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Original Investigation

The Challenges of Tobacco Fiscal Policy Implementation in Mexico From the Perspective of Key Actors

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Abstract

Introduction: Raising tobacco taxes is considered the most effective strategy to avoid smoking initiation and discourage its use, especially among vulnerable groups. However, few low- and middle-income countries have adopted high tobacco taxes. Raising taxes is, therefore, an opportunity to strengthen and accelerate tobacco control. The objective of this study is to analyze the barriers and facilitators to the tobacco tax increase in Mexico.

Aims and Methods: Based on the Governance Analytical Framework, data were generated through 17 in-depth interviews with key intersectoral actors for fiscal policy. The interviews were transcribed and coded according to *Hufty's* theory of governance.

Results: Robust scientific evidence, intersectoral coordination, and the presence of "champions" boosted progress in tobacco control (facilitators). The main barriers were the incomplete implementation of the World Health Organization—Framework Convention on Tobacco Control (WHO-FCTC) and MPOWER package and lack of commitment ("political will") by government decision makers and legislators, misinformation about the effects of tobacco taxes, and strong tobacco industry interference.

Conclusions: Robust evidence is necessary but not sufficient to advance the implementation of the MPOWER (WHO-FCTC) actions. To achieve tobacco tax increases and public policies that protect people from unhealthy products in general, the implementation of policies or legal frameworks against industry interference in the development of public policies is imperative.

Implications: By analyzing the barriers and facilitators to increasing the tobacco tax in Mexico, this study identifies two key messages: (1) The need to sensitize legislators and the general population to the problem of smoking not only through epidemiological data but also through testimonies that highlight the life experiences and adversities faced by people who smoke. (2) The need for a regulatory framework to prevent industry interference in public affairs and conflicts of interest. The same framework could be very useful for public health policies to control the consumption of ultra-processed food products or alcohol.

Introduction

In 2003, the World Health Organization (WHO) adopted the Framework Convention on Tobacco Control (WHO-FCTC), the first international tobacco control treaty that is legally binding on signatory countries.[1] To foster compliance with the Convention, in 2008, the WHO launched an action plan for cost-effective policies and interventions called "MPOWER,"[2] an acronym for the six main lines of action for tobacco control. The letter "R" refers to raising tobacco taxes, which is considered the most effective strategy for preventing smoking initiation, especially among vulnerable groups.[3,4] However, in 2020, only 13% of the world's population, living in 40 countries, most of them high income, had taxes higher than 75% of the final price of tobacco.[5] Raising taxes is, therefore, an opportunity to strengthen tobacco control.

Worldwide, the adoption of a fiscal policy on tobacco products has been difficult due to the interference of the tobacco industry (TI)[6–9] and the complex policy process, with a variety of stakeholders supporting or inhibiting the process, according to their economic interests, among others.[10–12] According to Bourdieu, each society is made up of autonomous "social fields," which are social spaces for action, influence, and conflict among members.[13,14] In tobacco taxation efforts, actors from different sectors interact during the formulation, adoption, and implementation of public policies.

In Mexico, the excise tax on tobacco is a uniform *ad valorem* tax that accounts for about 55% of the final price of cigarettes.

The health and economic benefits of increasing the tax by one peso per cigarette would amount to 12.6 million life years

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gained and 44.6 billion pesos in avoided treatment costs for the current cohort of smokers.[15] Nevertheless, the implementation of tobacco tax increases has been challenging, with periods of progress and setbacks. In the mid-1980s, the excise tax was increased significantly to finance reconstruction after an earthquake, particularly in Mexico City. Significant progress was also made following the country's ratification of the WHO-FCTC. Importantly, a specific component was added in 2010 to create a mixed tax structure, which was significantly increased in 2011. However, during the 2012–2018 administration, the tax increase was no longer part of the public policy agenda and remained frozen. Finally, at the end of 2019, the current government approved the update of the tax indexation to take into account the cumulative inflation since 2011, introducing an automatic annual indexation mechanism. However, since it was indexed to inflation, it was not really a tax increase. A significant tax increase is unlikely.

Based on the Mexican experience, this qualitative study aims to identify the barriers and facilitators of tobacco tax policy[16,17]

Theoretical Framework

This study is based on the Governance Analytical Framework (GAF), which analyzes the formal and informal collective processes of interaction among actors involved in decision making and the elaboration of public policies.[18] According to Hufty, public policy outcomes depend on cooperation and conflict during formal and informal interactions. The GAF is based on five analytical categories. These processes begin with an existing "**problem**" and "**actors**," through collective action, seek to change the "**norms**" of certain behaviors (eg, nonsmoking) and the principles that guide the development of public policy. The "**nodal points**" are the physical or virtual spaces of convergence of these governance processes. Finally, the collective "**processes**" are the sequences of states through which a system passes, identifying, for example, the factors conducive to change.

Study Design

This is a cross-sectional, qualitative study presented in accordance with the guidelines for Consolidated Criteria for Reporting Qualitative Studies.[19] This study was conducted by two experienced female social scientists (an anthropologist, LRGA, and a sociologist, FLT). Data were generated through face-to-face, semi-structured interviews with key actors involved in the implementation of fiscal policy at the federal level. Our sampling was purposive. We selected six sectors: academia, the executive, the legislative branch, public interest nongovernmental organizations (PINGOs), journalists, and United Nations multilateral agencies (Table 1). To follow to the WHO-FCTC guidelines,[20] the private sector/TI was not included. In Mexico, this discussion has historically been driven primarily by academia and later by the PINGOs.

A mapping developed and updated for more than a decade by two civil society organizations ("Salud Justa" and "Polithink") was used to identify the key stakeholders involved in fiscal policy on tobacco tax from different sectors (eg, academia, executive branch, legislative branch, UN multilateral agencies, PINGOs, media). Due to their in-depth knowledge of the actors involved in the issue, we were able to select the informants based on their attitude towards the tax increase (pro and anti-viewpoints), their academic background, and their field of action (eg, health, economics). Key stakeholders were invited through a formal letter explaining the general objective of the project.

Several cabinet shuffles and COVID-19 lockdowns impeded us from interviewing informants from the Ministry of Finance, the Ministry of Economy, and Congress, some of whom were from opposing viewpoints (Table 1). Thus, government officials were exclusively from the Ministry of Health and did not include the Ministry of Economy or Finance.

Fieldwork

The final sample included 17 informants; all of them were highly qualified. In-depth interviews were piloted and conducted between May 2019 and March 2020 in the workplace and in coffee shops. Interviews were conducted in Spanish by LRGA. Illustrative interview quotes were translated into English for this article. Informants were not known to the interviewer prior to the study.

The interviews were face to face and lasted 45–60 minutes. The main topics covered were: tobacco experiences, tobacco fiscal policy history, barriers to effective engagement, and recommendations to foster tobacco control policies.

Data Analysis

Interviews were audio-recorded, and transcribed verbatim. To interpret the interviews, the team followed a systematic procedure[21]: (1) categories and dimensions were identified using the initial in-depth interview guide and the research question; (2) emerging categories were incorporated into the coding tree after the team discussion; (3) encoding was performed using NVivo® software, and the results were interpreted by the sociologist through inference and contextualization of the testimonies.

Table 1. Specifications of the Sectors Considered for the Interviews

Sectors	Number of persons interviewed per sector	Specifications
Health academia	7	Different public health institutions with a mission directed to health research and care.
Executive branch of government	3	Only health institutions. It was not possible to include the Ministry of Economy and the Ministry of Finance.
UN Multilateral Agencies	1	Specialized in health issues.
Nongovernmental organizations (NGO)	2	Public Interest NGOs (PINGOs) without conflict of interest regarding tobacco companies.
Media	4	Press, television, and digital media.

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Results

Description of the Informants

We interviewed 17 informants; 10 were trained in the field of medical sciences, 3 in social sciences, and 4 in communication (Table 2). On average, the participants had worked for 17.3 years in the field of smoking prevention, treatment, and public policy on tobacco control. Academics were the informants with a greater number of years working in tobacco control. Nine informants had participated in working groups to increase the tax on tobacco products.

Facilitators and Barriers to Public Tobacco Control Policies and Tobacco Taxation

We observed great homogeneity of discourses across sectors. Table 3, based on Hufty's GAF, summarizes the main barriers and facilitators to the processes of tobacco control policy development and fiscal policy strengthening.

Identifying the Problem

All informants recognized that tobacco use causes premature death and preventable disease, and thus, requires public health responses such as those established by MPOWER. However, they pointed out that the WHO-FCTC and MPOWER guidelines have not been sufficiently disseminated to the general population, or to health institutions—a possible explanation for the lack of support and commitment to tobacco control:

> (…)] health institutions feel that they do not have much to do with them [tobacco taxes] (Academia).

Although all informants perceived tobacco taxation as an effective public health measure, they felt the lack of control over single cigarette sales threatened to undermine the effectiveness of the tax.

> One of the main objectives of the tax increase and the price increase is to prevent young people from buying cigarettes. But if you have a law that exists, that prohibits the sale of single cigarettes, and that is supposed to prohibit sales to minors, and you do not have the enforcement of this law, then forget it, it [the tax increase] is useless. So, they still spend 4 pesos, 3 pesos, depending on the cigarette, to buy a single stick, even if they cannot buy the pack (Academia).

In addition, some actors commented that the tax is unpopular with the public and therefore with governments and legislators.

> We are stuck because of the government, because of the legislators, the tax is an issue that they do not like, it is a sensitive issue, everything that is related to taxes is not very popular (Heath executive branch).

Actors

Informants shared a common understanding of the roles and resources to be mobilized by different sectors and their specific challenges.

There was a consensus that **academics** are involved in the production of knowledge and evidence to support tobacco control and fiscal policy. However, their role is limited. Journalists felt that this was due to a lack of innovation in the way scientists present data.

Table 2. Informants' Principal Sociodemographic Characteristics

Sector	Sex	Initial training	Years of experience in the area
Academia	Woman	Biology	22
Academia	Man	Medicine	19
Academia	Man	Medicine	38
Academia	Woman	Medicine	37
Academia	Man	Medicine	20
Academia	Man	Medicine	33
Executive branch Ministry of Health, The National Commission against Addictions	Man	Psychology	20
Executive branch. Ministry of Health, the Federal Commission for the Protection against Sanitary Risks.	Woman	Actuary	4
Executive branch. Ministry of Health, the Undersecretary of Prevention and Health Promotion.	Man	Medicine	2
Academia	Man	Medicine	15-20
UN Multilateral Agencies	Man	Medicine	20
PINGOs	Man	Political science	10
PINGOs	Woman	Economist	7
Media	Woman	Journalism and communication	17
Media	Woman	Communication	17
Media	Woman	Communication	17
Media	Woman	Communication	17

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Table 3. Barriers and Facilitators to Increasing Tobacco Taxes

Hufty's dimension	Barriers	Facilitators
Problem	Lack of understanding that the epidemic of tobacco is an obstacle for social development because it accentuates social inequality in Mexico.	Tobacco tax perceived as an effective public health measure.
	Limited vision of actions needed for tobacco control among all sectors because of lack of dissemination of the WHO-FCTC/ MPOWER.	
	Perception that tobacco tax effectivity may be reduced because of incomplete implementation of the WHO-FCTC and low level of taxes.	
	Taxation is perceived as an unpopular policy by the population and therefore by governments and legislators.	
Actors	Lack of creativity and innovation in the way that academics present their findings.	Clarity on the different actors' roles and resources to be mobilized by the different sectors.
	Lack of political will of executive officers and legislators.	Presence of "champion" boosted advances in tobacco control
	Insensitivity and unawareness of legislators about tobacco use as a public health problem.	
	Triennial turnover of deputies.	
	Close relation of the legislators with industrial and economic sectors: conflict of interest and corruption.	
	Low mobilization of PINGO at the time of the interview. However, some informants recognized that in the past they had greater capacity of connecting the sectors among them.	
	Media's funding system (through advertising and subscriptions) partly conditions the content and may lead some of the journalists to "self-censorship."	
Process	Tobacco use, lost relevance compared to other health problems such as obesity and diabetes.	WHO-FCTC and MPOWER established the steps to be followed for the control of tobacco (including tax policy).
	Current lack of intersectoral coordination.	High level scientific evidence on tobacco in Mexico.
	Constant tobacco industry interference to stop tobacco control efforts, enabled by corruption and conflicts of interest (e.g., financial incentives).	Important past intersectoral collaboration.
	Taxes (including tobacco taxes) are not earmarked in Mexico.	
Norms	Opposition between two different models (health interests vs. economic interests).	Consensus around the definition of public policies based on scientific evidence.
	Scientific evidence is not always recognized when formulating public policy.	
	Different visions on the type of evidence to be produced to support the policy.	

The **executives** noted that their mission is to mobilize decision makers in favor of tobacco control and to advance the political and technical agenda. However, they pointed out that their immediate predecessors did not have the same "political will" and had a corruption problem with strong ties to the private sector and obstructing all the initiatives during 2012–2018.

Informants from all sectors noted that working with **legislators** is challenging because they are not sensitized to tobacco use as a public health problem. The 3-year mandate of members of the Chamber of Deputies members means that they have little time to raise awareness of the importance of tobacco control policies. Our informants summarized this situation as "lack of political will." Academics, journalists, and executive officials believed that the lack of commitment of legislators, and their ties to the IT sectors led to conflicts of interest and corruption. This explained the stagnation of tobacco fiscal policy.

The role of **PINGOs**, according to all informants, is to denounce and put pressure on the authorities and legislators to act in accordance with the necessary measures for tobacco control and to bring together decision makers and researchers:

> […] Denounce, denounce. There are several points. One, talk to legislators and tell them […], that it is necessary and that it has a very positive impact on society and that they will not lose [among public opinion] (…). Civil society is in touch with them (Academia).

All informants expected PINGO members to promote social mobilization and raise public awareness about tobacco control. Academic participants noted that the limited impact of PINGOs was due to their small number of members.

Journalists assumed that their role was to disseminate information produced by other sectors but admitted that they

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did not do so because of the lack of novelty of tobacco issue. Although not explicitly stated, it seems that the funding system of television and print media (through advertising and subscriptions) partly determines their content and may lead some of the journalists to "self-censorship."

> [...] maybe I'm cautious, because as a journalist, sometimes you can call it self-censorship, that you know what you're going to say or not say depending on whether you know they're going to accept it or not. You know that if you propose something and it's not going to be accepted, you don't even propose it. You look for the approach or the interview that you know will be attractive [...] the point is that you don't influence their advertisers, if you don't influence the advertisers, yes, you're careful, otherwise they won't accept what you're proposing (Media).

Finally, all informants agreed that TI hinders the development and promotion of the measures contained in the WHO-FCTC.

Processes

The informants acknowledged that the WHO-FCTC positioned tobacco use as a public health problem, and that it had enabled a comprehensive response with steps to be taken and main lines of action:

> And that change [WHO-FCTC], I think, culminated in the arrival of MPOWER. From my point of view, MPOWER was fundamental in creating a mental pattern for all of us who were responsible for tobacco control. Because it showed us the path, it showed us what are the most important points in tobacco control (Academia).

According to the informants, in addition to the production of scientific evidence, the progress made in public policy on tobacco control was made possible by intersectoral cooperation, the pressure from civil society through strong lobbying, the political will of key actors in the Ministry of Health and the presence of a political champion (2008–2011) who pushed for tobacco control legislation and increased tobacco taxes.

However, this process has been irregular with moments of progress, and others of halt and retreat, due to close ties with TI and conflicts of interest within the government cabinet during 2011–2018. Our informants most often mentioned the use of financial incentives, sometimes in the form of inviting journalists to the presentation of new products abroad (eg, electronic cigarettes), or as gifts to executive officials and legislators, as was done by the soft drink industry.

Informants mentioned other factors, including competing political agendas for tobacco tax increases with emerging health issues (eg, overweight and obesity/diabetes), lack of legislators' will, and their links to the private sector.

The lack of cross-intersectoral coordination was perceived by all informants as a barrier to advancing fiscal policy.

> More fluidity is needed in the interactions and relationships between three specific actors: researchers, civil society, and administrators, in this case the Ministry of Health (UN Multilateral Agencies).
>
> Each institution has been working in isolation, none has taken the lead (Media).

According to the informants, the TI used various strategies to obstruct tobacco legislation proposals: denial of scientific evidence, lobbying, misleading marketing, and manipulation of public opinion by emphasizing their right to free choice.

> The industries have misrepresented the information, reached out to the public to get out of compliance [with the FCTC], and that seems to me to be one of the worst aspects of national policy on tobacco (Heath executive branch).
>
> From my point of view, the tobacco industry has played a very important role in making Mexico's fiscal policy not what it should be.... what the industry does in the chambers... is much greater than we can do as a society, as civil society. Because there is a lot of money involved (Academia).

Against all tobacco tax increases, the private sector has argued that this would lead to job losses and illicit trade.

> [...] I'm not talking (…) about the previous government, where it was practically a hub for all kinds of interference. There was interference from the industry not only in the design, so that the legislators would not increase taxes, but also in the implementation of the tax itself. The Federal Commission for Protection against Health Risks worked very closely with the tobacco industry for many years. They issued a bulletin every 31st May saying that illicit trade had increased in Mexico […] illicit trade is the tobacco industry's favorite talking point. It is the main argument they used against the fiscal policy of governments and countries (PINGO).

Finally, informants agreed that the main limitation of the tobacco tax is that the funds collected do not finance tobacco prevention and medical care:

> The other important point about taxes is that in Mexico, they are not earmarked, a tax cannot be used specifically to control smoking and solve health problems (...). So, the increase in taxes is considerable and could be very useful to reduce consumption, and this money is useful to deal with health problems, mainly the consequences of smoking (Academia).

Norms

We have identified two nodal discussions that contribute to defining tobacco fiscal policy. The first is ideological with two opposing models. In the first model, population health overrides economic interests and thus, tobacco tax increases are favored as a public health measure.

> There should be [an increase in taxes], because it is beneficial to the country from the point of view of health and the protection of the population (Health executive branch).

In the second model, economic interests are the most important since they presumably bring employment and well-being. Any government action that threatens the economic benefits of the tobacco private sector (such as raising tobacco taxes) is categorically opposed.

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The pendulum swings between moments of progress and regression during the implementation process of the WHO-FCTC/MPOWER are explained by "struggles" between two opposing **worldviews** and norms regarding tobacco control.

The second nodal discussion concerns the value of scientific evidence for different sectors. There is a consensus among our informants that public policies should be based on **scientific evidence**.

> Evidence is never superfluous, scientific evidence always contributes with something, but it seems to me that at this point, what you are saying about the tax issue […] what is available should be enough to move it forward [...] the evidence is of course enormous, [...] what is needed to move things forward? Does it help to influence the political will? Yes, of course (Health executive branch).

However, scientific evidence faces several challenges. Although there is solid scientific data produced by renowned researchers in Mexico, PINGO members felt that this evidence was not always recognized, especially during the last administration.

> [...] before this government there was a kind of disdain or contempt from certain groups within the academic community for certain subjects. The National Institute of Public Health, which plays an important role in the formulation of fiscal policy and economic research on tobacco, has been excluded for the last six years (PINGO).

The type of evidence that should be produced to support the policy is also a subject of debate. The journalists and PINGO members argued that evidence should be generated with a **comprehensive perspective**, rather than focusing solely on economic and epidemiological population studies. There are many aspects to the tax issue, including context and how society perceives the problem:

> [...] there is data, but studies would only tell us what we already know: that adolescents smoke more, that second-hand smoke affects the most vulnerable because of this and that. Studies with new data that would help us to create a little bit of awareness, because the National Health and Nutrition Survey shows a little bit more prevalence, but I don't know, more specific data. Maybe smaller studies, with smaller populations, that would tell us that this happened in the school of such and such a community, to be able to make specific cases that could help us position these issues (Media).

According to the journalists, the current evidence is "cold" and purely statistical. They considered it insufficient to raise awareness and recommended generating evidence that reflects the everyday experience of smoking (addiction, health risks, heath care costs).

Discussion

The process of tobacco control policy implementation in Mexico, including tobacco taxation, has experienced pendulum-like swings between moments of progress and moments of regression.[3,22] The main facilitators of tobacco control were intersectoral cooperation, also previously documented in the Philippines and Ukraine[9]; robust scientific evidence on the social and economic impact of the tobacco pandemic; and the presence of "champions" with political commitment and leadership, also described in Kenya.[23] The main barriers identified were TI exploitation of executive and legislative corruption, also reported in other countries[24]; various competing public health issues on the political agenda; incomplete implementation of the WHO-FCTC and MPOWER package; lack of "political will"; and significant conflicts of interest and TI interference, also reported in Karnataka, India,[6] and globally.[24,25]

We have highlighted two issues for an effective implementation of tobacco control policy, that can be extended to alcohol and high-calorie dense foods, which are also major causes of noncommunicable diseases (NCDs)[26] and commercial determinants of health.[27,28]

The first point of discussion focuses on the relevance of scientific evidence for the acceptance and adoption of a public policy by executive and legislative decision makers. Although the production of data and evidence is essential from a public health perspective to support and inform "legitimate" public policies,[29] this principle does not always seem to be shared by other sectors. The reasons for this may be many and varied and may be related to the difficulty of presenting scientific data, which is always a challenge to disseminate to nonexperts, or because actors from other sectors may have different interests and be driven by different forces. In this sense, Mexico is an interesting case. Despite the production of reliable measurements of the illicit tobacco market[30] in response to the TI's exaggeration of the problem; detailed projections of the benefits of tobacco tax increases, including premature deaths averted[31]; and important efforts to disseminate these results,[30,32] all legislative initiatives were rejected between 2012 and 2018. Thus, the generation of epidemiological data does not appear to be sufficient to persuade legislators to act.[33] Through testimonies, data on the life experiences and adversities of smokers can empower and sensitize decision makers and the public to the importance of strengthening tobacco control strategies.

The second point of discussion relates to industry interference to protect its profits. A large body of literature has identified the many forms of this interference worldwide, particularly from the TI.[24,26,34–36] Based on a systematic review, Savell et al. identified six types of corporate political activity[35]: dissemination of favorable information; constituency building based on alliance with other firms, media, and professional groups; policy substitution promoting/developing alternative regulation (ie, self-regulation alternative regulatory policy); legal tactics (eg, pre-emption, litigation, or threat of legal action); constituency fragmentation and destabilization; discrediting potential opponents; and financial incentives (ie, gifts, entertainment, etc.). Our informants most often mentioned the dissemination of favorable information for the TI and the use of financial incentives, or as gifts to executive officials and legislators, as was done by the soft drink industry.[37,38] However, we were unable to obtain details on the *modus operandi* of these practices. This situation created a conflict of interest among stakeholders and was a bottleneck for the tobacco tax increase during the previous administration.

Our findings are also consistent with the Global Tobacco Industry Interference Index for Mexico,[25,39] which indicates a high level of government involvement in unnecessary interactions with the TI and conflicts of interests, that

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increased in 2021, due to the industry participation and interference during the parliamentary process to approve the reform of the General Tobacco Control Law.[40] Mexico was also ranked as having a high level of corporate penetration into the political, legal and extra-legal spheres.[41]

Given the asymmetric power relations with the big tobacco, food, and alcohol industries, there has been international debate about what solutions countries should adopt to curb this interference.[24,42,43] One response is to develop legal frameworks to control these interferences[25,41] and to adopt an ethical code of conduct aimed at prohibiting unnecessary interactions with the TIs, and promoting transparency of necessary interactions.[24] In the case of tobacco control, Gilmore and collaborators emphasize that Article 5.3 of the WHO-FCTC[44] proposes a number of effective measures that are useful in controlling industry interference.[24] Efforts have been developed but need to be intensified, to implement and evaluate measures to control corporate interference in public policy and its influence on our societies.

Our understanding is likely to be incomplete due to the lack of interviews with legislators and officials from the Ministries of Economy and Finance which traditionally prioritize economic interests. Future research should be conducted with these two sectors. However, due to the high profile and decades-long involvement of our informants in tobacco control issues, the information generated is relevant.

At least for the profiles interviewed, we reached information saturation, defined as the lack of new information for the analysis categories in the last interview. It should also be noted that the transferability of these findings may be reduced in contexts where the ability of governments to curb industry influence and corruption is higher.

However, other countries in the Latin American region are likely to face similar difficulties in combating industry interference.[25,39]

To our knowledge, this is the first study in Latin America and the Caribbean that systematizes the barriers and facilitators to tobacco control policy development process.

Conclusions

Robust evidence is necessary but not sufficient to drive the implementation of the MPOWER (WHO-FCTC) measures. To achieve tobacco tax increases and public policies that protect people from unhealthy products in general, the implementation of policies or legal frameworks against industry interference in the development of public policies is imperative.

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Declaration of Interests

None declared.

Author Contributions

Florence L. Théodore (Conceptualization [Lead], Formal analysis [Lead], Methodology [Lead], Validation [Lead], Writing—original draft [Lead]), Livia Roxana González-Ángeles (Data curation [Lead], Formal analysis [Equal], Investigation [Supporting], Methodology [Supporting], Writing—original draft [Supporting]), Luz Myriam Reynales-Shigematsu (Conceptualization [Equal], Funding acquisition [Lead], Investigation [Equal], Project administration [Lead], Resources [Lead], Writing—review & editing [Supporting]), Belén Saenz-de-Miera (Conceptualization [Supporting], Validation [Equal], Writing—review & editing [Equal]), Erick Antonio-Ochoa (Validation [Supporting], Writing—review & editing [Supporting]), and Blanca Llorente (Writing—review & editing [Supporting])

Data Availability

The data underlying this article cannot be shared publicly due to the privacy of individuals who participated in the study. The data will be made available upon reasonable request to the corresponding author.

References

1. Napier D, Ancarno C, Butler B, *et al*. Culture and health. *Lancet*. 2014;384(9954):1607–1639.
2. Organización Mundial de la Salud. *mpower: un plan de medidas para hacer retroceder la epidemia de tabaquismo*. Ginebra, Suiza: OMS; 2008.
3. International Agency for Research on Cancer. *Effectiveness of Tax and Price Policies in Tobacco Control: IARC Handbook of Cancer Prevention*. Vol. 14. Lyon, Francia: International Agency for Research on Cancer; 2011.
4. World Health Organization. *Guidelines for Implementation of Article 6 of the WHO WHO Framework Convention on Tobacco Control (Price and tax measures to reduce the demand for tobacco), FCTC/COP6(5)(2014)*. Geneva, Switzerland: World Health Organization; 2014.
5. World Health Organization. *WHO Report on the Global Tobacco Epidemic 2021: Addressing New and Emerging Products*. Geneva, Switzerland: World Health Organization; 2021.
6. Rao Seshadri S, Kaulgud R, Jha P. "You cannot touch taxes easily": making the case for tobacco taxation in India. *Health Policy Plan*. 2021;36(3):322–331.
7. Smith KE, Savell E, Gilmore AB. What is known about tobacco industry efforts to influence tobacco tax? A systematic review of empirical studies. *Tob Control*. 2013;22(2):e1–e1.
8. Ulucanlar S, Fooks GJ, Gilmore AB. The policy dystopia model: an interpretive analysis of tobacco industry political activity. *PLoS Med*. 2016;13(9):e1002125.
9. Hoe C, Weiger C, Cohen JE. The battle to increase tobacco taxes: lessons from Philippines and Ukraine. *Soc Sci Med*. 2021;279:114001.
10. Brugha R, Varvasovszky Z. Stakeholder analysis: a review. *Health Policy Plan*. 2000;15(3):239–246.
11. Egbe C, Bialous S, Glantz S. Role of stakeholders in Nigeria's tobacco control journey after the FCTC: lessons for tobacco control advocacy in low-income and middle-income countries. *Tob Control*. 2019;28(4):386–393.
12. Schmeer K. *Guidelines for Conducting a Stakeholder Analysis*. Washington, DC: PHR, Abt Associates; 1999.
13. Bourdieu P. *La distinction: critique sociale du jugement [A Social Critique of the Judgement of Taste]*. Paris, France: Les Editions de Minuit; 1979.

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14. Collyer FM, Willis KF, Lewis S. Gatekeepers in the healthcare sector: knowledge and Bourdieu's concept of field. *Soc Sci Med*. 2017;186:96–103.
15. Saenz-de-Miera B, Wu DC, Essue BM, *et al*. The distributional effects of tobacco tax increases across regions in Mexico. *Int J Equity Health*. 2022;21(21):8.
16. Sáenz de Miera Juárez B. Impuestos al tabaco en México: análisis del periodo 2006-2012. In: Reynales Shigematsu LMTJ, Lazcano Ponce E, Hernández Ávila M, eds. *Salud pública y tabaquismo*. Vol. I. Cuernavaca, México: Instituto Nacional de Salud Pública; 2013:144–155.
17. Waters H, Sáenz de Miera B, Ross H, Reynales-Shigematsu L. *Tobacco Economics and Tobacco Taxation in Mexico*. Paris, France: International Union Against Tuberculosis and Lung Disease; 2010.
18. Hufty M. Investigating policy processes: the Governance Analytical Framework (GAF). In Wiesmann HHe, ed. *Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South*. Vol. 6. Bern, Switzerland: University of Bern; 2011:403–424.
19. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care*. 2007;19(6):349–357.
20. World Health Organization. *Technical Resource for Country Implementation of WHO Framework Convention on Tobacco Control Article 5.3 on the Protection of Public Health Policies With Respect to Tobacco Control From Commercial and Other Vested Interests of the Tobacco Industry*. Geneva: WHO; 2012.
21. Gutiérrez J, García-Saisó S, Espinosa-de la Peña R, Balandrán D. Desigualdad en indicadores de enfermedades crónicas y su atención en adultos en México: análisis de tres encuestas de salud. *Salud Publica Mex*. 2016;58(6):666–675.
22. US National Cancer Institute and World Health Organization. *The Economics of Tobacco and Tobacco Control*. National Cancer Institute Tobacco Control Monograph 21. NIH Publication No. 16-CA-8029A. Bethesda, MD: US Department of Health and Human Services, National Institutes of Health, National Cancer Institute and Geneva, CH: WHO; 2016.
23. Mohamed SF, Juma P, Asiki G, Kyobutungi C. Facilitators and barriers in the formulation and implementation of tobacco control policies in Kenya: a qualitative study. *BMC Public Health*. 2018;18(1):1–14.
24. Gilmore AB, Fooks G, Drope J, Bialous SA, Jackson RR. Exposing and addressing tobacco industry conduct in low-income and middle-income countries. *Lancet*. 2015;385(9972):1029–1043.
25. Assunta M. *Global Tobacco Industry Interference Index 2019. Global Center for Good Governance in Tobacco Control (GGTC)*. Bangkok, Thailand: Global Center for Good Governance in Tobacco Control (GGTC); 2020.
26. Moodie R, Stuckler D, Monteiro C, *et al*. Profits and pandemics: prevention of harmful effects of tobacco, alcohol, and ultra-processed food and drink industries. *Lancet*. 2013;381(9867):670–679.
27. Kickbusch I, Allen L, Franz C. The commercial determinants of health. *Lancet Glob Health*. 2016;4(12):e895–e896.
28. Mialon M. An overview of the commercial determinants of health. *Glob Health*. 2020;16(1):1–7.
29. Brownson RC, Fielding JE, Maylahn CM. Evidence-based public health: a fundamental concept for public health practice. *Annu Rev Public Health*. 2009;30:175–201.
30. Sáenz de Miera Juárez B, Reynales-Shigematsu LM, Stoklosa M, Welding K, Drope J. Measuring the illicit cigarette market in Mexico: a cross validation of two methodologies. *Tob Control*. 2021;30(2):125–131.
31. Pichon-Riviere A, Alcaraz A, Palacios A, *et al*. The health and economic burden of smoking in 12 Latin American countries and the potential effect of increasing tobacco taxes: an economic modelling study. *Lancet Glob Health*. 2020;8(10):e1282–e1294.
32. Sáenz de Miera Juárez B, Reynales Shigematsu LM. *El Consumo de Cigarros Ilícitos En México. Una Estimación Robusta y Transparente Para Apoyar La Toma de Decisiones*. Atlanta: American Cancer Society Atlanta; 2019.
33. Humphreys K, Piot P. Scientific evidence alone is not sufficient basis for health policy. *BMJ*. 2012;344:e1316.
34. Amul GGH, Tan GPP, Van Der Eijk Y. A systematic review of tobacco industry tactics in Southeast Asia: lessons for other low-and Middle Income regions. *Int J Health Policy Manag*. 2021;10(6):324–337.
35. Savell E, Gilmore AB, Fooks G. How does the tobacco industry attempt to influence marketing regulations? A systematic review. *PLoS One*. 2014;9(2):e87389.
36. Friel S, Collin J, Daube M, *et al*. Commercial determinants of health: future directions. *Lancet*. 2023;401(10383):1229–1240.
37. Barquera S, Rivera JA. Obesity in Mexico: rapid epidemiological transition and food industry interference in health policies. *Lancet Diabetes Endocrinol*. 2020;8(9):746–747.
38. Gómez EJ. Coca-Cola's political and policy influence in Mexico: understanding the role of institutions, interests and divided society. *Health Policy Plan*. 2019;34(7):520–528.
39. World Health Organization. *2021 Global Progress Report on Implementation of the WHO Framework Convention on Tobacco Control*. Geneva: WHO; 2021.
40. Ochoa EA. Mexico 2021 tobacco industry interference INDEX. *Tob Prev Cessat*. 2021;7(Supplement):22–22.
41. Madureira Lima J, Galea S. The corporate permeation index–a tool to study the macrosocial determinants of non-communicable disease. *SSM Popul*. 2019;7:100361.
42. Lacy-Nichols J, Marten R, Crosbie E, Moodie R. The public health playbook: ideas for challenging the corporate playbook. *Lancet Glob Health*. 2022;10(7):e1067–e1072.
43. Tangcharoensathien V, Chandrasiri O, Kunpeuk W, Markchang K, Pangkariya N. Addressing NCDs: challenges from industry market promotion and interferences. *Int J Health Policy Manag*. 2019;8(5):256–260.
44. World Health Organization. *WHO Framework Convention on Tobacco Control: Guidelines for Implementation of Article 5. 3, Articles 8 to 14*. Geneva, Switzerland: World Health Organization; 2013.

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