Transitions in smoking and nicotine use among the UK smokers in 2016-2017

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Smoking, nicotine and harm

• Addiction and nicotine

• Tobacco harm

• Mortality
  7,000,000 + 1,200,000 per year\(^1\)

• Morbidity
  Among leading 5 risk factors\(^2\)

1. World Health Organization, 2019
2. Reitsma et al., *The Lancet*, 2017
100 tobacco smokers
2/3 would like to stop smoking
1/3 attempt to stop smoking
1 in 20 stop smoking

3. Smoking toolkit study, 2019
Nicotine and harm reduction

- Tobacco and nicotine products have a continuum of health risks:
  
  * Combustible tobacco
  * \( \downarrow \)
  * E-cigarettes
  * \( \downarrow \)
  * Nicotine replacement therapy

Credit: iStock
Research question and aims

How do smokers switch from cigarettes to using e-cigarettes/NRT or stopping smoking?

1. To identify latent groups among current and former smokers
2. To explore transitions between the identified groups
Methods

Participants

- The UK past-year smokers were surveyed in June 2016 ($n=2857$), followed-up in October 2017 ($n=1471, 51.5\%$)

Data analysed using:

- Latent transition analysis

*Smoking, vaping and NRT use status, urges to smoke and last quit attempt*
Item-response probabilities of ex-smokers' groups

Ex-smokers using e-cigarettes
Abstinent ex-smokers

Not a smoker Non-daily smoker Daily smoker Not a vaper Non-daily vaper Daily vaper Uses NRT Strong to extreme urges Didn’t try to quit Tried unassisted Tried assisted
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Conclusions

- Participants who transitioned generally moved towards quitting smoking, with most abstaining from nicotine altogether.

- Using of e-cigarettes alongside smoking was associated with higher probabilities of stopping smoking.

- Nearly half of participants were heavy or light smokers.
Limitations and Strengths

- LTA is exploratory: the groups we analysed only indicative.
- Our model does not account for multiple changes during follow-up period.
- Longer-term ex-smokers were not included.
- Representative cohort of past-year smokers from the UK
- First study to evaluate transitions between different groups of smokers incorporating alternative nicotine product use.
Thank you!

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