

MASSACHUSETTS COLLEGE of PHARMACY and HEALTH SCIENCES

The Effect of Case-Based Learning Versus a Traditional Lecture on PA Students when Teaching Inclusive Communication and Resources Related to the Care of Patients with Vision Impairment

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Introduction

Teaching Physician Assistant (PA) students to use an inclusive approach when caring for patients with diverse backgrounds is important and required by the Accreditation Review Commission.¹ There are, however, limited resources to guide curriculum design, or to recommend best practices. Very few published studies have measured opinions or performance of students after learning about using an inclusive approach with specific patient populations.²⁻⁴ Patients with vision loss are a prevalent population that requires PAs to use an inclusive approach.⁵ There are currently no studies that evaluate training in PA education to use an inclusive approach for patients with visual impairments.

Purpose

To evaluate and compare PA students' opinions and knowledge after attending a case-based lecture versus a traditional lecture on inclusive language and resources when caring for patients with a visual impairment.

Methods

Population: 92 PA students in their 2nd didactic year.

Design: Students were randomly and evenly assigned to attend one of two lectures.



Outcomes: Pre and Post Lecture Surveys

- Opinion Survey: Interest, value, confidence using inclusive language when interacting with patients with a visual impairment
- Knowledge Quiz: 10 multiple choice questions

Statistical Analysis: Independent samples T-test compared differences between the groups and a paired t-test was used to test for significant changes within the groups. A p-value ≤ 0.05 (*) was considered to be statistically significant.

IRB approval: Obtained from MCPHS University IRB.



Key Findings

- Response rates were high and similar between groups.
- Both lectures showed improvement in knowledge regarding the approach for caring for a visually impaired patient.
- The students felt more engaged in the case-based lecture than the traditional lecture format.
- Irrespective of the format, students' opinions improved regarding: including this topic in PA education, confidence in verbalizing and documenting, identifying resources, valuing the importance of inclusive language and comfort levels in approaching a patient with visual impairment.

Conclusion

In teaching PA students the importance of inclusive language and resources when caring for a patient with visual impairment: Interactive Lecture

- Improves student engagement
- Increases interest to utilize inclusive language
- Significantly improved their quiz scores

Traditional Lecture

Higher performance on the quiz

We conclude, teaching about inclusive approach for patients with visual impairment is valuable to include in PA education and can be achieved via case-based learning.

References

- Accreditation Review Commission on Education for the Physician Assistant. Accreditation Standards for Physician Assistant Education. 5th ed. ARC-PA; 2019. http://www.arc-pa.org/accreditation/standards-of-accreditation. Accessed January 1, 2023
- Hart BG, Kindratt TB, Vasudevan A, et al. Developing a Curriculum on Transgender Health Care for Physician Assistant Students. J Physician Assist Educ. 2021;32(1):48-53. doi:10.1097/JPA.000000000000339
- Kayingo G, Bradley-Guidry C, Burwell N, Suzuki S, Dorough R, Bester V. Assessing and benchmarking equity, diversity, and inclusion in healthcare professions. JAAPA. 2022;35(11):51-54. doi:10.1097/01.JAA.0000885184.50730.94
- Vasquez Guzman CE, Sussman AL, Kano M, Getrich CM, Williams RL. A Comparative Case Study Analysis of Cultural Competence Training at 15 U.S. Medical Schools. Acad Med. 2021;96(6):894-899. doi:10.1097/ACM.000000000004015
- American Optometric Association Consensus Panel on Care of the Patient with Low Vision. Optometric clinical practice guideline care of the patient with visual impairment (low vision rehabilitation). American Optometric Association. 2007