

Vaping as a Harm Reduction Strategy: Lessons from the Past

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INTRODUCTION

The rise of electronic cigarettes (e-cigarettes), or vaping devices, has led to debates on their role in harm reduction for smokers. While proponents argue that vaping reduces exposure to harmful chemicals from tobacco, it is important to recognise the potential risks and lack of comprehensive evidence regarding its long-term effects. Malaysia is facing a public health challenge, with an increase in vaping, especially among the youth, as the *Control of Smoking Products for Public Health Act 2023 [Act 852]* remains unenforced.

The Unknown Safety Profile of Vaping

One of the most pressing concerns with adopting vaping as a harm reduction tool is the lack of long-term data on its safety profile. E-cigarettes are relatively new, having entered the global market in the early 2000s. This short timeframe is insufficient to assess the long-term health risks posed by regular e-cigarette use. Proponents claim that vaping is less harmful than traditional smoking, but “less harmful” does not mean “safe.” Emerging research highlights that vaping still poses serious health risks.

Aerosols produced by e-cigarettes contain harmful substances such as heavy metals, volatile organic compounds, and known carcinogens such as formaldehyde and acrolein.¹ Furthermore, the impact of inhaling flavouring agents, approved for ingestion but not for inhalation, remains largely unstudied.² In the United States, cases of e-cigarette or vaping-associated lung injury (EVALI) underscore the dangers of these products, especially when they contain unregulated additives.³

Historical Parallels with Cigarette Smoking

History provides a cautionary tale about the dangers of adopting products before fully understanding their health

risks. In the early 20th century, cigarettes were widely consumed, and their harms were not recognised until the 1950s, when researchers began linking smoking to lung cancer, heart disease, and other illnesses.

Pioneering studies by Ernst L. Wynder and Evarts A. Graham in the United States and Sir Richard Doll and Sir Austin Bradford Hill in the United Kingdom provided the first epidemiological evidence of smoking's lethal effects. In 1950, Wynder and Graham linked cigarette smoking to lung cancer,⁴ while Doll and Hill conducted similar research in the UK.⁵ Later, the British Doctors Study followed 40,000 doctors and confirmed the severe health impacts of smoking.⁶ However, by the time these harms were widely acknowledged, millions were already addicted, resulting in a global tobacco-related health crisis.

This historical oversight, where cigarettes were normalised before their risks were fully understood, serves as a stark reminder of the dangers of prematurely endorsing new products like e-cigarettes.

The Situation in Malaysia: Unregulated Access and Youth Vaping

Malaysia's *Control of Smoking Products for Public Health Act 2023 [Act 852]* is designed to regulate the sale and marketing of tobacco and vaping products. Still, the delay in enforcement is allowing the vaping industry to grow, particularly among adolescents. In July 2024, the Ministry of Health Malaysia (Kementerian Kesihatan Malaysia, or KKM) raised concerns about the unregulated sale of vaping products through vending machines, which is prohibited under Act 852.⁷ The lack of enforcement allows young people to access vaping products without sufficient oversight.

The rise in youth vaping is especially alarming. Research shows that nicotine exposure during adolescence can disrupt brain development and lead to long-term cognitive and behavioural impairments.⁸ Additionally, vaping often acts as a “gateway” to smoking traditional cigarettes, a trend observed in several studies.⁹ This normalisation of vaping risks undoing decades of progress in reducing smoking rates, particularly among vulnerable youth populations.

The appeal of vaping products to young people is exacerbated by the widespread availability of sweet, fruity flavours, such as mango and bubble gum, which are highly attractive to adolescents. Studies have shown that flavoured e-liquids increase experimentation and regular use among youth.¹⁰ Without enforcing Act 852, Malaysia’s youth remain vulnerable to nicotine addiction and the harmful effects of vaping.

The Case Against Vaping as a Harm Reduction Tool

The argument that vaping can serve as a harm-reduction tool rests on the assumption that it is safer than traditional cigarettes. While vaping may pose fewer immediate risks, it is not without serious health concerns. Evidence suggests that vaping can lead to respiratory and cardiovascular issues.⁹

One of the main problems with promoting vaping as a harm reduction tool is the phenomenon of “dual use,” in which individuals use both e-cigarettes and traditional cigarettes. This behaviour fails to reduce exposure to harmful chemicals and may even exacerbate health risks by combining the dangers of both products.¹¹ Rather than reducing harm, dual-use prolongs exposure to toxins and impedes the transition to complete cessation.¹¹

Moreover, promoting vaping as a harm-reduction tool could undermine efforts to discourage smoking initiation and encourage cessation. Presenting vaping as a “safe” alternative weakens the social unacceptability of nicotine use, especially among younger populations. Normalising vaping threatens the significant progress made in tobacco control efforts.

RECOMMENDATIONS

The uncertainty surrounding the long-term safety of vaping, combined with the increasing trend of youth vaping, underscores the need for caution. The *Control of Smoking Products for Public Health Act 2023 [Act 852]* is expected to come into force on 1st October 2024. This is a significant step forward for public health in Malaysia, but its effectiveness will depend on stringent enforcement and comprehensive regulation. The Act needs to be enforced effectively to curb the rising vaping epidemic, particularly among youth, and to ensure that the sale and marketing of smoking products, including e-cigarettes, are controlled to protect public health.

Strong regulation is necessary to prevent the widespread use of vaping products, particularly among the youth, who are vulnerable to the harmful effects of nicotine.

History teaches us that delays in responding to emerging public health risks can lead to devastating consequences. The parallels between vaping and the early days of cigarette smoking are too striking to ignore. We must act now to enforce Act 852 effectively, regulate the vaping industry, and protect future generations from the long-term dangers of nicotine addiction and vaping-related harm. Immediate action is essential to safeguard the health and well-being of Malaysians.

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