



Global Disparities in Tracheostomy Delivery and Education

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INTRODUCTION

Tracheostomy care is complex, resource-intensive, and highly dependent on interdisciplinary coordination, caregiver education, and access to trained healthcare professionals. Despite advances in airway management and postoperative care, substantial disparities persist in tracheostomy education, workforce competency, affordability, and access to care, particularly in underserved and resource-limited settings. This study aimed to identify major gaps in global tracheostomy care and highlight opportunities for improving patient-centered outcomes through collaborative and scalable interventions.

METHODS

A cross-sectional, descriptive global survey was conducted through the Global Tracheostomy Collaborative learning community.

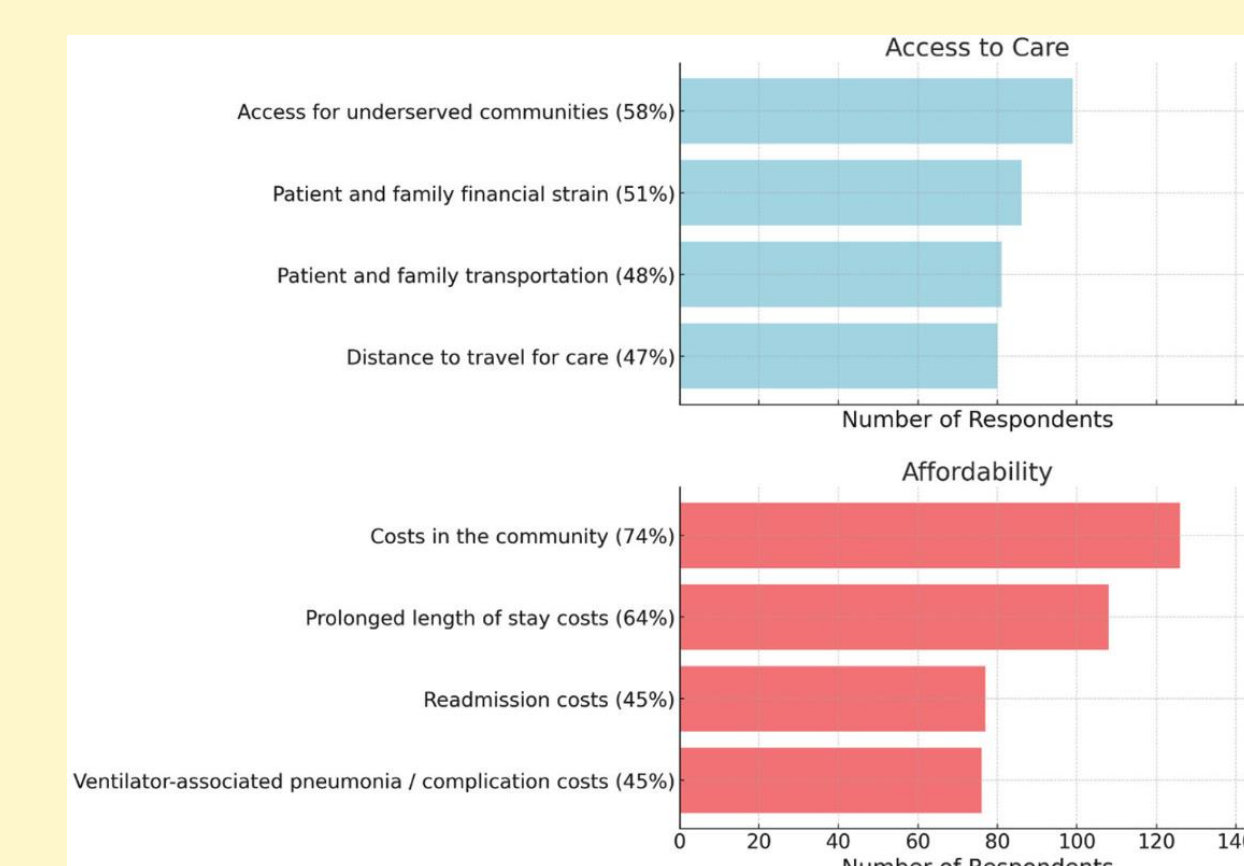
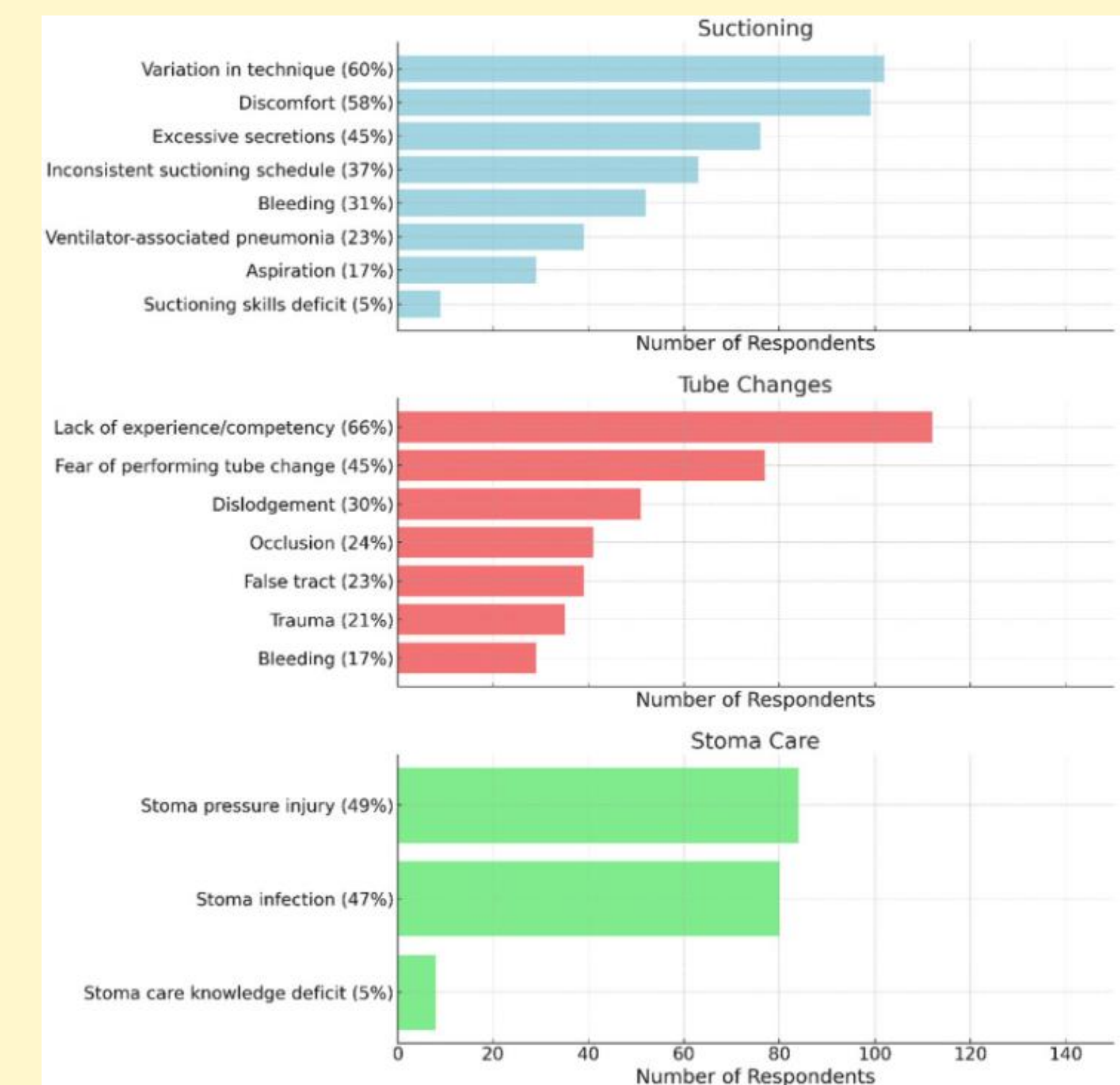
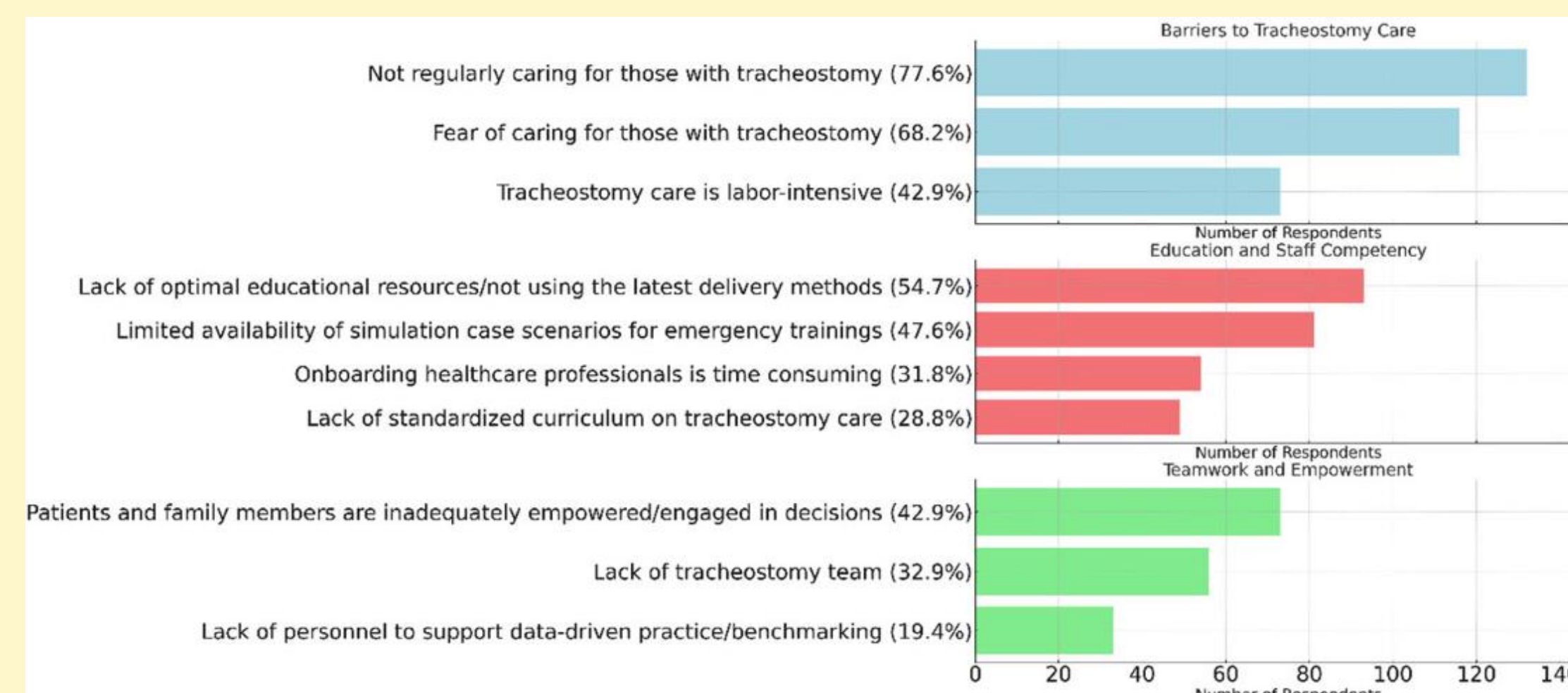
A 19-item survey was developed collaboratively with healthcare professionals, patients, and caregivers to evaluate challenges related to tracheostomy education, care delivery, access, affordability, and caregiver empowerment.

Respondents rated challenges using severity scales and provided qualitative feedback regarding barriers and potential solutions.

Quantitative data were analyzed descriptively, while qualitative responses were stratified by stakeholder group and thematically synthesized.

RESULTS

Issue	Specific Challenges	Severity Score Median (Interquartile range)
Limited availability of HCP with expertise in tracheostomy care	Nurses Speech language pathologists Respiratory care practitioners Social workers Case managers	8 (6, 10)
Difficulty with access to tracheostomy care	Patients traveling from remote sites Inequities in access to care	7 (4, 9)
Issues related to tracheostomy suctioning	Discomfort Aspiration Bleeding Excessive secretion Ventilator-associated pneumonia	6 (3, 7)
Challenges with affordability	Cost of prolonged length of stay Ventilator-associated pneumonia	6 (4, 8)



CONCLUSION

This global multi-stakeholder survey identified substantial gaps in tracheostomy education, workforce competency, access, and caregiver support across diverse healthcare settings. Findings support the need for scalable, equity-focused interventions including standardized training frameworks, simulation-based education, telehealth-enabled care models, and stronger interdisciplinary collaboration. Addressing these systemic barriers may improve tracheostomy care delivery, enhance patient and caregiver experiences, and reduce disparities in resource-limited and underserved populations.

FULL MANUSCRIPT

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