

BACKGROUND

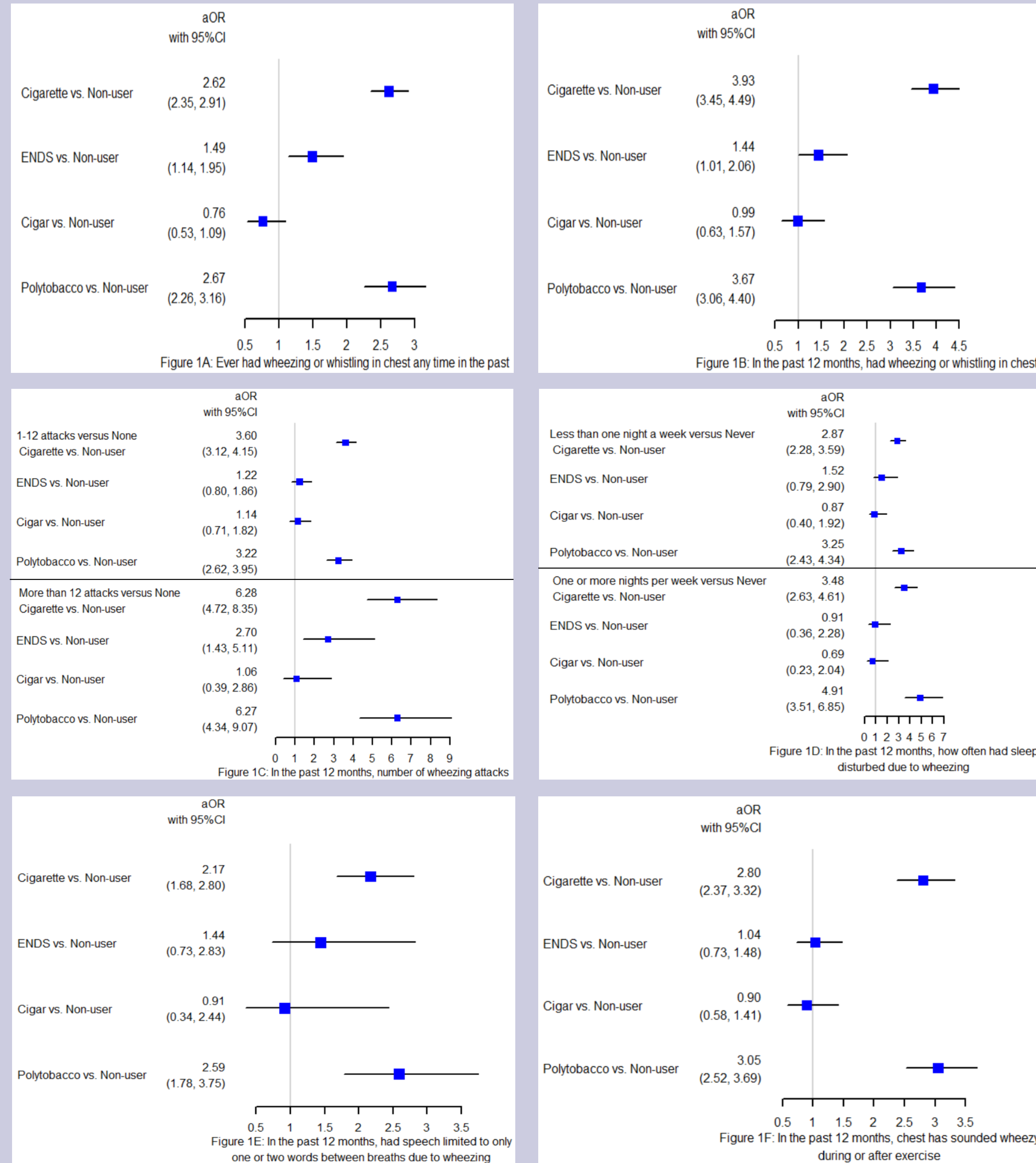
- In 2018, the most popular tobacco products reported included cigarettes (13.7%), cigars (3.9%), and electronic nicotine delivery systems (ENDS; 3.2%).¹
- Nearly 19% of current tobacco users reported using two or more tobacco products.¹
- Wheezing is characterized by a high-pitched whistling sound during expiration or inspiration due to the narrowing of airway walls.²
- Use of cigarettes, ENDS, and dual use of cigarettes and ENDS has been shown to be associated with including wheezing symptoms,³ but research is limited for cigar use.
- This study assessed the association of the top 3 tobacco product use with wheezing among a national representative sample of US adults.

METHODS

- Data are from Wave 3 of the Population Assessment of Tobacco and Health (PATH) Study, an ongoing nationally representative, longitudinal cohort study of tobacco use and its health effect.
- Multivariable logistic and multinomial logistic regression models were used to assess the association of self-reported wheezing and related respiratory symptoms for non-users compared to users of current, established users of cigarettes, ENDS, cigars, and any combination of these products (N=28,082).
- Models were adjusted for age, gender, race/ethnicity, body mass index (BMI), insurance, asthma, and secondhand smoke exposure (lived with smoker during childhood, currently live with a smoker, rules about smoking combustible product inside home, and rules about smoking ENDS inside home).
- Analyses were conducted using Stata 16 software with W3 replicate weights and balanced repeated replication methods with Fay's adjustment of 0.3.

RESULTS

Figure 1: Association of wheezing and other respiratory symptoms with the top 3 tobacco products among adults in the US



CONCLUSIONS

- Wheezing was found to be associated with the use of cigarettes, ENDS, or any combination of cigarette, ENDS and cigars among the adult population when compared to current non-users.
- The lack of association between cigar use and wheezing symptoms may be due to small sample size, the fact that cigar users report not inhaling the smoke into their lungs,^{4,5} or the usage pattern of cigars, though cigar use has other demonstrated negative health impacts.⁶
- Eliminating use of tobacco products remains a clear benefit to health.

ACKNOWLEDGMENTS

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