

## Introduction

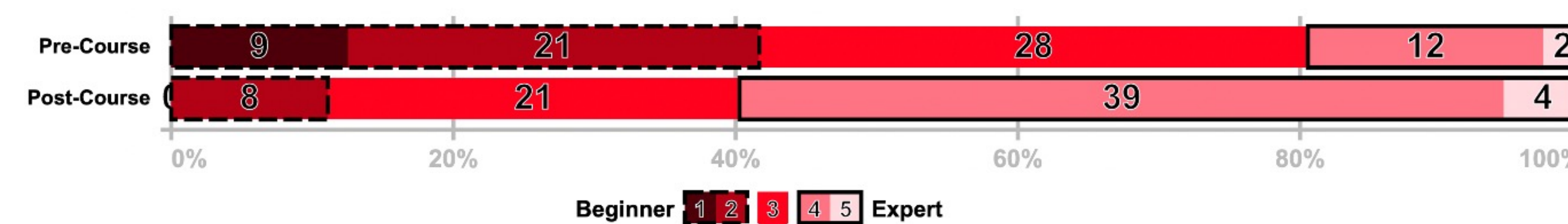
- It is critical to introduce medical students to emergency airway management early in undergraduate medical curriculum
- We developed a hands-on introductory emergency airway management course to familiarize students with:
  - Clinical airway anatomy and physiology (A&P)
  - Indications for different modalities of airway management
  - Review of endotracheal and surgical airway procedures

## Methods

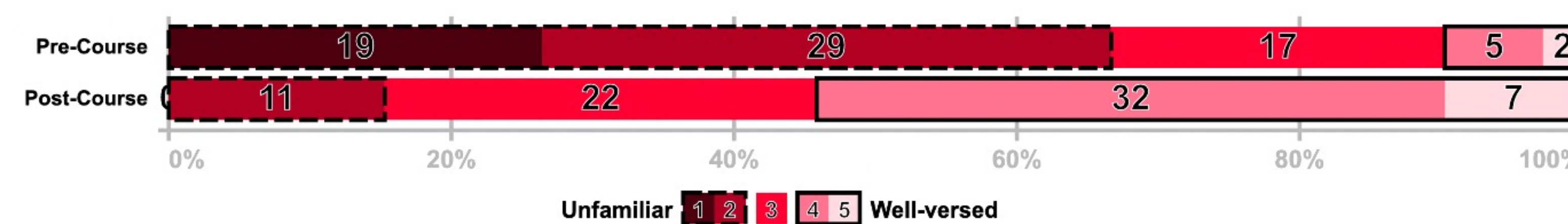
- Multidisciplinary airway management course, developed by an otolaryngologist and medical student hosted in October 2022
- Medical students covered the A&P of airways, and management techniques including bag valve mask ventilation, endotracheal intubation, tracheotomy, and cricothyrotomy
- Facilitated with perspectives and practices of emergency medicine and anesthesiology
- Participants completed questionnaires about their attitudes and preparedness for airway management pre and post-course
- Confidence in students' knowledge and attitudes on airway management was reported using a 5-point Likert scale
- Pre and post-course data was analyzed using the Wilcoxon Signed Rank Test

## Results

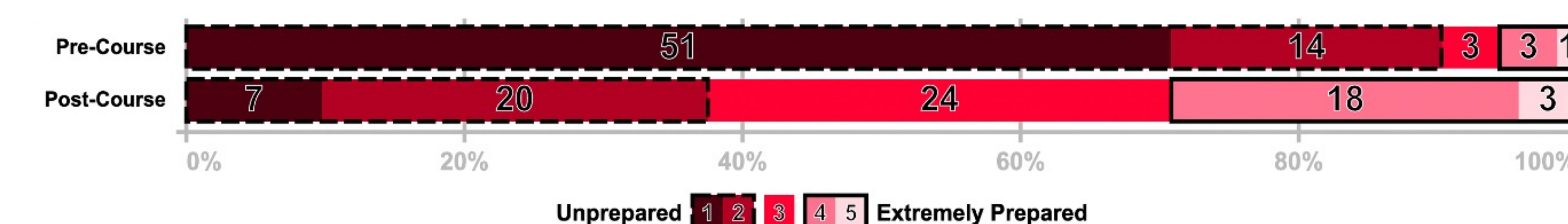
**Figure 1.** Reported confidence in airway anatomy and physiology rose from a median of 3 to 4 ( $p < .001$ ) (1=Beginner, 5=Expert)



**Figure 2.** Reported familiarity with techniques and indications for airway management rose from a median of 2 to 4 ( $p < .001$ ) (1=Unfamiliar, 5=Well-versed)

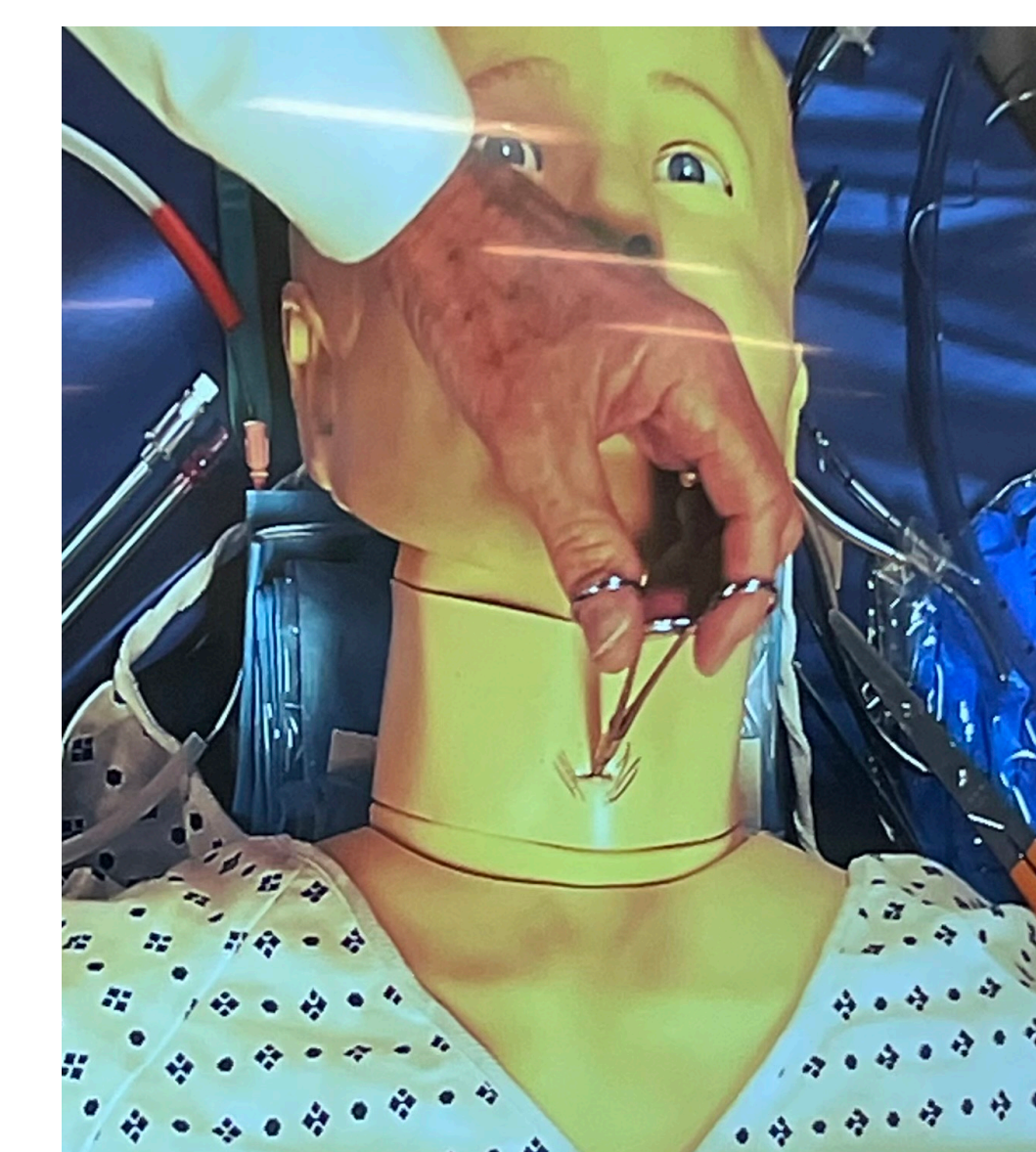


**Figure 3.** Reported confidence levels in preparedness to manage airways rose from a median of 1 to 3 ( $p < .001$ , 1=Unprepared, 5=Extremely Prepared)



## Results

- Out of 136 total participants, 53% (N=72) completed an anonymous pre and post-course survey
- Most participants were novices, 89% (N=64) reported never having managed an airway.
- 100% of respondents felt that the course should be included in the medical school curriculum



## Discussion

- Simulation-based multidisciplinary emergency airway management courses generate interprofessional collaboration and have shown to bolster perceived self-confidence and clinical performance.<sup>1,2</sup>
- Implementation of emergency airway management courses can help foster medical student interest in otolaryngology – head and neck surgery.<sup>3</sup>

## Conclusion

- Knowing how to manage emergency airways is pivotal to budding physicians
- The most basic methods can be life-saving in critical situations
- Our course was successful in increasing students' perceived confidence in basic airway A&P, and their preparedness in managing emergent airways
- Incorporation of multidisciplinary emergency airway simulations early on in medical schools should be encouraged

## References

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