

From glass boxes to social media engagement: an audit of tobacco retail marketing in Indonesia

Putu Ayu Swandewi Astuti ^{1,2}, Ni Made Dian Kurniasari,^{1,3} Ketut Hari Mulyawan,^{1,3} Susy K Sebayang,⁴ Becky Freeman^{2,5}

► Additional material is published online only. To view please visit the journal online (<http://dx.doi.org/10.1136/tobaccocontrol-2018-054833>).

¹Department of Public Health and Preventive Medicine, Udayana University Faculty of Medicine, Denpasar, Indonesia

²School of Public Health, The University of Sydney, Sydney Medical School, Sydney, New South Wales, Australia

³Udayana Center for NCDs, Tobacco Control and Lung Health, Udayana University Sudirman Campus, Denpasar, Indonesia

⁴BioStatistics and Population Studies, Universitas Airlangga, Banyuwangi, Indonesia

⁵Prevention Research Collaboration (PRC), Charles Perkins Centre, The University of Sydney, Sydney, New South Wales, Australia

Correspondence to

Ms Putu Ayu Swandewi Astuti, Department of Public Health and Preventive Medicine, Udayana University Faculty of Medicine, Denpasar 80232, Indonesia; ayu.swandewi@unud.ac.id

Received 7 November 2018
Revised 5 March 2019
Accepted 20 March 2019
Published Online First 30 May 2019

ABSTRACT

Objective To assess tobacco promotion intensity, retailer behaviours and tobacco company efforts to link retailer marketing to online channels.

Methods We completed an audit of tobacco advertisements and promotions at 1000 randomly selected cigarette retailers in Denpasar, Bali, Indonesia that included an observation checklist, digital photos and structured interviews with retailers. We then calculated the tobacco promotion index for each retailer and made comparisons based on store types. Next, we conducted a photo analysis from 100 randomly selected retailers to explore links to online channels and other promotional cues to engage young people.

Results Mini-markets have both the highest total number of promotions and the highest indoor promotion index with a mean score of 5.1 and 3.7, respectively. Kiosks have the highest outdoor promotion index with a mean score of 1.6. Most of the retailers (98.9%) displayed cigarettes, more than half of kiosk retailers (54.8%) and mini-market retailers (56.3%) admitted selling cigarettes to young people, and 74% of kiosk retailers sell single stick cigarettes. We found links to online marketing, including two hashtags and a company website. Promotional materials also included youth-focused content such as English taglines, new products and small packs.

Conclusion Tobacco companies in Indonesia have strategically differentiated their advertisements based on retailer type and have bridged conventional retailer marketing to online channels. Reforming Indonesian tobacco laws to include bans on single sticks and small pack sales, point-of-sale advertising, including displays, and enforcement of laws on sales to minors is urgently required.

INTRODUCTION

Retail point of sale (PoS) is not solely a place to purchase cigarettes, but serves as a front-line tobacco promotion and marketing channel.^{1,2} Retail merchandising is considered an essential medium to convey brand imagery, maintain brand presence and perception of popularity, differentiate from other brands, and finally to attract customers with creative designs and promotions.³ The presence of retail marketing and negative retailer behaviours, such as selling to minors, are linked to youth having both positive attitudes towards smoking and easy access to cigarettes.⁴ PoS is not isolated from other forms of tobacco marketing, and may serve as a link to other promotion, including tobacco industry-sponsored events and digital platforms.⁵ These digital platforms are in turn a more engaging and

customer-driven marketing,^{5–7} and also help to facilitate connections to other promotion channels.⁵

As recommended by the WHO Framework Convention for Tobacco Control (WHO-FCTC), a total ban should be applied to all types of tobacco advertising, promotion and sponsorship (TAPS), including at PoS.⁸ Cigarette retail promotions and displays are associated with the initiation of smoking,^{9–12} susceptibility to future smoking,^{5, 9, 13, 14} impulse purchasing^{15, 16} and decreased smoking cessation success.¹⁵ Policies to remove PoS marketing have strong public support internationally^{17–19} and have been shown to be an effective tobacco control measure. Positive short-term effects of a cigarette display ban include perceived increased odds of quitting success among adult smokers and smoking prevention among young people.¹⁸ In New Zealand, a tobacco display ban, implemented alongside other tobacco control policy measures, resulted in a significant decrease in smoking initiation, experimental and regular smoking, and cigarette purchase attempts among students aged 14–15 years.²⁰

Indonesia faces a huge tobacco burden with almost 2 million tobacco-related illnesses and 230 000 tobacco-related deaths annually.²¹ In 2015, the country bore an estimated total of US\$45.9 billion economic loss due to tobacco.²¹ Smoking prevalence in Indonesia is the highest in the South-East Asian region,²² with a smoking rate of 36.3% among the adult population^{22,23} and 19.4% among youth.²⁴ Student smokers aged 13–15 years report starting smoking at a very young age, with 43.2% initiating smoking at age 12–13 years and 19.8% below the age of 10.²⁴

Nationally, there are no regulations in place to manage cigarette retailing and promotion, with the exception of the prohibition of sale to minors (children aged <18 years), as outlined in the government regulation for tobacco control, *Peraturan Pemerintah (PP) 109/2012*. This regulation is little enforced, with the 2014 Global Youth Tobacco Survey²⁴ revealing that almost two-thirds (64.5%) of student smokers were able to freely buy cigarettes and three-quarters (74%) have purchased cigarettes as single sticks; reported exposure to PoS marketing was also high at 60.7%.²⁴

Cigarette retailers in Indonesia are primarily small, owner-operator businesses such as kiosks or street vendors, with a growing number of convenience stores, commonly called mini-markets. Indonesian customers have begun to shift their shopping preference to the modern mini-market due to product availability, cleanliness, variety, convenience



© Author(s) (or their employer(s)) 2019. No commercial re-use. See rights and permissions. Published by BMJ.

To cite: Astuti PAS, Kurniasari NMD, Mulyawan KH, et al. *Tob Control* 2019;**28**:e133–e140.

and prestige.^{25–27} In this growing competitive retail environment, documenting the differences in tobacco promotions and retail behaviours between store types will provide insights into tobacco company promotional strategies. This information will assist the development of a more focused tobacco retailer monitoring, education and regulation programme in the future.

Similar to the national situation, there are no retail regulations in place in the city of Denpasar, the capital city of the Bali island province. In 2013, the local Denpasar government placed a moratorium on outdoor cigarette billboards,²⁸ and prohibited advertising and promotion of tobacco products in some public places, including traditional and modern markets such as supermarkets and mini-markets (convenience store).²⁹ The Denpasar City Health Office has expressed an interest in banning all forms of TAPS, including cigarette displays at PoS,³⁰ but there has been no actual implementation of a policy to date. Assessing the intensity of cigarette ads at PoS and associated retailer behaviour may assist in progressing a local PoS TAPS ban policy and will also be replicable in other Indonesian cities/provinces.

Our study compares tobacco advertising and promotion intensity based on retailer type, and assesses retailer behaviours including single stick cigarette sales and sales to young people in Denpasar, Bali. In this study, we have also captured tobacco company efforts to link retailer marketing to new media channels that appeal to and further engage young people. The aim of our study is to paint a complete portrait of tobacco company retail marketing in a minimally regulated environment, such as Indonesia, in the era of new media.

METHODS

Study setting

The study was conducted in the city of Denpasar in January 2018. As the capital of Bali Province, Denpasar is categorised as a ‘big city’ with a population of 893 700 and a population density of approximately 7022 people/km².³¹

Study design

We conducted the study in two phases. The first phase was an audit survey, followed by photo analysis and online search and observation.

Phase 1: audit

Sample size and sample selection

This was a stratified sample survey of retailers with three stratum: kiosk, mini-market and ‘other’ type. We used the database of 4114 cigarette retailers previously mapped in the city of Denpasar³² as the sampling frame. The sample size was calculated based on Lwanga and Lemeshow³³ sample size calculation for stratified sample surveys. The sample size calculation was based on the total size of each stratum—kiosk (n=3199), mini-market (n=606), and other including supermarkets, wholesalers, street vendors (carts which usually remain on the same spot), village/institution co-op and mobile phone shops (n=309)—an assumption of the proportion of retailers with outdoor cigarette promotion in each stratum (0.7 for kiosk, 0.4 for mini-market, 0.2 for other), 95% confidence level and 0.025 absolute precision. We found the minimum total sample size was 985 and was rounded up to 1000 retailers. The sample is then proportionately divided between strata and randomly selected within each stratum. We applied simple random sampling using the random number generator in Microsoft Excel to select the sample from each stratum. We obtained a high response rate (99.6 %); of the 1000 selected retailers, 1 retailer declined to participate because

she did not have time and 3 retailers were closed, despite two visits. These four retailers were replaced with the next listed retailers in the sampling frame.

Measures

We measured the presence of different types of outdoor and indoor advertisements and documented promotional taglines on the marketing materials. We developed a tobacco promotion index modified from the work of Cohen *et al.*¹ The index assesses the degree of tobacco advertising and promotion in each type of retailer. We included scores for the presence of different types of tobacco promotion, displays and power walls. We scored 1 for each promotional item observed during the audit, except for tobacco company power walls which were scored 2 (online supplementary material 1). Then, we calculated the promotion index as the sum of each score for outdoor, indoor and total (indoor + outdoor) promotion for each audited retailer. From the questionnaire survey, we recorded retailer behaviours, including selling to young people and selling single stick cigarettes.

Data collection

Data collection was conducted by trained enumerators (students and alumni of the undergraduate public health degree at Udayana University in Bali). The enumerators received 1.5 days of training including inclass and field training. Data collection had two components: (1) observation and digital photo taking of all advertisements and promotional items located in the outdoor and indoor space of the retailer, using an observation checklist (online supplementary material 2); and (2) short, structured interviews using questionnaires with retailers (owner or shopkeeper age >18 years old) using a pretested questionnaire (online supplementary material 2). We adapted the observation checklist from Johns Hopkins School of Public Health, Institute for Global Tobacco Control point of sale monitoring guideline.³⁴ The questionnaires include questions about the promotion of cigarettes, cigarette prices, cigarette selling, and incentives for selling products or displaying tobacco advertising. The field coordinator (NMDK) randomly selected 25 of the sampled retailers and conducted an audit using the same observation checklist as a reliability check. We calculated inter-rater kappa statistic comparing the audit conducted by the enumerators and field coordinator. The kappa statistic was above 0.9 for the individual ads and 0.8 for the tobacco promotion index, indicating high reliability.

Analysis

We calculated the tobacco promotion index and then we applied one-way analysis of variance for a difference in mean tobacco promotion index score between retailers. The proportion of each type of advertisement and retailer behaviour of selling to young people and selling single sticks was calculated for each retailer type. We conducted χ^2 test to determine whether the difference in the proportion of promotional items and retailing behaviour between retailers could have occurred by chance. We conducted all statistical tests using STATA/IC V.13.

Phase 2: photo analysis

We (PASA) conducted the photo analysis from 100 retailers that were selected using the random number generator in Microsoft Excel, from the 1000 audited retailers. We reviewed photos and identified any promotional materials and documented the promotions contained within the materials. Any duplicates were

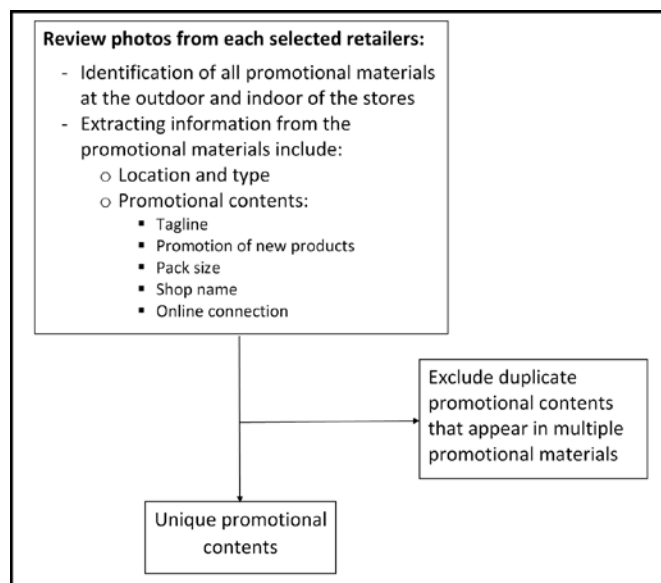


Figure 1 Flow chart of photo analysis.

deleted (figure 1). The promotions were coded for the following categories: link to online marketing activities, promotion of new products, promotion of cigarette price, promotion of pack size and promotion of a personalised item.

Finally, we visited any online links found on the materials and retrieved a description of the website. We also performed a search on the social media photo-sharing site Instagram, on 28 May 2018, of any endorsed hashtags included in the advertising.

RESULTS

Retail cigarette promotion

We observed an extensive range of cigarette promotions at retailers in Denpasar both at the outdoor and indoor space. The promotions were mainly advertisements and other materials that included brand logos and cigarette displays. We only found one sales promotion offer during the time of survey, which was an exchange of four empty packs for a new pack of the same brand. Of the 1000 retailers, 674 (67.4%) had at least one outdoor promotion and almost all 989 (98.9%) had at least one indoor promotion, including a cigarette display. The most common form of outdoor promotion was a banner, observed at 544 (54.4%) of the retailers, while the most prevalent indoor promotion, other than the cigarette display, were stickers at 316 (31.6%) retailers. Outside, a maximum of 8 banners and 16 posters were observed, which covered most of the available space.

Based on the promotion index (online supplementary material 1), we found a significant difference in the intensity of promotion between retailers. Overall, mini-markets had both the highest total promotion index with an average score of 5.1 and the highest indoor promotion index with a score of 3.7, while kiosk had the highest outdoor promotion index with an average score of 1.6 (table 1).

There were significant differences in the types of advertisements based on retailer type (table 2); twice as many outdoor banners (59.6%) were observed in kiosks compared with mini-markets (32.5%) and other retailers (36.7%). For indoors, stickers were more prevalent at kiosks (36.0%), more than triple than found at mini-markets (11.9%), while the highest placement of personalised promotions including a shop name on banners or

Table 1 Tobacco promotion index based on store type

Promotion index score	Range	Retailer types			P value*
		Kiosk n=800	Mini-market n=151	Other n=49	
Outdoor	0–4	1.6 (1.2)	1.4 (1.3)	1.2 (1.2)	0.02
Indoor	0–8	2.7 (1.4)	3.7 (1.6)	3.0 (1.5)	<0.0001
Total	0–11	4.3 (2.1)	5.1 (2.3)	4.1 (2.1)	0.0001

*One-way analysis of variance.

store name board, illuminated ads, and objects with brand logos, both indoors and outdoors, was found in mini-markets (table 2).

Cigarette display: glass power wall

Most of the retailers (989, 98.9%) displayed cigarettes. There were some differences in the type and location of the display (table 2). Mini-markets had more displays behind the cashier (116/151, 76.8%) and displays for a specific brand/company (101/151, 67.3%), while kiosks had more above-the-counter displays (674/800, 84.3%) and for a mix of cigarette brands (481/800, 60.1%). While more displays that were <1 m above the floor were found in mini-markets, more displays <1 m from food products were in kiosks (table 2). The cigarette displays in kiosks were glass shelves/boxes (glass power walls) placed on top of another shelf or table (figure 2). The size of the displays varied, and we observed a maximum of eight displays in one store. Price boards or stickers were found more in mini-markets compared with other retailers. As shown in figure 2, the glass displays are decorated with different types of advertisements, including sticker strips (highlighted) placed on the metal frame.

Promotional taglines

Two-thirds (67.5%) of the 74 unique observed promotional taglines were in English. The taglines contained aspirational messages for several cigarette brands, such as ‘rise and shine’ (Surya Gudang Garam) and ‘committed to greatness’ (Gudang Garam Signature); encouragement to take action or to not quit such as ‘Never Quit’ (Surya Pro) and ‘Act now!’ (Clas Mild); and promotion of the taste and/or quality of the product, for instance ‘new look, same smooth taste’ (Marlboro Gold Light), ‘fine cut smooth taste’ (Dunhill Mild) and ‘Mild yet strong’ (Surya Pro Mild). We also found two taglines with a hashtag (#).

Promotional content from photo analysis

New release, ‘Kiddie’ pack and personalised banner

From the photo analysis of the promotional materials at 100 randomly selected retailers, we found 276 different promotional materials with 85 unique promotional content. Around one-fourth of these promotions (20/85, 23.5%) explicitly promoted a new product or brand variance, and 29 of 85 (34.5%) displayed the pack size. Of the 29 items that displayed the pack size, 20 (70%) promoted small cigarette packs (kiddie packs) that contained less than 20 sticks, and 6 of 29 (20.8%) promoted packs as small as 10–12 sticks (table 3). One-third included the cigarette price, which ranged from 9000 Indonesian rupiah (US\$0.62) to 20000 Indonesian rupiah (US\$1.38) per pack, and 5 of 85 (5.9%) displayed the single stick price of 1000 Indonesian rupiah (US\$0.07) (table 3).

Table 2 Cigarette advertisements and display based on retailer type in Denpasar

Promotional materials and cigarette display	Retailer types			P value*
	Kiosk n=800	Mini-market n=151	Other n=49	
Outdoor				
Banner	477 (59.6)	49 (32.5)	18 (36.7)	<0.001
Whole shop paint	14 (1.8)	1 (0.7)	0 (0.0)	0.406
Partial paint/shop name	19 (2.4)	17 (11.3)	2 (4.1)	<0.001
Poster	239 (29.9)	55 (36.4)	13 (26.5)	0.225
Object with brand logo	24 (3.0)	15 (9.9)	3 (6.1)	<0.001
Visibility from street	494 (61.8)	75 (49.7)	20 (40.8)	0.001
Indoor				
Illuminated ads	2 (0.25)	32 (21.2)	3 (6.1)	<0.001
Sticker/Poster <A4	288 (36.0)	18 (11.9)	10 (20.4)	<0.001
Poster >A4	93 (11.6)	12 (7.9)	5 (10.2)	0.409
Indoor shop paint	13 (1.6)	3 (2.0)	0 (0.0)	0.624
Object with brand logo	156 (19.5)	48 (31.8)	11 (22.5)	0.003
Location of display				
Behind cashier	37 (4.6)	116 (76.8)	26 (53.1)	<0.001
Above cashier/counter	674 (84.3)	46 (30.5)	24 (49.0)	<0.001
<1 m from floor	166 (20.8)	70 (46.4)	15 (30.6)	<0.001
<1 m from food/children's product	566 (70.8)	83 (55.0)	32 (65.3)	0.001
Type of display				
A specified cigarette brand	158 (19.8)	101 (67.3)	18 (36.7)	<0.001
Mixed cigarette brands	481 (60.1)	54 (35.8)	17 (34.7)	<0.001
Mixed with other products	193 (24.1)	23 (15.2)	11 (22.5)	0.057
Standard shelf	40 (5.0)	15 (9.9)	4 (8.6)	0.049
Price display	53 (6.6)	57 (37.8)	9 (18.4)	<0.001

bold:highest value

* χ^2 test.

Additionally, 12 of 100 (12%) retailers displayed a tobacco banner that included the shop name and address. Seven of the 12 banners were badged with the 'Gudang Garam* Strategic Partnership (GGSP)' and one had 'Sampoerna* retail community (SRC)' (Gudang Garam and Sampoerna are two of the largest tobacco companies in Indonesia.).

Hashtags and online connections

From the 100 randomly selected retailers, we found examples of social media promotions at retail, including a website link (

www.suryanation.id) on a banner of Surya Gudang Garam brand and the use of #hashtags on marketing material (figure 3). The website titled 'suryanation motorland' was presented as a riders' community with a range of activities and events such as motor-bike touring, art and 'Suryanation musicland' (figure 4). Only two of the seven pages on the website required a login.³⁵

We found #hashtags on banners and other promotional materials for the Pro Mild brand, #temenanitu (being friend), and the Apache brand, #caraksatria (the heroic way). The hashtag #temenanitu was accompanied with different taglines about friendship, such as 'selalu kasih dukungan' (always support each other), 'beda hobi satu tongkrongan' (different hobby yet the same passion), 'bikin yang biasa jadi seru' (make the ordinary become exciting) and 'main bareng bukan jaim bareng' (play together not guard your image together). These promotional materials included images of young people having fun together (figure 3).

For the Instagram search, we found a small number of relevant posts for #caraksatria; this hashtag is not specific to tobacco and may cover a broad range of topics. For #temenanitu, we found 3914 posts, and noticed the posts also contained the hashtag #projam, which is linked to the official Instagram account for projam.id, which has >44 000 followers. The projam.id website,³⁶ sponsored by PT Gudang Garam, is presented as a street culture community that includes skateboarding and Bicycle Motocross (BMX) enthusiasts called 'Projammers'. The website contains information on different activities, challenges and competitions, and includes a series of offline events (figure 4).

Retailer behaviour

More than half of the retailers at both kiosks and mini-markets admitted selling cigarettes to young people (table 4). More kiosk retailers (592/800, 74%) stated they sold single stick cigarettes compared with 23 of 151 (15.2%) mini-markets and 10 of 49 (20.4%) other retailers. The kiosk owners mostly purchased their stock directly from a larger shop or wholesalers, while mini-market and other retail operators obtained their stock from tobacco company distribution agents (table 4).

DISCUSSION

'Presence and creativity at point-of-sale are crucial to maintain consumer awareness since POS materials are the last exposure to advertising before product purchase'

—Philip Morris.³⁷

Tobacco companies have highlighted the importance of PoS as a primary marketing communication avenue at the point where the product is also available for purchase.^{1 37 38} Previous studies have documented a range of PoS tobacco promotional materials^{1 39–41} designed to show the availability and accessibility of the products, to sell brand image, to recruit new customers and to retain the current ones.³ In our study, the extensive promotional materials observed at the retailers in Denpasar appealed to young people and leveraged traditional promotion and marketing to also promote more modern forms of online promotion. These youth-friendly promotions were reinforced through retailer behaviour of selling single sticks and selling to the minors.

We observed a higher cigarette promotion index at convenience stores/mini-markets compared with kiosks, which is a similar result to the Cohen *et al*¹ study. More outdoor marketing materials were found at the kiosks; however, more indoor promotions were found at the mini-markets. The kiosks are relatively small in size,⁴² making outdoor promotion a better option



Figure 2 Tobacco power walls: glass displays at kiosks (left) and mini-markets (right).

to ensure more exposure; on the contrary, mini-markets have more indoor space available for tobacco industry promotions. The difference is also likely related to the nature of the retailers and how they are connected to the tobacco company marketing chain. Most of the kiosk owners in our study purchase cigarettes from a larger store or wholesaler, indicating the outlet is self-owned and self-managed. The majority of mini-market retailers obtained their cigarette stocks from sales representatives, which facilitates more direct contact with tobacco companies. Indonesian tobacco companies have tailored their promotions based on different retailer types to ensure optimum reach through the strategic placement of different types of promotional materials based on the size of available spaces within retailers.

Additionally, we found personalised banners with the shop name and address of the retailers. The shop names occupy only a small space on the banner, yet such customised marketing

material likely increases retailer engagement. The presence of Gudang Garam Strategic Partnership (GGSP) (an example of the GGSP contract is available at <https://id.scribd.com/doc/53619790/Gudang-Garam-Strategic-Partnership>) and Sampoerna Retail Community⁴³ logos on banners suggests these tobacco companies are engaging retailers in a sales incentive programme. A similar observation has been reported in four cities surrounding Jakarta, with the two main retailer expectations being to display banners and to place cigarette displays in a prominent location.⁴⁴ Historically, tobacco companies have used retailer incentive programmes to ensure the sale and promotion of their products,^{37 38 45} and continue to do so even after the adoption of pack display bans.⁴⁶ A comprehensive PoS promotion ban should also include a ban on promotional communication between the tobacco companies and the retailer.⁴⁶

Indonesian tobacco companies continue to argue that they do not target young people⁴⁷; however, the promotional materials

Table 3 Promotion of new products and price

Promotions (n=85)	Yes, n (%)
New product	20 (23.5)
Pack size	29 (34.1)
10	1 (3.5)
12*	5 (17.2)
16*	14 (47.5)
17	2 (6.9)
20	9 (31.0)
Price/pack	28 (33.3)
Price range	9000–20 000 Indonesian rupiah
Individual price	5 (5.9)
Price	1000 Indonesian rupiah

*Two items contain both 12 and 16 sticks pack promotion.



Figure 3 Hashtag and other online connection.

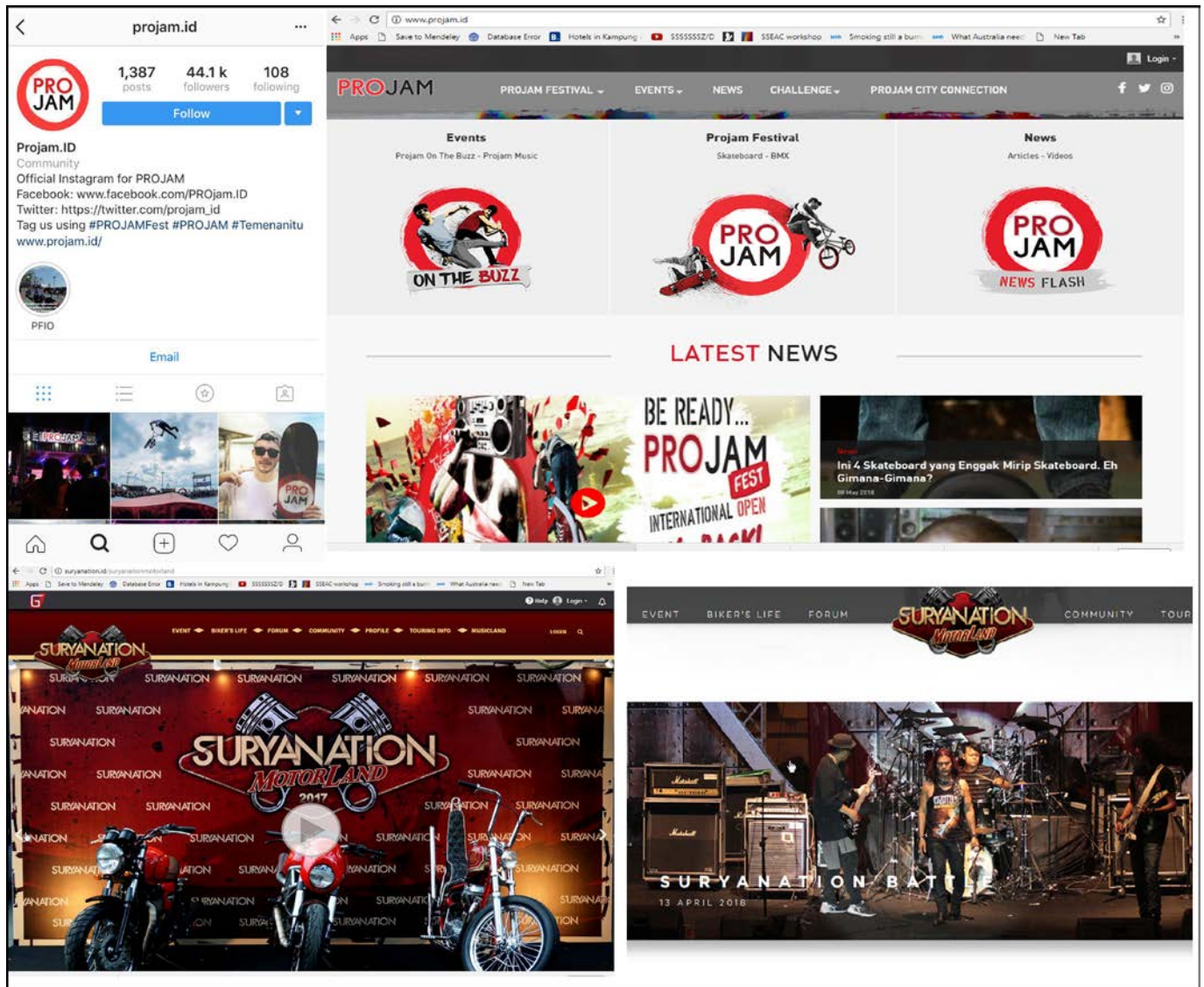


Figure 4 Projam Instagram account, projam.id and suryanation.id.

and retailer behaviours documented in our study suggest otherwise. Tobacco companies are positioning smoking as part of youth culture, reflected by the use of English and youth language or slang—known as *Bahasa Gaul*⁴⁸ (*language of sociability*)—on the promotional materials. (*Bahasa Gaul* is a term commonly used for youth slang in Indonesia and originated from ‘Bahasa

pergaulan’, meaning language for socialisation.). English has gained prestige in Indonesia and has become an important part of the Indonesian youth mindset.⁴⁹ It is recognised as a key to social and economic improvement and as cultural capital to reach the global world.⁴⁹ English has been adapted and mixed with Bahasa Indonesia (the national language) in daily conversation, including youth slang.^{50 51} For instance, the promotional tagline ‘#temenan itu main bareng bukan jaim bareng’ reflects a form of *Bahasa Gaul*. The word ‘jaim’ is an abbreviation of ‘jaga image’, meaning guard one’s image.⁵⁰ To Indonesian youth, *Bahasa Gaul* is a symbol of sociability and solidarity.^{48 52} It also reflects a cosmopolitan, more educated, middle upper class group.^{48 52} We also observed images of friendship on promotional materials, themes that directly appeal to the youth market.⁵³

Another global tobacco industry strategy to attract new, younger consumers is to introduce new products that appeal to starter smokers.⁵⁴ New products are frequently associated with product innovation or new experiences, which appeal to young people.⁵⁵ In our study, the promotion of new products in small pack sizes and promoting single stick prices are other examples of youth-targeted strategies. The promotion of ‘kiddie packs’ and single sticks further highlights the affordability of products

Table 4 Cigarette retailing activity based on store type

Retailing behaviour	Retailer types			P value*
	Kiosk n=800	Mini-market n=151	Other n=49	
Selling to young people	438 (54.8)	85 (56.3)	18 (36.7)	0.041
Selling loose cigarettes	592 (74.0)	23 (15.2)	10 (20.4)	<0.001
Source of cigarettes				
Buy their own from wholesaler/larger shop	527 (65.9)	38 (25.2)	13 (26.5)	<0.001
From distribution agent	273 (34.1)	113 (74.8)	36 (73.5)	

bold: the highest value

* χ^2 test.

to young people. In addition, the explicit display of new products, the promotion of low-cost brands¹⁹ and single stick prices²⁰ also serve as environmental cues to normalise smoking.

These promotional messages are amplified through retailer behaviour, with more than half of the retailers in Denpasar admitting to selling cigarettes to young people. This is despite the national tobacco control regulation PP 109/2012 Article 25b,⁵⁶ which outlines the prohibition on selling cigarettes to young people. To date, no subnational adoption and enforcement of a tobacco sales ban to minors is in place. Internationally, adequate enforcement of tobacco sales bans to minors has reduced youth cigarette purchase^{57–59} and reduced smoking prevalence.^{60–62}

Tobacco industry efforts to attract young people also included links to online and social media. The websites and Instagram posts^{35,36} linked to the promotions captured in our study did not directly advertise or sell cigarettes, but instead promoted ‘cool, fun, and adventurous’ lifestyles and activities. The online channels were linked to offline, live events, emphasising the industry’s strategic marketing mix of online and offline promotional channels.⁵ This finding suggests that the tobacco companies have employed retailer marketing to influence onsite purchase or to directly sell brand image, and to invite online engagement. It supports the evidence that a partial TAPS ban will always provide opportunities for tobacco companies to optimise its marketing strategies. Adoption of a comprehensive ban on tobacco advertisement, including cigarette displays at PoS, may also assist in reducing online engagement and other intertwined marketing strategies.

The smoking rate among youth in Indonesia is the highest in South-East Asia.⁶³ The 2018 national survey⁶⁴ showed that smoking prevalence among youth aged 10–18 years continued to rise from 7.2% in 2013 to 9.1% in 2018, which can be attributed to a combination of high exposure to all forms of tobacco advertising, lack of enforcement of sales to minor laws, weak smoke-free laws and low cigarette prices. A total ban on tobacco advertising, including a PoS cigarette display, has shown a significant effect on decreasing smoking prevalence.⁶⁵ This measure has been adopted in high-income countries such as Australia,⁶⁶ Canada,¹⁷ New Zealand,⁶⁷ Ireland¹⁸ and Norway,¹⁹ and in Thailand⁶⁸—one of Indonesia’s closest neighbours. PoS display removal policies in these countries were well supported, including by smokers, and achieved high compliance rates.^{17,19}

The adoption of such a policy should be possible in Indonesia, despite the national tobacco regulation placing no limitation on PoS marketing. The subnational government under local autonomy has the power to regulate TAPS and displays at PoS by imposing stronger local regulations. Such adoption has been pioneered by the city of Bogor. The city has implemented a TAPS ban in all outdoor spaces, including at retail, and a cigarette display ban at convenience stores since 2015.⁶⁹ An evaluation of these local regulations showed that 96.4% of 269 convenience store retailers supported the local ordinance with a high compliance rate of 90.7%.⁷⁰

Our study had an exceptionally high response rate and strong reliability, yet it is subject to some limitations. For the statistical analysis, we did not correct for multiple testing, and as such we are more likely to find a significant result simply by chance. However, as we sampled a quarter of all retailers and did not make any finite population corrections, our estimates are likely to be conservative. We have only provided a broad description of the promotional taglines and did not perform a comprehensive thematic or content analysis of the images obtained during this study, as it was beyond the aims of this paper. Further analysis

What this paper adds

- ▶ This paper has documented the strategic efforts made by tobacco companies in Indonesia to differentiate advertising materials between retailers and to link retailer marketing to online, new media channels.
- ▶ It has also shown how the tobacco industry in Indonesia has co-opted local youth language for its own marketing taglines.

of the promotional materials may be beneficial in developing an effective youth prevention countermarketing campaign.

To our knowledge, this is the first audit study that documents a link between retailer marketing and online channels. Findings from our study suggest the adoption of comprehensive TAPS bans, including display bans at retail, will reduce direct exposure to cigarette advertising and marketing and contribute to weakening online and event-based promotions. Urgent action is required to revise the national regulation to optimally adopt Article 13 of the WHO-FCTC.

Acknowledgements The authors thank Rizanna Rosemary and Ade W Prastyani for their support throughout the project, Bradley Dayton for his feedback on the Methods section, and the enumerators and cigarette retailers for their valuable contribution to the study. The authors also thank the reviewers for their thoughtful feedback on the paper.

Contributors PASA designed the study, conducted the analysis and prepared the first draft of the manuscript. NMDK and KHM were involved in the design of the study, and conducted data management and analysis. SKS was involved in the design of the study and edited the manuscript. BF designed the study, edited the manuscript and provided social marketing expertise. All authors agree with the final version of the manuscript.

Funding The study was funded by the Australia-Indonesia Centre (AIC)-Health Cluster and supported by the Australian Commonwealth Government. PASA received Indonesia Endowment Fund for Education (LPDP) scholarship for her PhD.

Competing interests None declared.

Patient consent for publication Not required.

Ethics approval The study was approved by the ethics committees of The University of Sydney and the Faculty of Public Health of Universitas Airlangga.

Provenance and peer review Not commissioned; externally peer reviewed.

ORCID iD

Putu Ayu Swandewi Astuti <http://orcid.org/0000-0002-4723-212X>

REFERENCES

- 1 Cohen JE, Planinac LC, Griffin K, *et al*. Tobacco promotions at point-of-sale: the last hurrah. *Can J Public Health* 2008;99:166–71.
- 2 Dewhirst T. POP goes the power wall? taking aim at tobacco promotional strategies utilised at retail. *Tob Control* 2004;13:209–10.
- 3 Pollay RW. More than meets the eye: on the importance of retail cigarette merchandising. *Tob Control* 2007;16:270–4.
- 4 Kim AE, Loomis BR, Busey AH, *et al*. Influence of retail cigarette advertising, price promotions, and retailer compliance on youth smoking-related attitudes and behaviors. *J Public Health Manag Pract* 2013;19:E1–E9.
- 5 Astuti PAS, Assunta M, Freeman B. Raising generation ‘A’: a case study of millennial tobacco company marketing in Indonesia. *Tob Control* 2018;27:e41–9.
- 6 Freeman B. New media and tobacco control. *Tob Control* 2012;21:139–44.
- 7 Freeman B, Chapman S. Open source marketing: Camel cigarette brand marketing in the “Web 2.0” world. *Tob Control* 2009;18:212–7.
- 8 World Health Organisation. Guideline for implementation of article 13 of WHO FCTC: World Health Organisation.
- 9 Paynter J, Edwards R. The impact of tobacco promotion at the point of sale: a systematic review. *Nicotine Tob Res* 2009;11:25–35.
- 10 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.
- 11 Slater SJ, Chaloupka FJ, Wakefield M, *et al*. The impact of retail cigarette marketing practices on youth smoking uptake. *Arch Pediatr Adolesc Med* 2007;161:440–5.
- 12 Henriksen L, Schleicher NC, Feighery EC, *et al*. A longitudinal study of exposure to retail cigarette advertising and smoking initiation. *PEDIATRICS* 2010;126:232–8.

- 13 Braun S, Kollath-Cattano C, Barrientos I, *et al.* Assessing tobacco marketing receptivity among youth: integrating point of sale marketing, cigarette package branding and branded merchandise. *Tob Control* 2016;25:648–55.
- 14 Paynter J, Edwards R, Schluter PJ, *et al.* Point of sale tobacco displays and smoking among 14–15 year olds in New Zealand: a cross-sectional study. *Tob Control* 2009;18:268–74.
- 15 Wakefield M, Germain D, Henriksen L. The effect of retail cigarette pack displays on impulse purchase. *Addiction* 2008;103:322–8.
- 16 Burton S, Clark L, Jackson K. The association between seeing retail displays of tobacco and tobacco smoking and purchase: findings from a diary-style survey. *Addiction* 2012;107:169–75.
- 17 Brown A, Boudreau C, Moodie C, *et al.* Support for removal of point-of-purchase tobacco advertising and displays: findings from the International tobacco control (ITC) Canada survey. *Tob Control* 2012;21:555–9.
- 18 McNeill A, Lewis S, Quinn C, *et al.* Evaluation of the removal of point-of-sale tobacco displays in Ireland. *Tob Control* 2011;20:137–43.
- 19 Scheffels J, Lavik R. Out of sight, out of mind? removal of point-of-sale tobacco displays in Norway. *Tob Control* 2013;22:e37–42.
- 20 Edwards R, Ajmal A, Healey B, *et al.* Impact of removing point-of-sale tobacco displays: data from a New Zealand youth survey. *Tob Control* 2017;26:392–8.
- 21 Kosen S, Thabrany H, Kusumawardani N, *et al.* *Health and Economic Costs of Tobacco in Indonesia: Review of Evidence Series*. Jakarta: Lembaga Penerbit Badan Penelitian dan Pengembangan Kesehatan (LPB), 2017.
- 22 Lian TY, Dorotheo UBungon Ritthiphakdee MAK, Kin F, Domilyn C, *et al.*, eds. *The ASEAN tobacco control atlas*. 2 ed.. Thailand: South East Asia Tobacco Control Alliance (SEATCA), 2014.
- 23 Badan Penelitian dan Pengembangan-Kementerian Kesehatan Republik Indonesia. *Riset Kesehatan Dasar: Riskesdas 2013*. Jakarta: Kementerian Kesehatan Republik Indonesia, 2013.
- 24 World Health Organisation. Global youth tobacco Survey (GYTS), Indonesia reports, 2014: World health Organisation-SEARO; 2014.
- 25 Masrurroh R. The impact of modern retail Minimarket towards the continuity of traditional retail Businesses. *IOP Conf Ser Mater Sci Eng* 2017;180.
- 26 Susanto S. Modern retail impact on store preference and traditional Retailers in West Java. *Asian J Bus Res* 2012;2.
- 27 Utomo TJ. The competition of retail business: traditional vs modern. *Fokus Ekonomi* 2011;6:122–33.
- 28 Walikota Denpasar. Peraturan Walikota Denpasar no 14 Tahun 2013 Tentang Penundaan Sementara Pemberian Ijin Reklame di Kota Denpasar. Denpasar.
- 29 Walikota Denpasar. Peraturan Daerah Kota Denpasar Nomor 7 Tahun 2013 Tentang Kawasan Tanpa Rokok. Denpasar; 2013.
- 30 Bali Express, Suyatra IP. Pemkot Denpasar akan Persempit Ruang Gerak Iklan Rokok, 2018. Available: <https://radar.jawapos.com/baliexpress/read/2018/03/07/55185/pemkot-denpasar-akan-persempit-ruang-gerak-iklan-rokok>
- 31 Badan Pusat Statistik Kota Denpasar. Statistik daerah Kota Denpasar Tahun 2017. Denpasar; 2017.
- 32 Astuti PAS, Rosemary R, Kurniasari NMD, *et al.* Call for policy action to regulate cigarette Retailers in Indonesia (research results and policy recommendations). *figshare Paper* 2018 <https://doi.org/>
- 33 World Health Organization, Lwanga SK, Lemeshow S. Sample size determination in health studies: a practical manual / S. K. Lwanga and S. Lemeshow. Geneva World Health Organization; 1991.
- 34 Johns Hopkins Bloomberg School of Public Health, Campaign for Tobacco Free Kids, The International Union Against Tuberculosis and Lung Disease. Assessing Compliance with Tobacco Advertising, Promotion, and Sponsorship (TAPS) Bans: A “How-to” Guide for Conducting Compliance Studies of Point of Sale Advertising & Product Display; Outdoor Advertising; and Product packaging, 2013. Available: http://globaltobaccocontrol.org/sites/default/files/TAPS_Compliance_1_0.pdf
- 35 Suryanation. Suryanation Motorland, 2018. Available: <http://www.suryanation.id/> [Accessed 20 May 2018].
- 36 Pro jam. Available: www.projam.id [Accessed 20 May 2018].
- 37 Lavack AM, Toth G. Tobacco point-of-purchase promotion: examining tobacco industry documents. *Tobacco Control* 2006;15:377–84.
- 38 Feighery EC *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.
- 39 Feighery EC, Ribisl KM, Schleicher N, *et al.* Cigarette advertising and promotional strategies in retail outlets: results of a statewide survey in California. *Tob Control* 2001;10:184–8.
- 40 Wakefield MA, Terry-McElrath YM, Chaloupka FJ, *et al.* Tobacco industry marketing at point of purchase after the 1998 MSA billboard advertising ban. *Am J Public Health* 2002;92:937–40.
- 41 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.
- 42 Asmarandani D. Kiosk rokok di wilayah kaki lima studi bentuk-fungsi-antropometri-Ergonomi. seminar Nasional Pakar 2018.
- 43 PT HM Sampoerna Tbk. Bangga Bersama Sampoerna. Available: <https://www.sampoerna.com/sampoerna/id/about-us/bangga-bersama-sampoerna> [Accessed 1 August 2018].
- 44 SEATCA. Indonesia: Tobacco industry merges retailer incentives with brand promotions 2017 [28 July 2017]. Available: <https://tobaccowatch.seatca.org/index.php/2017/07/28/indonesia-tobacco-industry-merges-retailer-incentives-with-brand-promotions/> [Accessed 1 Jun 2018].
- 45 Feighery EC, Ribisl KM, Schleicher NC, *et al.* Retailer participation in cigarette company incentive programs is related to increased levels of cigarette advertising and cheaper cigarette prices in stores. *Prev Med* 2004;38:876–84.
- 46 Stead M, Eadie D, Purves RI, *et al.* Tobacco companies’ use of retailer incentives after a ban on point-of-sale tobacco displays in Scotland. *Tob Control* 2018;27:414–9.
- 47 The Guardian, Boseley S, Collins D, *et al.* How children around the world are exposed to cigarette advertising. Available: <https://www.theguardian.com/world/2018/mar/09/how-children-around-the-world-are-exposed-to-cigarette-advertising>
- 48 Djenar DN. Youth language in Indonesia and Malaysia: From slang to literacy practices. In: Djenar DN, ed. *NUSA: Youth language in Indonesia and Malaysia*, 2015: 1–8.
- 49 Lamb M, Coleman H. Literacy in English and the transformation of self and society in Post-Soeharto Indonesia. *Int J Biling Educ Biling* 2008;11:189–205.
- 50 Tamtomo K. Multilingual youth, literacy practices, and globalization in an Indonesian city: a preliminary exploration. *Tilburg paper in cultural studies*; 2012.
- 51 Saddhono K, Sulaksono D. *Indoglish as adaptation of English to Indonesian: change of society in big cities of Indonesia*. 126. IOP Conf Ser: Earth Environ Sci, 2018.
- 52 Smith-Hefner NJ, Language Y. Gaul sociability, and the new Indonesian middle class. *J Ling Anthropol* 2008;17:184–203.
- 53 Pollay RW. Targeting youth and concerned smokers: evidence from Canadian tobacco industry documents. *Tob Control* 2000;9:136–47.
- 54 Lee S, Ling PM, Glantz SA. The vector of the tobacco epidemic: tobacco industry practices in low and middle-income countries. *Cancer Causes Control* 2012;23 Suppl 1:117–29.
- 55 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.
- 56 Pemerintah Republik Indonesia. *Peraturan Pemerintah Republik Indonesia no 109 Tahun 2012 Tentang Pengamanan Bahan Yang Mengandung Zat Adiktif Berupa Produk Tembakau Bagi Kesehatan*. Jakarta: Republic of Indonesia, 2012.
- 57 Landrine H, Klonoff EA, Reina-Patton A. Minors’ access to tobacco before and after the California stake act. *Tob Control* 2000;9:15ii–17.
- 58 Levinson AH, Mickiewicz T. Reducing underage cigarette sales in an isolated community: the effect on adolescent cigarette supplies. *Prev Med* 2007;45:447–53.
- 59 Ma GX, Shive S, Tracy M. The effects of licensing and inspection enforcement to reduce tobacco sales to minors in greater Philadelphia, 1994–1998. *Addict Behav* 2001;26:677–87.
- 60 Jason LA, Ji PY, Anes MD, *et al.* Active enforcement of cigarette control laws in the prevention of cigarette sales to minors. *JAMA* 1991;266:3159–61.
- 61 Tutt D, Bauer L, Difranza J. Restricting the retail supply of tobacco to minors. *J Public Health Policy* 2009;30:68–82.
- 62 Difranza JR, Carlson RP, Caisse RE. Reducing youth access to tobacco. *Tob Control* 1992;1:58.
- 63 Tan Y, Dorotheo U. *The tobacco control atlas: ASEAN region*. Third Edition. Bangkok, Thailand: Southeast Asia Tobacco Control Alliance (SEATCA), 2016.
- 64 Kementerian Kesehatan Republik Indonesia. Hasil Utama Riskesdas 2018. In: *Badan Penelitian DAN Pengembangan Kesehatan*, 2018.
- 65 He Y, Shang C, Huang J, *et al.* Global evidence on the effect of point-of-sale display bans on smoking prevalence. *Tob Control* 2018;27:e98–104.
- 66 Carter OBJ, Phan T, Mills BW. Impact of a point-of-sale tobacco display ban on smokers’ spontaneous purchases: comparisons from postpurchase interviews before and after the ban in Western Australia. *Tob Control* 2015;24:e81–6.
- 67 Fraser T. Phasing out of point-of-sale tobacco advertising in New Zealand. *Tob Control* 1998;7:82–4.
- 68 Li L, Borland R, Yong H-H, *et al.* Impact of Point-of-Sale tobacco display bans in Thailand: findings from the International tobacco control (ITC) Southeast Asia survey. *Int J Environ Res Public Health* 2015;12:9508–22.
- 69 Pemerintah Kota Bogor. Peraturan Daerah Kota Bogor Nomor 1 Tahun 2015 Tentang Penyelenggaraan reklame. Bogor Pemerintah Kota Bogor; 2015.
- 70 Priyono B. Lesson learnt KebijakanTAPS ban DAN POSD ban di Kota Bogor. Presented at Calling Policy Action to regulate cigarette retailer Workshop; 26 April 2018, Bali, 2018.

© 2019 Author(s) (or their employer(s)) 2019. No commercial re-use. See rights and permissions. Published by BMJ.