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EDITORIALS

No more butts

Reducing plastic pollution means banning the sale of filtered cigarettes

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Growing awareness of the harm done to ecosystems through disposal of vast quantities of plastic has created public outrage and compelled governments to act.¹ The European Union, for example, will ban many single-use plastic products, such as cutlery, plates, and straws, from 2021.² However, these measures do not extend to one of the leading sources of plastic waste worldwide that is hiding in plain sight: the cigarette butt.

The largest part of most cigarette butts is a non-biodegradable plastic filter made of cellulose acetate.³ Filters first appeared in the 1950s following early health concerns about cigarettes, and their rapid adoption was helped by the post-war explosion in manufacturing of plastics.⁴ The tobacco industry portrayed filters as a way to make cigarettes safer by absorbing some of the “tar” that was implicated in the lung cancer epidemic. We now know that this safety argument was a myth (box 1), one of many created by the tobacco industry to sell cigarettes.⁶

Box 1: Filtering the truth

• “Filters are the deadliest fraud in the history of human civilization. They are put on cigarettes to save on the cost of tobacco and to fool people. They don’t filter at all. In the US, 400 000 people a year die from cigarettes—and those cigarettes almost all have filters.”⁵

• Chemist Claude Teague, a filter researcher working for R J Reynolds, discovered that alteration of the pH in cellulose acetate based filters produced discolorations within the filter during use. He wrote:

“The cigarette smoking public attaches great significance to visual examination of the filter material in filter tip cigarettes after smoking the cigarettes. A before and after smoking visual comparison is usually made and if the filter tip material, after smoking, is darkened, the tip is automatically judged to be effective. While the use of such colour change material would probably have little or no effect on the actual efficiency of the filter tip material, the advertising and sales advantages are obvious.”⁴

Filters did reduce tar when cigarettes were tested in smoking machines designed by the industry but not when smoked by humans. The industry soon realised this⁴ and subtly shifted the focus of its work from trying to find a filter that would reduce toxins to how to use filters to support the industry’s marketing narrative, using misleading terms such as “light,” “low tar,” and “natural.” These terms are now prohibited in many countries, so it seems logical to take the next step in tackling their messaging: a ban on the filters we now know to be ineffective.

Marketing tool

The tobacco industry has worked hard to avoid anything that casts cigarettes in a bad light, including distracting attention from the pollution caused by butts. This includes creating downstream anti-litter campaigns in which it could control the messaging.⁷ Even though the cellulose acetate filter is the single most commonly collected item of litter globally,⁸ the industry has largely succeeded in avoiding the public outrage expressed towards plastic waste produced by, for example, McDonald’s and Starbucks. Unlike manufacturers of some other polluting post-consumption waste products, such as refrigerators containing fluorocarbons, it has never been held accountable for the cost of the waste it generates.⁹

The concern about plastic waste from cigarettes has also been excluded from the international tobacco control agenda, even though it is now widely recognised that the cellulose acetate filter is simply a marketing tool that has no health benefit¹⁰ and that filters enhance the appeal of cigarettes to adolescents.¹¹ Non-communicable diseases, with smoking a major risk factor, and environmental degradation are now both high on the global political agenda.^{12,13} However, the discussions on how to respond largely take place in separate silos. Can they come together to tackle an issue that lies on the interface between these concerns?

Diverting attention

A ban on the sale of single-use plastic cigarette filters would be resisted vehemently by the tobacco industry as it challenges the deception it has perpetuated in marketing manufactured cigarettes. Yet the background analyses that informed the EU’s Single-Use Plastics Directive suggested that a ban was feasible, even though the final text required only that industry “help cover the costs of waste management and clean-up, data gathering [and] awareness raising measures.”¹⁴

It is not clear why filters were not included in the ban on single-use plastics.² However, as was seen with the EU’s Tobacco Products Directive, the industry mounts large scale lobbying activities to divert attention from its damaging

products. The exclusion of filters from the plastics directive seems like a missed opportunity, especially since the background analysis said that the intention of any filter ban would not be to reduce cigarette consumption. However, EU countries have committed to assure “health in all policies,” and such a ban would also be consistent with EU nation obligations under the Framework Convention on Tobacco Control, the world’s first international health treaty.

The tobacco epidemic remains a leading cause of death and disability globally. Just like the threat of global warming, it will persist until nations implement innovative interventions. New, bold actions are needed to shape what are aspirationally described as “endgame” tobacco control strategies. Many people previously doubted the possibility of smoke-free bars, pubs, and planes. The idea that a pack of cigarettes would be restricted to plain packaging with graphic warnings seemed unthinkable. It may be time for a similar radical approach that strengthens ties between the environment and health communities for the common planetary good. If we fail to reduce the trillions of butts added to the world’s waste burden annually, we undermine our efforts to curb global plastic waste and miss an opportunity to help end the global tobacco epidemic.

Competing interests: We have read and understood BMJ policy on declaration of interests and declare that TEN is chief executive of the Cigarette Butt Pollution Project, a non-profit educational and research organisation registered in California and has been a consultant to the Truth Initiative, a tobacco control advocacy organisation.

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- 1 Buranyi S. The plastic backlash: what’s behind our sudden rage—and will it make a difference? *Guardian* 2018 Nov 13. <https://www.theguardian.com/environment/2018/nov/13/the-plastic-backlash-whats-behind-our-sudden-rage-and-will-it-make-a-difference>
- 2 European Commission. Circular economy: Commission welcomes Council final adoption of new rules on single-use plastics to reduce marine plastic litter. Press release 21 May 2019. https://europa.eu/rapid/press-release_IP-19-2631_en.htm
- 3 Slaughter E, Gersberg RM, Watanabe K, Rudolph J, Stransky C, Novotny TE. Toxicity of cigarette butts, and their chemical components, to marine and freshwater fish. *Tob Control* 2011;20(Suppl 1):i25-9. 10.1136/tc.2010.040170. 21504921
- 4 Harris B. The intractable cigarette ‘filter problem’. *Tob Control* 2011;20(Suppl 1):i10-6. 10.1136/tc.2010.040113. 21504917
- 5 Kennedy P. Who made that cigarette filter? *New York Times Magazine* 2012 Jul 6. <https://www.nytimes.com/2012/07/09/magazine/who-made-that-cigarette-filter.html>
- 6 Petticrew MP, Lee K, McKee M. Type A behavior pattern and coronary heart disease: Philip Morris’s “crown jewel.” *Am J Public Health* 2012;102:2018-25. 10.2105/AJPH.2012.300816 22994187
- 7 Smith EA, Novotny TE. Whose butt is it? Tobacco industry research about smokers and cigarette butt waste. *Tob Control* 2011;20(Suppl 1):i2-9. 10.1136/tc.2010.040105. 21504919
- 8 Araújo MCB, Costa MF. A critical review of the issue of cigarette butt pollution in coastal environments. *Environ Res* 2019;172:137-49. 10.1016/j.envres.2019.02.005 30782533
- 9 Curtis C, Novotny TE, Lee K, Freiberg M, McLaughlin I. Tobacco industry responsibility for butts: a model tobacco waste act. *Tob Control* 2017;26:113-7. 10.1136/tobaccocontrol-2015-052737 26931480
- 10 Novotny TE, Slaughter E. Tobacco product waste: an environmental approach to reduce tobacco consumption. *Curr Environ Health Rep* 2014;1:208-16. 10.1007/s40572-014-0016-x. 25152862
- 11 Wayne GF, Connolly GN. How cigarette design can affect youth initiation into smoking: Camel cigarettes 1983-93. *Tob Control* 2002;11(Suppl 1):i32-9. 10.1136/tc.11.suppl_1.i32. 11893812
- 12 United Nations General Assembly. Political declaration of the third high-level meeting of the general assembly on the prevention and control of non-communicable diseases. 2018. https://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/73/2
- 13 UNFCCC. UN summit delivers new pathways to shift climate action into higher gear. Press release, 23 Sep 2019. <https://unfccc.int/news/un-summit-delivers-new-pathways-to-shift-climate-action-into-higher-gear>
- 14 European Commission. Annex to the press release. Directive on the reduction of the impact of certain plastic products on the environment: summary and main outcomes. 2019. <https://europa.eu/rapid/attachment/IP-19-2631/en/Annex.pdf>

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