Comment

Smoke economics: lessons from tobacco ban for e-cigarette regulation in Bhutan

Monu Tamang^{a,b,*} and Benu Prasad Dahal^o

^aGraduate School of Public Health, International University of Health and Welfare, Narita, Japan ^bCentral Regional Referral Hospital, Gelephu, Bhutan ^cGriffith University, Brisbane, Australia

In December 2024, two Bhutanese teens were hospitalized with vaping-linked pneumothorax,1 highlighting the growing public health concern posed by e-cigarettes. Driven by lax local attitudes and global trends, e-cigarettes are swiftly gaining traction among Bhutanese adolescents, with 186,916 units imported in the first nine months of 2024 — a 632% increase over 2022.1 Hospitals have reported 15 recent cases of lung cysts in individuals who vape.1 Such health issues are mainly from tetrahydrocannabinol (THC)-containing e-cigarettes, and the US Centers for Disease Control and Prevention classifies them under e-cigarette or vapingassociated lung injury (EVALI).2,3 This trend underscores a need for robust regulatory and public health interventions to address health hazards and the financial burden on Bhutan's state-funded healthcare system.

Bhutan has a history of stringent tobacco regulation. In 1989, local leaders in Bumthang, the country's religious heartland, advocated a tobacco ban, a stance later adopted by the National Assembly, which deemed tobacco a religious anathema and health hazard.⁴ In 2004, Bhutan ratified the WHO Framework Convention on Tobacco Control, and in 2010, it enacted the Tobacco Control Act, banning all tobacco sales nationwide and imposing a 100% tax on the limited imports permitted for personal use. Enforcement was strict, with long prison sentences for violations.⁴ While smokers, individuals with liberal sensibilities, and opposition politicians criticized the ban as undemocratic and draconian, religious figures, rural communities and students supported it.⁴

The law provided a robust framework to control smoking in public areas and limit access.⁴ However, tobacco use (both smoking and smokeless tobacco) rose from 18.5% in 2004 to 27.3% in 2019,⁵ with tobacco-related illnesses now causing 10% of deaths—about 400 annually⁶ —and children as young as 11 taking up smoking.⁵ The law's focus on curbing supply allowed unmet demand to thrive, which explains its mixed outcomes. The ban unwittingly drove retailers

underground, leading to smuggling across the Bhutan– India border.⁴ Although consumers could legally import tobacco for personal use by paying over 100% in taxes, many opted for cheaper, untaxed products, sustaining illicit trade.

The COVID-19 pandemic highlighted the risks of cross-border virus transmission through tobacco smuggling, prompting Bhutan to review the 2010 legislation.⁷ The Tobacco Control Act 2021 legalized domestic sales, allowing a public duty-free retailer to import and distribute tobacco to micro-outlets from where consumers could purchase tobacco products for personal use. Bhutan's experience demonstrates that outright bans result in mixed outcomes, sometimes complicating straightforward assessment because of the prevalence of illicit points of access. It should therefore focus on measures to discourage demand, not just restrict supply, in regulating e-cigarettes.

First, Bhutan must regulate e-cigarettes, which remain unregulated. While the US FDA classifies them as tobacco products and the WHO lists them alongside tobacco on its public portals, Bhutanese retailers sell them as electronic gadgets, subject to only a 5% sales tax and 10% customs duty.1 To address this, the Tobacco Control Act 2021 should be updated to classify e-cigarettes as harmful products, subjecting them to 100% sales tax and 10% customs duty under the Tax Act of Bhutan 2022. The Goods and Services Tax Act 2020, expected to be implemented by July 2025, which imposes excise taxes on harmful goods, offers an opportunity to close this gap. A balanced approach could categorize e-cigarettes into flavored and non-flavored varieties,8 applying tax rates that reflect their harm and the greater addictiveness of flavored e-cigarettes, both in Bhutan⁹ and globally,⁸ while preserving their potential as smoking cessation tools.

The WHO identifies higher taxes as a "best buy" approach to reduce tobacco and nicotine use.¹⁰ Evidence shows that e-cigarettes are price-elastic,¹¹ and their demand is impacted by tax levies.¹² A large body of research shows that e-cigarettes are price-responsive.^{12–15} In developed countries such as the United States, Canada, and the United Kingdom, an increase in e-cigarette prices is associated with a decrease in demand.^{13–15} However, while the e-cigarette tax curbed vaping, it nudged some users to smoke tobacco, exposing the risk of an isolated price hike without parallel regulatory





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^{*}Corresponding author. Graduate School of Public Health, International University of Health and Welfare, Narita, Japan.

E-mail addresses: monutamang.pt@gmail.com (M. Tamang), sdbenu92@gmail.com (B.P. Dahal).

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intervention on tobacco products.¹² In Bhutan, where tobacco remains regulated through stringent law, an ecigarette tax offers a viable option to address the growing concern of vaping without encouraging a product switch. Moreover, the revenue collected from taxes on e-cigarettes can fund anti-smoking and anti-vaping educational programs under Bhutan's resource-constrained healthcare system.

Secondly, many people mistakenly believe vaping is innocuous, while its long-term health effects are uncertain. Studies link e-cigarettes to lung inflammation, cardiovascular risks, and impaired adolescent brain development.¹⁶ Contaminated vaping products are also associated with hospitalizations and death from EVALI.³ Moreover, teens who vape are three times more likely to start smoking.¹⁷ Thus, public health education is required to raise awareness of the harms of vaping and to shift social norms to build a more critical attitude toward vaping. Studies show that youth exposed to antismoking campaigns were more likely to quit smoking and less likely to take up smoking.18,19 While Bhutan currently lacks specific awareness programs on the harm of e-cigarettes, it should approach awareness on the risk of e-cigarettes by leveraging the strong social structures, religious ethos against smoking, and public attitudes against unhealthy habits such as smoking shaped by a long history of anti-tobacco programs anchored on science and religious sentiments. The health ministry must partner with key opinion leaders, media and local influencers to discourage vaping using scientifically appropriate and religiously resonant messages. Additionally, health warnings on products should be accessible and impactful in local languages.

In conclusion, Bhutan must recognize vaping as a growing public health issue and apply market-based regulations and social partnerships and sustained awareness on the harms of vaping to discourage the use of e-cigarettes among the youth.

Contributors

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Declaration of interests

We declare no competing interests.

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