

Original article

Perceptions of plain cigarette packaging among smokers and non-smokers in Andalusia (Spain)

Blanca Lacave-García^a, Juan Miguel Rey-Pino^{b,*}, Karine Gallopel-Morvan^c, Crawford Moodie^d, Esteve Fernández^e, Isabel Nerín^f^a Department of Marketing and Communication, University of Cádiz, Cádiz, España^b Department of Marketing Management and Research, University of Granada, Granada, España^c EHESP School of Public Health, EA 7348 MOS, Rennes, France^d Institute for Social Marketing, University of Stirling, Stirling, United Kingdom^e Tobacco Control Unit, Institut Català d'Oncologia (ICO-IDIBELL); School of Medicine and Health Sciences, Universitat de Barcelona, Barcelona, Spain^f Tobacco Control Unit, Department of Medicine, Psychiatry and Dermatology, School of Medicine, University of Zaragoza, Zaragoza, España

ARTICLE INFO

Article history:

Received 15 February 2018

Accepted 24 April 2018

Available online 17 July 2018

Keywords:

Tobacco

Plain packaging

Social marketing

Qualitative research

ABSTRACT

Objectives: Each year tobacco is responsible for 650,000 deaths in Europe and 55,000 in Spain. With tobacco advertising and promotion banned in Spain and most of Europe, the last bastion of marketing is the packaging. Plain tobacco packaging—which involves packs having a standardised appearance—has been proposed to counter this. The objective of this study is to research perceptions arising from the plain packaging of tobacco products.

Methods: We employed a qualitative research methodology -focus groups- with smokers and non-smokers in two medium-sized Andalusian towns (Spain).

Results: Results show the importance of plain cigarette packaging as a form of promotion, particularly among women and young people, how pack colour influences product perceptions, and how removing full branding increases the salience of the warnings.

Conclusions: Plain packaging, combined with pictorial health warnings, may reduce the capacity of packaging to be distinctive and a badge product. Altering pack design in such a way would make it more difficult for tobacco companies to create a favourable image of their brands and may help to reinforce the ability of the population to protect themselves from the dangers of smoking.

© 2018 SESPAS. Published by Elsevier España, S.L.U. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Percepciones del envase neutro del tabaco entre fumadores y no fumadores en Andalucía (España)

RESUMEN

Objetivos: El tabaco es causa de aproximadamente 650.000 muertes en Europa, y de ellas, unas 55.000 en España. Debido a las prohibiciones de realizar actividades de publicidad y promoción, el envase está considerado como el último bastión de comunicación para la industria tabacalera. El envase neutro—un aspecto uniforme del envase para toda marca comercializada—ha sido propuesto como forma de combatirlo. El objetivo de este trabajo se centra en estudiar las percepciones que suscita el diseño neutro del envase.

Métodos: Se ha realizado una investigación cualitativa, a través de grupos focales en dos ciudades de tamaño medio con personas fumadoras y no fumadoras en dos ciudades de tamaño medio de Andalucía (España).

Resultados: Los resultados señalan la importancia que tendría el envase de tabaco neutro como estrategia de desnormalización del tabaco, en especial en las mujeres y las personas jóvenes, como el color del envase neutro influye en las percepciones que el consumidor tiene del producto, y como incrementa la visibilidad de las esquelas sanitarias insertadas en el envase.

Conclusiones: El envase neutro, unido a las advertencias sanitarias combinadas, podrían reducir la capacidad distintiva del envase. La desaparición de los rasgos estéticos del envase, de esta manera, añadiría una dificultad más a las compañías para presentar sus marcas de forma favorable, y ayudaría a proteger a la población de los peligros del tabaco.

© 2018 SESPAS. Publicado por Elsevier España, S.L.U. Este es un artículo Open Access bajo la licencia CC BY-NC-ND (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Palabras clave:

Tabaco

Envase neutro

Marketing social

Investigación cualitativa

* Corresponding author.

E-mail address: jrey@ugr.es (J.M. Rey-Pino).

Introduction

Tobacco is a major global health problem, being a risk factor in six of the eight leading causes of death globally and responsible for seven million deaths per year.¹ Tobacco is responsible for approximately a quarter (27%) of all deaths in Spain each year.² Public health policy makers face two important challenges: to reduce consumption and prevalence among smokers and discourage non-smokers from starting. The World Health Organisation's Framework Convention on Tobacco Control recommends a range of measures to protect citizens; one of these concerns the packaging and labelling of tobacco products. Article 11 of the Framework Convention on Tobacco Control recommends pictorial health warnings on packaging, which are now mandatory in more than 100 countries,³ and also plain (or standardised) packaging –the standardisation of pack appearance so that all cigarettes must come in drab colour packs with pictorial health warnings but without any branding, except for the brand name.

Packaging is a multipurpose marketing tool and crucial for tobacco products, particularly in countries where other communication tools are banned. In Spain, for instance, since tobacco advertising, promotion and sponsorship is no longer permitted, the packaging is extremely important. There are numerous examples of innovative pack design in Spain, such as novel pack shapes and ways of opening, slimmer packs for female-oriented brands, and also textured packs, which create a distinctive tactile sensation –touch is important in developing emotional or affective connections with brands.⁴ Further innovation seems likely.

While the importance of fully-branded packaging as a marketing tool for tobacco is well established, the impact of plain packaging is not well understood in Spain. Indeed, a systematic review of research on plain packaging found that most studies were conducted in five countries (Australia, Canada, France, New Zealand, United Kingdom),⁵ all with stringent tobacco control policy. It may be that reactions to plain packs will differ in other countries, as cultural differences have been found in response to anti-tobacco media campaigns,⁶ pictorial warnings,⁷ perceptions of branding and colour preference and meaning.^{8–10} The main aims of plain packaging are to reduce the appeal of the pack and product; increase the salience of the health warnings; and reduce misperceptions of product harm as a result of pack design.¹¹ Australia was the first country to implement plain packaging in December 2012, followed by France and the United Kingdom in 2017. Norway, New Zealand and Ireland will fully implement plain packaging in 2018 and a number of other countries are considering this measure.

The aim of this study is to gauge smokers and non-smokers' perceptions of plain tobacco packaging in comparison to fully-branded packaging, their response to different plain pack colours, and what impact, if any, plain packaging has on the salience of the health warnings.

Methods

Design and sample

Given that plain packs are not available on the Spanish market, we employed a qualitative methodology to fully explore participants' attitudes, perceptions and reactions to plain packaging. Eight focus groups (5–8 participants per group; $n = 59$) were conducted in two Spanish medium sized towns (Granada and Cádiz). The sample was segmented by gender, age and smoking status, following criterion of homogeneity for intra-groups characteristics and heterogeneity for between-groups characteristics. People aged 15 to 45 years were interviewed because they

are a key target group for Spanish health practitioners, and male and female smokers and non-smokers were included given that plain packaging is intended to encourage smokers to quit and discourage non-smokers from starting (see [Table 1](#) for sample characteristics).

In order to determine the number of focus groups we established a minimum of two groups per considered category of the segmentation variables, combining categories for not having an excessive number of groups that would not add new information for the analysis,¹² with a bigger number of groups for the young people categories, that are supposed to be a main target for the tobacco industry, as well as the fact that at this early stages people start to smoke.^{13,14}

Materials and procedure

To explore the impact of pack design, participants were presented with fully-branded and plain packs with cigarettes inside. The brands chosen for the study were those on the Spanish market that were most popular with each group. Mock-up plain packs were produced so as to look as realistic as possible for participants. The plain packs were presented in three different colours (brown, white and grey), with these colours the most frequently explored in plain packaging research.^{5,15,16}

Each focus group was conducted by two researchers, one male and one female, with one leading as moderator and the other assisting as co-moderator and ensuring that the groups were recorded. Groups were conducted in quiet rooms with a round table to help participants interact, with the group discussions video and audio recorded for transcription and analysis. All groups were first shown a set of fully-branded cigarette packs and asked their opinion of these. They were then shown the differently coloured plain packs and asked their thoughts and feelings on these. Participants were compensated with a gift voucher (25 €) at the end of the session to encourage recruitment.

Each focus group discussion was transcribed and analysed using NVivo 10 software, which involves a semantic categorization of participants' comments and a frequency analysis of the appearance of each category by the creation of nodes. Coding resources –focus groups transcripts– and categorization references –gender, age and smoking status– were used for the frequency analysis. Semantic categorisation was undertaken in three stages¹⁷:

- Reducing chunks of text from transcripts into common meanings, following an initial read-through, and undertaking a more advanced reading of the texts.
- Assuming a complete read-through of all transcripts, repeated several times.
- Extracting literal chunks of text from the transcripts to illustrate the results.

Quality of data collection and analysis

We followed a rigorous process to increase the reliability of the results. Firstly, a semi-structured topic guide was developed by the

Table 1
Number of participants by gender, age and smoker status.

Age group (years)	Women		Men		Total
	Smoker	Non-smoker	Smoker	Non-smoker	
15–24	8	8	5	8	29
25–34	-	8	8	-	16
35–45	6	-	-	8	14
Total	14	16	13	16	59

research team to ensure that all relevant topics were discussed in each group. Secondly, given the importance of the stimuli we only used actual packs of cigarettes, rather than images. Thirdly, we recruited participants who were not known to each other¹⁸ and ensured homogeneity within each group.¹⁹ Fourthly, extensive field notes were taken during the groups and these were used in conjunction with the video and audio recording to analyze participants' comments, discussions and behaviors. The coding and analysis was performed by two of the researchers who moderated the groups, thus helping triangulate the findings. Finally, we comprehensively reviewed the literature prior to the groups being conducted in order to fully understand the topic and to allow us to compare our findings with past research.

Results

Role of fully-branded packaging

The aesthetic appeal of current, fully-branded cigarette packaging was mentioned frequently. Women were more aware of, and interested in, pack aesthetics than men. With regard to the different pack elements, most comments related to pack colour, particularly for women, who said that colour influenced their perceptions of the pack and product. For instance, the cream colour of one of the fully-branded packs was viewed as feminine, thought to make the pack look more elegant, and suggestive of smooth tasting cigarettes.

- “It’s feminine, no, more than this, it is really feminine” (female, smoker, 35–45 years old).
- “Maybe it could have some relation, the outer design (the pack) with the fact of you smoking a cigarette, it’s soft. . . I don’t know, maybe it’s because of this” (female, smoker, 15–24 years old).
- “It’s elegant, for wealthy people” (female, non-smoker, 25–34 years old).

In terms of which element of the pack participants reported seeing first on fully-branded packs, non-smokers said the health warnings whereas smokers, women and young adults said the branding. Another frequent answer, irrespective of smoking status, was the colour of the pack.

- “I have directly seen ‘smoking kills’” (female, non-smoker, 25–34 years old).
- “The red colour” (male, non-smoker, 35–45 years old).
- “So, I have seen directly the brand. . . I’ve seen the brand and I have said to myself, huh!” (female, smoker, 15–24 years old).

Perceived impact of plain packaging on smoking-related behavior

In all groups, although particularly among young men, plain packaging was considered something that could help reduce cigarette consumption. Participants suggested that removing full branding from cigarette packs would be effective, a strong deterrent for those susceptible to smoking and those who have recently started smoking.

- “Young people search for the best, the coolest thing; then, when they see this, this does not catch their attention” (male, smoker, 25–34 years old).
- “If you see something so insipid, so dull, something that is somewhere at home, I even do not know that it is a tobacco pack. I see this thing white (the plain pack) and I say to myself: what is this? I do not even pick it up, they do not recall my attention. And if children see these sad colours, so subdued colours, so dulled,

children will never recall tobacco products” (female, smoker, 15–24 years old).

- “If all packs have the same colour, with the name of the brand and that picture, I am sure that consumption will be reduced” (male, smoker, 25–34 years old).
- “Because of the design, I think that it would be better (. . .) to search for all brands and make all of them be the same, that is, all packs the same; so, you see them and you do not like them” (male, non-smoker, 35–45 years old).

They suggested that plain packaging, i.e. packs without different colours and designs, would essentially convert the product into something vulgar. Few felt it would have any impact on adult smokers however, although it may help to reduce consumption for some, and some young women smokers doubted the efficacy of plain packs in stopping people from starting to smoke.

- “It is obvious, then, maybe I see this (fully-branded pack), and I know perfectly that it is tobacco and the company, and then I see this other one (plain pack) and I do not know what it is, it is a box, and it can contain bolts, earphones. . . And it does not impact me in any way. It is clear to me that it is less easy to distinguish that it is tobacco” (male, smoker, 25–34 years old).
- “They would arrive to something if they make all brands exactly the same, all grey, especially for people that have never smoked” (male, non-smoker, 15–24 years old).
- “It’s not a question of a single model, I do not think that a lot of people that began to smoke did it because of the pack being this way. . . It is more a question of friendship, of your circle of friends” (female, non-smoker, 15–24 years old).

Effect of plain packs on warning salience

Participants commented that the warnings were more visible on plain packs, as the branding no longer distracted from them, and that this would make people more aware of them. The absence of branding (aside from brand name) was also thought to make brand identification more difficult.

- “I think that it is much easier to get used to the current pack of the brand with a picture on it, than getting used to the grey one with a picture on it. The picture on this pack (plain pack), you see it all the time. And in this (fully-branded pack) you can distract this vision a bit, you can get distracted with the logo, the red colour” (male, smoker, 25–34 years old).
- “That’s right, it does not distract you from seeing it, it is simply the picture” (female, non-smokers, 35–45 years old).
- “The pack, being so simple, it does not have anything that capture your attention except the picture, your eyes always will go to the picture, the pack does not have anything but the picture” (female, smoker, 15–24 years old).
- “It is clear to me, you see this one (plain pack) and see immediately the picture, not the brand, nothing. . .” (male, smoker, 15–24 years old).

Perceptions of plain pack colour

While the three plain packs had a similar appearance, the different colour of each significantly influenced how they were perceived. Two of the three plain pack colours (grey and brown) were considered much more negatively than the white pack. Participants referred to the grey pack as ugly, associating it with

dirty, something bad or diseased lungs. The cigarettes within this pack were also considered to be poorer quality.

- “The grey pack does not capture my attention, it’s not flashy; if you have it in your pocket, or if you see somebody with it, you won’t like to try. It is not the same, I don’t know, the brown is what you say, it looks like a cigar with cinnamon flavour that I have sometimes bought (. . .) and the white. . . the white, it does capture more the attention” (male, smoker, 25–34 years old).
- “The one I dislike more is the grey and the one I like more, the white” (female, non-smoker, 25–34 years old).
- “The grey looks like if it has more smoke, death, obscurity, the two other ones are more easy to advertise, more classic and they are more noticeable. . . This (the grey) is like not having anything, except the pictures” (male, smoker, 15–24 years old).

The brown plain pack generated mixed perceptions, being more frequent the positive ones. It was considered ugly and dirty by some participants, and was associated with illness and death. It was also considered to have lower quality cigarettes. However, others thought it looked attractive and flashy, or like chocolates or cigars. Results reveal that this colour can be as appropriate as the grey one when the target is young people.

- “The brown one looks sadder and that the tobacco is poorer quality” (male, smoker, 15–24 years old).
- “The brown, because I see this colour. . . like if my lungs are already like this colour, or the teeth” (male, smoker, 15–24 years old).
- “The chocolate, I like more the brown colour” (female, smoker, 15–24 years old).
- “The brown one capture my attention, but because it looks like this, a pack of condoms, or a pack of cigars, or. . ., I don’t know, any other thing” (male, smoker, 25–34 years old).

Finally, the white pack reminded participants of a pharmacy product, being seen as less harmful.

- “It looks even fancy. . . the idea is that if you want, you can choose, and I can choose, I might prefer the white one, because it looks like a medicine, you know, you always can think that a medicine can be good, but if you see it in brown or grey. . .” (male, smoker, 25–34 years old).
- “It looks cleaner” (female, non-smoker, 15–24 years old).
- “The white colour looks light tobacco” (male, smoker, 25–34 years old).

Discussion

Packaging is a crucial marketing tool which can influence consumers in myriad ways.²⁰ It can appeal to consumers, generate interest, communicate information about the product and its benefits, and add value by increasing the quality of experiences related to its use.^{21,22} It has a key function at the point-of-sale but importantly can function post-purchase.^{23–25} For tobacco products, packaging is often considered a badge product given its high social visibility, and it can enhance positive perceptions of smoking as well as confer a positive image of the smoker.^{5,26}

Our findings suggest that package design can significantly influence pack and product perceptions. The appearance of fully-branded packaging was viewed as important by women, with some packs considered elegant and the product perceived as smoother; smoother cigarettes are often thought to be less harmful.²⁷ That pack design appeared more pronounced for women than men may reflect the importance attached to the aesthetic characteristics of

packaging by women, as identified in tobacco industry marketing documents²⁸ and previous academic research.²⁹

The results suggest that plain packaging may have a role to play in combating smoking by discouraging younger people from starting to smoke or new smokers from continuing, although consistent with past research the impact on adult smokers was considered marginal.³⁰ With the branding removed participants also felt that this would make the warnings stand out more, which is one of the core aims of plain packaging, and also that it would be more difficult for them or others to form a strong connection with brands.

People are known to attach meanings to particular colours,⁹ as was found with the different coloured plain packs. The brown and grey plain packs (especially the grey) were more likely than the white pack to have negative associations, being considered ugly, dirty and like diseased lungs. It is well established in the marketing literature that pack appearance influences product evaluation,²³ with the cigarettes considered higher quality in fully-branded packs and poorer quality in the brown and grey plain packs.

In terms of limitations of the study, the use of qualitative research means that the findings cannot be generalised to the wider population, and possible biases may have occurred during the focus group discussions, e.g., some influencing from researchers to participants. With respect to the stimuli, the brands we chose may have also created some bias among participants, depending on their attitudes to these brands. The brown plain pack we used differs from the darker pack used in countries which have implemented plain packaging (Australia, United Kingdom, France), which likely resulted in this pack being viewed slightly more positively, given that research has found that darker plain pack colours are perceived as more off-putting.²⁹ The study also provides no insight into the impact of plain packaging on actual smoking behaviour.

The main strength of this research is that it offers an understanding of how smokers and non-smokers in Andalusia (Spain) perceive a measure that could extend tobacco control policy, but that has not been yet considered by Spanish policy makers. In addition, while there are limitations with focus groups, they are an appropriate methodology for exploring consumers’ views of plain packaging, given that these packs are not available for sale in Spain. They allow for in-depth responses on the possible impact that plain packaging may have, and the impact of pack colour.

In conclusion, the findings suggest that plain packaging, combined with pictorial health warnings, may reduce the capacity of packaging to be distinctive and a badge product. Altering pack design in such a way would make it more difficult for tobacco companies to create a favourable image of their brands, and may help to reinforce the ability of some consumers to protect themselves from the dangers of smoking. Finally, as we found some differences with past research in other countries in how different packs colors were perceived, this suggests that it may be beneficial to explore the suitability of particular plain pack colors in each country before implementing this measure.

Editor in charge

Carlos Álvarez-Dardet.

Transparency declaration

The corresponding author on behalf of the other authors guarantee the accuracy, transparency and honesty of the data and information contained in the study, that no relevant information has been omitted and that all discrepancies between authors have been adequately resolved and described.

What is known about the topic?

There is a growing evidence base about plain packaging for tobacco products, which is recommended by the Framework Convention on Tobacco Control. This measure has now been fully implemented in Australia, France, the United Kingdom and New Zealand. Studies suggest that plain tobacco packaging may diminish the positive image that fully-branded packaging can create and elicit more negative perceptions about the product. Other research suggests that this measure can increase the visibility of the health warnings on packs and reduce misperceptions of harm as a consequence of pack design. Nevertheless, less research has looked at perceptions of specific attributes of plain packaging, like colour.

What does this study add to the literature?

This research explores perceptions of plain tobacco packaging among smokers and non-smokers in Spain, as well as plain pack colour. This study provides an insight into this measure in Spain, which will be of interest to public health and policy makers given the potential of plain tobacco packaging to be used to help tackle tobacco-related harm.

Authorship contributions

B. Lacave-García is responsible for the article and contributed to the conception and management of the work, to the analysis and interpretation of data, the critical review and the final writing of the manuscript, with important intellectual contributions. J.M. Rey-Pino contributed to the conception of the work, to the data collection and their analysis and data interpretation, as well as the data initial writing of the manuscript. K. Gallopel-Morvan contributed to the conception of the work, to the analysis and interpretation of data, and to the critical review of the article with relevant intellectual insights. C. Moodie contributed to the conception of the work, to the interpretation of data, and to the critical review of the article with relevant intellectual insights. E. Fernández contributed to the conception of the work, to the interpretation of data, and to the critical review of the article with relevant intellectual contributions. I. Nerín contributed to the conception of the work, to the interpretation of data, the initial writing of the article and to the critical review of the article with relevant intellectual contributions. All authors approved the final version of the article when it was sent. All authors are responsible for having reviewed all aspects of the manuscript and for having discussed all of it for having an integer version of it.

Funding

B. Lacave-García and J.M. Garcia have been financially supported by the Andalusian Government, health department, with the project “effects of plain packaging of tobacco products and visual warnings on the fall of the demand of tobacco products: a research from the social marketing perspective” (code 49/08).

C. Moodie is supported by Cancer Research UK.

E. Fernández is partly supported by Ministry of Universities and Research, Government of Catalonia (grant 2017SGR319) and by the Instituto de Salud Carlos III, Government of Spain, co-funded by the European Regional Development Fund (FEDER) (grants INT16/00211 and INT17/00103).

Conflicts of interest

None.

References

1. World Health Organization. WHO global report on trends in prevalence of tobacco smoking 2015. World Health Organization. 2015 (Accessed 15/02/2017.) Available at: http://apps.who.int/iris/bitstream/10665/156262/1/9789241564922_eng.pdf
2. Eriksen M, Mackay J, Ross H. The tobacco atlas. 5th ed. Atlanta: The American Cancer Society; 2015. p. 88.
3. Canadian Cancer Society. Cigarette package health warnings: international status report. 2014 (accessed 14/02/2015). Available at http://global.tobaccofreekids.org/files/pdfs/en/WL_status_report_en.pdf
4. Spence C, Gallace A. Multisensory design: reaching out to touch the consumer. *Psychol Mark.* 2011;28:267–308.
5. Moodie C, Stead M, Bauld L, et al. Plain tobacco packaging: a systematic review. Stirling: University of Stirling; 2012.
6. Laroche M, Toffoli R, Zhang Q, et al. A cross-cultural study of the persuasive effect of fear appeal messages in cigarette advertising: China and Canada. *Int J Advert.* 2001;20:297–317.
7. Sabbane LI, Lowrey TM, Chebat J-C. The effectiveness of cigarette warning label threats on nonsmoking adolescents. *J Consum Aff.* 2009;43:332–45.
8. Grimes A, Doole I. Exploring the relationships between colour and international branding: a cross cultural comparison of the UK and Taiwan. *J Mark Manag.* 1998;14:799–817.
9. Madden TJ, Hewett K, Roth MS. Managing images in different cultures: a cross-national study of color meanings and preferences. *J Int Mark.* 2000;8:90–107.
10. Roullet B, Droulers O. Pharmaceutical packaging color and drug expectancy. *ACR North Am Adv.* 2005;32:164–71.
11. Stead M, Moodie C, Angus K, et al. Is consumer response to plain/standardised tobacco packaging consistent with Framework Convention on Tobacco Control Guidelines? A systematic review of quantitative studies. *PLoS One.* 2013;8:e75919.
12. Callejo J. Investigar las audiencias: un análisis cualitativo. Barcelona: Paidós Ibérica; 2001.
13. MacFadyen L, Hastings G, MacKintosh AM. Cross sectional study of young people's awareness of and involvement with tobacco marketing. *BMJ.* 2001;322:513–7.
14. Shafey O, Eriksen M, Ross H, et al. The tobacco atlas. Atlanta Am Cancer Soc. 2009;3:38–9.
15. Gallopel-Morvan K, Jacques O, Mathias W, et al. Demarketing tobacco products: the influence of plain packs on smokers and non-smokers perceptions and behavioural intentions. *Journale d'Economie Medicale.* 2012;30:322–31.
16. Gallopel-Morvan K, Gabriel P, Le Gall-Ely M, et al. Plain packaging and public health: the case of tobacco. *J Bus Res.* 2013;66:133–6.
17. Kvale S. Doing interviews. Thousand Oaks: Sage; 2008. p. 160.
18. Krueger RA. El grupo de discusión: guía práctica para la investigación aplicada. Madrid: Pirámide; 1991.
19. Murgado E. Teoría y práctica del grupo de discusión en la investigación de mercados: un modelo normativo. Jaén: Universidad de Jaén; 2011.
20. Chapman S. Public health advocacy and tobacco control: making smoking history. Oxford: Blackwell; 2007. p. 328.
21. Becker L, van Rompay TJJ, Schifferstein HNJ, et al. Tough package, strong taste: the influence of packaging design on taste impressions and product evaluations. *Food Qual Prefer.* 2011;22:17–23.
22. Rey-Pino JM, Nerín I, Lacave-García MB. El envase neutro de los productos de tabaco: una nueva estrategia para el control del tabaquismo. *Gac Sanit.* 2017;31:62–5.
23. Ford A, Moodie C, Hastings G. The role of packaging for consumer products: understanding the move towards “plain” tobacco packaging. *Addict Res Theory.* 2012;20:339–47.
24. Lindsay D. Shaped to sell. *Beverage World.* 1997;116:91–2.
25. Peters M. Good packaging gets through to fickle buyers. London: Marketing; 1994. p. 10.
26. Hastings G, Gallopel-Morvan K, Rey JM. The plain truth about tobacco packaging. *Tob Control.* 2008;17:361–2.
27. Mutti S, Hammond D, Borland R, et al. Beyond light and mild: cigarette brand descriptors and perceptions of risk in the International Tobacco Control (ITC) Four Country Survey. *Addiction.* 2011;106:1166–75.
28. Carpenter CM, Wayne GF, Connolly GN. Designing cigarettes for women: new findings from the tobacco industry documents. *Addiction.* 2005;100:837–51.
29. Moodie C, Ford A. Young adult smokers' perceptions of cigarette pack innovation, pack colour and plain packaging. *Australas Mark J.* 2011;19:174–80.
30. McNeill A, Gravelly S, Hitchman SC, et al. Tobacco packaging design for reducing tobacco use. *Cochrane Database Syst Rev.* 2017. CD011244.