

# ASSOCIATIONS BETWEEN ORAL SEX PRACTICES AND FREQUENT MOUTHWASH USE IN HETEROSEXUALS: A CROSS-SECTIONAL SURVEY IN MELBOURNE, AUSTRALIA

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## Introduction

Rates of sexually transmitted infections (STIs) are rising in heterosexuals and the oropharynx has been implicated in transmission. This has led to investigations into mouthwash use, although its effect on oral STIs is unknown. This study aimed to determine the frequency of mouthwash use and its association to oral sex practice in heterosexuals.

## Methods

Heterosexual men and women attending Melbourne Sexual Health Centre between March-April 2019 were invited to take this cross-sectional survey using computer-assisted self-interview (CASI). Univariable and multivariable logistic regression were performed to examine the association between frequent mouthwash use (i.e. daily or weekly mouthwash use) and oral sex practices (including tongue kissing, fellatio, cunnilingus and insertive rimming).

## Results

There were 728 heterosexuals included in the analysis; 345 (47.4%) men and 383 (52.6%) women. Of participants, 328 (45.1%) used mouthwash frequently; 178 (24.5%) infrequently and 222 (30.5%) never used mouthwash. There was no significant difference in the proportion of frequent mouthwash users between men and women (47.0% of men vs 43.3% of women;  $p=0.328$ ). The proportion of frequent mouthwash users increased with increasing age groups (40.5% in  $\leq 24$ , 45.2% in 25-34, and 54.2% in  $\geq 35$  years or older;  $p_{\text{trend}}=0.016$ ) with those aged  $\geq 35$  years having a 1.83 (95% CI: 1.17 to 2.87) times higher odds of being a frequent mouthwash user than those aged  $\leq 24$  years. Frequent mouthwash users had a 1.52 (95% CI: 1.02 – 2.27;  $p=0.040$ ) times higher odds of having performed rimming (oral sex) in the previous three months compared to those who infrequently used mouthwash after adjusting for age and country of birth.

## Conclusion

Older heterosexuals and those who perform rimming are more likely to use mouthwash. If mouthwash is shown to influence oral STI risk, studies assessing the prevalence of STIs at this site should also assess mouthwash use given it increases with age in heterosexuals.

## Disclosure of Interest Statement:

None to declare