



POLICY BRIEF

SOCIAL, BEHAVIOUR & HEALTH (MQB7004)

Electronic cigarettes (e-cigarettes) are a potential benefits or harms to youth?

A regulatory policy notes

Public Health Issue on e-cigarettes

There are many distinct types of electronic cigarettes (e-cigarettes). E-cigarette's emissions typically contain nicotine and other toxic substances that are dangerous to both users, and non-users who are exposed to the aerosols second-hand¹.

There is limited data on their short- and long-term safety and efficacy of e-cigarettes. The impact of chronic e-cigarette exposure is essentially unstudied². Nicotine raises blood pressure and heart rate^{2,3}. Particular matter causes stiffening of the arteries of the arteries and systematic inflammation, which induce effects on the lungs and can cross into the bloodstream^{2,3}.

One of the challenges in studying the health effects of e-cigarettes is that the ingredients and mode of delivery are not standardised. Newer generation e-cigarettes introduced in the market by some unregulated industries deliver more concentrated vapour for longer periods that earlier published researched may have underestimated the impact on health⁴.

Knowledge & Awareness on Safety Issue

According to National Youth Tobacco Survey (NYTS), a total of 1.80 million school students are using e-cigarettes in 2020⁵. Study reported by Sharifa Ezat Wan Puteh et al (2018) showed that majority of 74.9% from 1,302 university students in Malaysia smoked e-cigarettes. Recent NHMS 2015 reported an estimated 5 million Malaysians aged 15 and older are smokers out of a total population of about 32 million⁶. Youth who use e-cigarettes may be more likely to smoke cigarettes in the future⁷.

A few studies reported greater health consequences of e-cigarettes on youth and provided powerful conclusions on the dangers of nicotine such as acute toxicity, lasting adverse consequences for brain development, nicotine addiction, initiating use of conventional cigarettes or dual use of conventional cigarettes with e-cigarette, influence on subsequent illicit drug use, more comorbid mental health disorder and risk of cancer⁸.

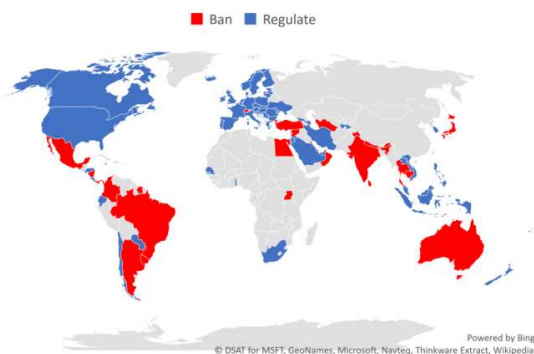
Other ingredients like propylene glycol, glycerine and flavourings, which are inert may have same effects when inhaled. Limited studies have examined the chronic exposures on the potential inhalation toxicity of these to consumers. Youth can easily purchase e-cigarettes through open-source marketing beside conventional ways such as social media platforms without being regulated or monitored⁹. Majority companies don't publish the contents of their liquid in e-cigarettes and claiming its proprietary.



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A review by Kennedy R.D. et al (2014) reported many countries regulate e-cigarettes using legislation not written for e-cigarettes. About 35% (68 countries) out of total countries in the world regulates e-cigarettes: 22 countries regulate e-cigarettes using existing regulations; 25 countries enacted new policies to regulate e-cigarettes; 7 countries made amendments to existing legislation; 14 countries use a combination of new/ amended and existing regulation. Common regulatory policies include a minimum-age-of-purchase, indoor-use (vape-free public places) bans and marketing restrictions. A few countries are enforcing a tax to e-cigarettes¹⁰.

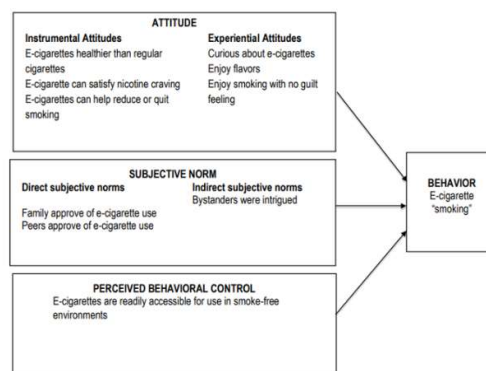


This conceptual framework can be used as a theoretical consideration to determine the aspect of people's health behaviour, in which actions taken by individuals that affect health and morbidity (Figure 2). By using theory of planned behaviour, it will be explained further how the social determinants of health, concept of embodiment, social gradient had influenced health behaviour as what has been proposed by Rudolf Virchow's: 3 principles for practice of social medicine¹¹.

Recommendation for action – way forward

The use of any tobacco products, including e-cigarettes is unsafe for youth¹¹. Many countries regulate e-cigarettes using legislation not written for e-cigarettes. Unfortunately, legislation has not been very successful in restricting the promotion and uptake of e-cigarettes or other related products in order to protect people

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Conceptual framework to explain reasons and perceptions associated with e-cigarettes among smoker

The Malaysian Communications and Multimedia Commission (MCMC) outlined the Malaysian Communications and Multimedia Content Code to prevent/unacceptable any advertisements of products or services related to cigarette, tobacco and its accessories. An innovative and continuous awareness programme on health consequences of using e-cigarettes towards youth at school/ education facilities



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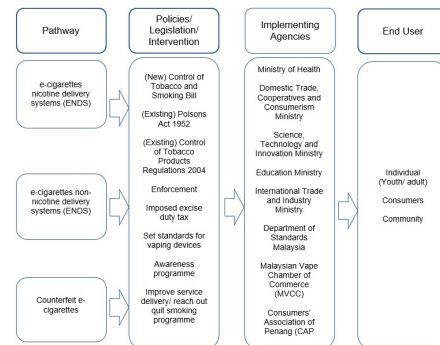
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especially youth and non-users from aerosols secondary, from nicotine addiction and harm to health¹².

The Health Ministry said the recent spate of deaths and illnesses linked to e-cigarette use in the United States added urgency to Malaysia's review of its policies¹⁴. The government aims to reduce the accessibility, affordability and attractiveness of tobacco and smoking products, thus preventing youth from developing addiction to such products. This Bill prohibited the display of tobacco products behind counters and made it illegal to smoke in vehicles with children. Using the existing Act, the Poisons Act 1952 will control of products or any preparation of e-liquid containing nicotine.

A good team of enforcement from Ministry of Health (MOH) with Custom Department will impose tax on vaping and e-cigarette liquids as well on non-nicotine liquids. The Ministry of Domestic Trade and Consumer Affairs (KPDNHEP) will cover the monitoring and set up rules of the production, distribution, and licensing activities, as well as import and export and retail of e-cigarette devices and liquids with/ without nicotine. The Department of Standards Malaysia based on Standards of Malaysia Act 1996 have developed the standards for batteries, devices, and packaging of e-cigarettes. The regulatory and enforcement of Safety Standard Rule for batteries and nicotine-free e-cigarette devices have been placed under the Consumer Protection Act 1999 by the KPDNHEP. Under the Poisons Act 1952 and Regulations, nicotine is classified as a Category C poison, which means products containing it should only be dispensed by licensed personnel.

or mass media by MOH working together with Ministry of Education, Department of Islamic Development Malaysia and Ministry of Youth and Sports.



Regulatory framework for e-cigarettes: policies/legislation and multi-agencies approach

CONCLUSION: Towards a healthy future

Using Virchow's principles to address public health intervention and stressed on the social, health disparities, individual including collective social capital. We need to recognise that various level in society affect health, exposure to harm, risk for illness-producing behaviours and the people's sense of agency. We cannot ignore the social context when looking at the status of a population's health.

The institutional theory provided additional insights in understanding the role of multi-agencies approach/ environment in upscale level of health outcomes. Therefore, in order to achieve reduction in prevalence of e-cigarettes and deaths/ illnesses linked to e-cigarettes in Malaysia, efforts and cooperation throughout all stakeholders, ministries, non-governmental organisation and individual are essential throughout all levels of societies that implies upstream to downstream approaches

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