Exploring Behavioral and Pharmacological Interventions against Excessive Tobacco Use

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To the editor,

I was interested in a recent article by Ihyauddin et al.1) regarding the prevalence, determinants, and correlates of tobacco use among school-age adolescents in Indonesia. The authors concluded that tobacco use is high among Indonesian adolescents and highlighted the need for a more stringent tobacco control policy and tailored cessation programs.1) In response, I suggest a program that focuses on behavioral and pharmacological aspects implemented in the Philippines. The success of such a program can be applied in other countries for effective interventions against excessive tobacco use.

Tobacco use is the leading cause of preventable deaths and is estimated to kill more than 5 million people annually worldwide. In the Philippines, tobacco use and exposure to second-hand smoke pose a significant public health problem, because they result in at least 87,600 deaths annually (240 deaths every day), with one-third of the victims being men in the most productive age of their lives.2) Low- and middle-income countries have adopted various effective measures, such as proper and thorough monitoring of tobacco use, timely availability of help for smoking cessation, frequent sensitization of the public regarding the harmful consequences of tobacco, implementation of bans on advertisements, sponsorship, and promotion of tobacco products, and substantial increases in the taxation of tobacco products.3) Although these measures can help address the problem, additional approaches are required for a more significant impact. Individuals severely addicted to smoking may find ways to continue their habit despite the different strategies mentioned. Although their smoking may cease momentarily, they often struggle to resist cravings, ultimately giving in to the habit and undoing their efforts. Therefore, I suggest that a combined behavioral and pharmacotherapeutic approach can make a difference.

A pharmacological approach was designed to block the reinforcing effects of nicotine and reduce withdrawal symptoms. Treatment options for smoking cessation include nicotine replacement therapy (NRT), bupropion, and varenicline.4) NRT involves the gradual administration of decreasing doses of nicotine. It maintains relatively low plasma nicotine levels, which eases anxiety and withdrawal symptoms. Bupropion, on the other hand, was the first non-nicotinic drug treatment approved by the US Food and Drug Administration to stop smoking. It is an antidepressant that stimulates noradrenergic and dopaminergic functions and has been shown to double abstinence rates, even in the long term. Finally, varenicline is a cholinergic receptor that promotes dopamine release into the mesolimbic system, disrupting the positive reinforcement of smoking behavior, and blocking the reinforcing effects of nicotine.5) The recent DOH Memorandum No. 0242 (2021) officially included NRT and varenicline in the primary care formula.

In addition to pharmacological interventions, a behavioral approach is integral to smoking cessation efforts. Examples include behavioral therapy, cognitive behavioral therapy (CBT), and motivational interviews. These strategies can be applied individually or in groups and vary in intensity and delivery mode.6) Behavioral therapy addresses historical learning processes that are directly relevant to smoking and the current contextual factors that make quitting difficult. Similarly, CBT
helps individuals identify smoking triggers such as specific situations, emotions, or activities, and assists them in developing alternative behaviors to replace smoking. This may involve implementing new coping strategies, engaging in healthy activities, or using relaxation techniques to manage cravings. Motivational interviewing, on the other hand, utilizes a counseling style that is directive, patient-centered, non-confrontational, non-judgmental, and highly collaborative.

With these approaches, the latest Global Adult Tobacco Survey reported that smoking prevalence in the Philippines now ranks lower than that in most of its ASEAN (Association of Southeast Asian Nations) neighbors: Indonesia (33.5%), Lao PDR (27.9%), Myanmar (26.1%), Vietnam (22.5%), Malaysia (21.3%), Brunei Darussalam (19.9%), and Thailand (19.1%). Only Cambodia (16.9%) and Singapore (10.1%) had lower smoking prevalence. Notably, the number of Filipinos using tobacco has declined from 16.7 million in 2015 to 15.1 million in 2021. With the combined pharmacological and behavioral interventions, a higher likelihood of success prevails in smoking cessation, leading to reduced tobacco use and improvement in various health risk factors.

CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

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