

INTRODUCTION

In Malaysia, the popularity of electronic cigarettes has increased gradually over the last years. E-cigarette were created as an alternative for traditional cigarettes, but their safety and efficacy profile are still unclear. In the mid of 2014, fatal cases of e-cigarettes made headlines.

The role of community pharmacists in the general health care system is expanding. From a product-oriented to a patient-centered role, a shift from a business-focused to a health-focused mindset, and active participation in health promotion. It is important that community pharmacists must be aware on the safety and effectiveness of e-cigarettes as a smoking cessation tool.

AIM/S

This study was aimed to determine the knowledge, attitude and perception of community pharmacists towards e-cigarettes.

- To determine the demographic profile of the community pharmacists.
- To determine the awareness of the community pharmacist on the use of e-cigarette in Selangor.
- To determine the perception of the community pharmacist on the safety and efficacy of e-cigarette.

METHOD

A quantitative study design engaging community pharmacists in Selangor, Malaysia was done. A pilot study using the adopted questionnaire was conducted for content and face validation after the ethics approval by the university research committee. The community pharmacists were selected by convenience sampling. Ninety-seven registered Malaysian community pharmacists within the vicinity of Puchong, Shah Alam, Subang Jaya, Puchong Jaya and Klang were the respondents. Data collection was achieved using paper-based survey questionnaire. The questions employed were close and open ended. Respondents were asked to score statements on a five-point scale ranging from "most important" to "least important" using Likert scale. Questionnaires were in written in English. Data was explored prior to analysis in order to determine the missing values and the distribution of variables. Descriptive statistics were utilized for the data analysis and the results were presented using tables, pie, and bar charts.

RESULTS

Table 1 showed that 69 respondents were female and 28 male. About 68.04% of them worked in the community pharmacy within 5 years after the registration and only 5.15% reached 20 years. Table 2 depicted that 78.35% were aware that utilization of e-cigarettes escalated in Selangor for the last five years and about 62.9% counselled patients concerning its usage. Meanwhile, more or less than a quarter of respondents received complaints from patients suffering cough, dry mouth, sore throat, and headache. Table 3 presented that 28.9% of the community pharmacists perceived that (family and support group) as "very effective" smoking cessation tool whereas only 1.0% considered e-cigarettes and sudden withdrawal as such.

Fig 1 showed that majority of the respondents (75.3%) disagreed that e-cigarettes do not cause any adverse effect. However, most of them agreed that informative campaign should be promoted to heighten awareness on the benefits and risks of using e-cigarettes.

Table 1 Demographics of community pharmacist

	Number (n)	Percentage (%)
Gender		
Male	28	28.87%
Female	69	71.13%
Location		
Puchong	25	25.77%
Shah Alam	45	46.39%
Puchong Jaya	6	6.19%
Klang	11	11.34%
Subang Jaya	10	10.31%
Years of practice (after registration)		
0-5	66	68.04%
6-10	11	11.34%
11-15	8	8.25%
16-19	7	7.22%
20	5	5.15%
Total N=97		

Table 2 Awareness on the use of e-cigarettes within Selangor

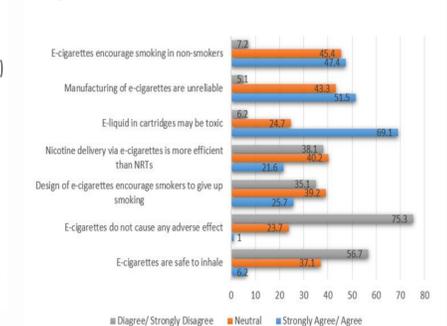
	Number (n)	Percentage (%)
Awareness on the reported use of e-cigarettes in Selangor in the last five years.		
No Answer	2	2.1%
Increased	76	78.35%
Decreased	2	2.1%
Do not Know	11	11.34%
Same as before	6	6.18%
Pharmacists who talked to patients who use e-cigarettes		
Talked to patients	61	62.9%
Didn't talked to patients	36	37.1%
Side effects of e-cigarette presented to the pharmacist		
Cough	30	34.1%
Dry mouth	28	31.8%
Sore throat	20	22.7%
Headache	10	11.4%
Total N=97		

Table 3 Perception on the effectiveness of e-cigarettes as a smoking cessation tool

	MTAC counselling	Family and support group	GP and pharmacist support	Classic NRTs (e.g. patch)	E-cigarettes	Sudden withdrawal (cold turkey)
	n %	n %	n %	n %	n %	n %
Very effective	6.0 6.2	28 28.9	17 17.5	9 9.4	1 1.0	1 1.0
Effective	44 45.3	45 46.4	49 50.6	56 57.7	7 7.3	9 9.3
Moderately Effective	33 34.0	22 22.6	27 27.8	31 31.9	43 44.3	39 40.3
Totally ineffective	9 9.3	2 2.1	1 1.0	0 0	30 30.9	40 41.2
Unsure	5 5.1	0 0	3 3.1	1 1.0	16 16.5	8 8.2
Total	97 100	97 100	97 100	97 100	97 100	97 100

MTAC- Medication Therapy Adherence Clinic; NRT- nicotine replacement therapy; GP- general practitioner

Fig 1 Perception on the safety and effectiveness of e-cigarettes.



CONCLUSION

This survey was conducted to gain insight into the perception of the community pharmacist regarding e-cigarettes in terms of awareness, safety, and effectiveness. Smokers are likely to consult them for evidence-based advice about its use. Thus, educational intervention and evidence-based training for pharmacist is recommended.

REFERENCES

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