



Experiences and perspective of healthcare providers on using e-cigarettes for smoking cessation: a cross-sectional study in Thailand

Surarong Chinwong*, Phitinan Tengcharoenphongthorn, Siroj Pingkaew, Dujrudee Chinwong
Faculty of Pharmacy, Chiang Mai University, Thailand



Introduction

Electronic cigarettes (e-cigarettes) have increased in Thailand, partly for smoking cessation. This cross-sectional study investigated healthcare providers' experiences and perspectives on using e-cigarettes for smoking cessation.

Methods

Study design:

- A cross-sectional study.
- Participants: healthcare practitioners (doctors, dentists, pharmacists, and nurses) from two tertiary hospitals in Chiang Mai Province, northern Thailand
- Instrument: a self-administered questionnaire included seven questions with answers on a Likert scale ranging from 1 to 5 (strongly disagree to strongly agree), which evaluated respondents' perspectives on using e-cigarettes to aid smoking cessation.
- Data collection time: January to March 2020

Statistical analysis:

- Descriptive statistics: mean (SD), frequency, percentage
- Inferential statistics: independent t-test
- STATA software.

Ethical consideration:

The study protocol was approved by the Human Research Ethics Committee, Faculty of Pharmacy, Chiang Mai University

Result

Table 1. Characteristics of participants (n=760)

Characteristics	n=760
Sex	
Male	119 (15.66)
Female	641 (84.34)
Occupation	
Doctors	148 (19.47)
Dentists	25 (3.29)
Pharmacists	69 (9.08)
Nurses	518 (68.16)
Smoking status	
Never smoke	727 (96.16)
Used to smoke	27 (3.57)
Current smokers	2 (0.26)
Are you currently working on giving advice on how to quit smoking?	
Never	600 (79.89)
Used to do	32 (4.26)
Currently working	119 (15.85)
How many years have you worked or are working in giving advice on how to quit smoking?	
≤ 1 year	38 (24.52)
2-5 years	61 (39.35)
6-10 years	20 (12.90)
≥11 years	36 (23.23)

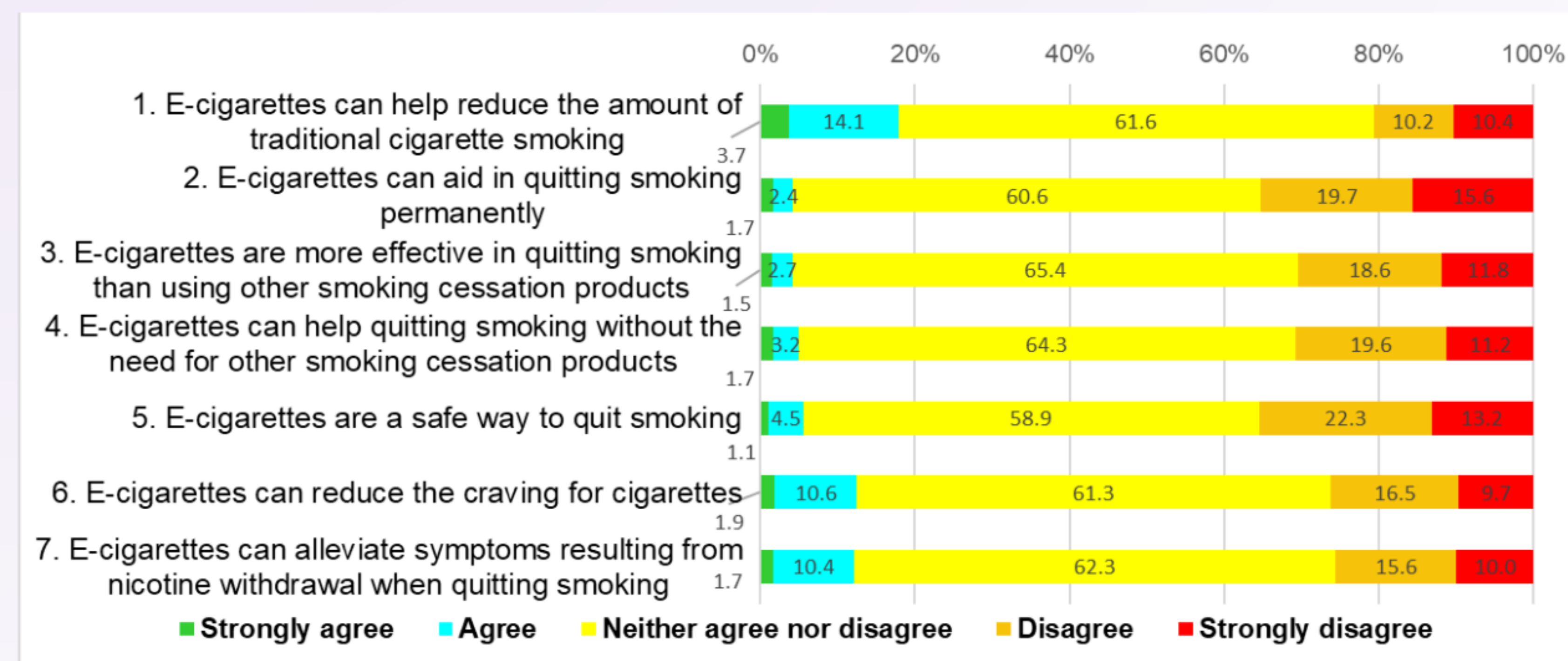


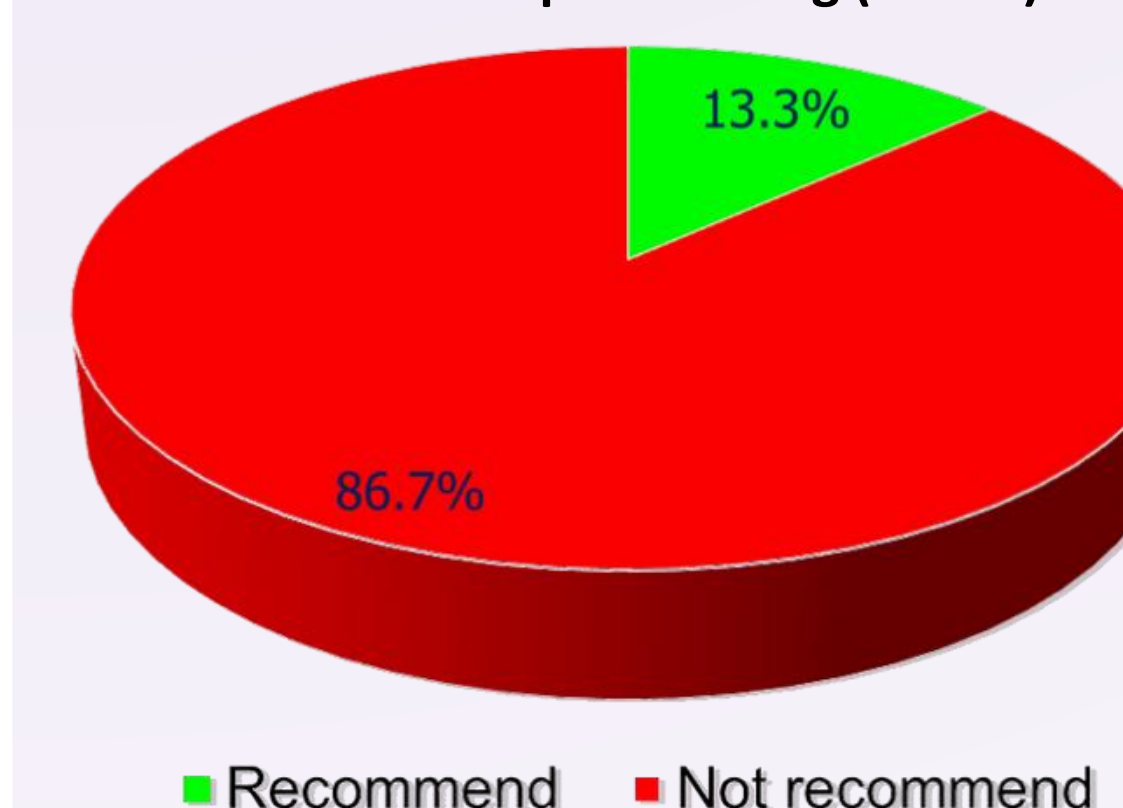
Figure 1: Opinions on using electronic cigarettes for smoking cessation (n=752)

Table 2. Comparisons on using e-cigarettes for smoking cessation between healthcare providers without and with experiences in smoking cessation services (n=751)

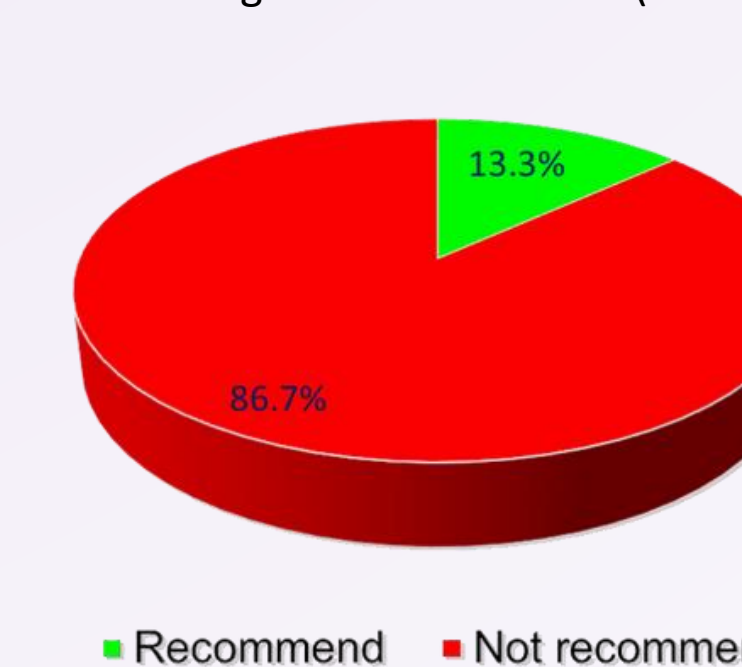
Perspectives on using e- cigarettes for smoking cessation	Healthcare providers without experience in smoking cessation services (n=600)	Healthcare providers with experience in smoking cessation services (n=151)	p-value
1. E-cigarettes can help reduce the amount of traditional cigarette smoking	2.92±0.87	2.84±0.95	0.326
2. E-cigarettes can aid in quitting smoking permanently	2.59±0.82	2.42±0.90	0.030
3. E-cigarettes are more effective in quitting smoking than using other smoking cessation products	2.67±0.76	2.49±0.83	0.012
4. E-cigarettes can help quitting smoking without the need for other smoking cessation products	2.70±0.77	2.46±0.82	<0.001
5. E-cigarettes are a safe way to quit smoking	2.62±0.78	2.44±0.92	0.032
6. E-cigarettes can reduce the craving for cigarettes	2.78±0.79	2.85±0.98	0.409
7. E-cigarettes can alleviate symptoms resulting from nicotine withdrawal when quitting smoking	2.77±0.79	2.83±0.94	0.460

The numbers shows the average scores (mean±SD) of each item using the 5-point Likert scale - (1) strongly disagree; (2) disagree; (3) neither agree nor disagree; (4) agree; (5) strongly agree

Recommendations for using E-cigarettes as a tool to quit smoking (n=629)



Recommendations for using E-cigarettes as a tool to quit smoking among participants without experience in smoking cessation services (n=495)



Recommendations for using E-cigarettes as a tool to quit smoking among participants with experience in smoking cessation services (n=134)

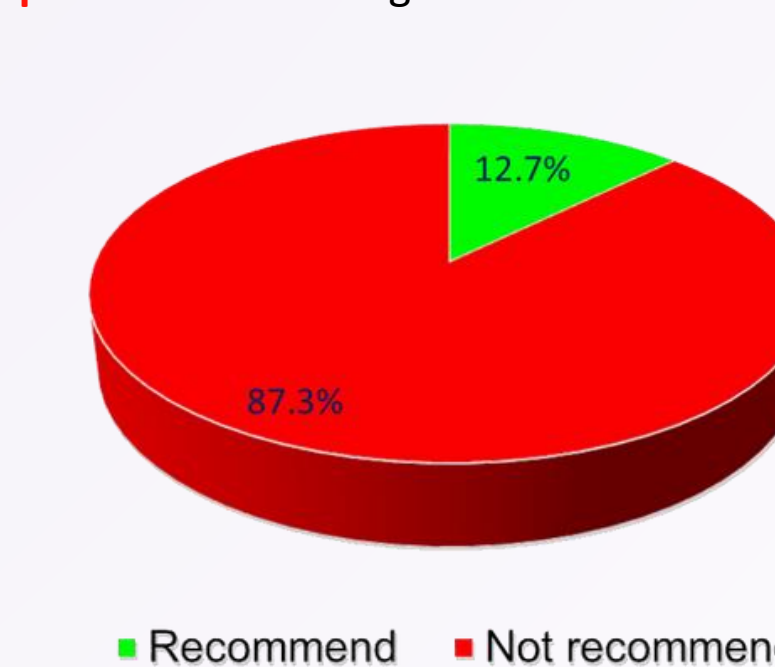


Figure 2: Recommendations for using E-cigarettes as a tool to quit smoking among participants with and without experience in smoking cessation services

Conclusion

Healthcare providers who had experience in smoking cessation appeared to have a more negative view of the effectiveness of e-cigarettes for quitting smoking. However, approximately 87% of healthcare providers, both with and without experience, did not recommend the use of e-cigarettes as a tool to quit smoking.