

Persistent Disparities in Global Otolaryngology Research: A 30-Year Analysis of Authorship Representation

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INTRODUCTION

Despite the disproportionate burden of otolaryngologic disease in low- and middle-income nations (LMINs), research from these regions remains severely underrepresented.^{1, 2} Prior studies to quantify research from LMINs focused only on clinical trials and major otolaryngology journals.³

This study examines trends in LMIN first-author (FA) representation and evaluates the quality and impact of LMIN-led research in the otolaryngology literature over the past three decades.

METHODS

- PubMed-automated search algorithm for years 1990 to 2023
- Reviewed all articles with abstracts published in the 27 otolaryngology journals with the highest h-5 index
- Information extracted:
 - First-author country affiliation
 - Study design
 - Citation impact
- Analysis: multivariable regression models

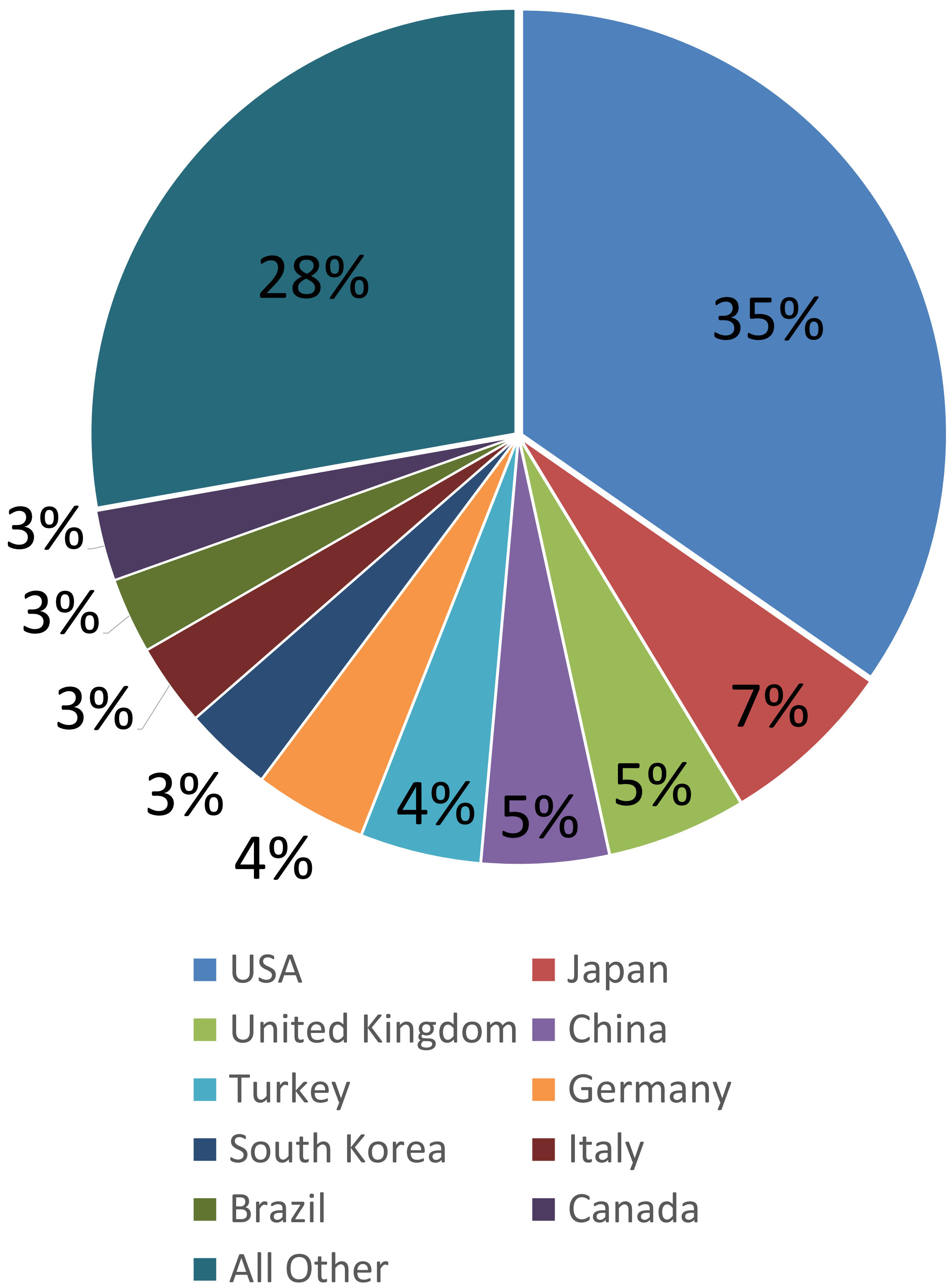
RESULTS

- 102,186 research articles were analyzed
- 115 contributing countries
- First-author affiliations: high-income countries (HICs) 82.5%, upper-middle-income countries 15%, LMINs 2.6%.

RESULTS (CONT'D)

- Journals with the highest article representation: International Journal of Pediatric Otorhinolaryngology (12.8%), The Laryngoscope (12.9%), and Otolaryngology–Head and Neck Surgery (7.5%)
- Most common first-author affiliations: United States (35.6%), Japan (6.8%), the United Kingdom (5.4%), and China (5.0%) (**Figure 1**).
- LMIN first-author representation increased at 0.10% per year (95% CI: 0.09–0.11%).
- LMIN-led studies were more likely to be prospective (aOR 2.71, 95% CI 2.35–3.12) but received fewer citations per article (aIRR 0.69, 95% CI 0.66–0.72).

FIGURE 1. PERCENTAGE OF ARTICLES PUBLISHED BY COUNTRY



DISCUSSION

- HICs have higher rates of authorship, while LMINs remain underrepresented
- Higher proportion of prospective studies out of LMINs may be due to less complete data collection and database monitoring
- Barriers to LMIN research include individual, organizational, institutional, and governmental barriers

Limitations:

- Uses self-reported institutional affiliation
- Institutional affiliation may differ from the location of data collection
- All journals were weighted equal without consideration for impact factor

CONCLUSION

LMIN authorship in otolaryngology remains alarmingly low, with minimal improvement over 30 years. Given the disproportionate disease burden in these regions, targeted efforts are needed to support LMIN-led research and foster equitable authorship representation.

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