

What is the link between household garbage and tobacco control? The case of Brazil

André Salem Szklo¹, Maria Raquel Fernandes Silva², Bianca Ramalho Quintaes³, Alessandra Trindade Machado⁴

TO THE EDITOR:

In recent years, the strategy of raising cigarette taxes has reduced the prevalence of smoking and the consumption of licit cigarettes in Brazil.(1) However, a certain fraction of smokers may have migrated to cheaper, illicit cigarettes in order to save money.(2) In many low- and middle-income countries, the tobacco industry is the only source of information on the illicit cigarette market, and this information can be used in order to weaken or delay the implementation of effective tobacco control policies.(3)

In 2018, the *Instituto Nacional de Câncer* (INCA, Brazilian National Cancer Institute) conducted a pragmatic study to gain a better understanding of the illicit cigarette

trade in the city of Rio de Janeiro, Brazil, based on the characteristics and number of cigarette packs discarded with the household garbage. For that purpose, INCA worked in partnership with the Companhia Municipal de Limpeza Urbana (COMLURB, Municipal Urban Cleaning Company), which provides household waste collection services to the 156 neighborhoods in the city. Investigators in our research group took photographs of all stages of the study, thus allowing the images to "tell the story behind the numbers".

In addition to performing their regular recycling activities, COMLURB staff members were instructed to separate all cigarette packs discarded with the household garbage in each neighborhood (Figure 1A). A manual sieving method was used in order to separate discarded cigarette packs



Figure 1. In A, household garbage; in B, manual sieving to separate discarded cigarette packs from other materials; in C, discarded packs of "GIFT" cigarettes, the most commonly consumed illicit cigarette brand in the city of Rio de Janeiro, Brazil (brought into the country from Paraguay); and in D, discarded packs of "GIFT" cigarettes, some of which were legally manufactured in Brazil.

^{1.} Divisão de Pesquisa Populacional, Coordenação de Prevenção e Vigilância, Instituto Nacional de Câncer José Alencar Gomes da Silva – INCA – Rio de Janeiro (RJ) Brasil

^{2.} Divisão de Controle do Tabagismo e Outros Fatores de Risco, Coordenação de Prevenção e Vigilância, Instituto Nacional de Câncer José Alencar Gomes da Silva - INCA - Rio de Janeiro (RJ) Brasil.

^{3.} Unidade de Pesquisa Aplicada, Companhia Municipal de Limpeza Urbana - COMLURB - Rio de Janeiro (RJ) Brasil.

^{4.} Secretaria Executiva da Comissão Nacional para a Implementação da Convenção-Quadro para o Controle do Tabaco, Instituto Nacional de Câncer José Alencar Gomes da Silva - INCA - Rio de Janeiro (RJ) Brasil.



from other materials (Figure 1B). The packs that were found were classified as illicit or licit by INCA tobacco control analysts. For that purpose, they used the Brazilian National Health Surveillance Agency list of legal brands, as well as direct observation of the presence of Brazilian tobacco health warnings on the packs. (4) The most commonly consumed illicit cigarette brand in the city of Rio de Janeiro is called "GIFT" (Figure 1C) and is brought into the country from Paraguay, a known smuggling route. We also identified an odd situation that should be closely investigated by the Brazilian Secretariat of Federal Revenue: "GIFT" cigarettes legally manufactured in the city of Rio de Janeiro (with Brazilian pictorial health warnings displayed on cigarette packs; Figure 1D), as authorized by a court order.

Non-industry-funded studies are important to improve understanding of the illicit cigarette market and, as a consequence, help implement tobacco excise tax policies in Brazil and other low- and middle-income countries effectively.

ACKNOWLEDGMENTS

We would like to thank all COMLURB staff members who made this study possible.

AUTHOR CONTRIBUTIONS

All authors contributed to writing the manuscript. Silva MRF and Machado AT provided the photographs.

REFERENCES

- Szklo AS, Yuan Z, Levy D. Update and extension of the Brazil SimSmoke model to estimate the health impact of cigarette smoking by pregnant women in Brazil. Cad Saude Publica. 2017;33(12):e00207416. https:// doi.org/10.1590/0102-311x00207416
- Iglesias RM, Szklo AS, Souza MC, de Almeida LM. Estimating the size of illicit tobacco consumption in Brazil: findings from the global adult tobacco survey. Tob Control. 2017;26(1):53-59. http://dx.doi. org/10.1136/tobaccocontrol-2015-052465
- 3. The World Bank [homepage on the Internet]. Washington DC:
- The World Bank; c2020 [updated 2019 Jan 1; cited 2020 Feb 1]. Confronting Illicit Tobacco Trade: A Global Review of Country Experiences. Available from: http://documents.worldbank.org/curated/en/677451548260528135/Confronting-Illicit-Tobacco-Trade-a-Global-Review-of-Country-Experiences
- Brasil. Ministério da Saúde. Agência Nacional de Vigilância Sanitária [homepage on the Internet] Brasília: o Ministério; [cited 2020 Feb 2]. Consulta a registro. Available from: http://portal.anvisa.gov.br/tabaco/consulta-a-registro