

# PERIOPERATIVE RESPIRATORY ADVERSE EVENTS IN CHILDREN WITH PASSIVE SMOKING EXPOSURE UNDERGOING GENERAL ANESTHESIA: : A SYSTEMATIC REVIEW AND META-ANALYSIS OF COHORT STUDIES

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## Introduction

Passive smoking exposure (PSE) in children receiving general anesthesia was associated with increased respiratory related complications. This study aims to determine the effects of PSE on the incidence of perioperative respiratory adverse events in pediatric patients undergoing general anesthesia. This will give clinicians an evidence-based results on the importance of avoiding smoking in terms of perioperative complications.

## Methods

This study is a systematic review and meta-analysis, where published articles were obtained using MEDLINE and COCHRANE databases. Articles were screened and appraised by two reviewers, who independently assess the quality of each. Outcomes include the incidence of perioperative respiratory adverse events (PRAE), which includes laryngospasm, coughing, desaturation, and breath holding. Review Manager 5.4 was used for statistical analysis.

## Results

A total of 3 articles were included. The overall incidence PRAE, perioperative coughing, laryngospasm, and desaturation were lower in the no exposure group, although the differences were not significant. PSE has an overall risk ratio of 1.85, 95%CI [1.01, 3.43].

## Conclusion

PSE is one modifiable risk factor that may increase the incidence of PRAEs.

## Keywords

tobacco smoke, passive smoking, second hand smoke exposure, general anesthesia, children, perioperative respiratory adverse events (non-MeSH)

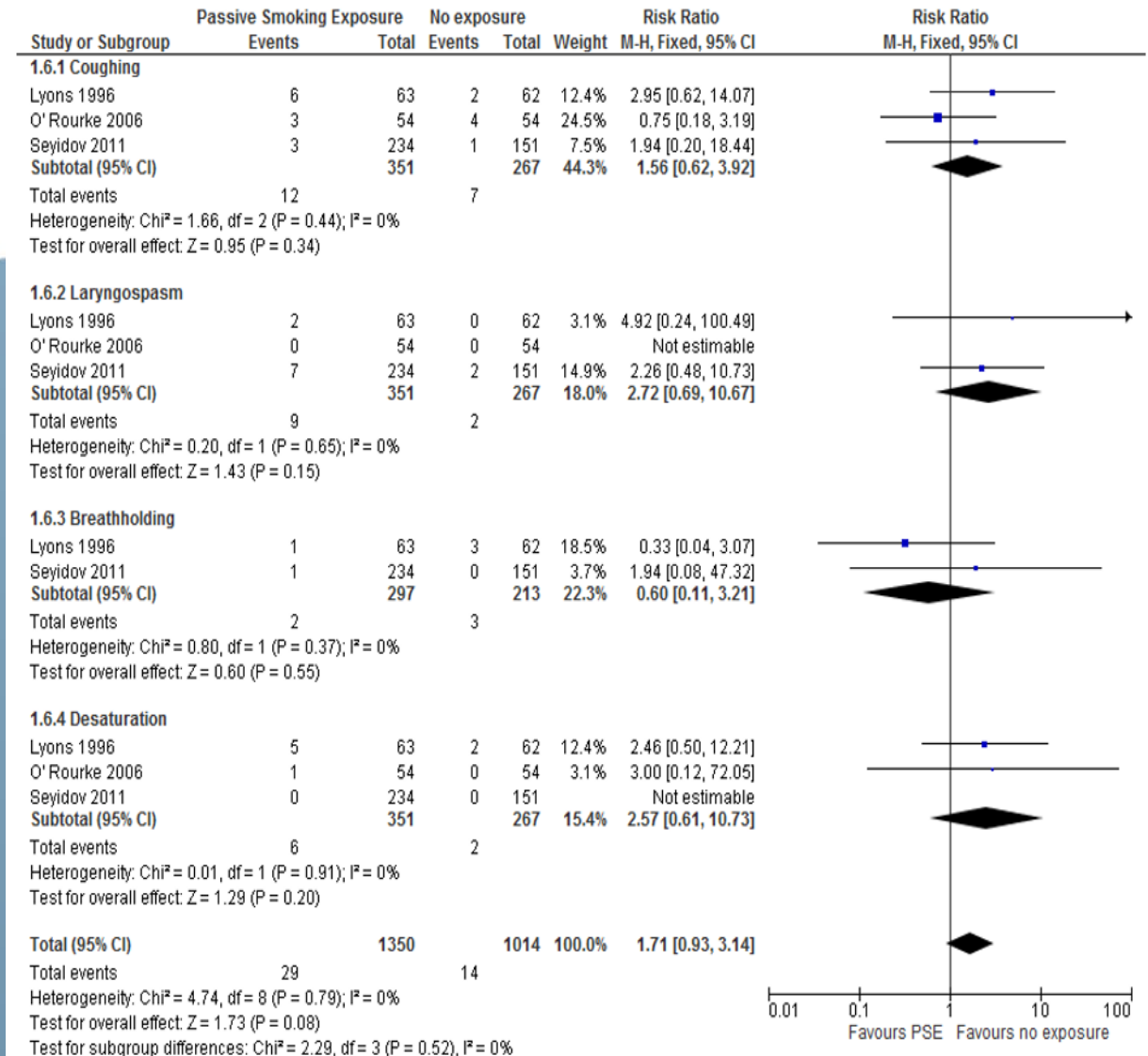


Figure 1. Subgroup analysis of the different PRAEs between Passive Smoking Exposure and No Exposure.