

Empowering general practitioners to assist smoking cessation among combustible and e-cigarette users effectively: A dual challenge in Malaysia

**Aimi Nadira Mat Ruzlin,
Nik Nairan Abdullah,
Balamurugan Tangiisuran**

ON 1 APRIL 2023, the Malaysian Government enforced the exemption of nicotine liquids and gels as controlled substances under the *Poisons Act 1952* while simultaneously imposing an excise duty of 40 cents per millilitre on e-cigarette (EC) liquids or gels containing nicotine regardless of the concentration of fluids.¹ Malaysia is at a crossroads due to consumer access policies that include declassifying nicotine liquids, which have disconnected the country from public health goals aimed at mitigating the prevalence of EC use. This has created an uproar, especially among medical professionals who have dedicated their efforts to raising awareness of the dangers of smoking combustible cigarettes (CCs) and ECs.² This might worsen the misuse of nicotine-delivery devices such as ECs, which could possibly harm the health of young Malaysians, many of whom are already dual users of CCs and ECs; the prevalence of daily EC use among current CC smokers was 17.4% in 2020.³

Although the exact definition of dual use is still up for debate, most evidence-based literature describes it as individuals who currently smoke both ECs and CCs.⁴

Among the several conceivable poly-tobacco use patterns, previous research indicates that the combination of smoking CCs and ECs is the norm, particularly among adolescents and young adults.⁵ However, using ECs as a substitute for CCs might pose a challenge for smoking cessation services, especially among dual users who are not necessarily motivated to quit, which makes it harder to stop.⁴ The smoking issue in Malaysia is serious, with no existing policies on the marketing and sales of ECs. In 2022, the Malaysian Government proposed a ban on cigarette smoking, including ECs; however, the declassification of nicotine as a scheduled poison gives youth the freedom to use both CCs and ECs concurrently, which could potentially indicate a surge in young dual users. Notably, there is also a lack of evidence on the long-term effects of EC use, particularly related to cardiovascular and respiratory health, immune biomarkers and pregnancy.⁶ In 2021, the Ministry of Health Malaysia (MOH) developed a guideline on the *Management of e-cigarette or vaping product use-associated lung injury (EVALI)*, which highlights a call for action in addressing the dual use of CCs and ECs in Malaysia.⁷

In Malaysia, smoking cessation services are easily accessible and provided by both the public and private healthcare sectors. The Malaysia Quit (mQuit) service, which was developed under the National Strategic

Plan for Tobacco Control (2015–20) and incorporated in government primary care clinics, emphasises healthcare professionals, including general practitioners (GPs), as being in a unique position as frontliner workers and the expected first point of contact for smokers who have the intention to quit smoking.⁸ GPs have a significant role in delivering good practices in smoking cessation management, such as providing support and motivation and delivering relevant health education messages to smokers attending smoking cessation services. However, the emergence of a new subgroup of smokers, namely dual users, poses future challenges for GPs in offering effective smoking cessation services, as the complexities of their smoking behaviour and health risks depending on their patterns of use and practices are diverse. For dual users who smoke ECs weekly, but smoke CCs daily, complexities might be imposing a more severe health risk profile compared to daily EC users who have significantly reduced the consumption of CCs from 20 to two cigarettes throughout the day.⁹ To address these challenges, GPs require good knowledge, a positive attitude and practice in smoking cessation assessment and management to assist dual users in quitting and maintaining abstinence effectively.

Findings from a systematic review reported that GPs were less confident in their ability to transfer knowledge to their

patients due to their lack of expertise and inadequate experience dealing with forms of nicotine delivery other than CCs.¹⁰ This was consistent with the findings in another study conducted in Malaysia that described similar practitioner-related barriers such as lack of training and skills, as there was only suboptimal practise of the 5As (ask, advise, assess, assist, arrange) and 5Rs (relevance, risk, reward, roadblocks, repetition), along with insufficient organisational support for health promotion materials and nicotine replacement medication.⁶ In contrast, instead of advising dual users to quit both CCs and ECs, alternative approaches have been adopted in the USA (eg dual users who prefer to completely switch to ECs are supported with tailored health education and specific behavioural support).¹¹ To be able to meet the new challenges of dual and poly-tobacco use individuals attending smoking cessation services in the future, it is recommended that further training of GPs is provided by the MOH on the management of smoking cessation through services incorporating multiple smoking cessation modalities in collaboration with pharmacists and Quitline coaches.¹¹ Furthermore, monitoring and evaluation of the feasibility of smoking cessation advice for dual users should also be undertaken to improve smoking management practices by GPs and to propose mechanisms for change such as additional incentives for public primary healthcare clinics or specific payments by private insurance funds for smoking interventions.¹²

Due to the evolving and broad composition of dual CC and EC use in the general population, which is currently not fully understood, dual use will continue to be a challenge for the public health sector. Hence, tailored interventions such as using social media platforms should be integrated into smoking cessation advice to increase awareness by delivering effective smoking cessation-related information and allow users who are interested in quitting to connect and learn from others who share similar health goals. This will assist in sustaining clinically meaningful smoking cessation outcomes among this subgroup of smokers. Given the different regulatory environments in Malaysia and Australia for ECs, the concept surrounding dual use remains a concern for GPs in both countries. This was further

explored in a recent study that highlighted Australian GPs' concern about the role of ECs as a potential pathway to smoking for those at risk.¹² Thus, it is recommended that GPs are provided with clearer guidance and essential knowledge about CC and EC use and their effects, and vaping-related clinical skills that are needed.¹³

Authors

Aimi Nadira Mat Ruzlin BSc (Hons) (UM), MPH (Melbourne), PhD (USM), Senior Lecturer, Department of Public Health Medicine, Faculty of Medicine, Universiti Teknologi MARA, Sungai Buloh, Selangor, Malaysia

Nik Nairan Abdullah MBChB (New Zealand), MPH (Malaya), MPH (Family Health) (Malaya), PhD (Community Health) (UKM), Medical Lecturer and Public Health Medicine Specialist, Department of Public Health Medicine, Faculty of Medicine, Universiti Teknologi MARA, Sungai Buloh, Selangor, Malaysia

Balamurugan Tangiisuran BPharm (Hons), MPharm (Clin Pharm), PhD (UK), Senior Lecturer, Discipline of Clinical Pharmacy, School of Pharmaceutical Sciences, Universiti Sains Malaysia, George Town, Pulau Pinang, Malaysia

Competing interests: None.

Funding: This work was supported by the MyRA Research Grant 2020 from the Universiti Teknologi MARA (project code: 600-RMC/MyRA 5/3 LESTARI [032/2020]).

Provenance and peer review: Not commissioned, externally peer reviewed.

Correspondence to: aiminadira@uitm.edu.my

References

- Lum DM. A challenging outlook for Malaysian healthcare in 2024. *The Star*, 16 January 2024. Available at www.thestar.com.my/lifestyle/health/the-doctor-says/2024/01/16/a-challenging-outlook-for-malaysian-healthcare-in-2024 [Accessed 25 January 2024].
- Shah A, Iskandar IM, Othman NZ. NGOs: Regulate vape industries before delisting nicotine as poison. *New Straits Times*, 23 March 2023. Available at www.nst.com.my/news/nation/2023/03/894750/ngos-regulate-vape-industries-delisting-nicotine-poison [Accessed 26 January 2024].
- Driezen P, Nordin ASA, Hairi FM, et al. E-cigarette prevalence among Malaysian adults and types and flavors of e-cigarette products used by cigarette smokers who vape: Findings from the 2020 ITC Malaysia Survey. *Tob Induc Dis* 2022;20:32. doi: 10.18332/tid/146363.
- Robertson L, Hoek J, Blank ML, Richards R, Ling P, Popova L. Dual use of electronic nicotine delivery systems (ENDS) and smoked tobacco: A qualitative analysis. *Tob Control* 2018;28(1):13-19. doi: 10.1136/tobaccocontrol-2017-054070.
- Collaco JM, Drummond MB, McGrath-Morrow SA. Electronic cigarette use and exposure in the pediatric population. *JAMA Pediatr* 2015;169(2):177-82. doi: 10.1001/jamapediatrics.2014.2898.
- Wasfi RA, Bang F, de Groh M, et al. Chronic health effects associated with electronic cigarette use: A systematic review. *Front Public Health* 2022;10:959622. doi: 10.3389/fpubh.2022.959622.

- Ministry of Health Malaysia. Management of e-cigarette or vaping product use-associated lung injury (EVALI). Malaysian Health Technology Assessment Section, 2021. Available at www.moh.gov.my/moh/resources/Penerbitan/CPG/Respiratory/e-CPG_Management_of_EVALI_for_Online_Publication.pdf [Accessed 29 May 2024].
- Ngee Ling BJ, Cheong AT, Manap AHA. Factors influencing the practice of Smoking Cessation Assessment and Management among Primary Care Doctors (SCAAM-DOC) in three districts of Malaysia. *PLoS One* 2022;17(9):e0274568. doi: 10.1371/journal.pone.0274568.
- Hajat C, Stein E, Selya A, et al; CoEHAR study group. Analysis of common methodological flaws in the highest cited e-cigarette epidemiology research. *Intern Emerg Med* 2022;17(3):887-909. doi: 10.1007/s11739-022-02967-1.
- Selamoglu M, Erbas B, Kasiviswanathan K, Barton C. General practitioners' knowledge, attitudes, beliefs and practices surrounding the prescription of e-cigarettes for smoking cessation: A mixed-methods systematic review. *BMC Public Health* 2022;22(1):2415. doi: 10.1186/s12889-022-14696-3.
- Vickerman KA, Carpenter KM, Miles LN, et al. A randomized pilot of a tailored smoking cessation Quitline intervention for individuals who smoke and vape. *Nicotine Tob Res* 2022;24(11):1811-20. doi: 10.1093/ntr/ntac129.
- Darker CD, Burke E, Castello S, et al. A process evaluation of 'We Can Quit': A community-based smoking cessation intervention targeting women from areas of socio-disadvantage in Ireland. *BMC Public Health* 2022;22(1):1528. doi: 10.1186/s12889-022-13957-5.
- Selamoglu M, Erbas B, Wilson H, Barton C. 'Why do we have to be the gatekeepers?' Australian general practitioners' knowledge, attitudes and prescribing intentions on e-cigarettes as a smoking cessation aid. *BMC Prim Care* 2024;25(1):53. doi: 10.1186/s12875-024-02292-w.

correspondence ajgp@racgp.org.au