

Peer Review File

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Reviewer A

Comment 1: My key suggestion here is to better link the situation in Ecuador with the literature on commercialized smuggling, particularly in South America and Africa, which demonstrates the structural nature of organized smuggling in Ecuador and other countries that requires international cooperation and critical analysis of the role of the major tobacco companies in the smuggling issue. In particular, the work out of the London School of Hygiene and Tropical Medicine and University of Bath would be valuable to integrate.

Reply 1: We thank you reviewer A for his/her input but unfortunately could not find any paper signed by LSHTM & University of Bath on South America or Africa. Only reference with those two institution is “Change in tobacco excise policy in Bulgaria: the role of tobacco industry lobbying and smuggling” published in *Tob Control* 2014;23:e75–e84. However, additional information from other countries in LA region has been included.

Changes in the text: Tobacco products are distinguished by the fact that they are increasingly sold illegally all around the world. It has been estimated that fully one third of global annual cigarette exports cannot be accounted for via legal distribution routes (23). The illicit tobacco trade (ITT) is difficult to measure due to its illegality, its global and changing nature, and data collection and analysis complexities (24). Moreover, ITT products skip regulatory controls at all levels of the commercialization chain, therefore are sold at lower prices and to all kinds of public, including minors. For example, in Brazil (25) the excise tax implementation showed a reduction in smoking prevalence, but at the same time, an increase in illicit consumption from 32.3% in 2013 to 42.8% in 2016. Similarly, in Uruguay (25) reported that a 10% price increase would increase by 4.6% the probability of consuming roll-your-own cigarettes over more expensive manufactured legal cigarettes. Thus the ITT is part of the larger illegal supply chains of illegal products (26). Tobacco smuggling has also become one of the main strategies from the tobacco industry to argue against taxes and controls. With the arrival of this illegal market, other socially unacceptable practices are promoted, such as child labor, illegal work, and drug trafficking, since many of the sellers of this type of merchandise take advantage of their legal position of selling gum, candy, and tobacco to also sell illegal drugs to children and minors, especially outside of schools (27).

Comment 2: If space is a concern, the discussion of the harms of tobacco in Ecuador and globally in the introduction could be synthesized to allow more discussion about the specific issues and the suggestions for Ecuador in particular.

Reply 2: Thank you reviewer A for your concern but no restriction has been mentioned by the editor, so no changes were done.

Changes in the text: None

Comment 3: It would also be useful to discuss in detail the potential solutions to smuggling. Specifically, how would the FCTC protocol on smuggling help Ecuador and are there any issues to implementation there? For instance, would track and trace protocols be helpful in the context? Are there any other interventions that should be tried that might work better in this environment?

Reply 3: We thank you reviewer A for raise this point and therefore a specific paragraph about potential solution, including two references, has been added in page 5.

Changes in the text: To mitigate any illicit trade problem, right now the only potential tool is to follow the Protocol to Eliminate Illicit Trade in Tobacco Products and implement its provisions, including an industry-independent tracking and tracing system to control local production and legal imports (33), but more importantly, the creation of health reforms supporting and promoting tobacco cessation will be instruments of extraordinary value in this fight (34).

Reviewer B

Comment 1: The interesting part is the section below: " A national academic report developed in Ecuador, which included surveys to tobacco consumers and litter package collection, estimated that the prevalence of illegal tobacco consumption is on average 51% of the studied population. This percentage is significantly less than the figures produced by the tobacco industry. Furthermore, from the collected samples during this study, it was estimated that 25% of illicit packs have China as their country of origin; 20% come from Colombia; 20% from Korea; 17% from Mexico; and 13% do not have legend indicating a place of origin" (21). Additionally, the study showed that the brand that is extensively commercialized illegally belongs to a major multinational company. These tobacco products were legally produced and commercialized in Colombia and Mexico but illegally brought to Ecuador. For this reason, it has been argued that tobacco smuggling is a countermeasure established by big tobacco companies to secure their sales worldwide while at the same time pressure governments to turn down health regulation and taxation (22)."

This section is research from the third author of the article. Not reference 21 or 22 but reference 25, not quoted in the article. This research (reference 25) with a clear description of the methodology, the role of PMI in smuggling, the track and trace system in Ecuador, the recent closure of a factory, the new rules for designating the operating traceability company, would be worth an article.

Reply 1: We thank you reviewer B for putting particular attention to the references. We realized there was a problem with the software used. Then, all references has been and numbers were no updated accordingly.

Changes in the text: All references have been updated and reviewed as directed.