Impact and Perception of Staff-Driven Webinar on Assisting Visually Impaired Patients

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Background

- Inclusion of individuals with visual disabilities to receive accessible healthcare aligns with Diversity, Equity, and Inclusion (DEI) practices
- Currently, there is limited data describing healthcare provider education on visual impairment assistance, despite the frequent contact patients may have with various providers
- Staff-driven education for students, faculty, staff, and administrators in healthcare on visually impaired accessibility has not been previously described

Objectives

- To assess the effectiveness of a staff-driven webinar on best practices for serving visually impaired patients
- To measure student, faculty, staff, and administrator perceptions on enhancing healthcare accessibility

Methods

- Study was approved by the MBKU Institutional Review Board Committee
- One-hour webinar presented by the Chief Executive Officer (CEO) of a company specializing in accessibility pharmacy services for the blind on January 30, 2024
- Available only to employees and students of MBKU, which has three health care programs: Doctor of Pharmacy (PharmD), Doctor of Optometry (OD), and Master's in Physician Assistant Studies (PA)
- Data was collected from April to May 2024
- Participants completed a 24-item survey designed and distributed through Qualtrics®
- Participants were asked to self-report their demographic data and awareness of the staff-driven event ("yes", or "no")
- Pre- and post-event self-rated questions on confidence in serving visually-impaired patients, perceived value of the webinar, and ability to serve visually-impaired patients were measured on a 4-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree), with higher scores indicating more favorability
- Three comprehension questions included to assess participants' retention of the webinar content
- Paired Student's t-test, Pearson's correlation, and descriptive statistics used to report the study findings

Survey

Demographics → Pre- and Post-Event Self-Rated Questions → Post-Event Comprehension Questions
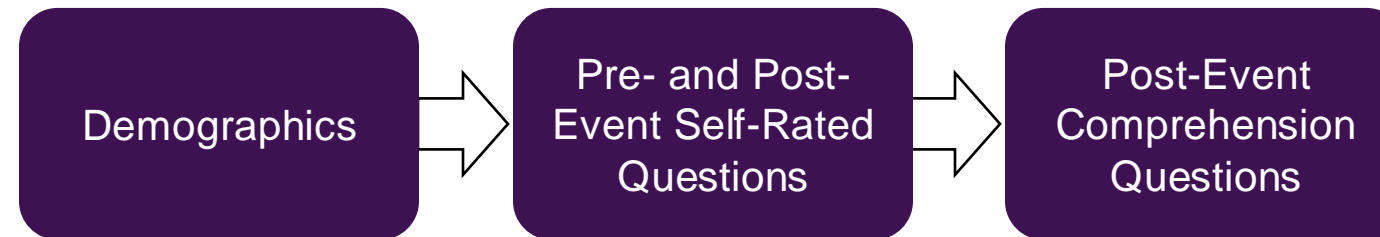
Example Pre- and Post-Event Self-Rated Confidence Questions:
- I can describe the challenges faced by individuals who are visually impaired
- I can describe resources that can help individuals who are visually impaired
- In general, this webinar was valuable to me
- I can apply this information to better serve patients who are visually impaired
- How likely would you recommend this webinar to your colleagues? (0 to 10)

Example Post-Event Comprehension Question:
- During the webinar, the speaker described an app that allows visually impaired patients to communicate with an operator that helps you navigate the environment. This app was called ____

Results

Table 1. Baseline Demographics	
Characteristic	Participants (N = 13)
Role, n (%)	
Student	2 (15.4%)
Staff	1 (7.7%)
Faculty	9 (69.2%)
Administrator	2 (15.4%)
Gender, n (%)	
Male	4 (36.4%)
Female	7 (63.6%)
Other	3 (25.0%)
Program, n (%)	
OD	2 (15.4%)
PharmD	10 (76.9%)
PA	1 (7.7%)
Practice in Clinical Setting, n (%)	2 (15.4%)
Note: Response rate 65% (13 respondents out of 20)	

- On average, participants correctly answered 2.4 out of 3 comprehension questions (80.0% performance)
- Self-rated confidence increased from pre-event to post-event perceptions, $t(12) = 2.99$, $p = .011$; see Table 2 for values
- Participants reported an average of 3.5 when asked if ready to serve visually impaired patients after the webinar, and 3.6 for how valuable they rated the event
- Valuation of the event was not linked to comprehension, $r(10) = .38$, $p = .70$
- Participant likelihood to recommend this webinar to colleagues had an average score of 8.85 out of 10

Table 2. Responses to Pre- and Post-Event Self-Rated Questions	
Question Category	Mean (SD)
Pre-Event Competence	3.2 (0.6)
Post-Event Competence	3.6 (0.5)

Discussion

- There was a 65% survey completion rate, with the majority of participants being pharmacy faculty members
- In general, all participants agreed or strongly agreed that the webinar was valuable to them
- Additionally, clinical faculty members agreed or strongly agreed that they can apply this information to better serve their patients who are visually impaired
- Responses on confidence in serving visually-impaired patients improved from pre-event to post-event by 12%, suggesting the positive impact the education provided
- Based on the high scores on the comprehension questions, participants recalled the webinar content well and retained information post-event (80% performance) after four months

Limitations

- Small sample size
- Majority of survey responders were pharmacy faculty members
- Survey was administered months after the event, which may bias perceptions of confidence before and after the event
- Because of the retrospective design of the survey, all findings are correlational, and causation cannot be inferred

Conclusion

- This staff-driven webinar on assisting patients with visual impairment was impactful for student, faculty, staff, and administrators in a healthcare university
- Competence appears to have increased after the event
- High performance on the comprehension questions indicate that participants recall the information they learned from the event
- The lack of a statistically-significant correlation between comprehension questions and self-rated valuation of the event suggests that this webinar successfully taught information, regardless of how valuable the participants believed this information to be

Acknowledgements