E-cigs: a help or a harm?

In December, the AMA issued a Position Statement on *Tobacco Smoking and E-Cigarettes* in which it called for nationally consistent controls on the marketing and advertising of e-cigarettes, including a ban on sales to children. The AMA has raised concerns that e-cigarettes are appealing to young people, undermining tobacco control efforts, and says there is no evidence to support their use as an aid to quitting smoking.

Below, AMA member Dr Colin Mendelsohn, a tobacco treatment specialist, raises objections to the AMA's current position on e-cigarettes, and the AMA responds.



Is the AMA statement on e-cigarettes consistent with evidence?

BY DR COLIN MENDELSOHN, TOBACCO TREATMENT SPECIALIST, THE SYDNEY CLINIC*

* Dr Colin Mendelsohn has received payments for teaching, consulting and conference expenses from Pfizer Australia, GlaxoSmithKline Australia and Johnson and Johnson Pacific. He declares to have no commercial or other relationship with any tobacco or electronic cigarette companies.

The recent AMA statement on smoking takes a very negative position on electronic cigarettes (e-cigarettes).

While there is still much to learn about e-cigarettes, there is growing evidence to support their effectiveness and safety for smoking cessation and harm reduction. Many experts feel that e-cigarettes are a potentially game-changing technology and could save millions of lives¹.

The AMA position statement does not reflect the current evidence in a number of areas. For example, there is currently no evidence for the AMA's statement that "young people using e-cigarettes progress to tobacco smoking" (the gateway effect). In the UK, for example, regular use of e-cigarettes by children is rare, and is confined almost entirely to current or past smokers². Research in the US has found that increased adolescent access to e-cigarettes is associated with lower combustible cigarette use, rather than the opposite being true.

Understandable concerns are raised that increasing the visibility of a behaviour that resembles smoking may 'normalise' smoking and lead to higher rates of tobacco use. However, since e-cigarettes have been available, smoking rates have continued to fall. In the US, daily smoking by adolescents has dropped to a historic low of 3.2 per cent. Adult smoking rates in the US and

UK are also at record lows.

A recent independent review of the evidence commissioned by the UK public health agency, Public Health England (PHE), concluded that e-cigarettes are around 95 per cent less harmful than smoking³. This assessment includes an estimate for unknown long-term risks, based on the toxicological, chemical and clinical studies so far. Any risk from e-cigarettes must be compared to the risk from combustible tobacco, which is still the largest preventable cause of death and illness in Australia.

Three meta-analyses and a systematic review⁴ suggest that e-cigarettes are effective for smoking cessation and reduction. The evidence indicates that using an e-cigarette in a quit attempt increases the probability of success, on average, by approximately 50 per cent compared with using no aid or a nicotine replacement therapy (NRT) purchased over-the-counter.

Most of the research to date has used now-obsolete models with low nicotine delivery. Newer devices deliver nicotine more effectively, and have higher quit rates.

In the UK, e-cigarettes are now the most popular quitting method, and are used in 40 per cent of quit attempts. In the UK alone, there are currently more than one million smokers who have quit smoking and are using e-cigarettes instead, with considerable health benefit⁵. It has been estimated that each year in England, many thousands of smokers quit using e-cigarettes and would not otherwise have quit if e-cigarettes had not been available.



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Many organisations disagree with the AMA's view that "currently there is no medical reason to start using an e-cigarette". The Australian Association of Smoking Cessation Professionals, Public Health England and the UK National Centre for Smoking Cessation and Training recommend e-cigarettes as a second-line intervention for smokers who are unable or unwilling to quit smoking using approved first-line therapies.

In the health care setting there is empirical evidence that combining e-cigarettes with counselling and other pharmacotherapies, such as varenicline and NRT, can improve outcomes further⁶.

The UK's Medicines and Healthcare Products Regulatory Agency recently licensed an e-cigarette which will be available on the

National Health Service in 2016. It can be prescribed by doctors to help smokers guit, and will be provided free.

In Australia, we need to have an evidence-based debate on the potential benefits and risks of e-cigarettes. Careful, proportionate regulation of e-cigarettes could give Australian smokers access to the benefits of vaping while minimising potential risks to public health. The popularity and widespread uptake of e-cigarettes creates the potential for large-scale improvements in public health.

The AMA has made a major contribution to reducing smoking rates in the past. It is well placed to take a leadership role in this debate to ensure that the potential benefits from e-cigarettes are realised.

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- 4. McRobbie H, Bullen C, Hartmann-Boyce J, Hajek P. Electronic cigarettes for smoking cessation and reduction. Cochrane Database Syst Rev. 2014;12:CD010216
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- 6. Hajek P, Corbin L, Ladmore D, Spearing E. Adding E-Cigarettes to Specialist Stop-Smoking Treatment: City of London Pilot Project. J Addict Res Ther. 2015;6 (3) http://dx.doi. org/10.4172/2155-6105.1000244

For a full list of references, go to: https://ama.com.au/ausmed/e-cigs-help-or-harm

Clarification on the AMA's position

The recently updated AMA Position Statement Tobacco Smoking and E-Cigarettes - 2015 states:

that the AMA has significant concerns about e-cigarettes. E-Cigarettes and the related products should only be available to those people aged 18 years and over and the marketing and advertising of e-cigarettes should be subject to the same restrictions as cigarettes. E-cigarettes must not be marketed as cessation aids, as such claims are not supported by evidence.

As noted in the background to the Position Statement, the evidence supporting the role of e-cigarettes as a cessation aids is mixed and low-level.

The stance taken by the AMA on e-cigarettes is consistent with that of the World Health Organisation, Cancer Council Australia, the National Heart Foundation, the National Health and Medical Research Council (NHMRC) and the Therapeutic Goods Administration (TGA) - the latter two organisations being the key decision makers on whether or not e-cigarettes have a role in smoking cessation in Australia.

It is worth noting that a number of smoking cessation aids, backed by evidence, are already available through the Pharmaceutical Benefits Scheme.

The assertion that there is no evidence that e-cigarettes are a potential gateway for young people to progress to tobacco smoking is incorrect.

The AMA's Position Statement refers to international research¹ showing that some young people who use e-cigarettes do in fact progress to tobacco smoking. Given the risk, the AMA supports a precautionary approach for children and young people.

E-cigarettes will continue to be topical. Research is being published regularly and the AMA will continue to monitor the issue.

The AMA Position Statement, which covers a range of issues, can be viewed at: https://ama.com.au/position-statement/tobacco-smoking-and-e-cigarettes-2015

¹ For example see, Primack, BA., Soneji, S., Stoolmiller, M, Fine, MJ & Sargent, D. (2015). Progression to traditional cigarette smoking after electronic cigarette use among US adolescents and young adults. JAMA Pediatr. and Bunnell RE, Agaku IT, Arrazola R, Apelberg BJ, Caraballo RS, Corey CG, Coleman B, Dube SR, King BA.(2014). Intentions to smoke cigarettes among never-smoking U.S. middle and high school electronic cigarette users, National Youth Tobacco Survey, 2011-2013. Nicotine and Tobacco Research. 2014.