

# Epidemiological Stagnation of Smoking and the Urgency of new Communication Strategies with Smokers

<https://doi.org/10.32635/2176-9745.RBC.2026v72n2.5566EN>

*Estagnação Epidemiológica do Tabagismo e a Urgência de Novas Estratégias de Comunicação com o Fumante*

*Estancamiento Epidemiológico del Tabaquismo y la Urgencia de Nuevas Estrategias de Comunicación con los Fumadores*

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## INTRODUCTION

The National Tobacco Control Policy (PNCT)<sup>1</sup> is a successful public health intervention model. Other non-communicable diseases (NCDs)<sup>2</sup> prevention and combat programs, such as those related to alcohol and unhealthy nourishment, are treading through the same pathways tobacco control initiatives have taken in lawmaking and regulatory instances and health promotion.

The creation in 2003 of a PNCT governmental commission<sup>3</sup> which entailed the adoption of multi-sectoral policies – definition of minimal cigarette prices, improvement of health warning labels on cigarette packs, advertising banning, and smoking bans<sup>4</sup> in public areas –, provoked a significant reduction in the prevalence of smoking<sup>5</sup>.

However, smoking continues to kill 173 thousand smokers annually, there are 22 million Brazilian smokers still<sup>6</sup>, whose majority smoke daily, mostly in low-income and education groups, potentially affected by severe diseases with social and economic repercussion for their families and society<sup>7,8</sup>.

Time-series analyzes of surveys and research revealed concerning epidemiologic data and raised a red flag among managers and investigators. Deceleration and inertia of the percent drop of adult smokers between 2018 and 2024, according to the surveillance system for risk and protective factors for chronic diseases by telephone survey (Vigitel)<sup>8</sup>, may indicate that the effects of the measures implemented so far are no longer as effective as before. The estimates suggest that the goal of prevalence of NCDs of 40% by 2030 will not be achieved<sup>9</sup>.

In addition, the national survey of school health (PeNSE) revealed an increase in the proportion of current smokers among adolescents (6.6% in 2015 to 6.8% in 2019), standing out 16-17 years old girls<sup>10</sup>. This growth may have various and combined causes as easy access to

buy cigarettes online<sup>11</sup> and at sellers per unit<sup>12</sup>, social media advertising<sup>13</sup>, weak tax policy which expands affordability and illicit ENDS (electronic nicotine delivery system) sale, already appearing in the statistics – according to the national alcohol and drugs survey 2025, 8.8% of the 14-years old or older population tried this product and 5.6% claimed they used it in the last year<sup>14</sup>. A possible outcome of this context was pointed out by the national health survey (PNS): among 18-24-years-old smokers, the prevalence was kept stable between 2013 and 2019 as opposed to the decline observed in older individuals<sup>5</sup>. The availability of illicit tobacco products, 38.6% of the Brazilian market<sup>15</sup>, and the growth of smokers during the COVID-19 pandemic<sup>16</sup> are part of this epidemiologic scenario.

PNS revealed a negative variation of 8.8% in the attempt to smoke cessation between 2013 and 2019, mostly in low education groups and in the age range of 40-59 years, where good part of the smokers can be found<sup>17</sup>. In addition, PNS observed that, regardless of the increase of visits to the doctor for several causes, the proportion of those who received counseling to quit smoking dropped from 57.1% in 2008 to 51% in 2019, and in this year, health professionals missed the opportunity to guide and encourage ten million smokers<sup>18</sup>.

## DEVELOPMENT

This epidemiological scenario indicates an urgency and necessity to adopt social marketing-based novel communication strategies to reach the smoker, expand their knowledge, and change their behaviour, strengthening the engagement in smoke cessation<sup>19</sup>. The use of digital technologies (SMS, interactive apps, chatbots etc.) is a notable way to encourage smokers in their decision to quit smoking and support cessation treatment programs<sup>20</sup>. Understandably, they are wide-ranging interventions

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but require technological development, structure maintenance, and data protection, among others.

Nevertheless, innovative and non-technological solutions have been proven to be effective. Brazil has a recognized experience with health warning labels on cigarette packs<sup>21</sup>. Since 2001, phrases and images required by the National Health Regulatory Agency (Anvisa) present a negative approach (or of losses) about tobacco's impact on health, whose objective is to inform, make the smoker to repel it, in contrast with the alluring graphic elements of cigarette brands. Anvisa's decision held the tobacco industry responsible for producing and printing these health warnings.

Furthermore, evidence suggests that negative health warnings that provoke fear and repulsion should be accompanied by positive behaviors that help the smoker to find ways to overcome their chemical and psychic dependence<sup>22</sup>. In that line, Canada's experience in enclosing package inserts on smoking cessation is a viable low-cost regulatory alternative for governments, strengthening guiding strategies and encouragement for smokers<sup>23</sup>.

Canadian package inserts bring two distinct positive approaches: (1) guidelines on how to quit smoking (on your own or relying on specialized support) that imbue the smokers with the belief they can change their behavior towards a healthier goal (perception of self-efficacy)<sup>24</sup>; (2) the benefits of quitting that stimulate the belief that behavioral change will reduce the risk of negative health consequences (perception of response efficacy)<sup>24</sup> to motivate habits changing. In that line, the literature on inserts presents positive results: more attempts to quit smoking, increased search for treatment services and support during smoking withdrawal<sup>25</sup>.

Since Brazilian smokers are aware of the tobacco health harms (through educative campaigns and health warnings)<sup>5</sup>, it is likely that communication strategies that highlight the benefits of smoking cessation (reinforcing the perception of response efficacy) and suggest attitudes the smokers can take on their own or health services where they have access to the treatment (promoting the perception of self-efficacy) can help to reverse the epidemiological scenario. In this last hypothesis, it is essential that the service where treatment is provided be disseminated across a larger number of health units and can absorb a large number of smokers with different profiles of nicotine dependence<sup>26</sup>.

Still, Anvisa would have to deal with the challenges resulting from the implementation of this initiative as monitoring cigarette packs to check whether the inserts are fully enclosed and their simultaneous or rotation distribution as stipulated in Law # 9,294/1996 and a probable resistance of the tobacco industry, including

judicialization, as already occurred with other regulatory interventions<sup>27</sup>.

## CONCLUSION

Smoking is a public health problem far from being resolved; it can't be accountable for paying the price of the success of its policy, which can be ephemeral. If a priority is not granted in both the political and lawmaking agenda, nor a recipient of investments in innovation and in effectively-proven experiences, it is possible that future population investigations reflect a reversal of the downward trend of smoking prevalence with impactful and negative social and economic consequences for the entire society.

Adopting novel strategies to communicate with the smoker can be useful. Most of the smokers have low nicotine dependence and claimed they did not have any support or counseling when they tried to quit smoking, as the PNS made clear. Eventually, there is an opportunity window to encourage them to quit smoking with handy daily-life tips and steer them to rely on the public health network.

Inserts added to the package are a cost-effective measure within Anvisa's jurisdiction, supported by Law # 9,782/1999 that ensured the Agency the ability to rule and control tobacco products, and by Law # 9,924/1996 that rules health warnings printed on cigarette packs. Insofar as the existing knowledge goes and the urgency of new educative strategies for smokers, national studies must analyze forms and characteristics of communication with positive approaches suitable to the national smoking population.

## CONTRIBUTIONS

All the authors contributed substantially to the conception and design of the study, acquisition, analysis and interpretation of the data, writing and critical review. They approved the final version for publication.

## DECLARATION OF CONFLICT OF INTERESTS

There is no conflict of interests to declare.

## DATA AVAILABILITY STATEMENT

All content underlying the text is contained in the manuscript.

## FUNDING SOURCES

None.

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Recebido em 13/11/2025  
Aprovado em 29/12/2025

