

Commentary on Friedman *et al.*: Policymakers should understand reasons for vaping when developing vape-free air laws

Reasons for vaping are important for understanding policy impact of vape-free air laws: most adults vape as a cessation aid, whereas many youth vape for enjoyment, novelty or peer pressure. Vape-free air laws may have little effect on reducing vaping among youth, but discourage adult smokers from switching to vaping.

As Friedman *et al.* [1] note, concerns about increase in vaping (i.e. that vaping could undermine current tobacco control, create new pathways to nicotine addiction and re-normalize cigarette smoking [2–4]) have resulted in some states and localities in the United States adding vaping restrictions to smoke-free air laws in order to reduce e-cigarette use. These concerns are of international relevance, with a number of countries adopting measures to restrict vaping in smoke-free spaces, often modelled on existing smoke-free air laws, to protect children and young people from accessing and using e-cigarettes. However, because the reasons for vaping differ between young people (motivated by different flavours and peers [5,6]) and older adults [5] and many young people do not necessarily vape in public spaces, vape-free laws may have a limited effect on vaping in this population group.

Friedman *et al.* [1] provide some insights into the potential unintended effects of adding vape-free laws to existing smoke-free work-site laws. Their key findings were that when added to existing smoke-free work-site laws, vape-free laws did not result in significant reductions in current smoking or recent vaping among ‘emerging adults’ (aged 18–25 years), and might even have counteracted the effects of existing smoke-free laws. This conclusion is interesting and counterintuitive, but assumes that smoke- and vape-free laws have additive effects and it is unclear if this assumption is valid, given the observational design used. Thus, these findings should be replicated with data from other countries, ideally those which have both smoke- and vape-free laws, such as New Zealand [7], Finland, Germany and others [8], to identify reasons why the effects of vape-free laws may vary for different population groups (e.g. emerging and ‘prime age’ adults, aged 26–54 years). Because most adult smokers vape as an aid to reducing smoking or quitting smoking [9–12], one might expect them to respond to vape-free laws by increasing smoking. It may be that prime age adults reduced smoking but compensated by

increasing use of other tobacco products (e.g. snuff, snus, chewing tobacco and dissolvable tobacco) [13]. This information is vital to inform optimal policies to reduce tobacco use across population groups.

It is also important to investigate the potential secondary effects of smoke- and vape-free air laws on use of other substances such as alcohol and cannabis. Evidence suggests strong associations between smoking, vaping, alcohol and cannabis use [14,15], implying that policies which impact upon the use of one substance could have knock-on effects on use of the other. For example, more people may wish to go out and eat, smoke or drink with peers in states or localities that do not have smoke- or vape-free restaurant laws than where these laws exist. Similarly, localities (states or counties) with these laws may have a lower prevalence of substance-related adverse events (including serious injuries, violence and violent crime, road traffic accidents, death and disability) [16] compared with other localities. Methods and data similar to those used by Friedman *et al.* [1] can be used to assess the prevalence of alcohol and cannabis use in states where cannabis is legal, in the presence and absence of smoke- and vape-free restaurant laws to guide future policy in jurisdictions considering legalizing cannabis use.

Although the intention of vape-free laws—to protect young people from e-cigarette use as a pathway to smoking and provide a clean and healthy environment—is laudable, these laws may not be effective in reducing vaping if young people are not motivated to vape in public spaces, and may be counterproductive if they discourage adult smokers from using e-cigarettes as a smoking cessation aid or a substitute for tobacco.

Declaration of interests

None.

Keywords Policy, other substances, smoke-free air laws, smoking, vape-free air laws, vaping.

BEN WAMAMILI¹  & RANDOLPH C. GRACE²

¹School of Health Sciences, University of Canterbury, Christchurch, New Zealand¹ and ²School of Psychology, Speech and Hearing, University of

Canterbury, Christchurch, New Zealand²

E-mail: ben.wamamili@pg.canterbury.ac.nz

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