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Compliance with Uruguay's single presentation requirement

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ABSTRACT

Introduction Tobacco companies vary pack colours, designs, descriptors, flavours and brand names on cigarette packs to target a multitude of consumers. These different brand variants can falsely imply that some brand variants are less harmful than others. Uruguay is the only country that requires cigarette companies to adhere to a single presentation (one brand variant) per brand family.

Methods An existing, systematic pack purchasing protocol was adapted for data collection.

Neighbourhoods in Montevideo were categorised into five strata by percentage of poor households. Five neighbourhoods within each stratum were selected based on geographical variation. In each neighbourhood, a 'starting hub' was identified and a systematic walking protocol was implemented to purchase unique packs at four key vendor types.

Results Unique packs were purchased in 9 out of 25 neighbourhoods. Fifty-six unique packs were purchased, representing 30 brands. Of these, 51 packs were legal, representing 26 brands. The majority of the legal brands ($n=16$; 62%) were compliant with the requirement. The remaining packs were non-compliant due to differences in colour, design element, brand name, crest and descriptors. Although not prohibited by the single presentation requirement, 16 legal brands had more than one stick count (10, 11, 14 or 20 sticks), and packs from four brands had more than one packaging type (hard, soft or tin).

Conclusion Overall, compliance with Uruguay's single presentation requirement was good. In addition to the current restrictions, future single presentation requirements could expand to include packs in more than one stick count and packaging type.

INTRODUCTION

Branding is a marketing technique used to create a visual effect or evoke an emotional response allowing consumers to distinguish between different products and services.¹ Cigarette companies can vary the pack colour, design, descriptors, flavour and brand variant names on cigarette packs to support users' product preferences and to target new consumers; these design elements can be misleading to consumers by reinforcing the false idea that some cigarette brand variants are less harmful than others.² The industry has exploited these fabricated product differences in response to recent tobacco control legislation. For example, leading up to and after implementation of Australia's plain packaging law, tobacco companies altered brand variant names³ to include a colour in the name so the brand name reflected the pack colour

visible prior to the law.⁴ Companies also expanded their brand variants and varied price points to communicate different levels of cigarette strength and quality.^{5,6} These findings further demonstrate the value of Uruguay's single presentation requirement as it directly prohibits the presence of brand variants. Research suggests that placing restrictions on cigarette branding may be an effective tobacco reduction strategy.^{2,7}

Uruguay, a middle-income country in South America, is the only country requiring cigarette companies to adhere to a single presentation per brand family. Article 3 of Ordinance No. 514 requires cigarette companies to sell only one unique presentation of each cigarette brand as of February 2009.⁸

To date, there are no published data on the extent of tobacco industry compliance with Uruguay's single presentation requirement. By identifying the range of brand variants available in Uruguay, we sought to explore, for the first time, whether tobacco companies are complying with Uruguay's single presentation requirement.

METHODS

The field protocol for this pilot study was adapted from the Tobacco Pack Surveillance System (TPackSS) study.⁹ The protocol involved purchasing one of each unique cigarette pack available at tobacco retailers in Montevideo, Uruguay. A pack was considered unique if it differed in at least one exterior pack feature, including stick count, size, brand name, colours or design elements.⁹ To maximise the number of packs collected, the protocol was implemented in 25 neighbourhoods spanning five socioeconomic income strata (supplementary appendix 1). The sampling frame was created based on poverty data provided by the Tobacco Epidemic Research Center of Uruguay (CIET).¹⁰ Five neighbourhoods were selected in each of the five socioeconomic income strata, based on geographical variety.

The four most popular tobacco sale vendor types, according to Euromonitor data,¹¹ were preselected for pack purchases: almacenes (small convenience store), minimarkets, kiosks and supermarkets (see supplementary appendix 2 for vendor type definitions). In each neighbourhood, a starting hub was preselected to begin the systematic walking protocol. The study team scanned the area for commercial activity (at least three shops) with their backs facing the hub. Commercial activity seen in the most right-hand direction determined the direction the team walked. The team entered the first required vendor type seen on either side of the street. On entering the store, data collectors



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said they were students conducting a research study and asked the store clerk if they would identify what cigarette brands they sold. In the first vendor, one of every unique pack available was purchased. After a purchase, packs were placed in individual plastic bags with a unique ID. In subsequent neighbourhoods, if new packs were found in a vendor, the study team purchased the packs and proceeded to the next neighbourhood. If new packs were not found, the study team exited the vendor and resumed the walking protocol. Data collectors used a tablet to systematically review all packs in the sample and identify new packs for purchase. After purchasing packs, cigarettes were shipped to the USA for coding and analysis.

All cigarette packs were coded using the Research Electronic Data Capture programme (REDCap).¹² The REDCap form was developed to identify brand variants and any non-compliance with the single presentation requirement. A brand was coded as non-compliant if more than one unique presentation of a cigarette brand existed (eg, variation in pack colours, pack design elements other than colour, brand names, crests or descriptors). Crests were defined as a coat of arms and were considered non-compliant if crests for the same brand differed or placement differed. Logos were defined as distinguishing images that were present on more than one pack of the same brand. Differences in pack attributes within a brand were identified by two independent coders, and disagreements (eg, in what was considered a design element) were reviewed by a third coder. Descriptive statistics were run using the statistical analysis program Stata V.14.¹³

RESULTS

A total of 56 unique packs were purchased, representing 30 different brands. Fifty-one packs were legal (had the required Uruguay health warning label), representing 26 brands. Five packs (representing five brands) were illegal (had a warning label that did not cover 80% of the pack and had slight differences in wording from the government preapproved health warning label ($n=1$), or did not have a health warning label present on the pack ($n=4$)). Illegal packs were recorded in REDCap but were omitted from the analysis. The parent company Cia Compañía Industrial de Tabacos Monte Paz S.A. (CIA) produced 49% of the packs that were purchased in the sample, followed by Philip Morris International (41%) and British American Tobacco (BAT) (10%). The distribution of packs is consistent with the order in market share of each tobacco company in Uruguay, with CIA controlling 88.7% of the market share, followed by PMI (10.7%) and BAT (0.6%).¹⁴ Differences could be attributed to the relative popularity of the brand variants collected. Our sample was designed to obtain a census of packs available on the market as opposed to capturing market share.

The majority of the legal brands ($n=16$; 62%) were compliant with the single presentation requirement (table 1). Ten brands represented by 23 packs were not compliant with the requirement. All three parent companies had at least one brand with non-compliant presentation. Eight of the non-compliant brands were non-compliant with respect to more than one pack attribute.

Six brands used more than one colour scheme. For example, Premier packs had one dark blue and one that was light blue (figure 1). The most common attribute for non-compliance was utilisation of a different 'design element', such as a different pattern or exterior design on cigarette packs of the same brand (eight brands). Benson & Hedges packs differed by design element as two packs varied by front and background design

(figure 1). One brand had a slight variation in brand name: 'Republicana' versus 'La Republicana'. Five brands differed by crest; for two brands (Marlboro and Next), only one pack displayed a crest. The crests on the Pall Mall packs differed by colour, wording underneath the crest, the helmet on top of the crest and mythical animals that appear on both sides of the coat of arms (figure 1). Two brands differed by logo, such as the hat present on the Republicana packs (figure 1).

Out of the six brands, two displayed different descriptors on the pack (eg, Filtro and Extra); among the remaining four brands, a descriptor was displayed on only one pack of each brand (Pall Mall, Premier, Marlboro and Next).

Differences in stick count and packaging type are not prohibited by Uruguay's single presentation requirement. Of the legal brands, 16 brands came in more than one stick count (10, 11, 14 or 20 sticks per pack) and packs from four brands came in more than one packaging type. The 10 and 20 stick counts were the most common size variations, accounting for 29% and 59% of the sample, respectively. Packs with different stick counts also varied by price per stick, the average price of a single stick was 4.6 pesos (US\$0.154) in a 10-pack, 4.36 pesos (US\$0.143) in an 11-pack, 4.81 pesos (US\$0.157) in a 14-pack and 4.64 pesos (US\$0.152) in a 20-pack.¹⁵ All packs were either hard or soft, with the exception of one pack that was a tin. It appears that three brands (Nevada, Coronado and Iceball) used different combinations of both stick count and packaging material to maximise the number of unique packs available to the consumer.

DISCUSSION

On 8 July 2016, the World Bank arbitration tribunal upheld two of Uruguay's packaging and labelling regulations that were challenged by Philip Morris.¹⁶ The single presentation requirement was adapted from a document published by the Physicians for a Smoke-Free Canada, titled *A Comprehensive Plan to End the Light and Mild Deception*, which described tobacco control strategies to end 'deceptive practices' of the tobacco industry.¹⁷ As countries consider plain packaging, they may also consider implementing the single presentation requirement as a precursor that will help in the transition to plain packaging by reducing the availability of misleading cigarette packaging.

These pilot data show that some brands are non-compliant with Uruguay's single presentation requirement. Furthermore, tobacco companies are using packaging type and stick count variation as a mechanism to increase pack variation. Studies have demonstrated the use of packaging variations to appeal to current smokers and future smokers.¹⁸

We found that the variety of cigarette packs for sale in Uruguay is similar to other Latin American countries: 30 unique brands were collected in Uruguay, compared with 33 unique brands in Mexico and 37 unique brands in Brazil, collected by the TPackSS study in 2013.¹⁹

This pilot study had some limitations. First, data collection was restricted to the city of Montevideo. A larger countrywide study would provide a better representation of the cigarette packs available in the country. Second, the regulatory ordinance did not specify an implementation period that defined how non-compliant packs would be systemically removed from store shelves. Some of the non-compliance could have been due to old packs remaining at vendors until purchased. However, data collection occurred 6 years after the single presentation requirement went into effect.

Future research to further understand the impact of this requirement at the consumer level is warranted. Exploring

Table 1 Unique pack attributes for legal packs

Company	Brand	Number of variants by										Packaging type				
		Total packs purchased	Colour	Design element	Name	Crest	Logo	Descriptor	Stick count					Soft	Hard	Tin
									10	11	14	20				
BAT	Kent	1										1			1	
BAT	Lucky Strike	2						1								2
BAT	Pall Mall	2	2	2	2		2	1				1			2	
CIA	California	2						1				1			2	
CIA	Coronado	4						1	1	1	2	2	2	2	2	
CIA	J&M	2						1			1				2	
CIA	La Paz	2	2	2	2	2	2	1		2		2				
CIA	Madison	2						1			1				2	
CIA	Nevada	4						1	1	1	2	2	2	2	2	
CIA	Niagara	1						1			1				1	
CIA	Ocean	2						1			1				2	
CIA	Pacific	1						1			1				1	
CIA	Republicana	2	2	2	2	2	2	1		1	1	1	1	1	1	
CIA	Richmond	2						1			1				2	
CIA	Victoria	1									1				1	
Philip Morris	Benson & Hedges	3	2	2				1			2				3	
Philip Morris	Casino	1									1		1		2	
Philip Morris	Fiesta	2					2				1				2	
Philip Morris	Filter Plus	1									1				1	
Philip Morris	Iceball	3		2				2			1			2	1	
Philip Morris	L&M	1									1				1	
Philip Morris	Marlboro	3		2			2	1			2				3	
Philip Morris	Next	2		2			2	1			1				2	
Philip Morris	Philip Morris	2	2	2	2	2	2	1			1				2	
Philip Morris	Premier	2	2				2				2		2		2	
Philip Morris	Silver Mint	1									1				1	
Total		51	12	16	2	10	4	15	1	5	30	10	40	1		

BAT, British American Tobacco; CIA, CIA Compañía Industrial de Tabacos Monte Paz S.A.



Figure 1 Examples of pack attribute variation on legal packs: (A) colour, (B) design element, (C) name, (D) crest and (E) descriptor. (C) is also an example of variation in packaging type (hard vs soft) and (D) is also an example of variation in stick count (10 vs 20).

consumers' behaviours may reveal both intentional and unintentional ramifications. In addition, it may be useful to examine consumers' perceptions of packs that employ different stick counts and packaging materials. Existing research on the harms and benefits of different pack sizes is inconclusive: although smaller pack sizes may allow consumers to reduce and regulate their consumption patterns, small packs may also appeal to youth and low-income smokers as a smaller size makes the pack more affordable.^{20 21}

Smoking rates in Uruguay have dropped steadily; the single presentation requirement may have contributed to this decline.²² As other countries contemplate implementing single presentation requirements, they could consider including restrictions on stick count and packaging material to further reduce tobacco companies' ability to increase brand proliferation.

What this paper adds

This paper explores, for the first time, whether tobacco companies are complying with Uruguay's single presentation requirement.

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REFERENCES

- 1 Branaghan RJ, Hildebrand EA. Brand personality, self-congruity, and preference: a knowledge structures approach. *J C B* 2011;10:304–12.
- 2 Hoek J, Wong C, Gendall P, *et al.* Effects of dissuasive packaging on young adult smokers. *Tob Control* 2011;20:183–8.
- 3 Hoek J, Gendall P, Eckert C, *et al.* Effects of brand variants on smokers' choice behaviours and risk perceptions. *Tob Control* 2016;25:160–5.
- 4 Scollo M, Ocleston J, Bayly M, *et al.* Tobacco product developments coinciding with the implementation of plain packaging in Australia. *Tob Control* 2015;24:e116–e122.
- 5 Greenland SJ. The Australian experience following plain packaging: the impact on tobacco branding. *Addiction* 2016;111:2248–58.

- 6 Borland R, Sawvas S. The effects of variant descriptors on the potential effectiveness of plain packaging. *Tob Control* 2014;23:58–63.
- 7 Eadie D, Hastings G, Stead M, *et al*. Branding: could it hold the key to future tobacco reduction policy? *Health Educ* 1999;99:103–10.
- 8 Ministry of Public Health. Ordenanza no. 514. 2008 <http://cieturuguay.org/?cat=11> (accessed 9 Jun 2016).
- 9 Smith K, Washington C, Brown J, *et al*. The tobacco pack surveillance system: a protocol for assessing health warning compliance, design features, and appeals of tobacco packs sold in low- and middle-income countries. *JMR Public Health Surveill* 2015;1:e8.
- 10 National Institute of Statistics (Uruguay), United Nations Economic Commission for Latin America and the Caribbean (CEPAL), United Nations Development Programme (UNDP). Uruguay National household income and expenditure survey 2005-2006, Montevideo, Uruguay: national institute of statistics (Uruguay). <http://ghdx.healthdata.org/organizations/national-institute-statistics-uruguay> (accessed 19 May 2016).
- 11 Euromonitor. Uruguay cigarettes. 2014 www.portal.euromonitor.com (accessed 19 May 2016).
- 12 Vanderbilt University. REDCap Software. 6.8.2. 2016.
- 13 StataCorp L. Stata data analysis and statistical Software. Special Edition Release. 14. 2007.
- 14 Euromonitor Euromonitor. Market share cigarettes Uruguay. 2016 www.portal.euromonitor.com (accessed 10 Dec 2016).
- 15 XE currency converter. <http://www.xe.com/currencyconverter/> (accessed 29 Dec 2016).
- 16 Campaign for Tobacco Free Kids. Historic win for global health: Uruguay defeats Philip Morris challenge to its strong tobacco control laws. 2016 http://global.tobaccofreekids.org/en/global_updates/detail/2016_07_08_uruguay (accessed 5 Jan 2016).
- 17 Physicians for a Smoke-Free Canada. A comprehensive plan to end the light and mild deception. 2005 http://www.smoke-free.ca/pdf_1/Endingthedeception-2005.pdf.
- 18 Freeman B, Chapman S, Rimmer M. The case for the plain packaging of tobacco products. *Addiction* 2008;103:580–90.
- 19 Institute for Global Tobacco Control. Countries. Archived by WebCite® at <http://globaltobaccocontrol.org/tpackss/countrieshttp://www.webcitation.org/6j2At2RVq> (accessed 15 Jul 2016).
- 20 Marti J, Sindelar J. Smaller cigarette pack as a commitment to smoke less? Insights from behavioral economics. *PLoS One* 2015;10:e0137520.
- 21 Farrell L, Fry TRL, Harris MN. 'A pack a day for 20 years': smoking and cigarette pack sizes. *Appl Econ* 2011;43:2833–42.
- 22 International Tobacco Control Policy Evaluation Project. ITC Uruguay national report, findings from the wave 1 to 4 surveys (2006-2012). http://www.itcproject.org/files/ITC_Uruguay_Report-English-Sept24v24.pdf (accessed 21 Aug 2016).