

Standardised cigarettes: the next step for tobacco policy?

Yvette van der Eijk 

Correspondence to

Dr Yvette van der Eijk, Saw Swee Hock School of Public Health, National University of Singapore, Singapore, Singapore; yvette.eijk@nus.edu.sg

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ABSTRACT

As tobacco marketing restrictions intensify, tobacco companies increasingly turn to the cigarette product itself as a marketing medium with new flavours, capsules, novelty filter features and attractive cigarette stick designs. This paper considers a 'standardised cigarettes' policy as a potential next step in restricting tobacco marketing. This policy would remove from cigarette products all the elements that increase their appeal and addictiveness: added flavours, nicotine, and visual designs and branding. The result would be a cigarette that is flavourless, not especially addicting, and visually off-putting. This paper discusses what a standardised cigarettes policy might look like from a regulatory standpoint, and how it fits into current policy obligations under the WHO Framework Convention on Tobacco Control.

THE CIGARETTE PRODUCT: AN IMPORTANT MARKETING MEDIUM WITH IMPORTANT CONSEQUENCES

As restrictions on tobacco marketing have intensified, so have tobacco industry efforts to circumvent these restrictions. As at 2021, 155 countries had a comprehensive or moderate ban on tobacco advertising, promotions and sponsorships (TAPS) and 109 countries had high or moderate tobacco taxes.¹ As at March 2022, 19 countries had implemented standardised packaging which requires tobacco products to be sold in standardised packs with drab colours, standardised fonts and no logos, colours or other branding elements.² Standardised packaging laws also restrict some branding and visual elements on the cigarette stick.³ Restricted in their ability to market tobacco products with TAPS, packaging or pricing, tobacco companies are increasingly turning to one of the few remaining marketing media: the cigarette product itself.

Modern cigarettes are far from plain. They are designed to deliver nicotine, an addictive drug, to the brain and contain additives to alter the nicotine delivery and sensory profile.⁴ They come in a considerable variety of flavours including menthol, fruity, herbal, spicy, sweet, floral or alcohol-like flavours.⁵ They come in 'slims', 'XXL' and other size varieties.⁶ They contain crushable capsules, microcapsules, threads and granules to impart a flavour or other sensory experience while filters can be twisted, pulled, crushed or covered up to vary smoke intensity, nicotine delivery or flavour.⁷ Some filters are 'firm' or recessed to increase their appeal.⁸ Most cigarette sticks feature branding and often decorative elements, such as colours, that match cigarette packs.⁹ The tobacco industry's

Key messages

What is already known on this topic

⇒ Prior studies have examined the potential of tobacco product restrictions, including tobacco flavour bans, dissuasive cigarette sticks and cigarettes with very low nicotine levels, to reduce smoking rates.

What this study adds

⇒ This study is the first to describe a 'standardised cigarettes' policy which would standardise all components that make cigarettes appealing and addictive: flavour, nicotine delivery and design of cigarette products, and to consider how such a policy fits into current policy obligations under the WHO Framework Convention on Tobacco Control.

How this study might affect research, practice or policy

⇒ The introduction of the 'standardised cigarettes' concept can pave the way for more research, discussions and potential interventions in the pursuit of a tobacco endgame.

investment in novelty cigarettes, especially with flavour capsules, has intensified since the 2010s.^{7 10}

Tobacco companies use novelty product features and flavours to differentiate and increase the appeal of cigarettes. Tobacco companies have targeted youth, ethnic minorities and women with menthol and other flavoured cigarettes for decades.^{11–15} It is estimated that, in the USA alone, 10.1 million smokers would not have started smoking in 1980–2018 if menthol cigarettes were not on the market.¹⁶ In some Asia-Pacific countries, menthol cigarettes form half of the total cigarette market.¹⁴ Capsule cigarettes, which contain a crushable flavour capsule in the filter, are the fastest growing segment of the combustible tobacco market and comprise a third of the total cigarette market in some Latin American countries.¹⁷ Tobacco companies have intensified their marketing of capsule cigarettes in countries with strict tobacco marketing regulations, such as New Zealand¹⁸ and Singapore,⁶ to maintain product appeal. Tobacco companies launched capsule cigarettes to target young people, who are drawn to their novelty and flavour personalisation appeal.^{7 19–23}

Non-flavour additives have also had a significant public health impact. Nicotine is arguably the main reason people continue to smoke. It is highly addictive; each year, an estimated 40% of smokers attempt to quit, but only 3% of smokers



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quit successfully.²⁴ Ammonia, which ‘freebases’ nicotine, enables the cigarette to impart a more intense nicotine delivery at lower nicotine concentrations. Philip Morris’ early discovery of this process was an important part of the commercial success of its Marlboro brand,⁴ the world’s top selling cigarette since 1972.²⁵ Young people perceive white-coloured, branded and slim cigarettes as more appealing and less harmful,^{26–28} and tobacco companies use design features that imply a reduced health risk, such as special filters and light colours, to reduce the perceived harmfulness of smoking and keep health-conscious smokers in the market.^{29–31} The companies used light and ‘slim’ cigarettes to target women in Western countries,³² where female smoking rates now are similar to, or—in some countries—higher than smoking rates in males.¹

Tobacco companies also use product features to undermine regulations. They use ventilation holes in the filter, which smokers can manually cover up to increase the smoke intensity, to skew standard tar and nicotine yield readings on machine tests.³³ They time the launch of cigarettes with novelty features, such as flavour capsules, with standardised packaging regulations and large tax increases to undermine the impact of these regulations.^{6, 34, 35}

Thus in countries with high taxes, a comprehensive TAPS ban and standardised packaging, the next logical step might be a ‘standardised cigarettes’ policy to restrict the tobacco industry’s ability to use the cigarette product as a marketing medium. This paper discusses what a standardised cigarettes policy might look like and how it fits into current policy obligations under the WHO Framework Convention on Tobacco Control (FCTC).

A STANDARDISED CIGARETTES POLICY

Product features that tobacco companies use to differentiate and increase the appeal of their cigarettes may be broadly classified into three categories: (1) added characterising flavours or features that add a flavour, scent or similar sensory experience, (2) nicotine, as well as adjustment of nicotine level or additives or features that affect nicotine delivery and (3) design features such as size variations, filter features, branding and design elements that help to differentiate the product. For a standardised cigarettes policy to be true to its terminology, it would have to standardise all three elements.

Tobacco flavours ban

Bans on added characterising flavours in tobacco products, such as menthol, fruit and sweet flavours, are already in force in Canada, the European Union, several African countries and parts of the USA, while the USA and Niger have partial bans that cover all characterising flavours except menthol and clove.³⁶ Most of these bans were implemented recently, although early evaluation studies report declines in cigarette use and improved cessation outcomes.^{37–39} A tobacco flavours ban could have an especially dramatic impact on smoking rates in countries with a high or rapidly growing market share for flavoured cigarettes.⁴⁰

For a tobacco flavours ban to effectively reduce the appeal of cigarettes it should be very broad, covering any characterising flavours currently on the market such as menthol, fruity, herbal, spicy, sweet, floral or alcohol-like flavours. It should also cover additives or other existing or future compounds that potentially impart a flavour, scent or other characteristic sensory experience, as tobacco companies add compounds to affect sensory experience in multiple ways. Although the types of compounds added are many and complex, common examples include low

levels of menthol to mask the harshness of tobacco smoke, and sugar to mask the bitterness.⁷

Tobacco companies are also likely to exploit loopholes, for instance with synthetic compounds that mimic a popular flavour or complex mixtures of compounds that affect the overall sensory experience. To illustrate, a 2015 patent by R.J. Reynolds for a ‘flavour additive accessory’, designed to incorporate added flavours into cigarettes, includes an exhaustive list of potential flavours and additives:

The flavor materials can be provided from sources other than tobacco, can be natural or synthetic, and the character of these flavors can be described as, without limitation, fresh, sweet, herbal, confectionary, floral, fruity or spice. Such flavoring agents can be employed as concentrates or flavor packages. Specific types of flavors include, but are not limited to, vanilla, coffee, tea, chocolate, cream, mint, spearmint, menthol, peppermint, wintergreen, lavender, cardamom, nutmeg, cinnamon, clove, cascarrilla, sandalwood, honey, maple, jasmine, ginger, anise, sage, licorice, lemon, orange, apple, peach, lime, cherry, and strawberry. Flavorants utilized in disclosed products also can include components that are considered moistening, cooling or smoothening agents, such as eucalyptus. These flavors may be provided neat (ie, alone) or in a composite (eg, spearmint and menthol or orange and cinnamon). In some instances, the flavorant may be provided in a spray dried form.⁴¹

The patent goes on to specify ‘exemplary sensory characteristics that can be modified by the flavour material’ as including taste, mouth feel, moistness, cool or heat sensations, fragrance or aroma.⁴¹ Hence additives that impart a sensory experience other than taste, but which potentially increases the appeal of the product, should be included under the scope of a tobacco flavours ban. A tobacco flavours ban should also cover the broad variety of physical forms in which the flavour can be provided, such as liquids, semisolids, powder, pellets, capsules, beads, pearls, pills, flacks, yarns, filaments, glues and other materials.⁴¹

A tobacco flavours ban should also cover product features or items that, when incorporated into a cigarette, can impart a flavour or similar sensation, as cigarettes have been found to include flavours in diverse forms such as crushable capsules, microcapsule layers, threads, granules and scented tipping paper, and via separately sold items such as flavour cards or filter tips that can be incorporated into a cigarette or cigarette pack.⁷ Tobacco companies have already exploited such loopholes. In the UK, following its tobacco flavours ban, tobacco companies started marketing roll-your-own filter tips with flavour capsules and menthol-flavoured cards that, when inserted into a cigarette pack, infuse the cigarettes with flavour.⁴²

Standardisation of nicotine delivery

Since the 2010s, there is a growing literature on reducing nicotine content in cigarettes to a non-addictive level with ‘very low nicotine cigarettes’ (VLNCs). The general consensus is that this level is 0.4 mg/g or less. Compared with cigarettes currently on the market, which typically contain 10–15 mg/g, this represents a 95% reduction in nicotine content.⁴³ VLNCs can be easily manufactured using a low-alkaloid or genetically modified plant species.⁴⁴ Although no country has yet implemented a VLNC mandate, it has been considered in the USA, Canada and New Zealand.^{44–46} New Zealand has announced plans to limit nicotine content to a ‘very low level’ by 2025,⁴⁶ and the US Food and Drug Administration has approved the marketing of two VLNCs, both which have a nicotine level of 0.5 mg/g.⁴⁵

When smokers use ‘light’ cigarettes, they often compensate for the lower nicotine level by drawing harder or by covering

up ventilation holes in the filter. Hence one concern with switching smokers to VLNCs is whether it will result in compensatory smoking, either by puffing harder or increasing cigarette consumption. However, studies have repeatedly shown that, when current smokers switch to VLNCs, they do not increase their consumption or draw harder and their toxicant exposures do not increase.^{47–49} Numerous studies, including four large randomised controlled trials, have consistently found that switching current smokers to VLNCs actually reduces their cigarette consumption and dependence, even for those not interested in quitting, with minimal withdrawal symptoms.^{44 50–53}

It is thus expected that, with a VLNC mandate, smoking prevalence would dramatically drop due to increased quit rates and a decline in smoking uptake as fewer youth transition from experimentation to regular smoking.⁵⁴ Three studies have simulated the impact of a VLNC mandate in the USA^{55 56} and New Zealand⁵⁷ by estimating its behavioural impact through a formal expert-elicitation process. These studies all predicted that a VLNC mandate would reduce smoking prevalence to levels below 5%.

For a VLNC mandate to be effective it has to be comprehensive, given the tobacco industry's propensity to exploit loopholes and the importance of nicotine to sustaining its business. It should cover non-cigarette tobacco products, such as roll-your-own tobacco and cigarillos, to prevent switching. It should also cover product features, accessories and additives that mimic or potentiate the effect of nicotine. For instance, the R.J. Reynolds patent above describes how accessories containing tobacco extracts and similar additives can be incorporated into a cigarette.⁴¹ This may enable tobacco companies to sell loose nicotine-containing units that, when inserted into a VLNC, transform it into a cigarette with higher nicotine levels. Tobacco companies may also incorporate other addictive substances or nicotine-like substances into VLNCs in this way. Tobacco companies have also marketed cigarettes with ventilation holes and twistable filters to increase the nicotine delivery⁷ and have a history of using additives such as ammonia to potentiate the effect of nicotine.⁴ It is possible that tobacco companies will attempt to find additives and features that, even in VLNCs, will result in the cigarette having addicting properties.

Hence a VLNC mandate should be quite broadly worded, reflecting that its goal is not only to cap nicotine level but also more broadly to *standardise the delivery of nicotine or other addictive compounds in cigarettes* to a level at which the cigarette is no longer addictive.

Dissuasive cigarette sticks

Based on the success of standardised packaging,⁵⁸ recent studies have explored the possibility of 'dissuasive cigarette sticks' which, similarly to standardised packaging, would strip cigarette sticks from all branding elements, logos and designs and standardise cigarette shape, size, colour and other attributes to the most unappealing format possible. The concept was first explored in 2013⁵⁹ and 2015,⁶⁰ in studies from Scotland and New Zealand, respectively, which found that health warnings on cigarette sticks can increase smokers' intentions to quit⁵⁹ and reduce the appeal of smoking.⁶⁰

Dissuasive cigarette stick prototypes that have been studied include unbranded, white-coloured sticks with deterrent warnings (eg, 'smoking kills') and unbranded cigarettes in a drab colour such as dark green or yellow. Compared with branded cigarette sticks with a cork or white-coloured filter, young people and adult smokers generally perceive the dissuasive

sticks as less appealing, suggesting that dissuasive sticks may discourage trial in youth and increase quit intentions in current smokers.^{61–65} Studies from Australia, Canada, the UK and USA also indicate that, while some smokers have become desensitised to the effects of standardised packaging, they are responsive to warnings on cigarette sticks. The most effective cigarette stick warnings emphasise the financial consequences, impact on personal appearance, health effects on others and 'minutes of life lost' from smoking cigarettes.^{66 67}

In two qualitative Australian studies, university students who smoke reported becoming desensitised to the health warnings and appearance of standardised cigarette packs, suggesting that some smokers may become desensitised to warnings on dissuasive sticks.^{66 67} However, dissuasive sticks go a step further than standardised packs in that they expose consumers to health warnings at the consumption level, increasing their exposure frequency and proximity to the warnings. This is especially pertinent to youth who tend to smoke single sticks and may not be as exposed to the warnings on cigarette packs.⁶⁸

As with standardised packaging, a dissuasive cigarette stick policy needs to be comprehensive to prevent tobacco companies from exploiting regulatory loopholes. Following standardised packaging in the UK, tobacco companies differentiated brands with rounded pack edges, special seals, textured surfaces, novelty filters and descriptive brand names.⁶⁹ Unless all these elements are standardised in regulations, tobacco companies are likely to exploit a weak dissuasive cigarette stick policy with subtle variations in stick size, diameter, surface texture, scents, special filters or other features.

Standardised cigarettes: flavourless, non-addictive and ugly

A standardised cigarettes policy is essentially a combination of three policies: a tobacco flavours ban, a VLNC mandate and dissuasive stick policy. The result would be cigarette products that have no added flavours, are not especially addictive and are visually off-putting.

These three policies are synergistic if implemented together as this prevents the 'popping balloon' effect: the tobacco industry's tendency to amplify marketing in one area when marketing in another is banned. Tobacco companies are well-known for their creative attempts to get around marketing restrictions, including tobacco advertising bans,⁷⁰ standardised packaging^{6 18 35 71} and tobacco flavour bans.^{42 72–74} With only a tobacco flavours ban, tobacco companies are likely to shift their focus to other product novelties such as tailored nicotine delivery and attractive stick designs. With only a VLNC mandate, tobacco companies may focus more on novelty flavours. With only a dissuasive stick policy, tobacco companies can still vary the nicotine content and flavours and differentiate these variants with elaborate brand and variant names. Hence the best way to implement these policies is to implement them together, ideally in an environment where other marketing mediums, such as TAPS and packaging, are already heavily restricted.

Is the idea of standardised cigarettes too far-fetched, or would it fall under the scope of current tobacco policy (FCTC) obligations?

STANDARDISED CIGARETTES AND CURRENT POLICY OBLIGATIONS

As at March 2022, 182 countries, covering over 90% of the world's population, were a Party to the FCTC which sets out the recommendations and minimum obligations for tobacco policy.⁷⁵ A standardised cigarettes policy potentially falls under

the scope of three FCTC Articles: Article 9 on the regulation of tobacco product contents,⁷⁶ Article 11 on the regulation of tobacco product packaging and labelling⁷⁷ and Article 13 on the regulation of TAPS.⁷⁸

Implementation guidelines for Article 9 state that “Parties should regulate, by prohibiting or restricting, ingredients that may be used to increase palatability in tobacco products.”⁷⁶ The guidelines explicitly articulate the need to prohibit flavours that increase product appeal (eg, menthol, fruits, spices, vanillin, sweeteners), additives used to create a perception of reduced harm (eg, vitamins, amino acids, essential fatty acids) and ingredients associated with energy and vitality (eg, taurine, caffeine). The guidelines also recommend the regulation of, more broadly, any ingredients or design features ‘which help make tobacco products attractive’, with ‘attractiveness’ referring to ‘factors such as taste, smell and other sensory attributes, ease of use, flexibility of the dosing system, cost, reputation or image, assumed risks and benefits and other characteristics of a product designed to stimulate use’.⁷⁶

A ban on added characterising flavours, additives or features that add a flavour, scent or other sensory experience clearly falls under this scope. However, the broad wording may also include design features such as special filters, capsules, nicotine adjustment, ventilation systems and variations in nicotine strength as these are all, in the words of the Article 9 guidelines, ‘designed to stimulate use’.⁷⁶ In addition, Article 9 guidelines include sections on regulating tobacco product addictiveness and toxicity, with specific recommendations to be proposed at a later date. This suggests that standardisation of nicotine content and delivery may fall under the scope of Article 9 as new evidence emerges.

Article 9 guidelines also specifically refer to Articles 11 and 13 as complementary, as their goal is also to reduce the appeal of tobacco products.⁷⁶ Although Article 13 is focused on regulating TAPS,⁷⁸ it does explicitly describe the cigarette stick as an advertising medium, stating that:

Packaging and product design are important elements of advertising and promotion ... individual cigarettes or other tobacco products should carry no advertising or promotion, including design features that make products attractive.⁷⁸

Article 11 states under its guiding principles that “every person should be informed of the health consequences, addictive nature and mortal threat posed by tobacco consumption”⁷⁷ and specifies that health warnings should be located on principal display areas. This may support a mandate for health warnings on cigarette sticks, as the cigarette stick is a display area to which all consumers, including those who smoke single sticks, are frequently exposed. Thus any design features that increase the appeal of cigarette sticks, such as branding, logos, colours and other differentiating features, may be prohibited under the scope of Article 13, while rotating health warnings on cigarette sticks may fall under the scope of Article 11.

Finally, it should be noted that, according to FCTC Article 2: “Parties are encouraged to implement measures beyond those required by this Convention and its protocols” and not prevented in doing so by the FCTC.⁷⁹ Thus, although the minimal provisions as set out by the FCTC and its guidelines do appear to support a standardised cigarettes policy, Parties are encouraged to go beyond these, for example in the pursuit of a tobacco endgame which may constitute, in part, a standardised cigarettes policy.

CONCLUDING REMARKS

A standardised cigarettes policy would remove from cigarette products all added flavours, nicotine, visual designs and branding to reveal them for the ugly and harmful products they really are. It would denormalise smoking at the consumption level as users would be repeatedly reminded of this every time they take a puff. In addition, standardised cigarettes would remove their addictiveness, arguably the main reason people continue to smoke at all, making it easier for current smokers to quit and for younger generations to never get hooked in the first place. By combining three different product regulations, a standardised cigarettes policy prevents tobacco companies from exploiting loopholes and would have dramatic impacts on smoking prevalence, both in the short term as people quit and in the long term as fewer initiate. It fits into existing policy obligations under FCTC Articles 9, 11 and 13, making it a logical next step for countries that have restricted other forms of tobacco marketing.

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ORCID iD

Yvette van der Eijk <http://orcid.org/0000-0002-8095-1214>

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