

Perceptions and beliefs about e-cigarettes among smokers:

Findings from the 2016 - 2018 ITC New Zealand Surveys

Edwards R.,¹ Stanley J.,¹ White M.,¹ Waa A.M.,¹ Kaai S.C.,² Quah A.C.K.,² Fong G.T.^{2,3}

¹ Department of Public Health, University of Otago, Wellington, New Zealand ² Department of Psychology and School of Applied Health and Health System, University of Waterloo, Waterloo, Ontario, Canada ³ Ontario Institute for Cancer Research, Toronto, Ontario, Canada

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Key findings:

1. Most participants held beliefs about ECs which should encourage their adoption over smoking.
2. The commonest perceived barrier to EC use was belief that vaping is less satisfying than smoking cigarettes.

Objective

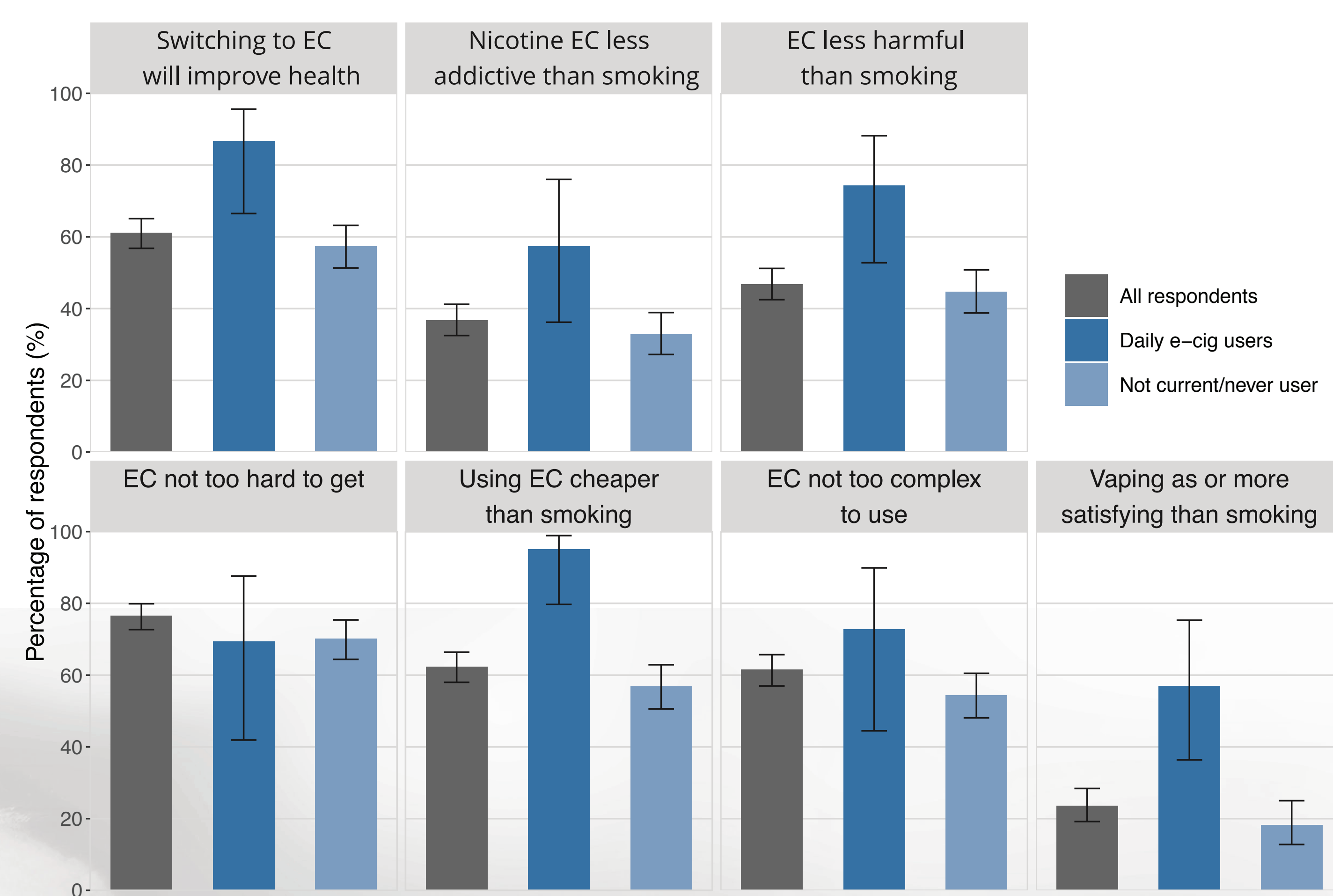
To investigate beliefs that might influence likelihood of using ECs in a sample of NZ smokers and recent quitters.

Background

- Use of e-cigarettes (ECs) among smokers may be influenced by beliefs about relative harmfulness, addictiveness, and satisfaction of ECs; and their cost, ease of use, and accessibility
- Pre-2017, ECs and e-liquids with nicotine were prohibited for sale in NZ and mainly available through online sales and personal importation
- From Mar 2017, ECs were increasingly sold from vape stores and then other retail outlets due to lax enforcement and the impact of a Mar 2018 court judgement which had the effect of liberalising retail sales.

Results

Figure 1 - Beliefs about e-cigarettes (Wave 2)



Conclusions:

- Most participants, particularly daily EC users, held beliefs about ECs which would be expected to encourage the adoption of ECs over smoking.
- Never/non-users were more likely to express uncertainty about EC harmfulness, addictiveness and potential barriers to their adoption.
- The most common perceived barrier to EC use was the belief vaping is less satisfying than smoking cigarettes;
- The results could inform efforts to increase awareness and use of ECs among smokers (e.g. information and testimonials about the degree of 'satisfaction' provided by vaping.)

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Disclosures/Conflict of Interest:

GTF has served as an expert witness on behalf of governments in litigation involving the tobacco industry. All other authors have no conflicts of interest to declare.

Contacts

Richard Edwards, e-mail: richard.edwards@otago.ac.nz



Methods:

- CATI interview data from Wave 1 (W1, Aug 2016-Apr 2017) and Wave 2 (W2, Jul-Dec 2018) of the International Tobacco Control (ITC) NZ Survey
- Participants were smokers and recent (≤ 12 months) quitters who were aware of ECs, recruited from respondents in the nationwide NZ Health Survey
- Repeat cross-sectional data from W1 (n=1004) and W2 (n=996) participants who had heard of ECs, including n=324 (W1) and n=385 (W2) who identified as Māori
- Weighted analyses so that estimates reflect the NZ adult smoking population.

Table 1. Beliefs about harmfulness and addictiveness of ECs

		All participants		Daily EC users		Never/non-users of ECs	
		W1 %	W2 %	W1 %	W2 %	W1 %	W2 %
Impact on health of smoker of switching completely to ECs	Improve health a little/lot	64.5	61.1	81.9	86.7	59.5	57.3
	No effect on health	9.9	13.7	7.9	0	11.2	13.4
	Worsen health a little/lot	3.3	7.3	1.3	8.6	3.7	6.6
	Don't know	22.3	17.9	8.9	4.7	25.6	22.6
Addictiveness of nicotine-containing ECs compared to smoking cigarettes	Much/somewhat less addictive	35.5	36.7	52.2	57.3	28.4	32.8
	Equally addictive	40.3	42.9	39.7	37.6	42.7	45.5
	Much/somewhat more addictive	5.8	8	2.3	4.2	6.8	6.5
	Don't know	18.5	12.4	5.8	0.9	22.1	15.3
Harmfulness of using ECs or vaping compared to smoking cigarettes	Much/somewhat less harmful	52.7	46.8	82.3	74.3	46.4	44.7
	No different	25.3	32.5	9.9	22	27.8	32.7
	Much/somewhat more harmful	2.1	5.4	0	0	2.6	3.2
	Don't know	19.9	15.3	7.9	3.7	23.2	19.3

Most W1 and W2 participants thought using ECs or vaping was less harmful than smoking and that switching to ECs would improve a smoker's health.

- Views about the relative addictiveness of ECs and smoking were mixed
- Daily EC users more commonly held positive beliefs about relative harms and addictiveness of ECs
- Never/non-users were much more likely to give 'don't know' responses.

Table 2. Beliefs about potential barriers and enablers of EC use

		All participants (%)	Daily EC users (%)	Never/non-users of ECs (%)
Agree/disagree that ECs or vaping devices are too hard to get	Agree/Strongly agree	9.5	16.4	11.8
	Neither agree nor disagree	4.2	13.4	3.8
	Disagree/Strongly disagree	76.5	69.3	70.2
	Don't know	9.8	0.9	14.2
Cost of vaping or using ECs compared to smoking	A bit/a lot cheaper	62.3	95	56.8
	About the same cost	10	0	9.5
	A bit/a lot more expensive	5.9	4.1	5.3
	Don't know	21.8	0.9	28.4
Agree/disagree that ECs or vaping devices are too complicated to use	Agree/Strongly agree	21.7	26.3	23.3
	Neither agree nor disagree	3.3	0	3.1
	Disagree/Strongly disagree	61.5	72.8	54.3
	Don't know	13.5	0.9	19.3
How satisfying vaping is compared to smoking cigarettes	Much/somewhat less satisfying	67.1	42.2	66.6
	Equally satisfying	13.7	31.3	12.7
	Much/somewhat more satisfying	9.8	25.6	5.5
	Don't know	9.4	0.9	15.2

- Most W2 participants, particularly daily EC users, disagreed with 3 of the 4 beliefs that are potential barriers to EC use.
- However, few people reported vaping as equally or more satisfying than smoking cigarettes
- Daily EC users were less concerned about potential barriers to use of ECs and less likely to give a 'don't know response' than never/non-users.
- From W1 to W2, the % agreeing ECs are 'too hard to get' decreased (from 20.4% to 9.5%) [data not shown].

