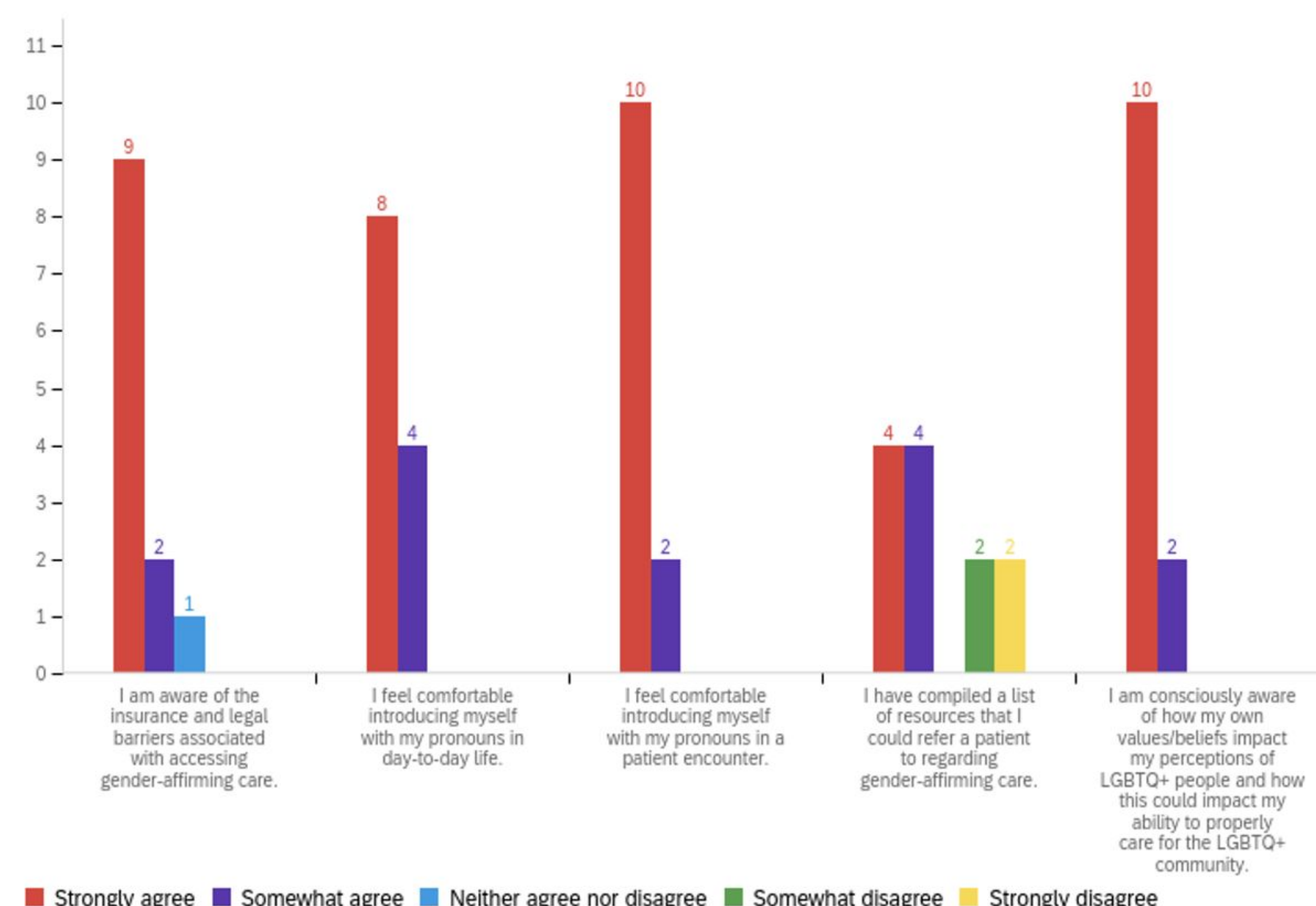
After one year, participants in the cohort were encouraged to fill out the post-survey via gift card incentive. The Wilcoxon signed-rank test was used for statistical analysis.

## Results

- There were 29 pre-survey participants with 30% identifying as LGBTQ+ and 12 post-survey participants with 50% identifying as LGBTQ+.
- Consistent with previous literature, this cohort shows favorable **attitudes** towards the LGBTQ+ community.



- Self-perceived **knowledge**: statistically significant difference in 12 out of 20 statements between pre and post-survey. ( $p < 0.05$ )
- **Self-efficacy**: statistically significant difference in 9 out of 11 statements. ( $p < 0.05$ )
- **Behavioral intention**: statistically significant difference in 5 out of 7 statements. ( $p < 0.05$ )



## Conclusion

The results of this study demonstrate how impactful real-world clinical experience can be for undergraduate medical students. There were vast gains in knowledge, self-efficacy, and behavioral intention. Undoubtedly, these results will result in better patient care for our LGBTQ+ patients.

## Challenges / Implications

One definite limitation of this study is the small sample size. This was attempted to be mitigated with gift card incentive. This makes it more difficult to generalize these results across all medical schools. Future studies should be carried out at other medical schools to assess reproducibility.

Participating in this study may also seem more appealing if one identifies as LGBTQ+ themselves, fulfilling a self-selection bias. This would most likely skew results to look more competent than a broader student population.

This project has the potential to revolutionize the way LGBTQ+ health is taught in medical school. In the long-term, it seeks to combat physician hesitancy around caring for LGBTQ+ populations, effectively deconstructing the health disparities that plague these individuals.

## Acknowledgements & References

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- **Statistician**- Mehrtash Hashemzadeh
- This study was approved to conduct research under the Research Office for Medical Education (ROME) Umbrella IRB for medical student data.

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[2] Obedin-Maliver J, Goldsmith ES, Stewart L, et al. Lesbian, gay, bisexual, and transgender-related content in undergraduate medical education. *JAMA*. 2011;306(9). doi:10.1001/jama.2011.1255

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