Cost of smoking: More than just a personal decision

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KUCHING: Smoking is often regarded as a personal choice, something smokers feel they have the right to decide for themselves. But the reality is that smoking affects far more than the individual who chooses to light up.

In East Malaysia, where close-knit communities share resources, spaces, and cultural practices, the repercussions of smoking can be even more pronounced, impacting families, communities, and the environment.

The effects of smoking spread like ripples across a pond. What may start as a personal habit can lead to increased health risks, burdened healthcare systems, and environmental damage. Smoking's costs are often overlooked, yet these costs impact everyone around the smoker and even future generations.

NCDs and cigarette smoke

Smoking is a major contributor to noncommunicable diseases (NCDs) such as lung cancer, heart disease, and chronic obstructive pulmonary disease (COPD).

As these diseases rise, they place an enormous strain on healthcare systems and economies globally, and there is no exception for us in East Malaysia. With limited healthcare resources, the costs of treating smoking-related illnesses divert funds that could be used to improve other essential services.

Secondhand smoke, or smoke exhaled by smokers and emitted from burning cigarettes, presents health risks to nonsmokers as well. Children, the elderly, and individuals with existing health issues are especially vulnerable to the harms of secondhand smoke.

The World Health Organisation (WHO) reports that smoking-related diseases kill over eight million people globally each year.

More than seven million of these deaths are directly linked to smoking, while around 1.3 million are attributed to secondhand smoke exposure.

In East Malaysia, this means families and friends of smokers may unknowingly bear health risks simply by sharing spaces with smokers.

Additionally, the WHO highlights that the economic impact of tobacco use is extensive, including high healthcare costs for treating tobacco-related diseases and the loss of productivity due to illness and premature death.

These economic strains are felt not only at national levels but also at community levels, where resources are limited. By reducing tobacco use, we could redirect valuable resources to other critical needs, improving overall quality of life and wellbeing.

Hidden Dangers in Cigarette Smoke

Cigarette smoke is more than just a nuisance – it contains harmful chemicals that can severely damage human health.

Among these chemicals are known carcinogens, including benzene, formaldehyde, and arsenic, as well as dangerous substances like carbon monoxide and tar.

These chemicals damage tissues, impair lung function, and lead to serious long-term health issues, affecting not only smokers but also those exposed to their smoke. Cigarette smoke is a product of combustion, which is defined as a chemical process of oxidation that occurs at a rate fast enough to produce heat and usually light in the form of either a glow or flame.

Combustion also includes both complete and incomplete (partial) combustion processes, such as smouldering (flameless) and flaming combustion.

The combustion of a cigarette takes place after ignition, when temperatures in a cigarette exceed about 400°C.

It then becomes self-sustaining as long as the exothermic (heat-generating) oxidation reaction is sufficiently strong to overcome heat losses and endothermic (heat consuming) processes, such as vaporisation and endothermic thermal decomposition.

Studies by Philip Morris International (PMI) show that cigarette smoke contains over 6,000 harmful chemicals, with more than 100 directly linked to diseases such as cancer, heart disease, and respiratory illnesses.

These chemicals have been identified as harmful and potentially harmful constituents (HPHCs).

Research has shown that a majority of HPHCs in cigarette smoke are caused by combustion. By eliminating combustion, the level of HPHCs produced can be reduced. PMI's studies have also shown an average reduction in THS aerosol HPHCs of 95 per cent, compared with cigarette smoke.

Awareness of these hazards is crucial in tackling smokingrelated health issues. Public health campaigns, educational programmes, and smoking cessation support are essential tools in reducing the burden smoking places on individuals,

communities, and healthcare systems.

Reducing exposure to these toxic substances can have immediate and long-lasting benefits, especially in Sarawak where healthcare access can be limited.

Secondhand smoke: A community health risk

Secondhand smoke, composed of exhaled smoke and smoke from the burning end of a cigarette, is a significant health hazard for non-smokers as well.

Non-smokers who breathe in this toxic mixture are at risk of many of the same health issues as smokers, including heart disease, lung cancer, and respiratory illnesses.

In East Malaysia, especially in Sarawak, where many households are multigenerational, children and elderly family members often live under one roof.

Children exposed to secondhand smoke are at higher risk for respiratory infections, asthma attacks, sudden infant death syndrome (SIDS), and developmental issues.

For adults, long-term exposure increases the risk of heart disease, stroke, and lung cancer. Those with existing respiratory conditions like asthma or COPD may find their symptoms worsened, further straining local healthcare resources.

This danger has led many countries to adopt strict public smoking bans to protect nonsmokers in workplaces, restaurants, and public areas.

As we look to improve community health, similar policies could help reduce the risks associated with secondhand smoke exposure and create a safer environment for everyone.

Harm reduction: Reducing risks

Harm reduction is an approach that aims to minimise the risks associated with certain behaviors, even if those behaviors are not completely eliminated. While it may be challenging to entirely stop certain activities, harm reduction focuses on reducing the potential damage they cause.

For example, using sunscreen reduces the risks of skin cancer from sun exposure, allowing people to safely enjoy outdoor activities. Similarly, wearing seatbelts minimises injury risk in car accidents.

These examples illustrate how harm reduction enables people to engage in behaviors while lessening potential harm.

In the case of smoking, harm reduction could involve offering alternatives to cigarette smoking that present fewer health risks.

Education about these alternatives and accessible resources for smokers interested in harm reduction can benefit individuals and their communities.

Harm Reduction Options for Smokers

Recognising the dangers of smoking, various less harmful alternatives have emerged. These options aim to deliver nicotine while avoiding many of the harmful chemicals released by burning tobacco, thus serving as tools for harm reduction.

Dr Vijayndhran Balakrishnan, who is PMI's Scientific Engagement Manager, explained that while nicotine causes addiction, it is the combustion process that produces most of the harmful chemicals in cigarette smoke.

"During the first puff of a cigarette, temperatures reach up to 800 degrees Celsius, releasing numerous toxic chemicals," he shared at a roundtable discussion in Kuching late last year. Highlighting a common misconception, he said many people think nicotine is the main cause of smoking-related diseases.

"But, while addictive, nicotine poses minimal harm to users, which is why it's safely used in nicotine replacement therapies."

Adding to this, Dr Ng Yee Guan from Universiti Putra Malaysia emphasised the importance of distinguishing nicotine's role from the dangers of burning tobacco.

"Understanding tobacco harm reduction could significantly improve public health outcomes in Malaysia," he noted.

Alternatives like heated tobacco products (HTPs), which heat but do not burn tobacco, create a nicotine-containing vapour with fewer harmful byproducts such as tar and carbon monoxide.

These products mimic the experience of smoking but with lower exposure to toxic substances. Vapes, or e-cigarettes, are another widely-used alternative. They vapourise a liquid, often containing nicotine, without combustion. While not entirely risk-free, vaping typically exposes users to fewer toxic chemicals than traditional smoking, making it a potentially safer option. For smokers seeking to quit entirely, nicotine replacement therapies (NRTs) such as patches and nicotine pouches deliver nicotine without the toxic chemicals in cigarette smoke. These products can help smokers manage their nicotine cravings and work toward reducing their smoking habits.

While these alternatives come with their own risks, they offer less harmful options for those who continue to smoke.

By raising awareness about harm reduction and offering supportive resources, East Malaysia can take steps toward a healthier future.

Encouraging these alternatives can help reduce the health impact of smoking on individuals and alleviate some of the burdens on local healthcare systems.

Addressing the costs of smoking goes beyond individual choices — it requires collective action to protect everyone. By educating the public, advocating for harm reduction, and promoting healthier alternatives, we can move closer to a smoke-free future.