

Less branding and more health warnings can reduce tobacco use in the European Union

*A large-scale survey of 8,000 European citizens across 10 EU member states tested participants' responses to health warnings in cigarettes and found that removing or reducing product branding and increasing the size of health warnings made cigarette packets significantly less appealing. **Amitav Chakravarti** writes that combined warnings provide an economical way to reduce the effectiveness of tobacco industry marketing and can contribute to changes in social norms and behaviours.*

Impact Case -- Research Excellence Framework (REF)

Europe has the highest prevalence of tobacco smoking among adults (compared to other World Health Organisation (WHO) regions) and some of the highest levels of tobacco use by adolescents. In the EU, an estimated 700,000 premature deaths each year are caused by smoking, and annual public healthcare expenditure on treating diseases caused by tobacco products is in the region of €25 billion.

Prominent text warnings on tobacco packaging have been mandatory in the EU since 2003. Since their introduction, these text warnings have been revised and reworded in response to developing scientific, behavioural, and psychological evidence. Some member states also require colour photographs and other illustrations to be featured on cigarette packets.

Despite evidence showing health warnings work, in 2014 the WHO European Region had the lowest rate for implementing large warnings and the lowest share of countries requiring pictorial health warnings, with just 20 countries using them at that time.

The EU therefore planned to revise its guidelines on health warnings, and needed robust evidence of the efficacy of different permutations of text and images on labels to inform its new rules.

What did we do?

In 2012, the European Commission's Executive Agency for Health and Consumers commissioned a multinational research consortium, including me and my LSE colleagues George Gaskell and Caroline Rudisill, to test the effect of different tobacco product warnings on consumers.

Our multi-method study was designed to test the large number of policy-related questions raised. We particularly sought to understand the role of emotions in decision-making related to tobacco warnings and smoking, and how they might have a complex and profound effect on choice.

We conducted a large-scale randomised control trial survey of 8,000 European citizens across 10 EU member states, with approximately 800 participants per country. The research tested participants' responses to: existing text health warnings; possible new messages on tobacco constituents and emissions; proposed new combined picture and text warnings; new warning layouts; and packet appearance, such as branding or plain packaging. The new proposed warnings had 84 variations containing a combination of text and images.

The survey combined behavioural responses (in terms of elicited willingness to buy cigarettes) and psychometric scales of responses to isolate the effects of different emotions. Physiological reactions (eye-tracking for attention and skin conductance for emotions) to the health warnings were also investigated in a laboratory in Trento Italy, and 440 respondents completed an experiment on branded and plain packaging at LSE's Behavioural Lab.

The resulting [report](#) signalled some important findings. They found that removing or reducing product branding and increasing the size of health warnings made cigarette packets significantly less appealing, with plain packaging very effective in reducing the products' appeal. The likelihood of buying a tobacco product can also be significantly reduced if the negative response elicited by the images increases. Crucially from a public policy perspective, not all strong emotions produce an equal effect. When images elicited emotions such as shame, anger, anxiety, and distress they were much more successful in reducing the likelihood of buying a tobacco product – which dropped by about 82 per cent – than when they elicited emotions like fear and disgust, which reduced purchase intentions by about 66 per cent. The results held across fixed characteristics such as country, gender, and age, suggesting that the role of emotions goes beyond cultural and demographic stereotypes.

Although we cautioned that combined warnings would not provide a quick fix for addiction, we concluded that they provide an economical way to reduce the effectiveness of tobacco industry marketing and can contribute to changes in social norms and behaviours.

What happened?

Our research constituted the largest randomised control trial, multi-country study ever conducted on tobacco pictorial warnings. The study provided robust evidence of the efficacy of the combined warnings proposed by the European Commission and demonstrated the emotional mechanisms by which they affect behavioural choices and intentions. It provided clear evidence for which of the 84 proposed warnings would deliver the best results, supporting a statistically significant lower propensity to purchase tobacco products, as compared to text health warnings alone.

As a result, in 2014, the EU published its revised [Tobacco Products Directive](#), for implementation in May 2016. It required all tobacco products in the EU to carry specific combined warnings, based on the study's findings, from an EC-approved list of 14 text warnings and 42 pictures. By May 2017, these picture warnings had to cover the top 65 per cent of the front and back of all cigarette packets sold in the EU.

The research elucidated important differences between the ways in which different types of emotions affect people's intention to buy tobacco products, demonstrating that emotions such as shame, anger, or distress are more effective deterrents than fear and disgust. This ran counter to expectations at the European Commission and [particularly influenced](#) their choice of images.

Given the research finding that the "right" image can reduce the likelihood of purchasing a tobacco product by some 80 per cent, maximising the efficacy of images is vitally important to attaining public health goals around reducing tobacco use. In 2014 those goals included a WHO target of a 30 per cent reduction in tobacco-use prevalence among the world's adult population by 2025. It now seems unlikely that this target will be met in any WHO region other than the Americas, but the European region is currently tracking towards an 18 per cent relative reduction in tobacco consumption [between 2010 and 2025](#). A [2019 WHO European Region report](#) on trends in European tobacco use identifies large pictorial warnings as one of several "highly effective and relatively low-cost interventions" demand-reduction strategies being used. This research is therefore having a substantial effect not just on producers and users of tobacco products, but also on health services, healthcare spending, and citizens across the EU.



Notes:

- *This blog post is based on LSE's Research Excellence Framework (REF) impact [case study](#).*
- *The post represents the views of its author(s), not the position of LSE Business Review or the London School of Economics.*
- *Featured [image](#) by [geralt](#), under a [Pixabay](#) licence*
- *When you leave a comment, you're agreeing to our [Comment Policy](#)*