

The tobacco endgame: a view from the United Kingdom

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The United Kingdom, or to be accurate England as the other three countries take a different view, stands with New Zealand as one of two countries worldwide where the public health community see electronic nicotine delivery systems, commonly termed e-cigarettes or vapes, as an important part of the tobacco endgame [1]. In the text that follows I will set out why they are wrong.

I can recall the first time I heard about these devices, sometime about 2010. I was at a meeting in New York as the chair of the Global Health Advisory Committee of George Soros's Open Society Foundations. We were the largest funder of harm reduction for drug users, an extremely controversial issue, especially in some of the countries in central Europe and the former Soviet Union. We supported Methadone replacement therapy and needle exchange schemes based on good evidence that they reduced many of the harms associated with illicit drug use. Given this, you might expect that I would have welcomed these new products. After all, they were being promoted as a safer alternative to smoking, and I had published extensively on smoking and smoking-related diseases, especially in Central and Eastern Europe. Surely, anything would be better than inhaling large amounts of carcinogenic tar?

But I also had conducted a lot of research on the tobacco industry. With my colleague Anna Gilmore, we had described how the industry had exploited the chaos in the former Soviet Union to promote its products [2, 3]. With Swiss colleagues, we had exposed a secret operation in Germany whereby Philip Morris acquired a testing plant where it could design experiments that would give it the result it wanted and then commission others to do them [4]. They would work extremely hard to find the precise conditions supporting their position, particularly regarding second-hand smoke. Of course,

we never heard about all the experiments that did not support their position.

In these circumstances, as it became clear that the tobacco industry was supporting these products, I became suspicious. Why would an industry that made so much money out of smokers be trying to reduce the size of its potential market? [5]. It didn't make any sense. Now, there are those who believe that we should celebrate when sinners repent. In many cases, they are right. But I saw very little in the actions of the tobacco industry to encourage me to believe that they really were repenting.

The more that I looked, the more problems that I could see. We know that most people who quit smoking do so unaided. And for those who do need some help, there is always nicotine replacement therapy (NRT). However, crucially, we also know that nicotine replacement therapy and smoking cessation medications only really work when they are part of a short-term intervention, backed up by psychological support. NRT bought over-the-counter simply keeps people addicted to nicotine [6]. And we knew that these alternatives were safe.

I had a few questions. Would these products actually help people to quit and, as importantly, to keep them off cigarettes? Were they safe? And could they encourage people who do not smoke to take it up by getting them hooked on nicotine?

Those who supported e-cigarettes asked me to trust them. Now, in many cases, I had no reason not to distrust them. But among their number were a few that I certainly did not trust.

Before answering my main questions, I needed to resolve some other matters. What was actually in these products? Nicotine, of course, and propylene glycol as

a carrier for the nicotine. But then there was an incredible array of flavourings – thousands of them – not just the simple ones, like fruits like oranges, apples, and bananas, but others that seemed designed to appeal to children, like bubble gum. What happened when these flavourings were heated? Did it change them?

I was told not to worry because many of these flavourings are used in cooking. However, the people I was talking to seemed either unaware or unwilling to accept that when we eat flavoured food, the chemicals are absorbed in our guts and transferred to our livers, where they are detoxified, and only then do they enter our general circulation. Presumably, given that this mechanism is present in all vertebrates, there must be a very good reason why it has been retained throughout evolution [7]. Allowing the same substances to go directly into our bloodstream does not seem such a good idea.

At the beginning, I just asked these questions. In a short piece in the *BMJ* where I drew attention to some important gaps in the evidence [8]. Then all hell broke loose. I came under sustained attack for even asking these questions. How could I possibly deny such an incredible benefit to people who were hopelessly addicted to nicotine and who would otherwise die from a tobacco-related disease?

This response told me that I was onto something. Why were these people so reluctant to consider that there might be problems, especially since they seemed unable to provide any of the answers I sought?

Now we know so much more. Some years ago, with some colleagues, we conducted a systematic review of laboratory studies looking at possible mechanisms by which e-cigarettes might increase the risk of cardiovascular disease [9]. And we found quite a few mechanisms. Now we know that their use is just as hazardous as smoking cigarettes, while those who are dual users are at even higher risk [10]. And in some countries, like the one I live in, we have an epidemic of vaping among young people. Alongside the health risks, teachers are complaining that their pupils are unable to concentrate in classes because of their craving for a hit of nicotine during the breaks.

Initially, given that these products do not contain tar, we thought that they would not bring the risk of cancer that we see with cigarettes. But, of course, they do contain aldehydes and other carcinogens [11].

The original argument was based on their proposed ability to wean people off cigarettes. Yet, remarkably, after all these years, the evidence remains extremely limited [12]. Where they have been shown to be effective, it has only been as part of a time-limited supervised intervention, not by making them available in retail outlets, where there is no evidence that they support quitting [13]. And even when they do work, they are no better than other methods and are associated with a higher rate of relapse [14–16].

Given all of this evidence, I remain sceptical as ever about their value. Fortunately, there are others who share this scepticism, including my colleagues at the World Health Organisation. Many governments worldwide have acted to restrict their use.

But there are other voices who continue to see them as some sort of magic bullet. Some of them live in England, where they have been extremely vocal, persuading prestigious organisations that should know better to support them [17, 18]. One of these, the British Medical Association, has now reversed its favourable position, something that I am pleased to have contributed to as one of its recent presidents. But others, especially the Royal College of Physicians, of which I am a Fellow, and the antismoking organisation ASH England, have yet to see the light.

Why can it be that England is such an outlier? If we go back to the beginning, when these products became available, their strongest advocates were chest physicians. I understand this. They were faced with patients who had tried everything to quit and had failed. Anything was worth a try. Others who were advocating these products came from the narcotic harm reduction field, a place with which I was very familiar because of my work with the Open Society Foundations. I think their view was, as with the illicit drugs that they worked with, that they felt that there was little that could be done to reduce supply. But they were wrong [19]. Consequently, all that they felt could be done was to reduce harm. But even at that time, people were expressing significant concerns. They included the public health community, mostly cardiologists and paediatricians. It was, however, the first group – the chest physicians and the harm reduction group – that dominated the narrative. Unfortunately, it has been difficult to persuade these prestigious organisations to change their mind. Part of that is that when you have already said something publicly for several years, it is difficult to admit that you were wrong. And concerningly, they have had an influence beyond the U.K.'s borders.

Where are we now? The British government now accepts that the enormous growth of e-cigarette use among young people is a problem and has just imposed a tax on vaping fluids. Some politicians and their advisers mistakenly think that they can be a quitting aid for established smokers. But others are becoming more sceptical. Another factor is the enormous amount of chemical and electronic waste created by disposable vapes, billions every year, so the environmental community is becoming concerned. A third factor that I have already mentioned is the impact on schools. It is not just that children are unable to concentrate in class. There is also a thriving black market, with everything that accompanies that. Consequently, the last British government proposed legislation that would tackle youth vaping. It included measures to regulate flavours and packaging to make them less attractive to young people. It would also

ban the sale of disposable vapes. Although it was a casualty of the 2024 election, the new government is now taking the legislation through Parliament.

Inevitably, the vaping industry is opposed. No surprise there. What is perhaps disappointing is that a few of those health professionals who did so much to create the problems that now need to be fixed, continue to oppose some of these measures. Incredibly, they argue that it is necessary for heavily addicted smokers to inhale vapour tasting of butter, roast chicken, tuna, or wasabi [20]. We can only hope that those now in power can see how ridiculous these arguments are.

DISCLOSURE

The author reports no conflict of interest.

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