

# 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.<sup>1, 2</sup> Prior studies to quantify research from LMINs focused only on clinical trials and major otolaryngology journals.<sup>3</sup>

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

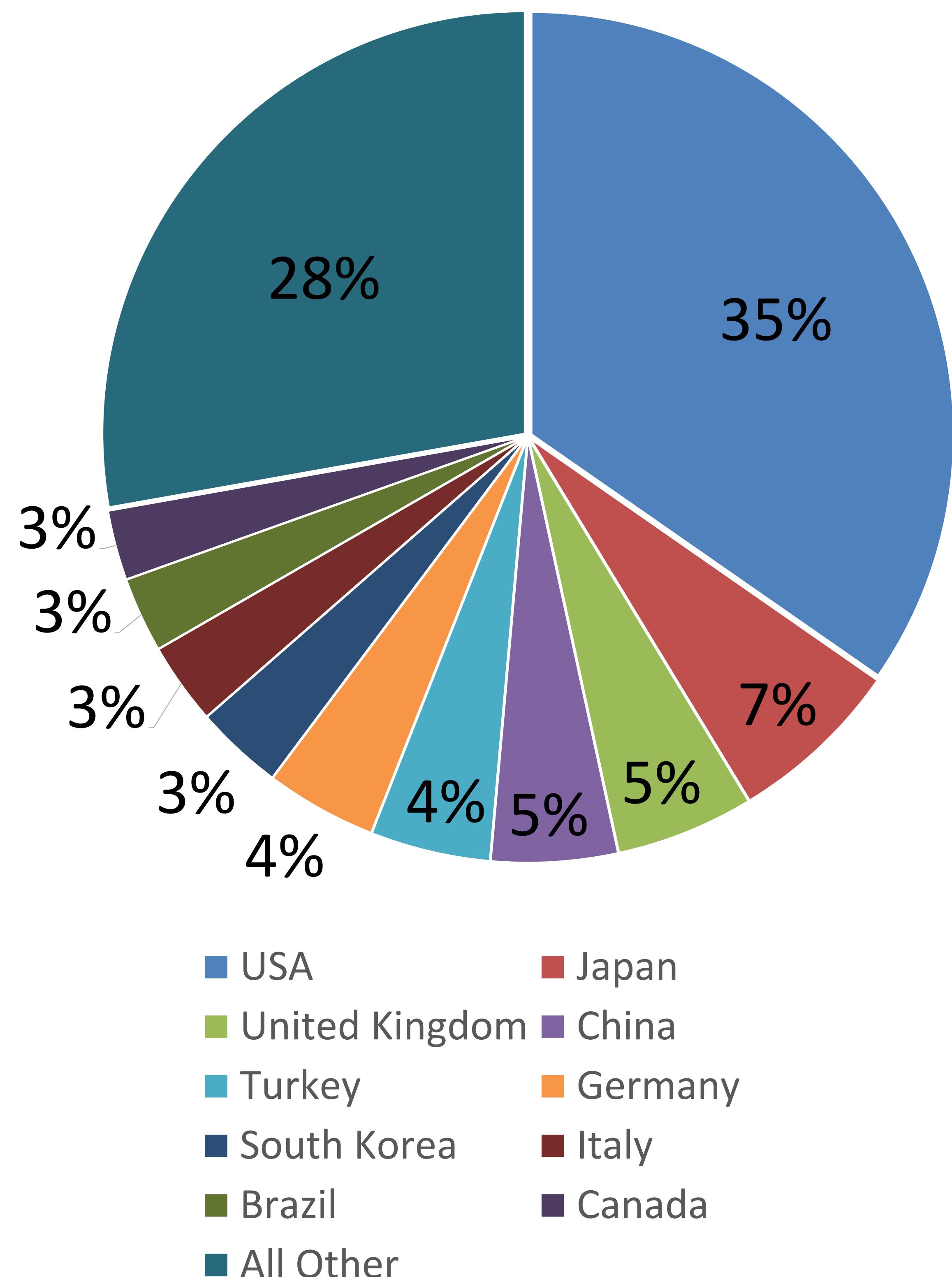
## RESULTS

- 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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