

**UNIVERSITI TEKNOLOGI MARA**

**AWARENESS AND PERCEPTION OF  
ELECTRONIC CIGARETTES**

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## ABSTRACT

Electronic cigarettes also known as e-cigarettes were first invented by the Chinese Pharmacist's Hon Lik in early 2000s. It has been claimed as an alternative for tobacco product since it is marketed as tobacco-free product, which mimic the characters of tobacco cigarettes. Basically, electronic cigarettes consist of power source, an atomizer which act as heating element that vaporized the solution, the solution also known as e-liquid. Usage of electronic cigarettes is increasing over time. At the moment data on awareness and perception of electronic cigarettes is still limited. The perception of the pharmacist's role in smoking cessation and disseminating information on electronic cigarettes is still not known. The aim of this study is to determine the awareness and perception of electronic cigarettes and to investigate the perception of the public on the pharmacist's role in smoking cessation. A survey was conducted in Batu Pahat Johor which consisted of 69 respondents. The instrument consist of four-parts self-administered 39 items questionnaire consisted of demographic, usage of conventional and electronic cigarettes, awareness and perception of electronic cigarettes and pharmacist's role in smoking cessation. The respondents were given 20 minutes to answer the survey. The result were analyzed using Statistical Package for the Social Sciences (SPSS) version 20.0.

Majority of the respondents were male (76.8%), ranging from 20-30 years old (44.9%) with SPM as the highest level of education (36.2%). 52.5 % of respondents were conventional cigarette users and only 13 % from them used electronic cigarettes. The respondents, (95.9%) were aware of electronic cigarettes. Three quarter (75.4%) of the respondents do not believe electronic cigarettes can be used as a smoking cessation tool and almost a quarter (23.2%) believe it can be use as smoking cessation tool. Almost half (43.5%) of the respondents believe electronic cigarette is as safe as conventional cigarette and a slightly higher percentage (49.3%) considered electronic cigarettes and conventional cigarettes are both harmful. Majority of the respondents agreed or strongly agree that pharmacist can advice you on smoking cessation (82.6%) and on safety and efficacy of electronic cigarettes (81.2%). Respondents also agree or strongly agree that pharmacist can provide smoking cessation counseling (86.9%) and smoking cessation medication (79.7%). Based on the result from this study, most of the respondents were aware of electronic cigarettes and have different perception towards electronic cigarettes. It was found that, majority of the respondents agreed that pharmacist play a role in smoking cessation.

# CHAPTER 1

## INTRODUCTION

### 1.1 Background of Study

The popularity of using electronic cigarettes increased since they were introduced in the United State market in 2007 (Breland, Spindle, Weaver, & Eissenberg, 2014). Electronic cigarettes can also be called as e-cigarettes was first invented by the Chinese Pharmacist's Hon Lik in early 2000s (R. Grana, Benowitz, & Glantz, 2014). It has been claimed as an alternative for tobacco product since it marketed as tobacco-free product, which mimic the characters of tobacco cigarettes (Copp, Collins, Dar, & Barrett, 2015). E-cigarettes can be classified as battery powered device that combust nicotine which produce no smoke (Siegel, Tanwar, & Wood, 2011). Moreover it has been reported to contain propylene glycol or glycerol (glycerin) and flavoring agent (R. Grana et al., 2014). Basically electronic cigarettes consists of power source, an atomizer which act as an heating element that vaporized the solution, the solution also known as e-liquid, this model were normally consists of same shape and size and have mouthpiece that look similar as cigarette filters (Breland et al., 2014) . Electronic cigarettes products in the market come with different type which is rechargeable, non-rechargeable and disposable e-cigarettes (R. Grana et al., 2014). There is a study published by American Society of addiction medicine stated that 7% electronic cigarettes help them to quit smoking, 6% and 4% quit smoking with nicotine patches and placebo e-cigarettes respectively (Breland et