

Letter to the Editor

Comment on “Estimating the Population Impact of E-Cigarettes on Smoking Cessation in England,” by Robert West, Lion Shahab, and Jamie Brown

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The effort by Dr. West and colleagues to quantify the contribution of e-cigarettes to smoking cessation (1) is admirable. The debate about the public health implications of e-cigarettes suffers from a dearth of good evidence either pro or con, a reflection in part of the novelty of this product category. Efforts such as this one advance the debate toward a more rational, empirically-grounded one. (I use the term e-cigarettes to refer to all electronic nicotine delivery systems. My observations apply equally to other next-generation products, including novel heat-not-burn devices (2).)

The authors' estimate that e-cigarettes produced a net increase of 16K-22K quitters in England in 2014 (22K-28K by their second method) will satisfy precisely no one – neither e-cigarettes' detractors, including those who conclude that e-cigarettes are reducing quitting among smokers (3), nor enthusiasts, one of whom believes that the “disruptive technology” of e-cigarettes will outsell cigarettes by 2023 (4). (The stated mission of NJoy, a major independent producer of e-cigarettes, is “to obsolete cigarettes” (5).)

The potential of e-cigarettes as an alternative to smoking, at least for a subset of smokers, seems self-evident. Nicotine replacement therapies (NRTs) remove the behaviors associated with smoking addiction while providing users with slowly-delivered nicotine. As such they have little appeal and limited effectiveness (6). By mimicking smoking, but without delivering the 7,000 chemicals in cigarette smoke, e-cigarettes deliver the addictive drug along with smoking-like behaviors. Hence their appeal. (“Different strokes for different folks” clearly applies here.)

The authors' analysis is a snapshot at a particular, fairly early point of time in the history of e-cigarettes. As scientific knowledge develops, as the technology itself evolves, as regulations emerge, and as communications about the products spread via formal and informal channels, the role of e-cigarettes in smoking cessation, and in tobacco control more generally, will morph into something unpredictable today. The role of policy is critical (7): whether e-cigarettes are treated as medicines or consumer products; whether flavors are regulated; whether the use of e-cigarettes is permitted in venues in which smoking is not permitted; if and how they can be advertised; whether or not they are taxed and, in particular, how they are taxed relative to the far more dangerous combusted tobacco products, especially cigarettes (8).

The answer to the ultimate question with regard to e-cigarettes – what their net public health impact will be – depends on developing scientifically-sound answers to more specific questions, as well as the policy response to those answers. The questions: How risky are e-cigarettes compared to smoking? Are they 95% less dangerous than cigarettes, as the recent Public Health England report concluded (9)? Or is the number closer to 90% or 80% or 70%? Will e-cigarettes addict significant numbers of young people to nicotine, with a subset then migrating to smoking? (How many?) And, of course, how many adult

smokers will quit smoking specifically as a result of the availability of e-cigarettes? We are indebted to West and colleagues for an early answer to the last question.

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