To reduce smoking harms, there is an urgent need to correct misperceptions about the risks of vaping

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Despite substantial evidence that vaping exposes users to much lower levels of toxicants than smoking,[1] most adults in Britain who smoke believe vaping is equally or more harmful.[2,3] This widespread misperception is not just an issue of misinformation – it has important implications for public health. Evidence suggests it can prevent people from switching completely from smoking to vaping,[1,4,5] resulting in more disease, disability, and premature death.

While vaping is not risk-free and there may be unknown long-term harms,[1] it remains substantially less harmful than tobacco smoking, which is known to cause many serious health conditions and kills up to two-thirds of long-term smokers.[6] Yet many people continue to conflate the harms of vaping with those of smoking.

One contributing factor is the way vaping is portrayed in the media. News coverage often highlights potential dangers of e-cigarettes without distinguishing them from cigarettes,[1] which can communicate that both are equally dangerous. A recent high-profile example claimed 'vaping may be more dangerous to the body than cigarettes' based on a single incomplete study that has not yet been peer-reviewed.[7] Such headlines are misleading and can amplify public fear, especially when they lack context or fail to compare findings directly with the well-established dangers of tobacco smoking.

Public understanding of the relative harms of e-cigarettes is currently worse than it has ever been.[2,3] Addressing this is an urgent public health priority. Correcting these beliefs could help a substantial number of people transition entirely away from smoking. In the UK, there are approximately 6 million adult smokers,[8] and around 2 million of them (34%) also vape.[9] These 'dual users' are already using e-cigarettes – most (75%) of them daily[9] – and are therefore potentially more amenable to fully quitting smoking.

Within this group, around 600,000 people (30%) vape daily and either smoke cigarettes non-daily or smoke non-cigarette tobacco.[9] This subgroup of dual users could be relatively easy to support to quit smoking altogether. However, their misperceptions likely present a barrier preventing many of them from making that final step.[1,4,5]

Currently, just two in five (42%) dual users believe e-cigarettes are less harmful than smoking. [2] This means around 1.2 million dual users – of whom an estimated 360,000 vape daily but do not smoke cigarettes daily – either think the two are equally harmful or wrongly believe vaping is worse. If this group had a more accurate understanding of the relative risks, evidence suggests they would be more likely to transition away from smoking, [1,4,5] which could accelerate the national decline in smoking prevalence and yield significant health gains.

Concerningly, misperceptions have worsened most rapidly among dual users. The latest survey data from Action on Smoking and Health (ASH) show more than half (56%) of all adults now believe vaping is at least as harmful as smoking, up from a quarter (26%) in 2019.[3] While inaccurate perceptions among all adults have doubled in that time, they have risen by 79% among dual users – a group who would benefit from switching.[3]

The opportunity cost of inaction is considerable. Smoking remains the leading cause of preventable morbidity and mortality in the UK.[10] The science is clear that e-cigarettes are both effective for helping people to quit smoking and much less harmful,[1] but while public perceptions are misaligned with evidence, the opportunity for vaping to further reduce smoking is being missed.

There is a pressing need for science-led, targeted public health campaigns, clear guidance from health authorities, direct advice from health professionals, and policy interventions to rectify vaping misperceptions. A national objective to transition hundreds of thousands of dual users fully away from smoking would help many to live longer and healthier lives.

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