



## INTRODUCTION

Background: In response to the **COVID-19 pandemic**, **Otolaryngology residencies** globally altered curricula on an institutional basis.<sup>1-29</sup>

Aim 1: To **present a comprehensive systematic review summarizing educational changes** to Otolaryngology curriculum during COVID-19.

Aim 2: To **evaluate implications on clinical and surgical training, didactic education, and well-being.**

## METHODS

Cochrane, Embase, Google Scholar, PubMed, Scopus, and Web of Science were queried for English articles from 2019-2023.

The search terms used were **(COVID-19 OR Pandemic) +/-AND (ENT OR Otolaryngology) +/-AND Resident +/-AND Residency.**

Two reviewers extracted data on country of origin, study type, and changes to training, didactics, and residents' well-being.

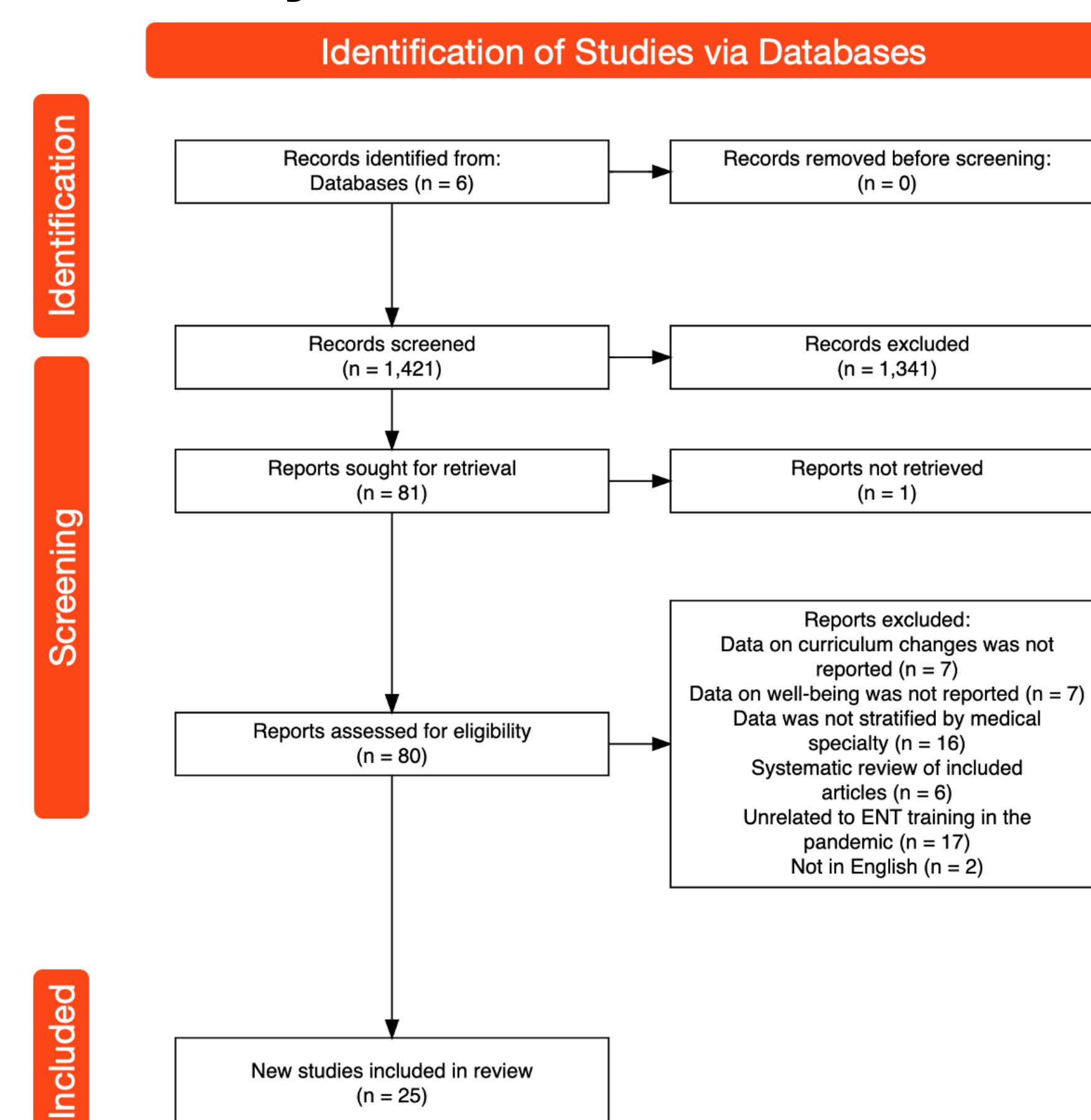


Figure 1: PRISMA Flow Diagram.

## RESULTS

Of 25 articles, the majority were cross-sectional studies from residency programs in the **United States**, multiple **European Union nations**, and **Saudi Arabia** (Fig. 2, 3).

14 articles reported changes to residents' well-being and 2 articles discussed future employment (Fig. 4).

13 articles reported changes to clinical and/or surgical training and 13 discussed didactic changes (Fig. 5).

Country	N (articles)
USA	6
Multiple	4
Saudi Arabia	3
India	2
Brazil	1
Canada	1
Chile	1
Egypt	1
France	1
Italy	1
Nepal	1
Spain	1
Thailand	1
Tunisia	1

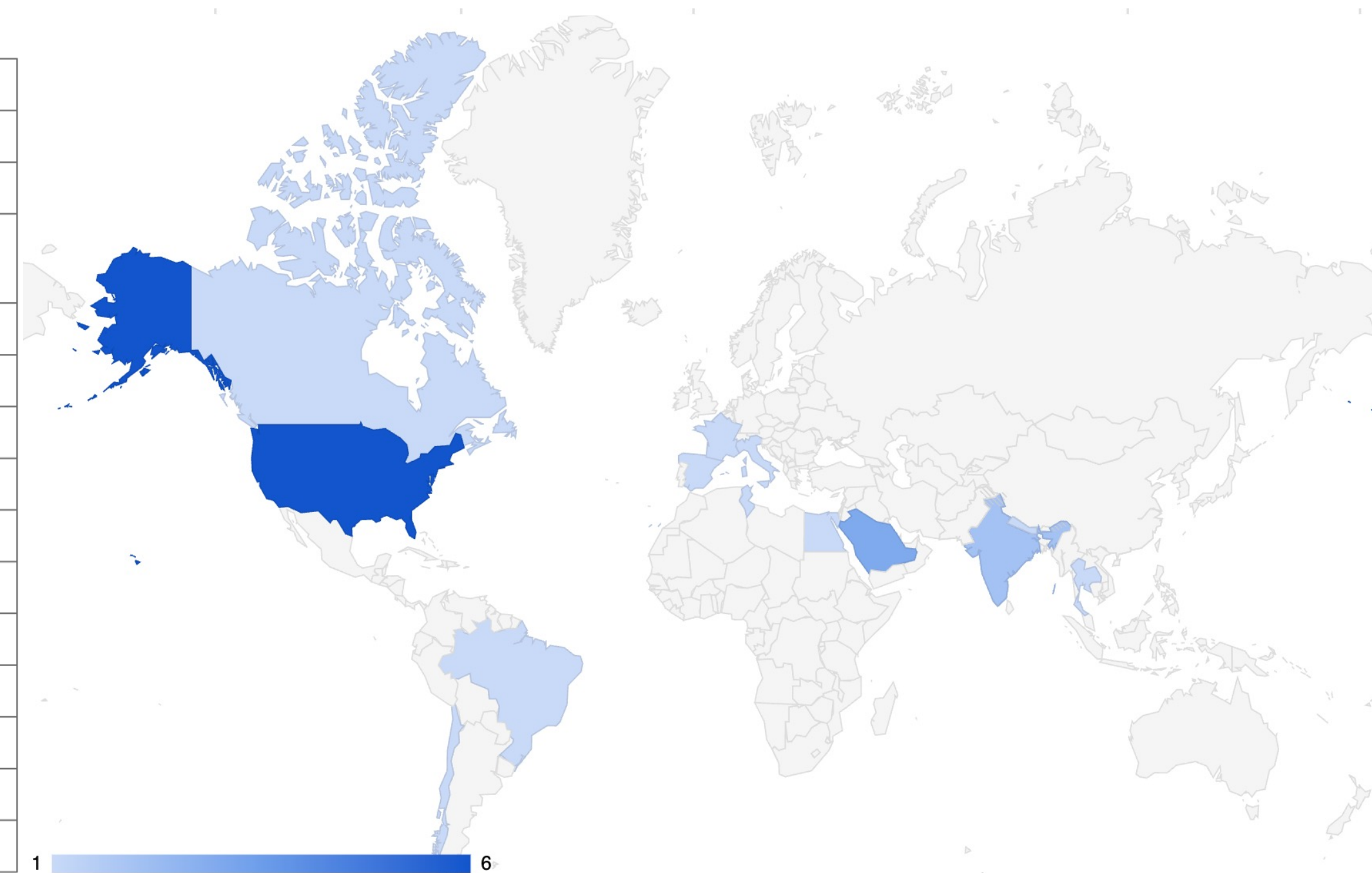


Figure 3: Table and global heat map showing country of origin for included studies.

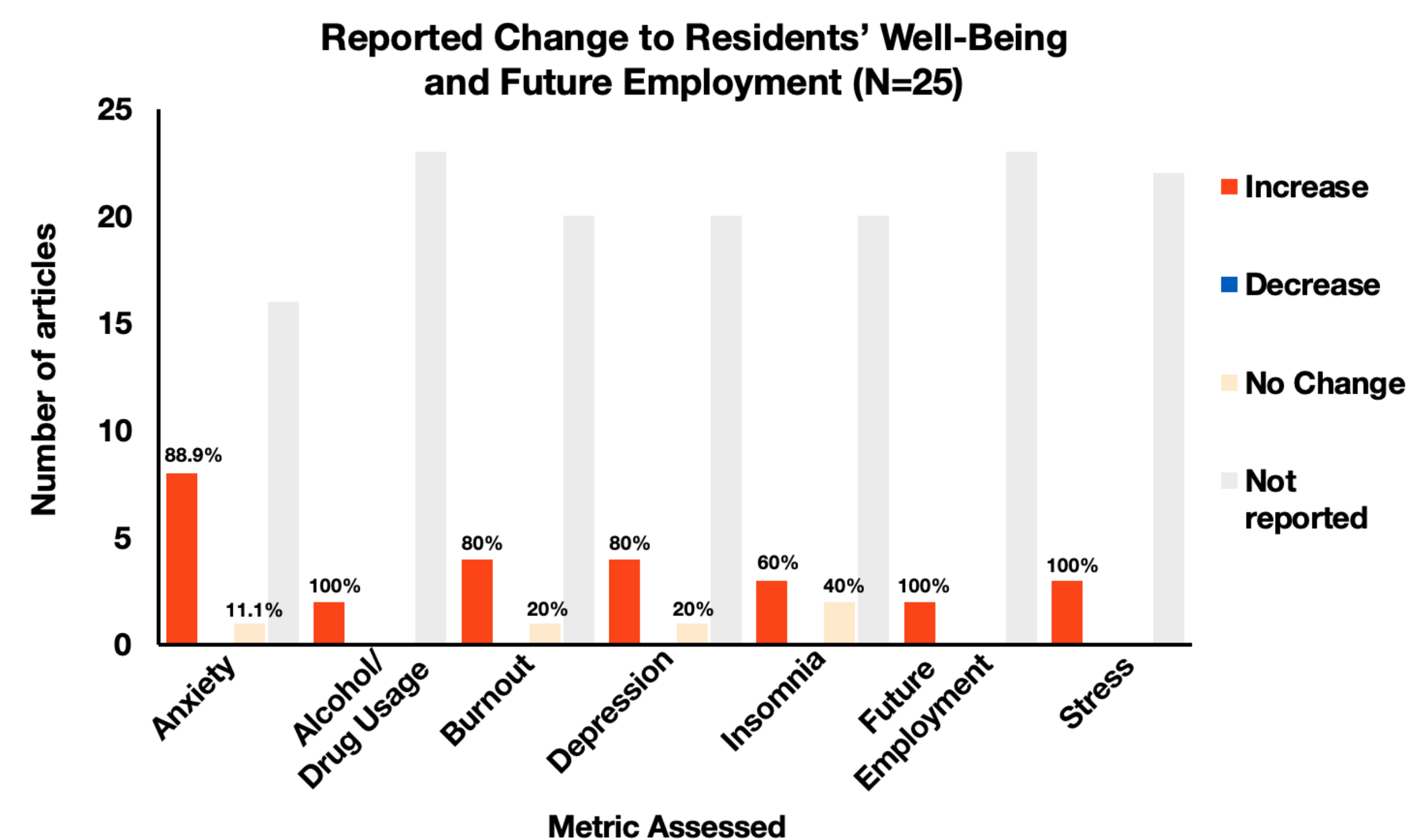


Figure 4: Comparison of changes to residents' well-being and employment. Percentages above exclude unreported data.

## Included Articles by Study Type

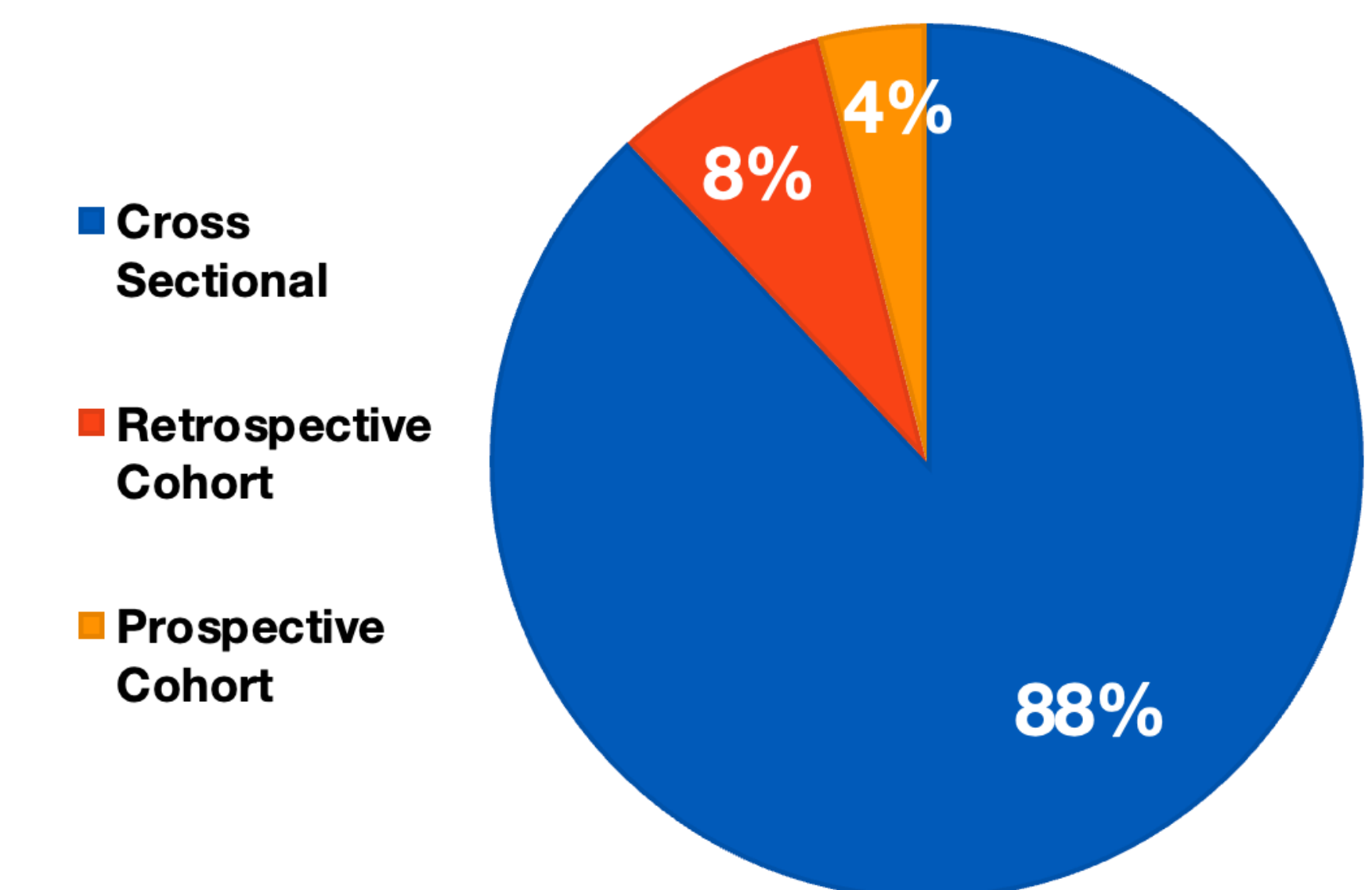


Figure 2: Articles divided by study type.

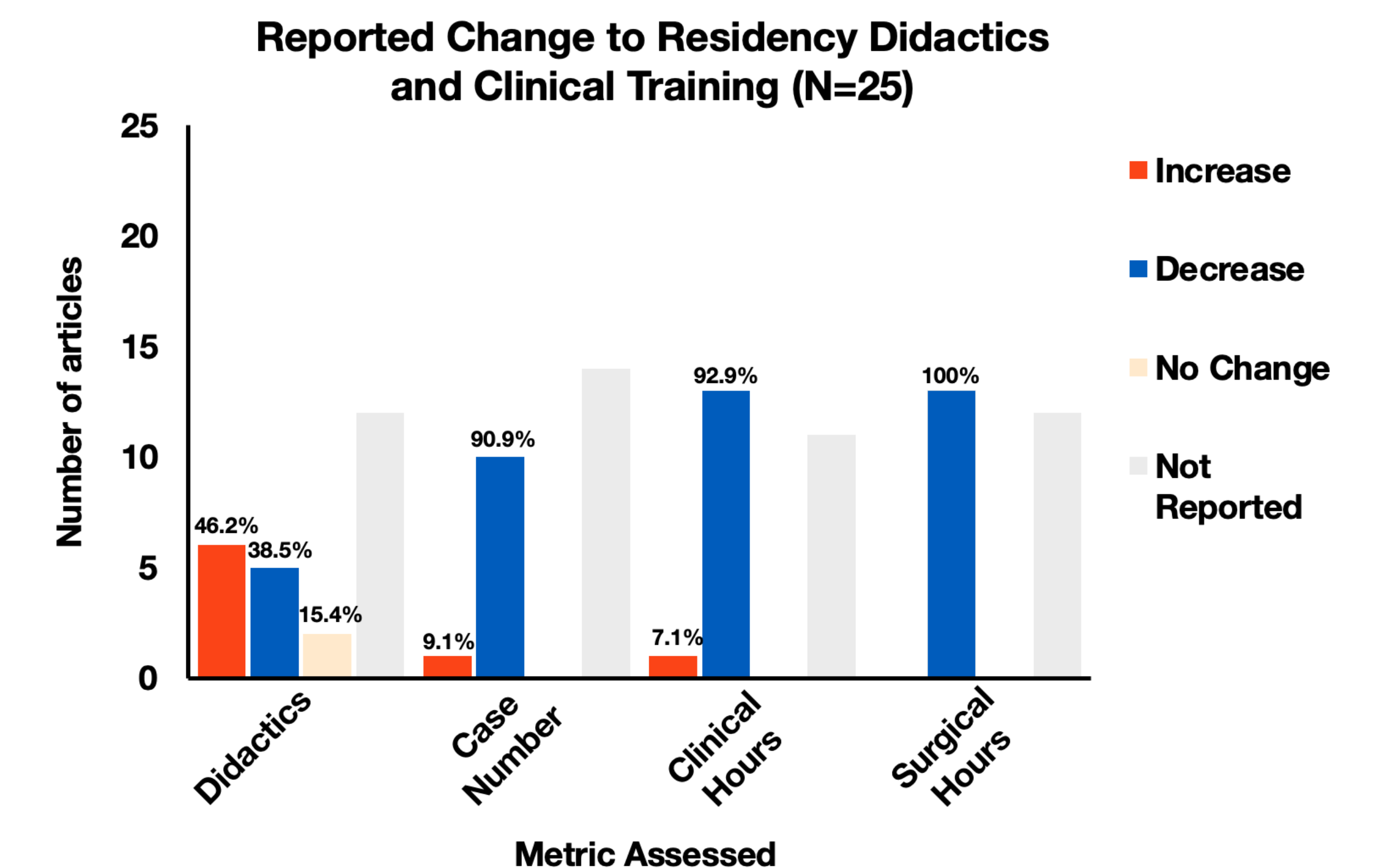


Figure 5: Comparison of changes to otolaryngology didactic education and clinical training. Percentages above exclude unreported data.

## CONCLUSION

Residents had **less training opportunities** and **worsened well-being** during the pandemic.

Didactic changes depended on **access to technology** and may highlight **global disparities**.

## REFERENCES

