

The importance of interprofessional communication as perceived by first-year medical students and the influence of early clinical exposure upon these perceptions

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Introduction

Medical students are expected to develop effective communication with patients and colleagues alike. Students at the University of Arizona College of Medicine-Phoenix (UACOM-P) learn to “function collaboratively on health care teams that include health professionals from other disciplines” by participating in interprofessional education activities.¹ Collaboration among health care professionals from different specialties has become an incredibly important aspect of the American health care system in light of health care worker deficits, the aging population, and the rapid expansion of scientific knowledge available to physicians.² Researchers have found that students think interprofessional communication is important for effective teamwork as well as critical in understanding and executing their responsibilities as health care providers.³

Early clinical exposure experiences are included in many preclinical curricula. Research has found these experiences to be beneficial in such areas as developing empathy, expanding confidence in patient interviews, and improving communicative skills.⁴ This qualitative study evaluates how the perceptions of students at the UACOM-P change in regard to interprofessional communication throughout the first year of medical school. Additionally, this study aims to determine whether students consider their early clinical exposure courses, Community Clinical Experience (CCE) and Capstones, to be the most influential experiences in shaping these opinions.

Research Questions

- How do the perceptions of first-year medical students at the UACOM-P change over the first year of medical school in regard to the importance of interprofessional communication in the clinical setting?
- Do students cite the two longitudinal early clinical exposure programs, CCE and Capstones, as the most influential clinical experiences for learning about interprofessional communication?

Materials and Methods

Subjects

The survey was sent to eighty-one medical students in the UACOM-P Class of 2022. Ten students responded to the October 2018 session of the survey. Nine students responded to the March 2019 session of the survey. The response rates were 12.3% and 11.1%, respectively.

Data Collection

An online survey was created with REDCap, which included the following questions:

- Why is interprofessional communication important in the clinical setting?
- What clinical experience has been most influential to your perception of interprofessional communication? Why?

The first round of the survey was sent out using the Class of 2022 Listserv on 10/15/18 and was closed on 10/31/18. The second round of the survey was sent on 3/4/19 and closed on 3/18/19.

The first Capstones experiences for the Class of 2022 occurred during the weeks of 10/1/18 and 10/8/18. The students began seeing patients through CCE starting on the week of 1/7/19, in-between the first and second rounds of the survey. Data was completely de-identified and stored in REDCap. This project received IRB approval from the University of Arizona on 8/28/18.

Statistical analysis

Thematic analysis was performed on both sets of responses on 4/9/19. Responses were read by each researcher separately, overall themes were identified, and a list of similarly identified themes was compiled. The themes from the beginning of the year data were applied to those from the end of the year to see if any additional themes arose. It was also noted if students mentioned early clinical exposure programs in their responses.

Results

The responses from October 2018 contained six overall themes: high-quality patient care, clear communication, team-based experiences, patient safety, provider stress and burnout, and resources for patients. The responses from March 2019 included these same themes except resources for patients. A new theme arose in the March 2019 responses, which was valuing other people.

Theme	# of responses in October 2018 (%) n=10	# of responses in March 2019 (%) n=9	Example from student narratives
High-quality patient care	8 (80%)	7 (77.8%)	“The health of a patient will benefit from interaction between multiple health care specialists”
Clear communication	2 (20%)	2 (22.2%)	“[I]deal communication keeps everyone on the same page, informed, up-to-date and better equipped to make vital decisions.”
Team-based experiences	8 (80%)	8 (88.9%)	“[A] patient needs a team of professionals each with their expertise and this team needs to communicate to provide the highest quality of care.”
Patient safety	2 (20%)	3 (33.3%)	“Multiple professional viewpoints can not only pick up information that a single person may miss (reduced errors), but allows more diverse planning to occur.”
Provider stress and burnout	1 (10%)	1 (11.11%)	“[an] ideal environment, possibly with enjoyment, without stress, and something that doesn’t lead to professionals burning out”
Resources for patients	3 (30%)	0 (0%)	“Effectively caring for a patient requires the collaboration of skills and resources among different healthcare professionals.”
Valuing other people	0 (0%)	3 (33.3%)	“[E]ach team member has valuable contributions that can only be gleaned if each person takes turns listening and respecting the opinions of their colleagues.”

Table 1 (above) shows the number of responses demonstrating each theme in October 2018 and March 2019 with examples from student narratives.

Early Clinical Experience	# of responses in October 2018 (%) n=10	# of responses in March 2019 (%) n=9	Example from student narratives
Community Clinical Experience	0 (0%)*	4 (44.4%)	“I get to see the relationship between doctors, nurses, and office workers”
Capstones	1 (10%)	1 (11.1%)	“I saw how rounds/grand rounds allows the team to meet, share ideas, and collaborate in the care of each patient.”
Team Arizona Summit	0 (0%)*	1 (11.1%)	“a good opportunity to show the value of interprofessional communication and collaboration with a complex patient case.”

Table 2 (above) shows the number of responses that included each early clinical experience in October 2018 and March 2019 with excerpts from student narratives. Note: Clinical rotations in CCE did not begin for the first-year medical students until January 2019, so 0% responding is expected. The Team AZ Summit for 2018 took place in November, so the 0% response rate here is also expected.

Conclusion

In conclusion, it was apparent that students appreciated a wide variety of interprofessional themes, which were largely consistent from the beginning of the year to the end of the year. The study also found that the CCE course was the most commonly described influential clinical experience. Overall, this research has shown students are gaining experience with interprofessional communication at the UACOM-P during their preclinical years. This study has also illuminated a need for more generalizable research into the intersection of interprofessional education and early clinical exposure.

Summary

- Most themes were present at the beginning and the end of the year, with the team-based dynamics and high-quality patient care themes being most frequently included in student responses.
- Students frequently described the longitudinal CCE course as influential in developing these perceptions.

Acknowledgements

I would like to thank Dr. Denny for all of her support throughout this project. I would also like to thank the Class of 2022 for taking the time to fill out the surveys during their first year.

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