E-cigarette Use among Australian Females of Reproductive Age: Implications for Unplanned Pregnancies

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Introduction

Both e-cigarettes and tobacco cigarettes can contain nicotine and other harmful constituents.[1]

Tobacco smoking is the leading cause of preventable adverse reproductive and pregnancy outcomes.[2]

The effects of e-cigarettes in pregnancy are unknown.

30% of pregnancies are unplanned[3], therefore there is a risk that a mother may unintentionally be exposing her foetus to potentially harmful substances in e-cigarettes.

To understand the extent of this risk, we need to determine the prevalence of regular e-cigarette use among females of reproductive age and quantify the extent to which they are used for constructive reasons.

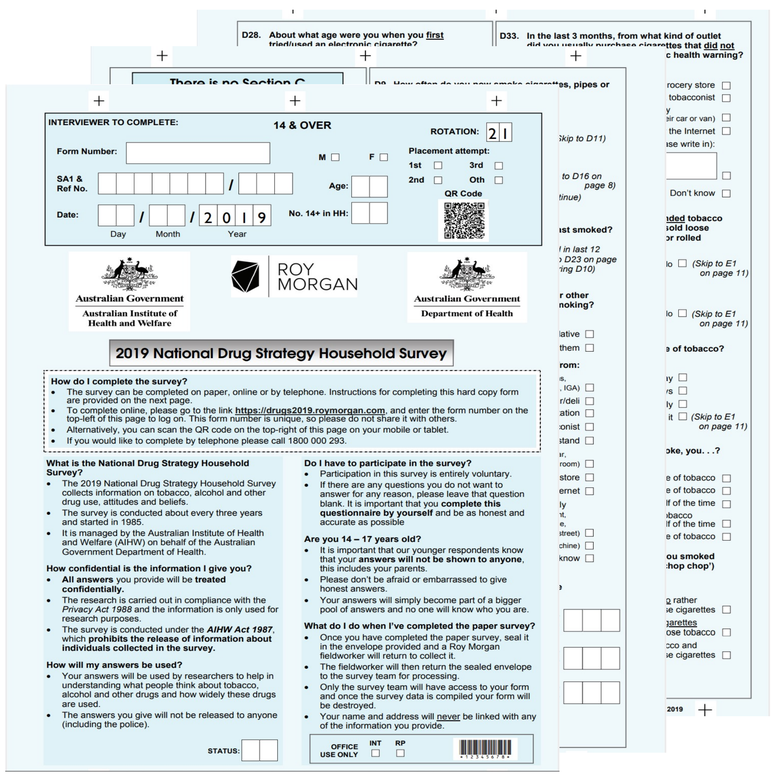
Aims

1. Determine the prevalence of regular e-cigarette use in Australian females of reproductive age
2. Identify the proportion of regular e-cigarette use that is for constructive motivations

Methods

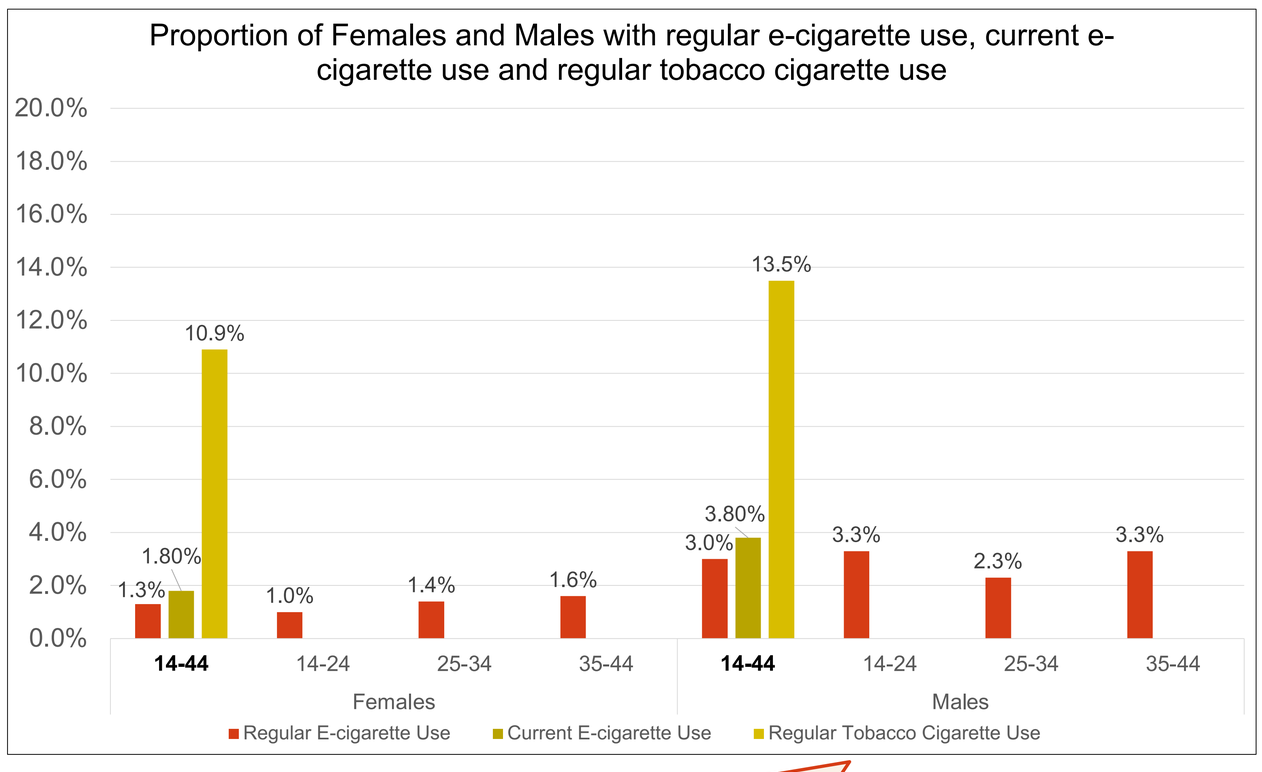
We conducted a cross-sectional study based on data from the 2019 National Drug Strategy Household Survey, a national survey conducted every three years.

Population of interest: females aged 14 to 44 years in Australia. Subdivided into 10-year age groups given age-related variation in fertility.

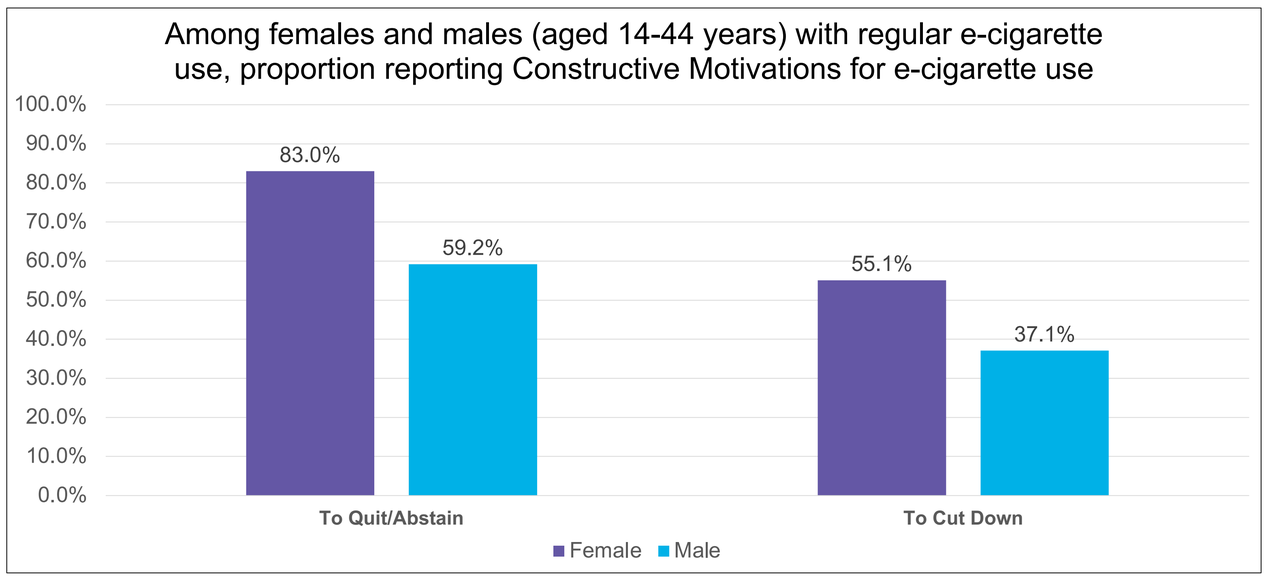


The 2019 National Drug Strategy Household Survey[4]

Results



Regular use: at least weekly;
Current use: at least monthly
Regular use is the exposure of interest as it likely poses more of a health risk during pregnancy than less frequent use. Current e-cigarette use and regular tobacco cigarette are presented for context



Conclusion

- In 2019, regular e-cigarette use among females of reproductive age was low overall, with little variation between age subgroups
- This is encouraging, given the high rate of unplanned pregnancies in females of reproductive age
- Most regular e-cigarette use was reported as being for constructive reasons (such as to help quit smoking), which is perhaps a more tolerable risk than e-cigarette exposure among those using them recreationally

Implications

- While regular e-cigarette use among females of reproductive age was low in 2019, continued monitoring is needed, given the evolving landscape of e-cigarette policy

Acknowledgements

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References

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