INTRODUCTION

Tonsillectomy is a very common procedure in the United States, representing >15% of all surgical procedures in children under 15 years of age. The American Academy of Otolaryngology-Head and Neck Surgery (AAO-HNS) has created a clinical practice guideline to help identify patients who might benefit from this procedure. Within this guideline are outlined current evidence gaps in tonsillectomy research. This goal of this study is to assess if current research is addressing these evidence gaps, and to what extent.

RELAVANCE

Recent estimates state that up to 85% of research is wasted or of little value due to factors like poor methodology, underpowered sample sizes, bias, and addressing the wrong research question.

METHODS

We located the latest clinical practice guideline for tonsillectomy from the American Society of Head and Neck Surgeons website. Within this guideline, the authors gave 18 recommendations for future research. We extracted these recommendations and created one or more research questions using the PICO format (Participants, Intervention, Comparator, Outcome) for each recommendation. The PICO method is a tool used to identify clinical elements for systematic reviews and is recommended by the Cochrane Collaboration. This was done in order to increase the accuracy of evaluating which studies addressed the recommendations. The PICO method was chosen over other methods due to evidence suggesting that it produces searches with greater sensitivity.

RESULTS

Our search of Pubmed yielded 2519 studies. Of the 2519 studies included in our sample, 276 (11%) were relevant to the 18 recommendations made within the Tonsillectomy in Pediatric Patients clinical practice guideline. The recommendation with the greatest amount of new and or ongoing trials was recommendation 12, regarding the treatment of postoperative pain with codeine. This recommendation has 119 (43%) new or ongoing studies addressing it (Table 1). The recommendation with the next highest amount of new and or ongoing studies was recommendation 8 regarding the resolution of sleep disordered breathing in the long and short term postoperative period.

CONCLUSIONS

We used the Tonsillectomy in Pediatric patients clinical practice guideline to evaluate the the extent of recently published tonsillectomy studies. Our study located over 200 studies addressing the recommendations for future research within the guideline. Our findings indicate that knowledge gaps within the guideline at publication may have been addressed, and a guideline update may be warranted considering the new available evidence.