

## Brief Report

# Claims of Reduced Odor on Tobacco Packs in Low- and Middle-Income Countries

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## Abstract

**Introduction:** Cigarettes designed to have less smoke smell were developed by the tobacco industry to supposedly reduce negative qualities. Cigarettes with marketing claims communicating these designs have been sold in high-income countries and marketing of “less smoke smell” terms on cigarette packaging can promote cigarette use. It is unclear to what extent they have been marketed in low- and middle-income countries (LMICs).

**Aims and Methods:** The Tobacco Pack Surveillance System (TPackSS) systemically collected tobacco packs available in 14 LMICs with high tobacco use between 2013 and 2017. We coded 4354 packs for marketing appeals, including claims related to smoke smell. We describe “less smoke smell” and similar claims found on these packs and compare across country and tobacco manufacturers.

**Results:** Phrases communicating less smoke smell were present on packs purchased in nine of 14 LMICs, including Bangladesh, Brazil, China, India, Mexico, Philippines, Russia, Ukraine, and Vietnam. The most commonly (74.1%) used terminology was “less smoke smell,” “LSS,” or a combination of the two. Packs from Russia had the most prevalent use (11.8%) of such claims. Companies using these terms across 21 brands included Japan Tobacco International (JTI), British American Tobacco (BAT), Philip Morris International (PMI), and other smaller companies. JTI accounted for 70.9% of packs with such terms.

**Conclusions:** Some of the world’s largest tobacco companies are communicating less smoke smell on packs in LMICs. Less smoke smell and similar phrases on packaging should be prohibited because they can enhance the appeal of cigarettes.

**Implications:** Tobacco companies are using “less smoke smell” and similar phrases on cigarette packs in LMICs. These claims have the potential to increase the appeal of smoking and promote cigarette use. Countries should consider policies to restrict attractive labeling claims, in accordance with the WHO Framework Convention on Tobacco Control (FCTC) Article 13 guidelines, which recommends restrictions on attractive design elements on tobacco packaging.

## Introduction

Policies and public support for smoke-free spaces have increased over the last two decades, and there has been an accompanying decrease in social tolerance for smoking.<sup>1</sup> Smoke-free spaces contribute

to reduced tobacco-caused morbidity and mortality.<sup>2</sup> Despite these gains, the tobacco industry continues to deploy a variety of marketing strategies, including the use of product descriptors that can influence tobacco use attitudes and behaviors.<sup>3</sup> For example, in the 1990s,

tobacco manufacturer RJ Reynolds developed a marketing plan targeted at Japanese smokers that leveraged interest in cleanliness and less harmful cigarettes. This campaign introduced the tobacco product Salem Pianissimo, a product designed to have less “scent of smoke.”<sup>4</sup> It was the first menthol cigarette that offered less lingering or sidestream smell to Japanese smokers.<sup>4</sup> Evidence from industry documents<sup>1</sup> and a focus group study<sup>5</sup> demonstrate that marketing which suggests masking the smell of smoke increases smoking appeal, especially among females.

In the last three decades, tobacco companies have invested in research and innovative strategies to improve the appeal/smell of cigarette smoke.<sup>6,7</sup> Researchers have demonstrated the tobacco industry’s attempt to remove or reduce the smell or odor from cigarettes since the 1970s,<sup>6</sup> with one-quarter of industry patents developed between 1997 and 2008 designed to improve smoke odor.<sup>7</sup> This period coincided with the first smoke-free laws,<sup>8</sup> suggesting that the tobacco industry was investing resources in promoting the appeal and social acceptability of smoking through “less smoke smell” cigarettes. Cigarettes with less smoke smell can potentially appease smokers who are concerned about odor from their cigarettes.

The tobacco industry has been aggressively marketing tobacco products in low- and middle-income countries (LMICs).<sup>9</sup> The use of “less smoke smell” terms could be one additional strategy being used by tobacco companies.

While less smoke smell cigarettes have been marketed in high-income countries like Japan and Canada for over 10 years,<sup>4,10</sup> it is unclear if they are empty claims or if the smell or sidestream smoke are actually reduced. It is also unclear to what extent they have been marketed in LMICs. In addition, there is limited evidence on which manufacturers sell these types of cigarettes and what terms or phrases they have used for marketing less smoke smell characteristics within LMICs.

To address these gaps in the literature, this paper aims to identify the presence of phrases related to less smoke smell on cigarette packaging in 14 LMICs and the cigarette brands and manufacturers that include these claims on their packaging. Findings from this research can inform policies that restrict the use of language related to

“less smoke smell” that potentially undermine smoke-free policies and enhance the appeal of cigarettes.

## Methods

The Tobacco Pack Surveillance System (TPackSS) systemically collects tobacco packs available in LMICs with high tobacco use. The included countries represented LMICs with the greatest number of smokers at the time the study was designed.<sup>11</sup> Between 2013 and 2017, TPackSS collected and coded 5576 cigarette packs for marketing appeals, including terms related to less smoke smell. For this analysis, we focus on the 4354 cigarette packs that featured a health warning label from the country of purchase, meaning they were intended for sale there. TPackSS initially aimed to collect a census of cigarette packs in 2013 (wave 1) across 14 LMICs (Bangladesh, Brazil, China, Egypt, India, Indonesia, Mexico, Pakistan, Philippines, Russia, Thailand, Turkey, Ukraine, and Vietnam).<sup>11</sup> Follow-up data collection occurred in nine countries (Bangladesh, Brazil, China, India, Indonesia, Philippines, Russia, Thailand, and Vietnam) from 2015 through 2017 (wave 2) after health warning label regulations were updated (eg, larger coverage) in a given country.

Cigarette packs were collected from three of the top 10 most populated cities in each country (with five cities in China in both waves and four cities in India in 2016) using a systematic protocol. Comprehensive sampling and data collection protocols are reported elsewhere.<sup>11</sup>

This sample includes 2468 country-unique cigarette packs that were purchased in 2013 (wave 1), and 1886 country-unique cigarette packs that were purchased between 2015 and 2017 (wave 2). Packs were double coded by two independent coders for the presence of the term “less smoke smell” or any similar claims in any language (Supplemental files—Appendix 1). We coded for country, wave/year, manufacturer, brand, less smoke smell, and similar claims on/in packaging (all exterior panels, interior surfaces, inserts, and cellophane). The average percent agreement for identifying the presence of less smoke smell claims was 99.6%. A third trained reviewer reconciled any coding discrepancies. The presence of these claims was subsequently examined for the exact statements used about the

**Table 1.** Distribution of Packs With Less Smoke Smell Terms by Country and Wave of Collection

Country	Wave 1		Wave 2		p
	Number of unique packs	% (n)	Number of unique packs	% (n)	
<b>Bangladesh</b>	56	0.0% (0)	71	5.6% (4)	.042*
Brazil	122	2.5% (3)	145	2.1% (3)	.817
China	422	0.5% (2)	604	0.2% (1)	.812
Egypt	55	0.0% (0)			
<b>India</b>	94	0.0% (0)	70	7.1% (5)	.007*
Indonesia	215	0.0% (0)	218	0.0% (0)	1.000
Mexico	132	1.5% (2)			
Pakistan	72	0.0% (0)			
Philippines	98	0.0% (0)	107	0.9% (1)	.249
<b>Russia</b>	501	7.6% (38)	502	15.9% (80)	<.001*
Thailand	65	0.0% (0)	80	0.0% (0)	.102
Turkey	242	0.0% (0)			
Ukraine	312	5.8% (18)			
Vietnam	84	0.0% (0)	89	1.1% (1)	.160
<b>Total</b>	<b>2468</b>	<b>2.6% (63)</b>	<b>1886</b>	<b>5.0% (95)</b>	<b>&lt;.001*</b>

Empty cells for countries without second collection. The bolded text is for significant findings.

\* $p < .05$ .

smoke smell. A professional translation service was used to translate non-English languages on the packs as per the TPackSS protocol.<sup>11</sup> We examined the presence of less smoke smell and similar claims by country, wave, manufacturer, and brand (Supplemental files—Appendices 1 and 2).

### Results

There were claims of less smoke smell on 2.6% ( $n = 63$ ) of the wave 1 sample of 2468 packs from 2013, and on 5.0% ( $n = 95$ ) of the wave 2 sample of 1886 packs from 2015 to 2017 ( $p < .05$ ) (Table 1).



**Figure 1.** Terms used to communicate "less smoke smell" with examples. 1. LSS: presence of "LSS" or "less smoke smell" or "less tobacco smoke smell" or "less cigarette smoke smell" on cigarette packaging. 2. Less smell/odor: presence of "less smell" or "odor reducing" or any term with "odor" on cigarette packaging. 3. Use of "technology" or "Innovation" terms. 4. Other: presence of other terms, for example, "Always pleasurable smell for your comfort" and "Reduced room smell of tobacco smoke," etc. (see Appendix 1 for all terms used).

## Terms or Phrases Used to Communicate Less Smoke Smell Cigarettes on Packaging

Terms used to communicate less smoke smell include four broad variations of “less smoke smell” including the abbreviation “LSS” (74.1%;  $n = 117$ ); claims of less/reduced smell/odor ( $n = 62$ ); terms with “technology” or “innovation” (eg, “Innovation technology reduces the smell of tobacco”) ( $n = 83$ ); and others with terms such as “always pleasurable smell for your comfort” and “reduced room smell of tobacco smoke” (Figure 1, Supplemental files—Appendix 1).

These terms were mostly communicated in a combination of English and the local language (77.2%) (Supplemental files—Appendix 2). Terms on seven packs (4.4%) were in the local language only, while 29 packs (18.4%) were in English only. Five of the nine countries (Bangladesh, China, India, Philippines, and Vietnam) had packs with less smoke smell claims only communicated in English. The two packs in Mexico both used only Spanish to communicate less smoke smell.

The use of terms implying less smoke smell characteristics were seen on multiple components of the tobacco product packaging: inserts, inner packaging, cellophane wrapping, and underneath the flip-top opening.

## Presence of Less Smoke Smell Claims on Cigarette Packs by Country

Less smoke smell claims were present on cigarette packs in nine of 14 countries assessed—Bangladesh, Brazil, China, India, Mexico, Philippines, Russia, Ukraine, and Vietnam (Table 1).

In wave 1, five of the 14 countries had less smoke smell claims (Brazil, China, Mexico, Russia, and Ukraine), while claims were found in seven of the nine countries in wave 2. Of these seven wave 2 countries, four (Bangladesh, India, Philippines, and Vietnam) did not have any packs with less smoke smell claims in wave 1. The country with the highest proportion of unique packs with less smoke smell claims in both waves was Russia (wave 1: 7.6%; wave 2: 15.9%; total: 11.8%). There were statistically significant increases between waves in Bangladesh, India, and Russia (Table 1).

## Tobacco Manufacturers With Less Smoke Smell Claims on Cigarette Packaging

Overall, companies using these terms across 21 brands included Japan Tobacco International (JTI), British American Tobacco (BAT), Philip Morris International (PMI), and other smaller companies. In both waves, JTI accounted for the most (70.9%) packs with such terms. In wave 1, JTI accounted for 88.9% of packs collected with less smoke smell claims, followed by PMI 6.3%, and BAT 4.8%. In wave 2, JTI again accounted for the most packs with less smoke smell claims (58.9% of the total packs collected) followed by PMI (35.8%) and others accounting for 5.3%.

## Discussion

Terms communicating “less smoke smell” or similar claims were present on packs purchased in nine of the 14 LMICs between 2013 and 2017; three of the transnational tobacco manufacturers (JTI, BAT, and PMI) marketed cigarettes using these terms. Further, our findings indicate the growth of PMI cigarette brands communicating less smoke smell terms on their packaging in these LMICs.

Prior evidence from industry research has identified the potential for cigarettes with less smoke smell to attract and appeal to smokers.<sup>1,12–15</sup> In addition, a review of patents also demonstrated plans for developing less smoke smell products, with more than a

dozen of such patents approved within a decade.<sup>6,7</sup> Our findings report the presence of cigarettes using “less smoke smell” claims in product marketing in LMICs. The presence of these terms may be especially of interest to smokers in countries like Russia and Thailand with a 100% smoke-free policy in indoor workplaces and public environments.<sup>16</sup> As more countries implement comprehensive smoke-free policies, there may be an increase in less smoke smell terms and descriptors on cigarette packaging, necessitating more comprehensive tobacco packaging and labeling policies.

Based on recommendations in the guidelines for the implementation of article 13 of the World Health Organization Framework Convention for Tobacco Control, packaging and design of tobacco products are important elements of promotion and parties are advised to eliminate features that make products attractive.<sup>17</sup> Terms that communicate less smoke smell have the potential to appeal to consumers in multiple ways. First, they may be perceived by smokers as an opportunity to engage in smoking unnoticed in a smoke-free space. Also, they may placate smokers who are conscious of the smell of cigarettes on their clothing in social settings,<sup>5,6</sup> and thereby increase the frequency of smoking.

Our findings demonstrate once again how the tobacco industry actively engages in measures to normalize and promote smoking by using appealing terms on product packaging. Future research could establish whether terms communicating less smoke smell influence risk perceptions of smokers and nonsmokers, and assess the possible influence on cigarette use. A potential limitation in this study is that, while the systematic protocol used to purchase the packs was an attempt to ensure diversity in the packs from each country, this approach might not have resulted in a collection of the entire range of packs present in the select 14 countries. Nonetheless, our findings demonstrate the use of terms implying less smoke smell on tobacco product packaging across a broad range of brands in LMICs.

Various terms in English and local languages are used by the tobacco industry to communicate less smoke smell in cigarettes. Some of these messages, such as “less smell on and around you” and “reduced room smell of tobacco smoke,” are explicit and may increase the social acceptability of smoking.<sup>7</sup> Terms communicating less smoke smell claims should be considered when jurisdictions regulate tobacco packaging and labeling. Another potential solution to curb use of these appealing terms is plain packaging, which prohibits tobacco companies from using any imagery and any text besides brand information on tobacco packaging,<sup>16</sup> and can reduce the appeal of tobacco packaging.<sup>18</sup> The use of English in non-English speaking countries like Brazil, China, Russia, and Ukraine supports prior findings that English remains a common tool for conveying brand appeal.<sup>19</sup> There needs to be careful consideration about the marketing found on cigarette packs since policy restrictions on other marketing avenues are increasing globally.<sup>20</sup>

## Supplementary Material

A Contributorship Form detailing each author’s specific involvement with this content, as well as any supplementary data, are available online at <https://academic.oup.com/ntr>.

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## Declaration of Interests

None declared.



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## Data Availability

The data underlying this article are available in the TPACKSS Digital Repository, at <https://globaltobaccocontrol.org/tpackss>.

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