



OPEN ACCESS

Spinning a global web: tactics used by Big Tobacco to attract children at tobacco points-of-sale

Jennifer L Brown ,¹ Debra Rosen ,² Maria G Carmona ,³ Natalia Parra,² Mark Hurley,² Joanna E Cohen ¹

¹Institute for Global Tobacco Control, Department of Health, Behavior and Society, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, USA

²International Communications, Campaign for Tobacco-Free Kids, Washington, DC, USA

³International Research, Campaign for Tobacco-Free Kids, Washington, DC, USA

Correspondence to

Dr Jennifer L Brown, Institute for Global Tobacco Control, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, USA; jlbrown@jhu.edu

Received 4 October 2021

Accepted 8 March 2022

Published Online First

31 May 2022

ABSTRACT

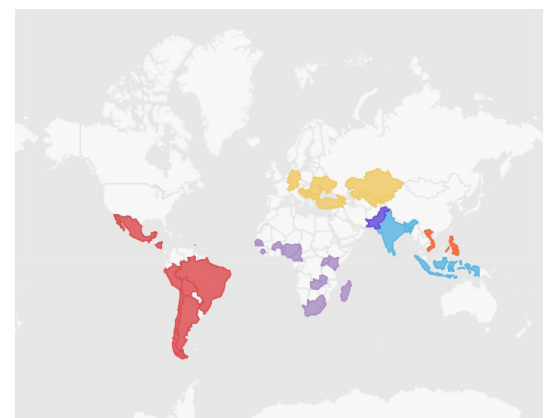
Most of the published literature on cigarette advertising and promotion at points-of-sale is on research conducted in high-income countries. We report findings from monitoring cigarette advertising and promotion at points-of-sale near schools and playgrounds in 42 countries, the majority low-income and middle-income. Four strategies were detected across most of these countries: (1) display of cigarettes near snacks, sweets and sugary drinks, (2) placement of cigarette advertisements near the eye-level of children, (3) advertisements and display of flavoured cigarettes and (4) sale of single sticks of cigarettes. These advertising and promotional tactics target children and youth and demonstrate that multinational tobacco companies use similar strategies to promote cigarettes at points-of-sale. The widespread violations of existing laws and regulations, the exploitation of regulatory loopholes and lack of existing tobacco control policies that apply to points-of-sale call for adoption and enactment of provisions recommended by the WHO Framework Convention on Tobacco Control such as comprehensive bans on tobacco advertisement, promotion and sponsorship, bans on sale of single cigarette sticks and regulation of flavours. These strategies will help to protect children and youth from exposure to tobacco advertising.

In many markets, policies prohibiting tobacco advertising via traditional media such as radio and television and on billboards have led the tobacco industry to focus on the point-of-sale (POS) as a critical channel to advertise and promote their tobacco products. For example, in the USA, the 1998 Master Settlement Agreement included a number of restrictions on advertising but did not include a ban on advertising at POS; by 2008, POS advertising accounted for over three-fourths of tobacco marketing expenditures.¹ In many countries, tobacco advertising and promotion at POS is nearly ubiquitous and extends beyond product display to include indoor and outdoor advertisements, branded walls and shelves and other branded store accessories.

Tobacco companies have historically targeted children and youth with tobacco product advertising. In an internal document from 1990, R.J. Reynolds' staff were encouraged to set up promotions at stores frequented by young people, saying 'those stores can be in close proximity to colleges or high schools'.² In the USA, extensive tobacco advertising at POS near schools has been documented³ and there is evidence that stores where adolescents shop regularly display more advertising than other stores in the same community.⁴

Tobacco advertising at POS is associated with youth smoking initiation and progression to regular use.¹ Children and youth who have frequent exposure to tobacco advertising and promotion at POS have higher odds of already having tried smoking and higher odds of being susceptible to smoking than those not frequently exposed.⁵ POS advertising also discourages cessation efforts and normalises smoking.⁶

Despite our knowledge of tobacco advertising targeted to children and youth near schools, our understanding of the extent of tobacco advertising and promotion across geographic regions is incomplete. Most of the published literature on tobacco advertising at POS has been conducted in high-income countries, except for research conducted in Guatemala, Russia and Indonesia.^{7–13} Our monitoring efforts across multiple countries, the majority low-income and middle-income (LMIC), extend knowledge of the advertising and promotional practices used to promote cigarettes at POS and indicates prevalent marketing efforts that target some of the world's most disadvantaged populations. Findings from this monitoring document tobacco marketing tactics that are used by the world's largest tobacco companies—including British American Tobacco (BAT), Imperial Brands, Japan Tobacco International (JTI) and Philip Morris



- AFRO: Benin, Burkina Faso, Cameroon, Kenya, Madagascar, Nigeria, Senegal, Sierra Leone, South Africa, Uganda, Zambia
- EMRO: Pakistan
- EURO: Armenia, Bosnia & Herzegovina, Bulgaria, Croatia, Georgia, Germany, Kazakhstan, Kyrgyzstan, Moldova, Montenegro, Romania, Serbia, Slovenia, Switzerland, Turkey, Ukraine, Uzbekistan
- PAHO: Argentina, Bolivia, Brazil, Chile, Mexico, Nicaragua, Peru
- SEARO: Bangladesh, India, Indonesia, Sri Lanka
- WPRO: Philippines, Vietnam

Figure 1 42 countries where data were collected, by WHO region.



© Author(s) (or their employer(s)) 2023. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.

To cite: Brown JL, Rosen D, Carmona MG, *et al.* *Tob Control* 2023;**32**:645–651.

Table 1 Cities, year and number of POS observed in each country

Country	City/cities where data was/were collected	Year(s) data was/were collected	Total # POS observed
Argentina	Buenos Aires; Buenos Aires, Mendoza	2016; 2021	634; 119
Armenia	Yerevan	2018	227
Bangladesh	Dhaka	2016	661
Benin	Cotonou	2016	108
Bolivia	La Paz	2016	318
Bosnia and Herzegovina	Sarajevo	2016	239
Brazil	Rio de Janeiro	2017	282
Bulgaria	Sofia	2017	452
Burkina Faso	Ouagadougou	2016	148
Cameroon	Yaoundé	2016	173
Chile	Santiago	2016	372
Croatia	Osijek	2019	33
Colombia	Bogotá, Manizales, Santiago de Cali, Popayán	2021	270
Georgia	Tbsili	2016	640
Germany	Berlin	2020	36
India	Chennai, Coimbatore, Pudukkottai, Hyderabad, Mahbubnagar, Karimnagar, Warangal, Jamnagar, Rajkot, Morbi, Ahmedabad, Indore, Bhopal, Sagar, Jabalpur, Gwalior, New Delhi, Guwahati, Dibrugarh, Jorhat	2017; 2019	487; 895
Indonesia	Bandung, Jakarta, Makassar, Mataram, Padang, Medang, Surakarta	2015; 2020–2021	Retailers around 360 schools; 1671
Kazakhstan	Almaty, Astana, Aktobe, Karaganda, Kostanai, Shymkent, Ust-Kamenogorsk	2019	325
Kenya	Nairobi	2016	860
Kyrgyzstan	Bishkek, Osh	2018	443
Madagascar	Antananarivo, Tanjombato, Sabotsy Namehana	2019	297
Mexico	Mexico City, Santiago de Querétaro, Puebla	2019	352
Moldova	Chisinau, Balti	2016	533
Montenegro	Podgorica, Nikšić	2019	101
Nicaragua	Managua	2016	355
Nigeria	Lagos	2016	29
Pakistan	Islamabad, Murree, Larkana, Peshawar, Hafizabad, Pindi Bhattian, Jalalpur Bhattian, Shakar Dara	2017	268
Peru	Lima	2016	347
Philippines	Manila	2020	1667
Romania	Bucharest	2016	589
Senegal	Dakar	2018	309*
Serbia	Belgrade	2019	315
Sierra Leone	Freetown	2019	146
Slovenia	Regions of Osrednjeslovenska, Podravska, Obalnokraška, Jugovzhodna, Gorenjska	2016	315
South Africa	Cape Town	2016	173
Sri Lanka	Colombo, Gampaha, Kandy, Rathnapura, Matara, Badulla, Anuradapura, Kurunegala, Jaffna, Trincomali	2018	1000
Switzerland	Genève, Versoix, Nyon, Gland, Morges, Renens, Lausanne, Vevey, Montreux	2016	430
Turkey	Istanbul	2019	298
Uganda	Kampala	2016	50
Ukraine	Kiev	2016	460

Continued

Table 1 Continued

Country	City/cities where data was/were collected	Year(s) data was/were collected	Total # POS observed
Uzbekistan	Tashkent	2019	294
Vietnam	Hanoi, Ho Chi Minh	2020	2670

*Data collected in Dakar were not limited to POS surrounding schools; this analysis includes a subset of data from retailers within 150 m of schools in Dakar. POS, points-of-sale.

International (PMI)—to promote their deadly products to children and youth across the globe.

METHODS: DOCUMENTING TOBACCO INDUSTRY TACTICS

From 2015 to 2021, public health professionals and volunteers, with support from the Campaign for Tobacco-Free Kids and the Johns Hopkins Bloomberg School of Public Health, systematically collected data on cigarette advertising and promotional tactics at POS within a short walking distance of schools and playgrounds in 42 countries across the globe, spanning all six WHO regions (figure 1). Table 1 includes the city/cities where data collection took place, the year data were collected and the number of POS observed in each country. In most countries, data collection took place in the capital city. The number of POS observed ranged from 29 in Nigeria to 2670 in Vietnam.

A list of schools and playgrounds to focus on for data collection was generated by in-country public health professionals in each country. Online tools were used to map the selected schools and playgrounds and draw a 100–250 m radius around them. Zoomed-in images of the maps were printed and distributed to data collectors who then followed the maps to locate individual schools or playgrounds and identify POS within the drawn radius. Data collectors were instructed to walk down every street and alley, including both sides of the road, to identify POS and trace their route on the paper map to cover all the area within the radius. If the POS identified sold tobacco, they completed an observational form, acting like a customer while completing the form.

Most of these investigations used mobile applications, Maggi and KoboToolbox, on phones or tablets that allowed users to complete forms offline and later upload them to the cloud or online and record geographic coordinates. The applications were populated with an observational checklist to systematically capture data, allowing for comparison of cigarette marketing tactics used at POS across countries. The observational checklist included questions on retailer location; retailer type; cigarette product display; display of cigarettes near sweets, snacks and soda; promotion of cigarettes; advertisement of cigarettes, including placement of signage; cigarette brands advertised and sold and sale of single cigarette sticks. Data were exported from the applications used into Excel and descriptive analyses were conducted in Stata or Excel.

RESULTS: FOUR STRATEGIES THAT INCREASE YOUTH EXPOSURE

Four strategies were consistently observed at POS near schools or playgrounds across nearly every country examined. These were associated with the cigarette brands of major international tobacco companies: BAT, Imperial, JTI and PMI (table 2).

Table 2 Multinational cigarette companies with cigarette brand(s) sold and/or advertised in at least one POS, by country

Country	British American Tobacco	Imperial Brands	Japan Tobacco International	Philip Morris International
Argentina	YES		YES	YES
Armenia	YES	YES	YES	YES
Bangladesh	YES		YES	YES
Benin	YES			YES
Bolivia	YES		YES	YES
Bosnia and Herzegovina	YES			YES
Brazil	YES		YES	YES
Bulgaria	YES	YES	YES	YES
Burkina Faso	YES	YES		YES
Cameroon	YES			YES
Chile	YES			YES
Colombia	YES			YES
Croatia	YES		YES	YES
Georgia	YES		YES	YES
Germany	YES	YES	YES	YES
India				YES
Indonesia	YES			YES
Kazakhstan	YES	YES	YES	YES
Kenya	YES			
Kyrgyzstan	YES	YES	YES	YES
Madagascar		YES		
Mexico	YES		YES	YES
Moldova			YES	YES
Montenegro	YES	YES	YES	YES
Nicaragua	YES	YES		YES
Nigeria	YES		YES	YES
Pakistan	YES			YES
Peru	YES			YES
Philippines	YES		YES	YES
Romania	YES		YES	YES
Senegal		YES		YES
Serbia	YES	YES	YES	YES
Sierra Leone	YES		YES	YES
Slovenia	YES	YES	YES	YES
South Africa	YES			
Sri Lanka	YES	YES		
Switzerland	YES		YES	YES
Turkey	YES	YES	YES	YES
Uganda	YES			
Ukraine	YES	YES	YES	YES
Uzbekistan	YES	YES	YES	YES
Vietnam	YES	YES	YES	YES

Display of cigarettes near sweets, snacks and sugary drinks

The display of cigarettes near consumable products such as sweets, snacks and sugary drinks appealing to children and youth (figure 2) was observed at POS in 90% (n=38) of the countries examined, representing all six WHO regions. In some stores, cigarettes were displayed in front of or on the counter, making them accessible to adults and minors alike, although in many stores cigarettes were not accessible via self-service displays.

Display of cigarette advertisements at eye-level of children

The display of cigarette advertisements at the eye-level of children, roughly 1 m off the ground, was observed at POS in 100% (n=42) of the countries examined (figure 3).

**Figure 2** Display of cigarettes near sweets and sugary drinks, Philippines (2021).

Flavored cigarettes

Assortments of flavoured cigarettes and/or flavoured cigarette advertisements were observed at POS in 76% (n=32) of the countries examined (figure 4). Specific marketing campaigns featuring flavoured and flavour capsule cigarettes were also observed across countries in disparate geographical regions. BAT's 'Click 4/Click and Mix' campaign and PMI's marketing featuring flavour capsule cigarettes were observed at retailers in countries in South America and Europe.

Single cigarette sales

Sale of single cigarette sticks were observed at POS in 78% (n=33) of the countries examined, representing all six WHO regions. In 17 (51%) of the countries where sale of single sticks was observed, single stick sales are prohibited by existing tobacco control policies.

Other strategies

Power walls

In the 15 countries where they were monitored, power walls, which are product displays with multiple shelves that hold multiple tobacco packs, were observed at POS in 14 countries (93%, N=15) (figure 5). Power walls were often boldly coloured and included branding for multiple brands of cigarettes.

Digital screens and illumination

In the 15 countries where they were monitored, the use of digital screens and/or lights to display or highlight advertisements for cigarettes at POS were observed at POS in 13 countries (87%, N=15) (figure 4). Digital signage, sometimes as a fixture on a power wall, above other product displays or near where the customer makes a purchase, such as near cashiers was also observed.

DISCUSSION

As many countries achieve declines in tobacco use, tobacco companies are marketing their products heavily in LMICs where young populations and growing economies hold a promise of long-term profits if the industry is successful at addicting young people to tobacco, where there are often gaps in tobacco advertising, promotion and sponsorship (TAPS) laws at POS, and where resources for enforcement are sometimes lacking.



Figure 3 Cigarette product display and advertisement at the eye level of children, Indonesia (2020).

Our findings indicate that the major multinational tobacco companies—namely BAT, Imperial, JTI and PMI—use similar marketing tactics at POS globally to attract children and youth to cigarettes.

The four strategies identified have previously been documented in some high-income countries and are effective in increasing youth exposure to tobacco. Candy and sugary drinks appeal to children and youth and are often marketed directly to this young demographic. Previous research found tobacco products placed within proximity of snacks, particularly candy, at POS in Scotland and Russia.^{8 14} The presence of tobacco products near these food and beverage products makes it difficult



Figure 4 Product display featuring flavoured cigarette ads that are backlit and assorted flavours, Argentina (2021).

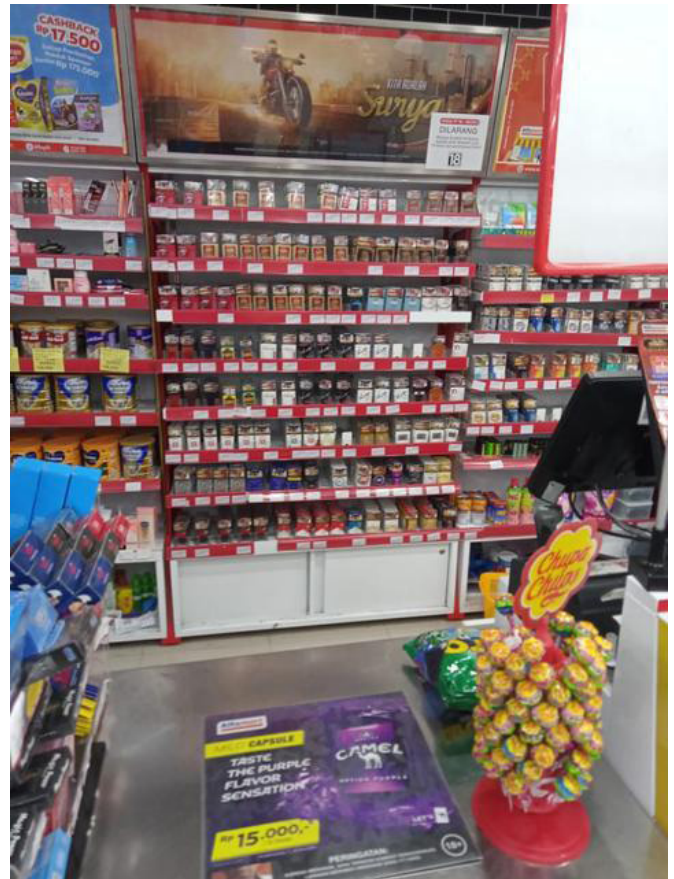


Figure 5 Power wall, Indonesia (2021).

for children and youth to browse and purchase snacks at POS without being exposed to tobacco advertising. The proximity of tobacco products to items like candy may also conflate the two products and contribute to misperceptions of the health risks posed by tobacco.

At an approximate height of 1 m, cigarette advertisements can easily be seen by children and attract their attention. Tobacco companies, including BAT and PMI, have long recognised that products placed at eye level are more likely to elicit a purchase than those placed elsewhere.¹⁵ The placement of tobacco advertisement at a low height targets children and expressly serves the purpose of attracting them to tobacco.

Flavoured cigarettes are appealing to younger demographics.¹⁶ The tobacco industry has acknowledged the appeal that flavours have among youth and beginner smokers and specifically developed new flavour technologies to target this consumer base.¹⁷ Flavoured tobacco products sold and/or advertised included menthol and sweets, which are particularly appealing to youth.^{18 19} Flavour capsule cigarettes, which are growing in popularity globally, are also appealing to youth.^{20 21} Packaging for flavoured tobacco is typically brightly coloured and vibrant; flavoured capsules in cigarettes are often featured on the packaging and have been likened to candy.²²

Sales of single sticks which can increase availability by making tobacco more affordable to children and youth and in jurisdictions where health warning labels are required on tobacco packaging, may result in less exposure to health warnings.

Power walls serve to attract attention to tobacco products and make the product more attractive. Power walls often took up a large amount of wall space behind the cashier, occupying prime advertising real estate at POS, being that all customers must

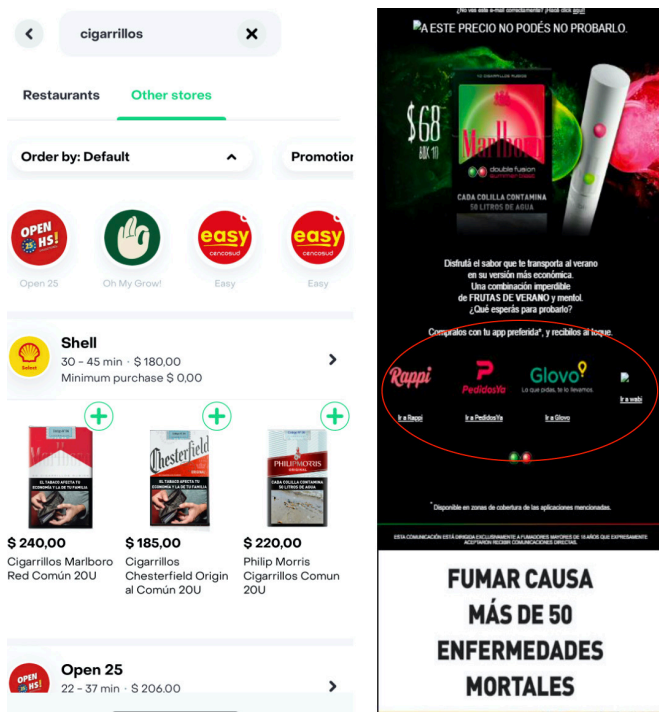


Figure 6 (A) (left) Electronic cigarette product display with multiple flavors and (B) (right) electronic cigarette product display near sweets, Germany (2020).

interact with the cashier, and thereby increasing product visibility. In experimental research, the presence of a tobacco power wall was shown to increase adolescents' susceptibility to future smoking by 14% compared with a hidden product display.²³

Dynamic digital advertisements attract consumer attention with videos, lights and sound. Lights used to illuminate cigarette advertisements and product displays attract attention and enable displays to be seen at a distance. While no research has been conducted on tobacco advertising using digital signage specifically, academic and commercial research finds that in-store digital signage increases sales of products, particularly for food and entertainment products.²⁴

The future of tobacco retail and advertising

Early POS monitoring of advertising for non-cigarette tobacco products such as electronic cigarettes, nicotine pouches and heated tobacco products has started in 15 countries as the market for these products grows and countries decide how to regulate them. Initial findings from Mexico, Colombia, the Philippines, Uzbekistan and Germany have documented POS marketing tactics for these products similar to tactics for cigarettes including posters, advertisement and product displays at the eye level of a child, flavours (figure 6A) and products placed near candy and sweets (figure 6B).

Recent monitoring efforts have also identified new ways that physical POS are extending their reach through use of new advertising and sales platforms that are gaining popularity, particularly in Latin America. The availability and use of mobile delivery applications to advertise and sell tobacco have been monitored and observed in Argentina, Brazil, Ukraine, India and the Philippines. Applications like Rappi, Glovo and Wabi partner directly with tobacco vendors and are becoming a popular way for brick-and-mortar retailers to promote their sale of tobacco products, particularly during the COVID-19 pandemic and



Figure 7 (A) (left) Screenshot of cigarettes sold by vendors on Rappi, Argentina (2021) and (B) (right) screenshot of email marketing by PMI with mobile applications circled, Argentina (2020) (Credit: FIC Argentina).

associated lockdown measures. These applications are similar to restaurant food delivery applications—they can be downloaded to mobile phones and consumers can browse and place orders for a variety of products from brick-and-mortar retailers and restaurants who belong to the application's network (see figure 7A for an example of products), gather the ordered items and pass them off to a courier who then delivers the order straight to the consumer's door. PMI and British American Tobacco Argentina promote these mobile applications for sale of tobacco (figure 7B). An age verification feature for the mobile delivery applications is often absent or easy to bypass. This method of advertising and sales is concerning as it can be easily accessed by children and youth, who are often tech savvy and highly proficient in using mobile apps. In some countries, such as Brazil, legal provisions that ban tobacco internet sales are being violated. There is also concern that sale of tobacco via these applications exploits loopholes in policies, such as in countries like Argentina where tobacco advertising and promotion is prohibited on the internet, but internet sale of tobacco is still permissible if age of the recipient can be verified.

Efforts to monitor tobacco advertisements at POS continue across the world, revisiting some countries where data have already been collected and expanding to new countries. The data collected during monitoring have been used effectively in tobacco control advocacy campaign efforts in 32 jurisdictions, resulting in the adoption and implementation of TAPS and other tobacco control policies. Closely following the release of the campaign and monitoring results, seven countries adopted national TAPS bans, six countries strengthened existing TAPS bans and three countries strengthened enforcement of TAPS bans. One example of policy success is in Pakistan where the results of 2018 monitoring were disseminated widely among policy makers to advocate for closing the POS loophole in the law banning some forms of tobacco advertising; the government issued a Notification eliminating remaining gaps in the law in 2020.

Limitations

In the majority of the 42 countries where POS were observed, data collection was limited to highly populated urban areas and to POS located near schools and playgrounds. Therefore, our findings may not be generalisable to the cigarette market in countries as a whole. The sample size of POS observed in some

countries was also small—it is possible that the observed vendors were not representative of tobacco POS throughout the country. We aimed to collect data systematically and the observational forms used by data collectors were largely the same; however, there may have been discrepancies in how observations were made due to differences in modes of data collection (mobile applications vs paper) and training (in-person vs self-taught using provided field protocol). In determining the multinational companies with product and advertisements present in each country, we did not differentiate between products that were on sale legally vs on sale as illicit products. While we hypothesise that it is likely that multinational tobacco companies encourage advertising and promotional tactics that appeal to children and youth across the globe, the scope of this work was limited to what can be observed from the vantage point of a consumer and did not include examination of business-to-business communications from tobacco companies to distributors and retailers, tobacco industry documents or direct communications by the tobacco industry.

Needed responses to tobacco advertising targeting children and youth at points-of-sale

While many countries now have bans on tobacco marketing via media such as radio, television and magazines, fewer have complete bans of tobacco marketing at POS, including bans on product display. In many of the countries where the high-lighted tobacco marketing strategies were observed, there are policies in place prohibiting sale and tobacco advertising at POS near schools and these regulations are clearly being violated. In others, loopholes in regulations are being exploited and the spirit of laws and regulations intended to protect customers from exposure to tobacco advertising at POS are being violated. Use of other tactics such as promotion of flavoured cigarettes and sale of single cigarettes also requires consideration of policies beyond tobacco advertising and promotion that can protect children and youth from exposure to tobacco at POS.

The widespread use of the described cigarette advertising and promotional tactics at POS and the commonalities in the ways the tactics are deployed demonstrate that multinational companies use similar advertising and promotional tactics across geographic regions to expose youth to their cigarette brands and products. It is likely these tactics used across the globe are instigated by the multinational tobacco companies which have both a vested interest in, and ample resources to, guide or even control how retailers advertise and promote their products. Moreover, it appears unlikely that tobacco retailers have the interest or ability to communicate about their cigarette promotion practices with peers in other countries. Such communication has been documented for many years and in different high-income countries as well as Turkey.²⁵ These findings also support existing research that finds the tobacco industry responds to partial TAPS bans by pivoting to promote its products via channels that are unregulated.²⁶

These findings highlight the contradictions underlying public claims made by the major tobacco companies, including their denial of marketing to youth and PMI's self-proclaimed move towards a 'smoke-free future'.²⁷ Despite this and the introduction of non-cigarette tobacco products by other companies like BAT, Imperial and JTI, the continued marketing of cigarettes in ways that are particularly attractive to youth demonstrates that the industry continues to invest in maximising cigarette sales and to recruiting future generations of tobacco users. Without strengthened efforts to implement solutions, we anticipate that

BAT, Imperial, JTI and PMI will continue to capitalise on lack of effective regulations to market to children and youth at POS. Several Articles of the WHO Framework Convention on Tobacco Control (FCTC) address the cigarette advertising and promotional tactics that we observed at POS. Article 13 of the WHO FCTC calls for comprehensive bans on TAPS, including bans on product display. Additionally, Article 16 of the WHO FCTC, which focuses specifically on minors, calls for the prohibition of single cigarette sales or small packets of cigarettes. Likewise, the guidelines for the implementation of Articles 9 and 10 call for the banning or regulation of flavouring ingredients designed to increase the palatability of cigarettes. The most effective way to stop the rampant marketing and promotion of tobacco products to children and youth is for governments to enact and enforce these key measures of the WHO FCTC through sensitisation of policymakers and the public to the need to address the POS and other tactics used by the tobacco industry to target children and youth.

What this paper adds

- ⇒ Tobacco companies have historically targeted children and youth with targeted advertising, including promotion of cigarettes at stores near schools. Research on the advertising and promotion strategies to target young consumers at points-of-sale is largely restricted to high-income countries.
- ⇒ We found that similar advertising and promotional tactics are used at points-of-sale to promote cigarettes to children and youth around the globe, regardless of region and income level. Similarities across countries indicate that multinational tobacco companies use similar strategies across geographic regions and that multinational tobacco companies may be complicit in violating existing laws and regulations and exploiting loopholes in tobacco advertising and promotion policies in some countries.
- ⇒ Advertising and promotional strategies at points-of-sale for novel tobacco and nicotine products are similar to those used to sell cigarettes. The use of mobile applications that facilitate tobacco delivery are being promoted by tobacco companies and are another way for some brick-and-mortar stores selling tobacco to promote their tobacco products.

Twitter Jennifer L Brown @jenniferlynette

Acknowledgements Thank you to all of the partners who collaborated on these efforts: Fundación InterAmericana del Corazón Argentina (FIC Argentina), PROGGA Knowledge for Progress, Bangladesh Centre for Communication Programmes (BCCP), Fundación InterAmericana del Corazón Bolivia (FIC Bolivia), Progressive Reinforcement of Organisations and Individuals (PROI), Smoke Free Life Coalition (SFLC), Framework Convention on Tobacco Control Implementation and Monitoring Centre in Georgia (FCTC IMCG), Consumer Information Network (CIN), Centrul Pentru Politici și Analize în Sănătate (PAS Centre), Universidad Católica Redemptoris Mater (UNICA), Comisión Nacional Permanente de Lucha Antitabáquica (COLAT), Clearpoint Communications Associates (CCA), University of Western Cape (UWC), No Excuse, Liges de la Santé/CIPRET-Vaud, National Association of Consumers of Armenia, Contrôle du Tabac en Afrique (ACTA), l'Education et le Contrôle du Tabac (IECT), African Tobacco Control Alliance (ATCA), Afrique contre le tabac (ACONTA), Coalition Camerounaise Contre le Tabac (C3T), Progressive Reinforcement of Organisations and Individuals (PROI), Framework Convention on Tobacco Control Implementation and Monitoring Centre in Georgia (FCTC IMCG), Consumer Voice, Voluntary Health Association of India, Childrens' Media Monitoring Foundation (Yayasan Pengembangan Media Anak), Indonesia Childrens' Lantern (Lentera Anak Indonesia), Smoke Free Agents (SFA), Smoke-free Kazakhstan Coalition, Public Health Protection Foundation, NY SAHY, Fundación Interamericana del Corazón México (FIC Mexico), Progressive Reinforcement of Organisations and Individuals (PROI), Juventas, Nigeria Tobacco Control Alliance, SPARC, ImagineLaw, Association Prevent,

Health for All Coalition, Türkiye Yeşilay Cemiyeti, Uganda National Health Consumers' Organisation (UNHCO), DEPOCEN, Corporate Accountability Colombia.

Contributors All authors made a substantial contribution to these monitoring efforts and developing the manuscript. All authors contributed to the conceptualisation of monitoring and design of data collection tools. JLB, DR and NP implemented data collection at different points in time. DR and NP collated the data. JLB wrote the initial draft of the manuscript and DR, MGC, NP, MH and JEC contributed to revisions and finalisation of the manuscript. All authors approved the final version.

Funding This work was supported with funding from Bloomberg Philanthropies' Bloomberg Initiative to Reduce Tobacco Use (bloomberg.org).

Map disclaimer The inclusion of any map (including the depiction of any boundaries therein), or of any geographic or locational reference, does not imply the expression of any opinion whatsoever on the part of BMJ concerning the legal status of any country, territory, jurisdiction or area or of its authorities. Any such expression remains solely that of the relevant source and is not endorsed by BMJ. Maps are provided without any warranty of any kind, either express or implied.

Competing interests No, there are no competing interests.

Patient consent for publication Not applicable.

Ethics approval Not applicable.

Provenance and peer review Not commissioned; externally peer reviewed.

Open access This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/4.0/>.

ORCID iDs

Jennifer L Brown <http://orcid.org/0000-0001-7418-1172>

Debra Rosen <http://orcid.org/0000-0002-5559-055X>

Maria G Carmona <http://orcid.org/0000-0002-2535-3895>

Joanna E Cohen <http://orcid.org/0000-0002-3869-3637>

REFERENCES

- 1 U.S. Department of Health and Human Services. *Preventing tobacco use among youth and young adults: a report of the surgeon General*. Atlanta, GA, 2012.
- 2 McMahon J. *Young adult market*. R. J. Reynolds Tobacco Company, 1990.
- 3 Centers for Disease Control and Prevention (CDC). Point-of-purchase tobacco environments and variation by store type—United States, 1999. *MMWR Morb Mortal Wkly Rep* 2002;51:184–7.
- 4 Henriksen L, Feighery EC, Schleicher NC, et al. Reaching youth at the point of sale: cigarette marketing is more prevalent in stores where adolescents shop frequently. *Tob Control* 2004;13:315–8.
- 5 Robertson L, Cameron C, McGee R, et al. Point-of-sale tobacco promotion and youth smoking: a meta-analysis. *Tob Control* 2016;25:e83–9.
- 6 Paynter J, Edwards R. The impact of tobacco promotion at the point of sale: a systematic review. *Nicotine Tob Res* 2009;11:25–35.
- 7 Barnoya J, Monzon D, Pinetta J, et al. New tobacco products, old advertising strategies: point-of-sale advertising in Guatemala. *Tob Control* 2021;30:1–3.
- 8 Kennedy RD, Grant A, Spiers M, et al. Point-of-sale tobacco advertising and display bans: policy evaluation study in five Russian cities. *JMIR Public Health Surveill* 2017;3:e52.
- 9 Azzahro EA, Dewi DMSK, Puspikawati SI, et al. Two tobacco retailer programmes in Banyuwangi, Indonesia: a qualitative study. *Tob Control* 2021;0:e50–5.
- 10 Sebayang SK, Dewi DMSK, Lailiyah Syifa'ul, et al. Mixed-methods evaluation of a ban on tobacco advertising and promotion in Banyuwangi district, Indonesia. *Tob Control* 2019;28:651–6.
- 11 Dewi DMSK, Sebayang SK, Lailiyah Syifa'ul. Density of cigarette retailers near schools and sales to minors in Banyuwangi, Indonesia: a GIS mapping. *Tob Induc Dis* 2020;18:06.
- 12 Adisasmito W, Amir V, Atin A, et al. Density of cigarette retailers around educational facilities in Indonesia. *Int J Tuberc Lung Dis* 2020;24:770–5.
- 13 Astuti PAS, Mulyawan KH, Sebayang SK, et al. Cigarette retailer density around schools and neighbourhoods in Bali, Indonesia: a GIS mapping. *Tob Induc Dis* 2019;17:55.
- 14 Stead M, Eadie D, MacKintosh AM, et al. Young people's exposure to point-of-sale tobacco products and promotions. *Public Health* 2016;136:48–56.
- 15 Pollay RW. More than meets the eye: on the importance of retail cigarette merchandising. *Tob Control* 2007;16:270–4.
- 16 Huang L-L, Baker HM, Meernik C, et al. Impact of non-menthol flavours in tobacco products on perceptions and use among youth, young adults and adults: a systematic review. *Tob Control* 2017;26:709–19.
- 17 Carpenter CM, Wayne GF, Pauly JL, et al. New cigarette brands with flavors that appeal to youth: tobacco marketing strategies. *Health Aff* 2005;24:1601–10.
- 18 Hoffman AC, Salgado RV, Dresler C, et al. Flavour preferences in youth versus adults: a review. *Tob Control* 2016;25:ii32–9.
- 19 Villanti AC, Collins LK, Niaura RS, et al. Menthol cigarettes and the public health standard: a systematic review. *BMC Public Health* 2017;17:1–13.
- 20 Moodie C, Thrasher JF, Cho YJ, et al. Flavour capsule cigarettes continue to experience strong global growth. *Tob Control* 2019;28:595–6.
- 21 Abad-Vivero EN, Thrasher JF, Arillo-Santillán E, et al. Recall, appeal and willingness to try cigarettes with flavour capsules: assessing the impact of a tobacco product innovation among early adolescents. *Tob Control* 2016;25:e113–9.
- 22 Brown J, Zhu M, Moran M, et al. 'It has candy. You need to press on it': young adults' perceptions of flavoured cigarettes in the Philippines. *Tob Control* 2021;30:293–8.
- 23 Setodji CM, Martino SC, Gong M, et al. How do tobacco power walls influence adolescents? A study of mediating mechanisms. *Health Psychol* 2018;37:188–93.
- 24 Burke RR. Behavioral effects of digital Signage. *J Advert Res* 2009;49:180–5.
- 25 Feighery EC, Ribisl KM, Clark PI, et al. How tobacco companies ensure prime placement of their advertising and products in stores: interviews with retailers about tobacco company incentive programmes. *Tob Control* 2003;12:184–8.
- 26 Dewhirst T. POP goes the power wall? Taking aim at tobacco promotional strategies utilised at retail. *Tob Control* 2004;13:209–10.
- 27 Pmi.com. PMI aims to become a majority smoke-free business by 2025 [Internet], 2021. Available: <https://www.pmi.com/our-transformation/pmi-aims-to-become-a-majority-smoke-free-business-by-2025>