DOSSIER | Page 1 of 24

Restricting the sale of tobacco products only

in tobacconists: a necessary measure to strengthen the National Tobacco Control Policy

Lucas Manoel da Silva Cabral¹ (Orcid: 0000-0001-6144-8050) (admlucascabral@gmail.com)

Maria José Domingues da Silva Giongo² (Orcid: 0000-0001-5566-1488) (mgiongo@inca.gov.br)

Fernando Nagib Jardim¹ (Orcid: 0000-0002-7366-4452) (fnagib@terra.com.br)

Aline de Mesquita Carvalho² (Orcid: 0000-0002-2066-3755) (alinem@inca.gov.br)

Abstract: Objective: To investigate and analyze current legislation, existing experiences and scenarios regarding the restriction of the sale of tobacco products only in tobacconists, in order to prepare recommendations for the public authorities, aiming to strengthen the National Tobacco Control Policy. Method: Scope review conducted according to the Joanna Briggs Institute methodology, based on the PRISMA Checklist and Explanation framework. The databases used were the Virtual Health Library (BVS), Epistemonikos, Latin American and Caribbean Health Sciences Literature (LILACS), Medical Literature Analysis and Retrieval System (MEDLINE) via Pubmed, SCIELO electronic library, SCOPUS, Web of Science, Digital Library of Theses and Dissertations (BDTD) and Johns Hopkins. Data collected in March 2021, considering studies published from January 2005 to December 2020. Articles and academic research developed in the Brazilian scenario and published between January 1994 and December 2020 were included. Results: Low-income neighborhoods generally have a higher density of tobacco outlets and have higher rates of tobacco use, leading to health inequities. Studies indicate that children are more likely to smoke when they live or go to school in neighborhoods with a high density of tobacco retailers. Conclusion: This study shows that it is necessary to set up the sale of tobacco products exclusively in tobacconists in Brazil, but such establishments would be subject to a new legal order to be instituted at the national level.

> Keywords: Health promotion. Tobacco. Smoking. Sales restrictions. Tobacco control. Tobacco shop.

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¹ Instituto de Medicina Social, Universidade do Estado do Rio de Janeiro. Rio de Janeiro-RJ, Brazil.

² Instituto Nacional de Câncer, Rio de Janeiro-RJ, Brazil,

Introduction

Preventing the initiation of smoking and protecting the health of children, adolescents and young people is an unavoidable ethical commitment that needs to be assumed by society as a whole. Brazil is a signatory to the Framework Convention on Tobacco Control, which establishes measures to contain the smoking pandemic that kills more than 8 million people a year, 1.2 million of which are the result of non-smokers exposed to secondhand smoke. There are millions of smokers living in low- and middle-income countries who are most affected by tobacco-related illnesses and deaths (WHO, 2021).

The National Health Survey (IBGE, 2019) reveals that there are still 20.4 million people in Brazil who use tobacco. The annual costs of damage caused by cigarettes in the health system and in the Brazilian economy are R\$125,148 billion (PALACIOS et al., 2021). Additionally, the National School Health Survey (PeNSE) 2019 records that 11.1% of students smoked cigarettes for the first time before the age of 14. As for how to obtain tobacco products, in that survey, students aged 13 to 17 who had already tried cigarettes were asked how they acquired them, and the result indicated that 37.5% purchase them in stores, bars, taverns, bakeries or newsstands (PeNSE, 2019). Such facts attest the importance of restricting selling points as one of the measures to prevent smoking.

Several factors contribute to the initiation of smoking, including the diversity of selling points that facilitate access to tobacco products, selling points close to teaching units, retail sales, illegal sales to minors, of the illegal tobacco market, absence of standardized packaging, wide variety of nicotine delivery products, behavior models (influencers, famous personalities, parents or guardians, relatives and professionals who work with children, adolescents and young people) and low product prices, since Brazil has the fifth lowest price in the Americas region for a pack of 20 cigarettes of the most sold brand in the country (SZKLO, 2020), among others.

It should also be noted that social networks have reached great popularity among adolescents and young people, and the tobacco industry, aware of this fact, has created various strategies and tactics to promote and sell its products, especially electronic devices for smoking, whose commercialization, import and advertising are prohibited in Brazil by the Resolution of the Collegiate Board No. 46/2009 (ANVISA, 2009), of the National Health Surveillance Agency. Experimentation is the first step towards

a future adherence to the regular consumption of tobacco products, and in Brazil, tobacco is the second most consumed drug by young people (SZKLO, 2020).

With the aim of strengthening tobacco control in the country, this study was developed, which object is the restriction of the sale of tobacco products only in tobacconists, with the purpose of knowing and systematizing the knowledge about the possible favorable aspects or limitations relating to easy access to such products.

Methodology

The methodology adopted was the scoping study (or scoping review) conducted in accordance with the Joanna Briggs Institute (JBI) methodology, based on the structure of the PRISMA Checklist and Explanation (PETERS *et al.*, 2017). This is a qualitative study that aimed to produce knowledge about the restriction of the sale of tobacco products only in tobacconists. For that, a protocol was elaborated, whose theoretical precepts contemplate the six methodological steps established for carrying out the scoping review: elaboration of the research question; search of relevant studies; screening of studies; data extraction; separation, summarization, preparation of a report of results and dissemination of results (ARKSEY; O'MALLEY, 2005; TRICCO, 2018). The protocol was registered with the Open Science Framework (doi:10.17605/OSF.IO/EA4C9), to ensure the visibility and transparency of the review process.

In order to obtain an overview of the current state of knowledge, the study was divided into two phases. In phase 1, the mapping of publications on existing experiences and scenarios on restricting the sale of tobacco products only in tobacconists around the world was carried out; and, in phase 2, legislation on existing experiences and scenarios regarding the restriction of the sale of tobacco products only to tobacconists was mapped in 33 pre-selected countries. It is worth mentioning that this division was possible because the scope reviews allow expanding the overview regarding a given topic and the main concepts that underlie an area of knowledge, in addition to helping in the examination regarding the extension, scope and nature of the investigations, summarizing their results and identifying possible gaps to be addressed or deepened in further studies (PETERS *et al.*, 2017).

Regarding the selection of countries included in the study, three cuts were defined. The first cut established for the selection of countries was: (i) higher

prevalence of smoking in the world (n=24), corresponding to 80% of the prevalence; (ii) countries with the most advanced legislation and implementation of MPOWER (n=8); and (iii) main leaf tobacco importing countries from Brazil (n=8). After excluding country duplications, a sample of 33 countries was established: South Africa, Germany, Australia, Austria, Belgium, Brazil, Canada, China, Egypt, Slovenia, Spain, United States of America, Estonia, France, Greece, Netherlands, Hungary, Indonesia, Ireland, Israel, Italy, Japan, Latvia, Lithuania, Paraguay, Poland, United Kingdom, Slovak Republic, Russia, Singapore, Switzerland, Turkey and Uruguay. This survey was carried out between April and August 2021. In order to map legislation on existing experiences and scenarios with regard to restricting the sale of tobacco products only in tobacconists, a survey was carried out on the main related websites to tobacco control, as well as consultation directly with the competent bodies of the 33 countries via e-mails. As for the countries whose e-mails were not located, information access forms were filled out, available on the official websites of the countries.

MPOWER (HEYDARI *et al.*, 2018) is a tool created in 2007 to help countries implement the measures of the World Health Organization Framework Convention on Tobacco Control to reduce consumption and protect people with noncommunicable chronic diseases (NCDs). The measures provide guidance on the importance of monitoring tobacco use and prevention policies; about protecting people from exposure to tobacco smoke and offering help for those who want to quit smoking. In addition, awareness should be raised about the dangers of tobacco use, comprehensive bans on tobacco advertising, promotion and sponsorship should be imposed, and taxes on tobacco products should be raised to make them less affordable. Brazil became, in July 2019, the second country to fully implement all MPOWER measures to their highest level of achievement. The first country was Turkey (HEYDARI *et al.*, 2018).

The time frame of the examined studies was 2005, the year in which the Brazilian Federal Senate approved the ratification of the Framework Convention for Tobacco Control of the World Health Organization. Therefore, studies published from January (2005) to December (2020) were examined. The review of the international literature on the restriction of the sale of tobacco products only in tobacconists had the following guiding question: are there restrictions in the countries selected for the study for the sale of tobacco products to be made only in tobacconists?

The study classified as international literature foreign and Brazilian productions, based on the location of the studies, both by the areas covered by the research and by the origin of the publications. In addition, we chose to choose bibliographic bases that bring together studies from several countries. Original scientific articles of an empirical nature or literature review, government articles, available online, complete, in English, Spanish and Portuguese were included. The following exclusion criteria were defined: duplication and unavailability; publications other than original scientific research articles (editorials, opinion, debates, communications); articles that did not specifically refer to the restriction of the sale of tobacco products.

The bibliographic bases were: Virtual Health Library (VHL); Epistemonikos; Latin American and Caribbean Literature in Health Sciences (LILACS); Medical Literature Analysis and Retrieval System (MEDLINE) via Pubmed; SCIELO electronic library; SCOPUS; Web of Science; Digital Library of Theses and Dissertations (BDTD) and Johns Hopkins. The search strategy was elaborated by combining Health Sciences Descriptors (DeCS), Medical Subject Headings (MeSH) and or/synonyms (Control and Sanitary Supervision of Tobacco-Derived Products, List of Tobacco-Derived Products, Smoke Sanitary Control, Tobacco, Tobacco Industry, Tobacco Shops, Tobacco-Derived Products Commerce, Tobacco specialist), using the Boolean operators AND, OR and NOT. ENDNOTE® reference management software (on-line version) was used to eliminate duplicate references.

Data collection

Regarding the data collection process, the initial option was for the combined search between the descriptors; however, it was necessary to differentiate the way of searching in each database, considering their research tools and the scope of the investigated literature. In each base, the search form that generated more articles focused on the objectives of this review was privileged. The number of articles in each database was: BVS (774 articles), Epistemonikos (86 articles), Lilacs (442 articles), Pubmed (8,066 articles), SciELO (503 articles), Scopus (8,277 articles), Web of Science (3,008 articles), Johns Hopkins (6 articles) and BDTD (69 dissertations/theses).

Initially, 21,231 documents were selected. After exclusion due to duplication and unavailability, 9,452 remained, with the reading of titles and abstracts performed by two researchers independently, 185 articles remained. In the complete reading process, adopting inclusion and exclusion criteria, the final selection of 38 articles was reached (Figure 1). The articles were organized in Microsoft Excel for Windows® version 2019.

dentification Articles identified in the database (n= 21.162) Theses and Dissertations identified (n=69) Duplicates excluded from database (n=11.779) and from BDTD (n=0) Selection Articles (n=9.383) Articles excluded (n=9200) Theses and dissertations (n=69) Theses and dissertations excluded (n=67)Submitted to the reading of titles and abstracts Eligibility Articles (n=183) Complete articles excluded (n=146) Theses and dissertations (n=2) Theses and dissertations excluded (n=1) Eligible for full-text reading Articles (n=37) Theses and dissertations (n=1) nclusion Total of studies included in the analysis (n=38)

Figure 1. Flowchart of articles selection

Source: Adapted from Levac, Colquhoun, O'Brien's Prism Flowchart (2010).

Results

After repeated readings of the material by three researchers, each article was assigned to a category. Regarding categorization, it was carried out after exhaustive vertical reading, which sought nuclei of meaning based on similarities and particularities between the findings, to identify the themes of each category. Chart 1 describes the references of selected articles according to journal, study method and location.

Chart 1. Description of articles included in the scope review, by author/year, journal, methods, location by author

| Study authorship and year | Journal | Study type | Authors location |
|-----------------------------|---|-----------------------------|------------------|
| Hudmon <i>et al.</i> (2006) | Tobacco Control | Qualitative study | United States |
| Toomey et al. (2009) | Public Health Reports | Quantitative study | United States |
| Rose et al. (2011) | Preventing Chronic Disease | Quantitative study | United States |
| William et al. (2009) | American Journal of Public Health | Quantitative study | United States |
| DiFranza (2012) | BMJ Journals | Qualitative study | United States |
| Smith <i>et al.</i> (2012). | BMC Research Notes | Qualitative study | United States |
| Adams et al. (2013) | Journal of School Health | Quantitative study | Puerto Rico |
| Chaiton et al. (2013) | International Journal of Environmental Research and Public Health | Quantitative study | Canada |
| Johns <i>et al.</i> (2013) | Journal of Urban Health | Quantitative study | United States |
| Blaine (2014) | Missouri Medicine | Does not apply to the study | United States |
| D'Angelo et al. (2014) | BMC Public Health | Quantitative study | United States |
| Duncan et al. (2014) | Public Health Reports | Quantitative study | United States |
| Haw et al. (2014) | BMC Public Health | Quantitative study | United Kingdom |
| Rodriguez et al. (2014) | Nicotine & Tobacco Research | Quantitative study | United States |
| Spanopoulos et al. (2014) | Tobacco Control | Qualitative study | United Kingdom |
| Marashi-Pour et al. (2015) | Spatial and Spatio-temporal Epidemiology | Quantitative study | Australia |

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| Study authorship and year | Journal | Study type | Authors location |
|--|---|--------------------|---------------------------------|
| Myers et al. (2015) | ScienceDirect | Quantitative study | United States |
| Bogdanovica et al. (2015) | Addiction Research Report | Quantitative study | United Kingdom |
| Allen et al. (2015) | Health Education Research | Quantitative study | United States |
| Shortt et al. (2016) | Tobacco Control | Quantitative study | United Kingdom |
| Reginald et al. (2016) | American Association for Cancer Research | Quantitative study | United States |
| D'Angelo et al. (2016) | American Journal of Public Health | Quantitative study | United States |
| Ribisl <i>et al.</i> (2017) | Nicotine & Tobacco Research | Quantitative study | United States |
| Shadel <i>et al.</i> (2016) | Tobacco Control | Qualitative study | United States |
| Hitchman et al. (2016) | AIMS Public Health | Qualitative study | Reino Unido |
| Ferreira-Gomes <i>et al.</i> (2017) | Salud Publica Mexico | Qualitative study | United States, Brazil, Chile |
| Ackerman et al. (2017) | Nicotine & Tobacco Research | Quantitative study | United States |
| Luke <i>et al.</i> (2017) | American Journal of Public Health | Quantitative study | United States |
| Chen <i>et al.</i> (2018) | International Journal of Environmental Research and Public Health | Qualitative study | Taiwan |
| Lee et al. (2018) | JAMA Network | Quali-quantitative | United States |
| Bhutia <i>et al.</i> (2018) | Tobacco Induced Diseases | Quantitative study | India |
| Sussman et al. (2018) | Tobacco Induced Diseases | Quantitative study | United States |
| Myers, Knocke & Leeman (2019) | Preventing Chronic Disease | Qualitative study | United States |
| Mbulo <i>et al.</i> (2019) | Tobacco Control | Quantitative study | United States |
| Pearlman et al. (2019) | Preventing Chronic Disease | Qualitative study | Iceland |
| Phetphum, Chakkraphan & Noosorn. (2019) | Journal of Public Health Management & Practice | Quali-quantitative | Thailand |

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| Study authorship and year | Journal | Study type | Authors location |
|---------------------------|---|--------------------|----------------------------|
| Wheeler et al. (2020) | International Journal of Environmental Research and Public Health | Quantitative study | United States |
| Trimble et al. (2020) | Nicotine & Tobacco Research | Qualitative study | China and United States |

Source: The authors.

An overview of the selected articles is shown in Table 1. An increasing number of publications can be seen from 2011 onwards. The origin of the publications is limited to ten countries. North America (United States, Canada) had the largest representation (63.2%), followed by Europe (United Kingdom, Scotland, Iceland) - 15.8%; Asia (India, China, Taiwan) and South America (Brazil), with 10.5% and 2.6%, respectively.

Table 1. Characterization of selected articles by period and countries (according to research field)

| Publication period | n | % | |
|--|-------------------|--------|--|
| 2005 – 2010 | 3 | 7.9% | |
| 2011 – 2015 | 16 | 42.1% | |
| 2016 – 2020 | 19 | 50.0% | |
| Total | 38 | 100.0% | |
| Landin | By research field | | |
| Location | n | % | |
| North America (United States, Canada) | 24 | 63.2% | |
| Europe (United Kingdom, Scotland, Iceland) | 6 | 15.8% | |
| Asia (India, China, Taiwan) | 4 | 10.5% | |
| International (review studies) | 2 | 5.3% | |
| Oceania (Australia) | 1 | 2.6% | |
| South America (Brazil) | 1 | 2.6% | |
| Total | 38 | 100.0% | |

Source: The authors.

In Table 2, the themes of the articles classified in the categories "Density of selling points", "Consumption of derivative products and prevalence of smoking" (18), "Advertising, marketing and promotion at the selling point" (6) and "Other aspects about selling points" (14) are presented. Each article was classified in only one category. Themes emerged from the analysis, assigning one or more themes to the same publication. Therefore, the sum of the frequencies of the themes is different from the number of studies in the respective category.

Table 2. Categories and themes of selected articles, 2005 to 2020

| Publication period | n | Themes | n |
|--|----|--|----|
| Density of selling points, consumption of derivative products and prevalence of smoking | 18 | Density of selling points, consumption of products and prevalence | 7 |
| | | Density of retail and neighborhoods with unfavorable economic conditions | 15 |
| | | Density of selling points close to schools, promotion of initiation and awareness of the minimum age for selling | 14 |
| Advertising, marketing | | Advertising, marketing and promotion at selling points | 5 |
| and promotion at the selling point | 6 | Use of QR Code in cigarettes packs | 1 |
| | | Selling points and restriction of additive products | 5 |
| Other aspects on selling points | 14 | Selling points and compliance with laws and guidance to retailers | 7 |
| | | Pharmacy as selling point | 5 |
| | | Pricing, profit and selling place | 5 |

Source: The authors.

Discussion

Around the world, tobacco products are purchased at different retail locations, making tobacco control, surveillance and law enforcement difficult. In this perspective, knowing where and how this trade takes place is important for planning public policies aimed at preventing initiation, increasing smoking cessation, promoting free environments and others. Additionally, scholars claim that knowing the places where cigarettes are sold can help guide interventions to reduce the accessibility and use of this product (MBULO *et al.*, 2019).

Density of selling points, consumption of tobacco products and prevalence of smoking

Scholars indicate that the density of selling points of tobacco products in a given location is related to consumption and the prevalence of smoking. Therefore, restricting it in residential areas helps to reduce the accessibility of products, smoking among young people and the burden on public health services (LUKE, 2017; LEE, 2018). Studies indicate that adolescents who live in areas with a higher density of tobacco retailers around the home environment are more likely to smoke and more likely to be smokers. Thus, the density of tobacco outlets in residential neighborhoods is associated with greater chances of smoking among adolescents (SHORTT *et al.*, 2016).

There is an association between the proportion of residents of neighborhoods inhabited by ethnic minorities and low-income with the highest density of tobacco retail stores in locations in socioeconomic disadvantage (WHEELER *et al.*, 2020). Research conducted in Rhode Island investigated the association between neighborhood sociodemographic characteristics and tobacco retail density, finding that there were statistically significant associations between neighborhood sociodemographic characteristics. In view of this, scholars indicate that policy efforts aimed at reducing disparity in access to tobacco products should focus on reducing the density of tobacco markets in poor neighborhoods, also considering the fact that the industry develops specific products for certain races and ethnicities (REGINALD *et al.*, 2016).

Tobacco retail density in low-income areas can be measured using establishment classification data from census tracts. Through this tool, it is possible to verify the heterogeneity of exposure to tobacco risk. This approach provides a better understanding of the complexity of sociodemographic influences on tobacco retailing and creates opportunities for policy makers to more efficiently direct actions to the neediest areas (RODRIGUEZ *et al.*, 2014).

Neighborhoods with lower socioeconomic status are more likely to have greater availability of tobacco products, and most retailers are located within walking distance of the school. The results suggest the importance of policies that regulate the location of tobacco sales outlets (CHAITON *et al.*, 2013).

Indeed, low-income and Hispanic students are disproportionately exposed to tobacco stores and fast-food restaurants near their schools. This aspect can influence the initiation of smoking among young people (D'ANGELO *et al.*, 2016).

In North Carolina, United States, the percentage reduction in the number and density of tobacco retailers resulting from the prohibition of sales of such products in pharmacies, the restriction of sales near schools and the regulation of the minimum distance allowed between points was tested. Results indicate that implementing policies that restrict tobacco sales in pharmacies, near schools or near another tobacco retailer would substantially reduce the density of tobacco outlets (MYERS *et al.*, 2015).

Studies that have examined the relationship between tobacco retailers' proximity to schools and violations of retail laws indicate that young people may be at particularly high risk of tobacco-related problems due to their high exposure to tobacco retailers and sales near their educational institutions. In this way, scholars support the possibility of zoning restrictions to prohibit the operation of tobacco retailers near schools (PHETPHUM *et al.*, 2019).

In an attempt to formulate tools that can be used within the scope of public policies to restrict selling points, it was found that increasing the price of tobacco products is the most effective way to reduce overall consumption and that the distance from selling points of schools must be expanded. In addition, greater surveillance is needed in relation to current bans, particularly as advertisement density near schools has been associated with student use outcomes (MYERS *et al.*, 2019; PHETPHUM; NARONGSAK, 2019).

Research conducted in Southern California investigated whether retailers licensed to sell tobacco in four racial/ethnic communities complied with legislation prohibiting sale to minors. The legislation had changed the minimum age from 18 to 21. Differences in signage compliance were assessed before and after state law changes. The findings suggest the need for immediate disclosure and educational actions for licensed tobacco retailers about changes in age-of-sale signage and surveillance (SUSSMAN, 2018).

Aiming to see whether a policy prohibiting tobacco product retailers from operating near schools in the US could reduce existing socioeconomic and racial/ethnic disparities in tobacco retail density, the authors confirmed such disparities by finding more retailers in areas with lower income and higher proportions of African American residents. They also concluded that policies prohibiting the sale of tobacco products near schools seem to be more effective in reducing retail density in low-income and racially diverse neighborhoods than in high-income and white neighborhoods, and may contribute to reduce tobacco products (RIBISL, 2017).

The race/ethnicity issue is considered one of the aspects in the strategies and tactics implemented by the tobacco industry. The variability of cigarette prices was evaluated in a study that demonstrated that cigarette prices vary according to the brand, the type of store, the number of young people, the race and ethnicity of a neighborhood, suggesting that the tobacco industry varies their marketing strategies based on the brand and the characteristics of the neighborhood (TOOMEY *et al.*, 2009).

The association of sociodemographic characteristics of the school with the availability of tobacco outlets and fast-food restaurants near these establishments, also using business lists and data from the National Center for Education Statistics to calculate the number of tobacco stores and fast-food restaurants within 800 meters of public schools in 97 US counties was analyzes. The research showed that more than 50% of schools with a majority of Hispanic students had a fast-food restaurant and tobacconist nearby, compared to 21% of schools with a majority of white students. Thus, low-income and Hispanic students are disproportionately exposed to tobacco stores and fast-food restaurants near their schools. Easy access can influence smoking initiation among young people and contribute to inadequate food intake (D'ANGELO *et al.*, 2016).

A random-effects regression analysis was performed to assess the relationship between density of tobacco retailers and rates of illegal tobacco sales in current smoking and lifetime prevalence of smoking. The density of tobacco retailers was significantly related to the prevalence of smoking among students (ADAMS; JASON; POLORNV, 2013).

As for the density of tobacco retailing, inspection programs that stopped tobacco sales to minors tend to reduce smoking among young people (DIFRANZA, 2012). Furthermore, further investigation of the relationship between student tobacco use, density, and proximity to tobacco retailers near schools indicates that it is plausible to reduce experimental smoking rates in students by restricting access to commercial sources of tobacco in areas urban areas (WILLIAM *et al.*, 2009).

Advertising, marketing and promotion at selling points

The association between the frequency of visits to stores, the observation of displays at tobacco selling points (POS) and the development of susceptibility to smoking were the subject of a study that concluded that the recognition of a greater number of brands among those who di not smoke and were not susceptible doubled

the risk that they would become smokers. Observing displays at tobacco outlets more frequently and recognizing a greater number of tobacco brands are associated with an increased risk of becoming susceptible to smoking (BOGDANOVICA *et al.*, 2015).

To estimate the relationship between point-of-sale tobacco exposure and smoking initiation in a racially diverse urban environment, a methodology was developed and found that frequent exposure to tobacco marketing in retail environments is associated with greater odds of initiation. Reducing exposure to tobacco retail marketing can play an important role in reducing smoking among adolescents, especially those less likely to be at risk (JOHNS *et al.*, 2013).

Thus, reducing the concentration of these retailers in poorer communities can limit young people's exposure to tobacco advertising and prevent them from making misleading associations between advertising and health messages (ACKERMAN *et al.*, 2017).

Research that analyzed point-of-sale tobacco product advertisements in tobacconists in Mumbai, India, found that point-of-sale advertisement display in Mumbai was conducted by a limited number of brands and two national tobacco companies. The researchers claim that the existing tobacco control law in that country should be amended to contain the new tactics of large tobacco companies aimed at young people (BHUTIA *et al.*, 2018).

A multivariable analysis was performed based on data from the Global Adult Tobacco Survey, in 2008, and from the National Health Survey, in 2013, with the aim of describing the adult population's perception of cigarette advertising at the selling point, according to use of tobacco, including sociodemographic characteristics such as gender, age, race/color, region, location of household and education. The results indicated that people perceive cigarette advertising at selling points and that measures that completely prohibit them would be effective in protecting the most vulnerable groups from tobacco consumption (FERREIRA-GOMES *et al.*, 2017).

Exposure of tobacco product brands and forms of communication on displays were associated with susceptibility to smoking. The association between exposure and brand communication at the selling point contributes to smoking in adolescence. In view of this, scholars recommend a comprehensive ban on displaying tobacco at selling points (SPANOPOULOS *et al.*, 2014).

Study carried out with adolescents to assess how changing aspects of displaying tobacco advertisements at selling points influences the behavior of using products,

noting that hiding the panel for the sale of tobacco products significantly reduces the susceptibility of adolescents to becoming smokers, compared to leaving them exposed. This action is a strong regulatory option to reduce the impact of the retail environment on the risk of smoking among adolescents. Still in this regard, exploratory research, developed in New York, revealed that the effect of tobacco promotion at the selling point on the smoking behavior of young people and adults represents a well-documented threat to public health (ALLEN *et al.*, 2015; SHADEL *et al.*, 2016).

The assessment of the impact of Scottish legislation banning tobacco advertising at selling points on the exposure of young people to tobacco advertising, their attitudes and behavior towards smoking was the subject of an investigation that revealed that displays at selling points increase the susceptibility, experimentation and initiation to smoking. Furthermore, the results reveal that displays can also contribute to the perception that tobacco products are easily obtainable and that they are a normal product (HAW *et al.*, 2014).

In China, the content of websites linked to QR Codes on cigarette packages was examined and found that the Chinese tobacco industry uses QR Codes on cigarette packages to link marketing content. They conclude that such QR Codes can expose users and non-users to cigarette marketing on pro-tobacco interactive websites and social media pages, particularly without restrictive access or health warnings. They state that health authorities may consider regulating this area, since that it is a channel through which the tobacco industry can communicate with current and potential consumers (TRIMBLE *et al.*, 2020).

Other aspects about the selling points

An evaluation of the implementation of a policy restricting the sale of flavored tobacco products and product price discounts in Providence, United States, concluded that tobacco product use among high school students decreased after policy implementation. However, product researchers claim that tobacco industry marketing that does not explicitly reference flavors can undermine the enforcement of point-of-sale restrictions (PEARLMAN *et al.*, 2019).

In research that investigated the relationship between smoking and exposure to secondhand smoke as important environmental risk factors that negatively

influence health, a session was held to advise retailers of tobacco products to refuse to sell to minors. Results revealed that, initially, 74% of retailers were selling tobacco products to minors, 40% at stage 2 and 15% at stage 3. The study demonstrated the importance of counseling retailers to prevent tobacco sales to minors (CHEN; CHOU; ZHENGS, 2018).

Several surveys have sought to assess pharmacy professionals' perceptions of tobacco sales in this type of establishment in the United States and have explored whether a policy prohibiting the sale of tobacco in pharmacies would change adult consumer buying behavior. The results reveal that there is little professional or public support for the sale of tobacco in this type of establishment (HUDMON *et al.*, 2006). Other researchers discuss the fact that when a pharmacy sells cigarettes, it legitimizes its use and emphasizes that there is an ethical conflict in the fact that an establishment that sells drugs to treat heart, lung, diabetes and other diseases sells a product that aggravates the problem (BLAINE, 2014).

A survey conducted with pharmacists in the Western New York area sought to assess these professionals' opinions about the sale of tobacco products in pharmacies and their role in patients' cessation of smoking. Results indicate that pharmacists support initiatives that increase their role in cessation counseling that restrict the sale of tobacco products in pharmacies (SMITH, 2012).

Strategies for restricting the sale of tobacco products

The results of this review offer an overview of the density of selling points, consumption of tobacco products and prevalence of smoking, as well as publicity, advertising and promotion at the selling point, in addition to other aspects, providing a variety of scenarios, views and socioeconomic and spatial realities related to selling points of tobacco products.

The analysis of the categories and themes involved revealed a wide view of issues and challenges, already well recognized, but also models and fundamentals of policies, planning and health practices within the scope of point-of-sale restrictions. Based on the scoping review, a set of strategies listed below were proposed so as to restrict sales of tobacco products only in tobacconists in the country.

Chart 2. Summary of the main strategies for restricting the sale of tobacco products to tobacconists in Brazil

| Categories | Main strategies |
|---|---|
| Density of selling points, consumption of derivative products and prevalence of smoking | Define rules for new licensing of tobacco products selling points based on sanitary zoning and zoning between selling points |
| | Prohibit the operation of tobacco shops inside another establishment. The entrance door must open onto the street sidewalk (main passage). |
| | Establish, through specific legislation, that tobacconists must be located at a minimum distance of two thousand meters from residential areas, Basic Health Units, and any educational institution that offers: Early Childhood Education, Elementary School - first and second segments, Secondary Education, Higher Education (undergraduate and graduate), preparatory courses for entrance exams, in order to prohibit the operation of tobacco retailers close to schools. In addition, they should be located at a distance of one thousand meters from each other, thus avoiding concentration of this type of establishment in the same place. |
| | Review the municipal and licensing / zoning Codes of selling points, with the suppression of permission to grant the activity of commercialization of tobacco articles in current selling points that are not tobacconists or that are not in compliance with the new legislation to be created. In addition, set a deadline for existing tobacco shops to adapt to the new legislation. |
| | Review the municipal and licensing / zoning Codes of selling points, with the suppression of permission to grant the activity of commercialization of tobacco articles in current selling points that are not tobacconists or that are not in compliance with the new legislation to be created. In addition, set a deadline for existing tobacco shops to comply with the new legislation. |
| Advertising, marketing and promotion at selling points | Prohibit the exposure of cigarette packs in exhibitors (display) or showcases. Establish that tobacco products are stored in closed (non-transparent) furniture so as not to encourage consumption. |
| | Include the QR Code on the mandatory posters at the entrances to tobacco outlets (tobacconists) with public health information, such as: health promotion and initiation prevention, smoking treatment, service locations, campaigns and information on tobacco diseases -related and others. |

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| Categories | Main strategies |
|---------------------------------|--|
| | Discuss with the competent authorities in the country the creation and adoption of the definition of the term tobacco shop, classifying such establishments as priority risk areas for the purposes of inspection actions. |
| | Restrict the sale of tobacco only in tobacconists, prohibiting the sale of any other product in these places other than tobacco, its derivatives and accessories, such as: food, beverages of any nature, and others. In addition, the access, entry and stay of minors must also be prohibited in accordance with the legislation in force in these establishments. The trader must demand the presentation of the official document with a photo of the person interested in entering the establishment before he/she enters the place |
| | Adapt existing legislation in states, municipalities and the Federal District to the new recommendations, making each and every establishment licensed as a tobacconist to carry out solely and exclusively retail activities of tobacco-derived smoking products, whose packaging must comply with the provisions of the legislation, prohibited in any case consumption on the spot. |
| | Institute a Tobacco Sales Permit (PVT) program. This program must ensure that all facilities selling tobacco products have valid licenses to operate. |
| Other aspects on selling points | Institute an age verification system at selling points (tobacconists). |
| sening points | The commercial establishment must prohibit the provision of individual or collective seats. |
| | The tobacconist must have separate premises and commercial license apart from any other type of trade and/or service establishment. |
| | Improve the regulatory framework for inspection of tobacco shops. |
| | Establish mechanisms that establish goals to be achieved with regard to inspection actions, encompassing health promotion and smoking prevention actions. |
| | Institute a system of fines for offenses committed by merchants and/or merchants of tobacco products that do not comply with current legislation. Link the collection resulting from fines to Tobacco Control actions in Brazil. |
| | Change the minimum age for the purchase, sale and consumption of tobacco products and their accessories from 18 years to 21 years. |
| | Redefine the legal framework related to childhood, adolescence and youth regarding the minimum age to acquire and consume products that are harmful to health, such as tobacco and others. Amend all specific legislation. |

Final considerations

The scope of the scoping review made it possible to obtain an overview of the sale of tobacco products. Studies have shown that low-income neighborhoods generally have a higher density of tobacco outlets and higher rates of tobacco use, leading to health inequities. They also demonstrated that children are more likely to smoke when they live or go to school in neighborhoods with a high density of tobacco retailers. Tobacco companies are also known to target low-income neighborhoods with predatory marketing and retail practices.

The review enabled the elaboration of a set of recommendations aimed at limiting the density of tobacco sales outlets authorized to operate in a location, limiting their proximity, restricting proximity to schools and other areas aimed at children, adolescents and young people, prohibiting the sale of tobacco products in commercial establishments other than tobacconists.

Through the study carried out, it is understood that it is possible to institute the sale of tobacco products exclusively in tobacconists in Brazil; however, such establishments would be subject to a new nationwide legal order. This measure will contribute to the National Tobacco Control Policy since it has benefits for reducing the demand and supply of these products in the national territory.

Restricting the sale of tobacco products only in tobacconists, with legal rules for opening and operating these establishments, with a well-defined location in advance, legislation on their proper functioning, priority health inspection and restriction of access to the population, will be another big step in tobacco control actions, thus contributing to a greater drop in the prevalence of tobacco consumption, as well as preventing initiation and passive smoking in Brazil.²

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Notes

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² L. M. da S. Cabral, M. J. D. da S. Giongo, F. N. Jardim and A. de M. Carvalho: study conception and planning, data analysis, text elaboration, revision and approval of the final version of the manuscript.

Resumo

Restrição da venda de produtos de tabaco apenas em tabacarias: uma medida necessária para o fortalecimento da Política Nacional de Controle do Tabaco

Objetivo: Investigar e analisar a legislação atual, experiências e cenários existentes sobre a restrição da venda de produtos derivados de tabaco apenas em tabacarias, a fim de elaborar recomendações para o poder público, visando fortalecer a Política Nacional de Controle do Tabaco. Método: Revisão de escopo conduzida de acordo com a metodologia Joanna Briggs Institute, com base na estrutura do PRISMA Checklist and Explanation. As bases de dados utilizadas foram Biblioteca Virtual em Saúde (BVS), Epistemonikos, Literatura Latino-Americana e do Caribe em Ciências da Saúde (LILACS), Medical Literature Analysis and Retrieval Sistem (MEDLINE) via Pubmed, Biblioteca eletrônica SCIELO, SCOPUS, Web of Science, Biblioteca Digital de Teses e Dissertações (BDTD) e Johns Hopkins. Dados coletados em março de 2021, considerando os estudos publicados no período de janeiro de 2005 a dezembro de 2020. Foram incluídos artigos e pesquisas acadêmicas desenvolvidas no cenário brasileiro e publicadas entre janeiro de 1994 e dezembro de 2020. Resultados: Os bairros de baixa renda geralmente têm uma densidade maior de pontos de venda de tabaco e apresentam taxas mais altas de uso do tabaco, levando a iniquidades em saúde. Estudos indicam que as crianças têm maior probabilidade de fumar quando vivem ou vão à escola em bairros com alta densidade de varejistas de tabaco. Conclusão: Por meio deste estudo, compreendese que é preciso instituir a venda de produtos derivados de tabaco exclusivamente em tabacarias no Brasil, mas tais estabelecimentos estariam sujeitos a um novo ordenamento jurídico a ser instituído em âmbito nacional.

➤ Palavras-chave: Promoção da saúde. Tabaco. Tabagismo. Restrições de vendas. Controle do tabaco. Tabacaria.

