



Reply to: “Nicotine or tobacco abstinence?”

Copyright ©The authors 2022

This version is distributed under the terms of the Creative Commons Attribution Non-Commercial Licence 4.0. For commercial reproduction rights and permissions contact permissions@ersnet.org

Received: 14 Aug 2022

Accepted: 23 Aug 2022

Reply to R.L. Murray and co-workers:

9 years ago, in July 2013, a group of 12 experts, many who had previously expressed support for e-cigarettes, rated the relative harm of 12 nicotine-containing products by using 14 criteria addressing harms to the users and others [1]. The group concluded e-cigarettes were substantially less harmful than combustible cigarettes. The popular media have taken up these results and promoted e-cigarettes as “95% less risky” or “95% less harmful” than combustible cigarettes. However, the authors acknowledged, “a limitation of this study is the lack of hard evidence for the harms of most products on most of the criteria” [1].

Despite this lack of “hard” evidence, Public Health England endorsed and publicised the “95% less harmful” assertion in 2015 [2]. Researchers clearly pointed out the “invalidity” of this estimate [3], and tried to explain the “English exceptionalism” on e-cigarettes [4]. Even so, R.L. Murray and colleagues used the “95% less harmful” assertion as the main argument in their response to our paper [5].

Since 2013, research on e-cigarettes has rapidly accumulated. Today, there is substantial evidence that using e-cigarettes is harmful to cardiovascular [6] and respiratory health [7]. Indeed, in 2019, an editorial in the *Lancet* stated that “no solid evidence base” underpins the marketing claims that e-cigarettes are healthier than cigarettes or that they can support quitting [8].

Unproven claims that e-cigarettes are useful harm-reduction tools are further undermined by their high uptake among young people, and the elevated risk of switching from e-cigarettes to combustible cigarettes. Results of the latest meta-analysis of 25 cohort studies confirm this concern, by showing that ever users of e-cigarettes at a young age had over three times the risk of ever cigarette use later on [9].

Discussions regarding the potential harms of e-cigarettes remind us of scientific debates about the health effects of cigarette use in the 1940s and 1950s. Smoking tobacco was apparently not even suspected as a cause of lung tumours, which were very infrequent at that time, until the final decade of the 19th century. It took us half a century to establish cigarette smoking as the leading cause of lung cancer. The true impact of vaping on health will manifest over the coming decades, but the evidence to date on the deleterious effects of e-cigarettes on health justifies the recommendation to abstain from the consumption of inhaled nicotine and other products. This recommendation is endorsed by a substantial number of international societies, including the Forum of International Respiratory Societies [10, 11], the European Academy of Paediatrics [12], and the American Cancer Society [13].



Shareable abstract (@ERSpublications)

The true impact of vaping on health will manifest over the coming decades, but the evidence to date on the deleterious effects of e-cigarettes on health justifies the recommendation to abstain from the consumption of inhaled nicotine and other products <https://bit.ly/3Dn4riC>

Cite this article as: Hanewinkel R, Niederberger K, Pedersen A, *et al.* Reply to: “Nicotine or tobacco abstinence?” *Eur Respir Rev* 2022; 31: 220158 [DOI: 10.1183/16000617.0158-2022].

Reiner Hanewinkel ¹, Kathrin Niederberger^{2,3}, Anya Pedersen ², Jennifer B. Unger ⁴ and Artur Galimov ⁴

¹Institute of Therapy and Health Research, IFT-Nord, Kiel, Germany. ²Clinical Psychology and Psychotherapy, Dept of Psychology, Kiel University, Kiel, Germany. ³Institute of Medical Psychology and Medical Sociology, University Medical Center Schleswig-Holstein, Kiel University, Kiel, Germany. ⁴Institute for Health Promotion and Disease Prevention Research, Dept of Population and Public Health Sciences, Keck School of Medicine, University of Southern California, Los Angeles, CA, USA.

Corresponding author: Reiner Hanewinkel (hanewinkel@ift-nord.de)

Provenance: Invited article, peer reviewed.

Conflict of interest: R. Hanewinkel reports the following relationships outside the submitted work: grants received from the German Ministries of Health and Research, German Cancer Aid and German Health Insurances. A. Galimov reports the following relationships outside the submitted work: grant received from NCI/FDA Grant #U54CA180905 (PIs: Mary Ann Pentz and Adam Leventhal). J.B. Unger reports the following relationships outside the submitted work: grant received from NIH. The remaining authors have nothing to disclose.

Support statement: A. Galimov and J.B. Unger are partially supported by the National Cancer Institute and the FDA Center for Tobacco Products (CTP) Award (NCI/FDA Grant #U54CA180905). NCI or the FDA had no role in the design and conduct of the study; collection, management, analysis, and interpretation of the data; preparation, review, or approval of the manuscript; and decision to submit the manuscript for publication. Funding information for this article has been deposited with the Crossref Funder Registry.

References

- 1 Nutt DJ, Phillips LD, Balfour D, *et al.* Estimating the harms of nicotine-containing products using the MCDA approach. *Eur Addict Res* 2014; 20: 218–225.
- 2 McNeill A, Brose LS, Calder R, *et al.* E-cigarettes: an evidence update. A report commissioned by Public Health England. London, Public Health England, 2015. <https://www.gov.uk/government/publications/e-cigarettes-an-evidence-update>
- 3 Eissenberg T, Bhatnagar A, Chapman S, *et al.* Invalidity of an oft-cited estimate of the relative harms of electronic cigarettes. *Am J Public Health* 2020; 110: 161–162.
- 4 McKee M. Evidence and e-cigarettes: explaining English exceptionalism. *Am J Public Health* 2019; 109: 965–966.
- 5 Hanewinkel R, Niederberger K, Pedersen A, *et al.* E-cigarettes and nicotine abstinence: a meta-analysis of randomised controlled trials. *Eur Respir Rev* 2022; 31: 210215.
- 6 Neczypor EW, Mears MJ, Ghosh A, *et al.* E-cigarettes and cardiopulmonary health: review for clinicians. *Circulation* 2022; 145: 219–232.
- 7 Jonas A. Impact of vaping on respiratory health. *BMJ* 2022; 378: e065997.
- 8 The Lancet. E-cigarettes: time to realign our approach? *Lancet* 2019; 394: 1297.
- 9 Yoong SL, Hall A, Turon H, *et al.* Association between electronic nicotine delivery systems and electronic non-nicotine delivery systems with initiation of tobacco use in individuals aged <20 years. A systematic review and meta-analysis. *PLoS One* 2021; 16: e0256044.
- 10 Ferkol TW, Farber HJ, La Grutta S, *et al.* Electronic cigarette use in youths: a position statement of the Forum of International Respiratory Societies. *Eur Respir J* 2018; 51: 1800278.
- 11 Pisinger C, Vestbo J. A rational approach to e-cigarettes: challenging ERS policy on tobacco harm reduction. *Eur Respir J* 2020; 55: 2000355.
- 12 Bush A, Lintowska A, Mazur A, *et al.* E-cigarettes as a growing threat for children and adolescents: position statement from the European Academy of Paediatrics. *Front Pediatr* 2021; 9: 698613.
- 13 American Cancer Society. American Cancer Society Position Statement on Electronic Cigarettes. Date last accessed: 8 May 2022. Date last updated: 2019. www.cancer.org/healthy/stay-away-from-tobacco/e-cigarettes-vaping/e-cigarette-position-statement.html